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Health Expenditure Review: Alexandria, Egypt

May 1999

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Abstract

A major restructuring of the service delivery, financing, and provider payment is underway in the Alexandria governorate as part of the health reform initiative being undertaken by the Ministry of Health and Population. While two rounds of National Health Accounts studies were conducted at the national level, not enough information existed at the level of the Alexandria governorate. The purpose of this report is to fill this important information gap and to use the results in developing methods to finance the cost of the basic benefits package, which will be made available under the reform initiative. This is the first time in Egypt that the National Health Accounts methodology has been used to develop expenditure estimates at a sub-national level.

In FY97 total health spending in Alexandria is estimated to have been LE 867.9 million. This was equivalent to LE 260.78 per capita (US\$ 76.93). Per capita expenditures in Alexandria are more than twice the national average. Public funds accounted for 30 percent of total health financing. Private funding accounted for 70 percent with the bulk coming from household out-of-pocket expenditures that represented 59 percent of all health expenditures. Fifty-one percent of the funds passed through financial intermediaries and 49 percent were transferred directly to providers. Purchase of drugs accounted for 33 percent of total health spending with the majority of it being out-of-pocket expenditures by households. Fifty-eight percent of the population was covered under HIO insurance schemes. The proportion of individuals in Alexandria with insurance is higher than the national coverage rate of 37 percent.

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Acronyms

AHE	Alexandria Health Expenditures
CCO	Curative Care Organization
DOP	Directorate of Planning, MOHP
EHHUES	Egypt Household Health Utilization and Expenditure Survey
FY	Fiscal Year
GDP	Gross Domestic Product
GOE	Government of Egypt
HIO	Health Insurance Organization
LE	Egyptian Pound
MOE	Ministry of Higher Education
MOF	Ministry of Finance
MOHP	Ministry of Health and Population
NGO	Non-governmental Organization
NHA	National Health Accounts
PHR	Partnerships for Health Reform Project (USAID)
SHIP	Student Health Insurance Program
SIO	Social Insurance Organization
Conversion Rate	US\$ 1.00 = 3.4 LE

Definitions and Data Notes

Health Expenditure

This report estimates health expenditures for Alexandria governorate in fiscal year 1996–1997. Health expenditures are defined as all expenditures or outlays for prevention, promotion, rehabilitation, and care; population activities; nutrition, and emergency programs for the specific objective of improving health. This definition is similar to that used for estimation of national health expenditures in the World Bank *World Development Report 1993*. Health includes both the health of individuals as well as of populations. There are many activities that have multiple objectives, including those of improving health, such as food subsidy programs, or water and sanitation projects. These are only included if the primary and main objective is the improvement of health itself.

Fiscal Year

The fiscal year of the government of Egypt runs from July 1 through June 30. Since the bulk of the data collected pertained to the government's fiscal year and since planning in the MOHP is based on the fiscal year, this report is organized on that basis. FY is used to denote the fiscal year, when appropriate, as in FY97 which refers to fiscal year 1996/97, i.e.: July 1, 1996 to June 30, 1997. All amounts are given in Egyptian pounds. Where foreign currencies are involved, they have been converted into Egyptian pounds using the average market exchange rate for the relevant calendar year as published by the International Monetary Fund in its *International Financial Statistics*, May 1998.

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Executive Summary

This report estimates health expenditures for Alexandria governorate for fiscal year (FY) 1996-1997. This expenditure data will enable Egyptian policymakers to study various financing options that will support provision of the basic benefits package of services in Alexandria.

In FY97 total health spending in Alexandria is estimated to have been LE (Egyptian pound) 867.9 million. This was equivalent to LE 260.78 per capita (US\$ 76.93). Per capita expenditures in Alexandria are more than twice the national average. Public funds accounted for 30 percent of total health financing. Private funding accounted for 70 percent with the bulk coming from household out-of-pocket expenditures that represented 59 percent of all health expenditures. Fifty-one percent of the funds passed through financial intermediaries and 49 percent were transferred directly to providers. Ministry of Health and Population (MOHP) facilities received 19 percent of total financing resources in the health sector, Health Insurance Organization (HIO) facilities received 16 percent, Alexandria University hospitals 11 percent, and Alexandria Curative Care Organization (CCO) 3 percent. Purchase of drugs accounted for 33 percent of total health spending with the majority of it being out-of-pocket expenditures by households. Fifty-eight percent of the population was covered under HIO insurance schemes. The proportion of individuals in Alexandria with insurance is higher than the national coverage rate of 37 percent.

Following are other significant findings, grouped by health care providers and payers.

The Ministry of Health and Population

- . The MOHP is the single largest institutional financier and provider of health care services in Alexandria.
- . Total MOHP expenditures were estimated at LE 164 million. Of this, LE 95.1 were actual expenditures by the directorate of health with the rest coming from the headquarters.
- . MOHP spending in Alexandria amounted to LE 46.19 per capita (US\$ 13.63).
- . Recurrent costs accounted for 65.4 percent of expenditures and capital investment for 34.6 percent.

The Health Insurance Organization

- . There were 1,934,874 beneficiaries enrolled under various social insurance schemes in Alexandria. Of these 877,066 were workers covered under Law 79, 184,105 were pensioners, 870,390 were school children covered under the Student Health Insurance Program (SHIP), and 3,313 were covered under Law 32
- . HIO received LE 167,159,963 from various sources. The primary sources of revenue were premiums (46.27 percent), transfers from HIO headquarters (24.47 percent), and premiums collected under the Labor Accident law (19.21 percent). Copayments accounted for only 1.56 percent of total revenues.

- . In FY 1997 the HIO spent a total of LE 152,445,601, or LE 41.70 per capita. Services provided at HIO facilities accounted for 89.8 percent of these expenditures and contracted services accounted for 10.2 percent of total expenditures.
- . The average cost per outpatient visit at a HIO facility was LE 26.16 and at a contracted facility LE 429.24. The average cost per admission at a HIO hospital was LE 461.62 and at a contracted facility LE 1181.59

University Hospitals

- . Total expenditures by university hospitals amounted to LE 97.8 million or LE 29.4 per capita. The Ministry of Finance provided for 74.3 percent of these expenditures and self-financing provided 24.2 percent.
- . Recurrent costs accounted for 89.4 percent of expenditures and capital investment for 11.6 percent.

Alexandria Curative Care Organization

- . The CCO is essentially self-financing, raising 85.3 percent of its income through providing services to individuals, HIO, MOHP, and companies on contract. It received 10.4 percent of its revenues from the Ministry of Finance, and 2.4 percent from other sources.
- . CCO expenditures amounted to LE 6.87 per capita. Of this salaries accounted for 33.4 percent of expenditures and drugs 16 percent.

Households

- . The annual utilization rate per capita in Alexandria was 4.83 visits for outpatient services, and 0.49 admissions for hospital services. This is significantly higher than the national average of 3.5 visits per capita for outpatient services, and .027 admissions for hospital services.
- . Overall 17.74 percent of outpatient visits took place at MOHP facilities, 15.74 percent at university hospitals, 14.63 percent at HIO or CCO clinics, 39.25 percent at private clinics, 9.76 percent at mosque clinics, and 2.88 percent at pharmacies.
- . An analysis by income profile shows that for those in the lowest income quintile the MOHP remains the primary provider for outpatient care. For this group 62.5 percent of the visits took place at a MOHP facility.
- . Per capita expenditure on health was LE 153.48. Of this, LE 128.13 was spent directly on health providers with the rest going through the MOHP, HIO, syndicates, and university hospitals. The amounts spent through HIO represent both premiums and copayments.

1. Introduction

A major restructuring of health care service delivery, financing, and provider payment is underway in the Alexandria governorate of Egypt. This restructuring is part of the health reform initiative being undertaken by the Ministry of Health and Population (MOHP) in its attempt to address a variety of public health problems and to reduce the inequalities in health status and access to high quality care for all the population.

In order for this initiative to move forward, current, reliable, and uniform financing and expenditure data are needed to understand the relative contributions of the different institutional sectors in providing and financing health care. While many departments and ministries within the Egyptian government make appreciable effort to collect and compile data on various aspects of the health care system, much of these data are not widely disseminated or accessible. Even when information is available, it is often contradictory because of problems in the standardization and reliability of data collection in the government and public sectors, making estimation of health expenditures in these sectors particularly difficult. In addition adequate data about the private sector do not exist.

At the request of the MOHP, the United States Agency for International Development-funded Partnerships for Health Reform (PHR) is providing technical assistance to the Egyptian reform initiative. This study reports on expenditure data that will enable Egyptian policymakers to study various financing options that will support provision of the basic benefits package of services in Alexandria.

1.1 Background

Health services in Egypt are financed using funds derived from the same ultimate sources: the government of Egypt (GOE), foreign donors, firms and households. Funding from these sources pass either directly or indirectly via intermediate financing agents to the ultimate providers of health care services. This report describes these flows and quantifies the amounts involved in relation to Alexandria governorate.

In doing this, the report goes beyond earlier (1991, 1995) Egypt National Health Accounts (NHA) studies. Those studies were conducted at the national level and thus did not provide sufficient information at the level of the Alexandria governorate. The purpose of this report therefore is to fill this information gap and to use the results in developing methods to finance the cost of the basic benefits package, which will be made available under the reform initiative. This is the first time in Egypt that the NHA methodology has been used to develop expenditure estimates at a sub-national level.

The Egypt health care system consists of the public sector—further divisible into the government and parastatal sectors—and private sector. In Alexandria, the major health care providers in the government sector are the Ministry of Health and Population, Alexandria University hospitals (under the Ministry of Education [MOE]), Health Insurance Organization (HIO), Curative Care Organization (CCO), Interior Ministry, and Defense Ministry. The Teaching Hospitals and Institutes Organization, included in national-level analyses, has no facilities in Alexandria. The public sector consists mainly

of financially autonomous government-owned companies and commercial organizations. The private sector consists of both non-profit non-governmental organization (NGO) providers, as well as for-profit providers such as private medical clinics, private hospitals, and pharmacies.

The government sector uses an accounting system that is organized exclusively according to the organizational distribution of inputs. In this case the key inputs are salaries, supplies and funding for capital investment, which correspond approximately to the four budget headings, also known as chapter headings or “babs.” Chapter 1 comprises salaries and other employee compensation, chapter 2 non-salary recurrent expenditures, chapter 3 capital purchases and investments, and chapter 4 debt repayments and other investment transfers.

Data for this analysis was obtained from the Ministry of Finance and government sector providers mentioned above: MOHP, Alexandria University hospitals, HIO, and CCO. (It was not possible to obtain information pertaining to the Interior Ministry and Defense Ministry.) Close collaboration with these agencies, through extensive consultations and review of the data, contributed greatly to the analysis.

Data for household expenditures came from the Egypt Household Health Utilization and Expenditure Survey (EHHUES), conducted in 1994. The EHHUES is the only source on household health care utilization and expenditures. However, the sampling frame for this survey was that of the Demographic and Health Surveys (DHS), making it representative at the level of regions and not at the level of the governorate. It was decided to use the data from the survey to obtain preliminary results on household out-of-pocket expenditures for Alexandria governorate. Data concerning other private sector expenditures are very limited and of doubtful accuracy and completeness. Obtaining additional information would have required a systematic survey of private insurance companies, providers, and private companies that offer self-financed health services to their employees. Time and resource constraints did not permit this. At a later stage more detailed data gathering efforts may be considered to better estimate Alexandria specific household and other private sector expenditures. Those can then be used to update these results.

1.2 Structure of the Results

The Alexandria Health Expenditures (AHE) are presented in a matrix structure, based on NHA methodology, which distinguishes between the source and final use of funds. The matrix structure consists of two interlinked matrices to reflect that many expenditure flows do not pass directly from the ultimate funding sources to the final providers of services. A large proportion of overall health care resources is passed from one institutional entity to another before being used finally for the provision of services. For example, individuals and firms pay premiums to a social insurance scheme, which in turn pays for the provision of medical services to the covered individuals by different medical providers. Constructing the AHE in the form of two interlinked matrices shows this passage of funds through intermediary entities.

The first matrix shows financial flows from the original sources of all funds—which by convention are taken as consisting of the government, households, firms, and foreign donors—to financial intermediaries. The second matrix describes the funding of the actual health services delivered by providers by the intermediary source of the funds involved.

1.3 Organization of the Report

The rest of this report is organized as follows: Section 2 provides an overview of health care expenditures in the governorate of Alexandria. Section 3 features information about social insurance in the governorate. Remaining sections (4-9) discuss expenditures of the various health care providers and payers: the MOHP, HIO, Alexandria University hospitals, CCO, households, and occupational syndicates.

2. Alexandria Health Care Spending in 1996/1997

2.1 Total Spending

In fiscal year (FY) 97 total health care spending in Alexandria is estimated to have been LE 867.9 million. This was equivalent to 0.54 percent of Egypt's GDP, or LE 260.78 per capita (US\$ 76.93 per capita). Per capita health expenditures in Alexandria are more than twice the national average. The two basic matrices of the AHE are shown in Table 1, immediately below, and Table 2, which appears later in this section.

Table 1. Sources to Financing Agents, FY 97 (in LE)

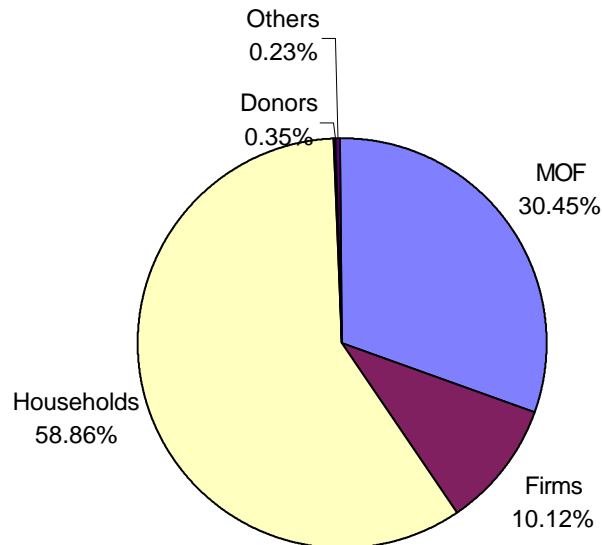
	Ministry of Finance	Firms	Households	Donors	Others	Total
MOHP	148,038,441		12,967,846	3,000,000		164,006,287
CCO	2,590,985	19,730,345			553,050	22,874,380
MOE	72,717,426		23,641,938		1,478,605	97,837,969
Syndicates			2,230,923			2,230,923
HIO	40,905,429	68,090,464	45,541,677			154,537,570
Household			426,444,547			426,444,547
Total	264,252,281	87,820,809	510,826,931	3,000,000	2,031,655	867,931,676

Note: Where cells are blank it means no transfer occurred, it was negligible, or data was unavailable.

2.2 Funding of the Health Care System

Both public and private sources of funding play important roles in the Alexandria health care system. Public funding accounts for 30 percent of total health financing. Private funding accounts for 70 percent of total health financing. The bulk of private expenditures is out-of-pocket spending by households, which represents 59 percent of all health spending. Figure 1 shows the relative roles of each of the major funding sources in Egypt's health care system.

Figure 1. The Alexandria Health Pound: Where It Comes From



2.3 Flow of Funds

Funds utilized by the health sector do not always pass directly from funding sources to their final uses. Fifty-one percent passes first through financial intermediaries. Forty-nine percent of funds are transferred directly to ultimate providers of care. The bulk of this is out-of-pocket expenditures by households (Table 1). Three major pathways can be observed:

- From general GOE revenues to MOF, which then allocates money to MOHP and university hospitals. University hospitals spend their money on their own facilities. MOHP also finances its own facilities and passes a small part to other public and private providers. It was not possible to estimate this for Alexandria. Hence all expenditures are shown against MOHP facilities.
- From MOF, premiums paid by firms, and out-of-pocket contributions to HIO, which finances its own facilities as well as other public and private providers.
- From household out-of-pocket spending directly to pharmacies, and private and other providers.

2.4 Use of Funds

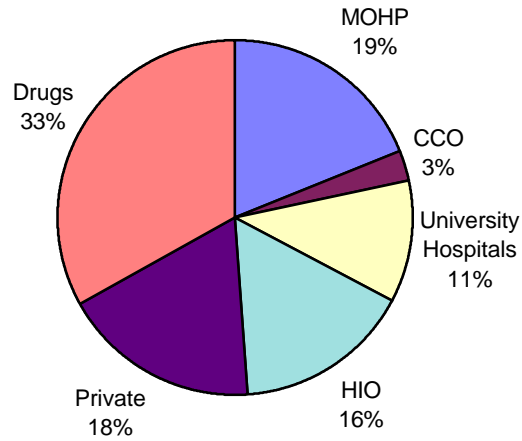
MOHP facilities receive 19 percent of total financial resources in the health sector, most of it coming from MOF and smaller amounts from foreign donors and self-funding. HIO facilities receive 16 percent of funds, Alexandria University hospitals 11 percent, and Alexandria CCO 3 percent. Purchase of drugs accounted for 33 percent of total health spending with almost all of it out-of-pocket spending by households. Private hospitals and clinics account for 18 percent of total expenditures (Table 2 and Figure 2).

Table 2. Financing Agents to Providers, FY 97 (in LE)

	MOHP	CCO	MOE	Syndicates	HIO	Households	Total
MOHP	164,006,287						164,006,287
CCO		22,874,380					22,874,380
University Hospital			97,837,969				97,837,969
HIO					138,773,997		138,773,997
Private				2,230,923	15,763,573	139,284,177	157,278,673
Pharmacies						287,160,370	287,160,370
Total	164,006,287	22,874,380	97,837,969	2,230,923	154,537,570	426,444,547	867,931,676

Note: Where cells are blank it means no transfer occurred, it was negligible, or data was unavailable.

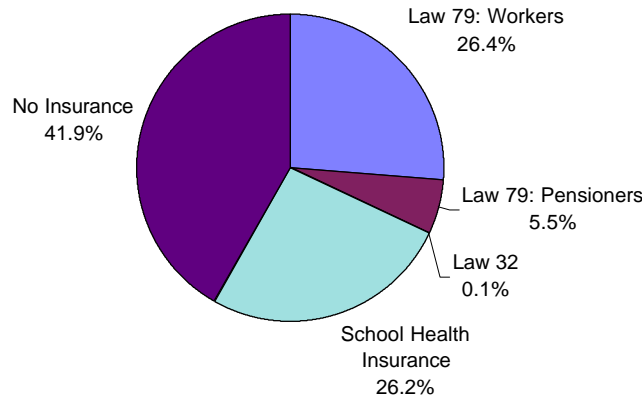
Figure 2. The Alexandria Health Pound: Where it goes



3. Insurance Coverage

Fifty-eight percent of the population in Alexandria has insurance coverage through the Health Insurance Organization, either under the School Health Insurance Program or another social insurance program. (Figure 3 shows the distribution of the population in Alexandria by type of social insurance coverage.) The proportion is higher than the national coverage rate of 37 percent. Those with no insurance are more likely to be female and from lower income households. It was not possible to obtain Alexandria specific data on private insurance coverage and hence this proportion is a lower bound.

Figure 3. Distribution of the Population by Type of Insurance Coverage



4. Ministry of Health and Population

4.1 Overview

The Ministry of Health and Population is the largest single institutional financier and provider of health care services in Egypt. It utilized 56 percent of the total health budget authorized by MOF in FY96. Part of this budget is transferred directly to MOHP headquarters in Cairo, but the bulk consists of expenditures undertaken by the governorates at the local level. Even though the directorate allocates and spends the money allocated to it, in practice the amount available for discretionary spending is small as many line items, in particular the level of salaries and number of authorized staff, are predetermined. Data for this section of the report was obtained from the audited accounts of the MOF and the MOHP.

4.2 Ministry Headquarters

The money allocated to MOHP headquarters is used to pay for the general overhead costs of running the MOHP, central procurement of certain drugs and insecticides,¹ and for funding a number of centrally run programs. Several of these programs supply commodities, personnel, and other resources to individual governorates. Drugs and insecticides are also used by governorates although they appear in the headquarters accounts. To estimate the total spending of the MOHP in Alexandria, part of the headquarters budget is added to the funds transferred directly by the MOF to the directorate of health. This amount was based on the assumption that the headquarters budget is divided equitably among all governorates in proportion to their population size.

The headquarters budget is also used to pay for two national patient treatment programs, which pay for the expenses of selected patients who cannot receive their required treatment from MOHP facilities. One of them pays for treatment abroad; the program disbursed LE 50 million in FY97. The second program is a domestic program that pays for selected patients to receive treatment within Egypt. The program paid LE 130 million in FY97 for patient treatment at both public and private facilities. MOHP facilities are among the public facilities that receive additional funds to provide treatment. In such a case the additional funds appear in the facilities accounts as self-funding. Thus these funds are counted twice by MOF accounts, once in the headquarters budget and once in the facilities' budget. To avoid this, the amount spent by the headquarters to treat patients at MOHP facilities in Alexandria should be subtracted from the total figure of self-funding shown in Alexandria governorate accounts.

¹ Certain items— anti-Bilharzial drugs, insecticides, vaccines, and anti-sera—are procured centrally and appear in the headquarters accounts, although they are utilized by the governorates.

4.3 Sources of Revenue

The main source of income for the MOHP is from the general revenues of the GOE. MOF accounted for 90.3 percent of MOHP income in Alexandria in FY97. Self-funding accounted for LE 12.97 million, only 7.9 percent of the income. The accuracy of user fees reported to MOF by governorates however can not be verified. Foreign donors provided less than 2 percent of the MOHP income of Alexandria in FY97. Such donations are included in the MOF records. A more detailed survey of donors combined with an analysis of MOHP central records would have led to a more accurate estimation of donor assistance going to Alexandria. However, for purposes of this report researchers allocated donor assistance in proportion to population.

4.4 Analysis of Expenditures

Total MOHP expenditures in Alexandria in FY97 was estimated at LE 164 million. LE 95.1 million were actual expenditures by the directorate of health, and the remaining amount is from the headquarters budget and is an estimate based on the population number. Total MOHP spending in Alexandria is equivalent to LE 46.19 per capita (US\$ 13.63 per capita).

Governorate level expenditures increased from LE 83.36 million in FY95 to LE 95.13 million pounds in FY97. There appears to have been a sharp drop in FY96. Researchers were unable to find a satisfactory explanation for this decline.

Drugs were estimated as 70 percent of the material component of chapter 2 expenditures allocated directly to Alexandria. These estimates are based upon the results of the Budget Tracking System. After combining the share of the headquarter expenditure allocations, drugs and medical supplies accounted for 14.5 percentage of expenditures by MOHP. Salaries comprised 41 percent of spending and capital investments, at LE 41.7 million, 28 percent (Tables 3,4 and 5).

Table 3. Distribution of Directorate of Health Expenditures by Budget Chapter, FY 95–97 (in LE)

Fiscal Year	Chapter 1	Chapter 2	Chapter 3	Chapter 4	Total Expenditures	Per Capita (%)
FY 95	52,473,411	15,018,340	15,567,604	302,800	83,362,155	24.4
FY 96	31,809,026	19,149,261	15,323,254	500,124	66,781,665	19.3
FY 97	60,121,022	22,278,444	12,485,488	248,091	95,133,045	28.6

Source: MOF, MOHP

Note: This table only includes expenditures by the directorate of health in Alexandria; expenditures by the MOHP headquarters is shown in Table 5.

Table 4. Distribution of Directorate of Health Expenditures by Budget Chapter, FY 95–97 (percentage of total)

Fiscal Year	Chapter 1	Chapter 2	Chapter 3	Chapter 4	Total	Per Capita
FY 95	62.9%	18.0%	18.7%	0.4%	100.0%	24.4%
FY 96	47.6%	28.7%	22.9%	0.7%	100.0%	19.3%
FY 97	63.2%	23.4%	13.1%	0.3%	100.0%	28.6%

Source: MOF, MOHP

Table 5. Total MOHP Expenditures in Alexandria, FY 97 (in LE)

Category	Governorate	HQ all Egypt	Alexandria's share of HQ	Total MOHP Expenditures	Percentage
Recurrent Expenditures	82,399,466	429,544,780	24,862,686	107,262,152	65.4
Salaries (Chapter 1)	60,121,022	36,145,907	2,092,178	62,213,200	37.9
Total Chapter 2	22,278,444	393,398,873	22,770,508	45,048,952	27.5
Materials	12,460,492	153,425,560	8,880,498	21,340,990	13.0
Drugs	8,722,344			8,722,344	5.3
Investment Expenditures	12,733,579	760,356,484	44,010,556	56,744,135	34.6
Investments (Chapter 3)	12,485,488	755,189,000	43,711,454	56,196,942	34.3
Capital Transfers (Chapter 4)	248,091	5,167,484	299,102	547,193	0.3
Total Expenditures	95,133,045	1,189,901,264	68,873,242	164,006,287	100.0

Source: MOF, MOHP

5. Health Insurance Organization

5.1 Overview

The Health Insurance Organization is an independent governmental organization under the supervision of the Minister of Health. It provides compulsory health insurance to workers in the formal sector. It was established in 1964 with the objective of covering the whole population, which never materialized. It first started operating in the governorate of Alexandria. Coverage has been extended to three major groups of beneficiaries under different acts of legislation: (i) government employees (Law 32), (ii) government,² public, and private sector employees (Law 79), and (iii) widows and pensioners. The number of beneficiaries increased from 140,000 in 1965 to 6,510,485 by the end of June 1997, representing 11 percent of the total population (Table 6). Benefits are restricted to beneficiaries, the only exception being Alexandria, where, for historical reasons, benefits extend to beneficiaries' families.

In 1993, HIO took responsibility for extending insurance coverage to schoolchildren under a separate program (Law 99). The School Health Insurance Program (SHIP) had enrolled 15,370,000 students (25.9 percent of total population) by the end of June 1997.³

Table 6. Number of HIO Beneficiaries ('000s), 1975-1997

Number of Beneficiaries	1975	1980	1985	1990	1992	1993	1994	1995	1996	1997
Law 32 & 79, Pensioners/Widows	602	1,651	3,225	4,606	4,895	n.d.	5,508	5,851	6,220	6,510
SHIP	0	0	0	0	0	n.d.	10,106	14,819	14,890	15,370

Source: HIO Annual Reports 1995, 1996, 1997

5.1.1 Funding Sources

HIO is principally funded through a system of premiums and copayments for services rendered. Details of these are outlined in Table 7. In addition, HIO may and often does receive additional transfers from the Ministry of Finance to cover operating losses. Mandated premiums from covered employees and employers are officially collected by the Social Insurance Organization (SIO), while the Pensions and Insurance Organization (PIO) collects premiums from pensioners. Both are supervised by the Ministry of Social Affairs. All premiums collected under laws 32/79 (2-4 percent of base salary) and from pensioners/widows (1 percent of basic pension) are transferred to the HIO according to MOF documents. The 1 percent labor accident premiums are divided equally between the HIO and SIO as regulated by law, because the SIO has obligations towards labor accident cases, in the form of early retirement pensions. Payment of premiums is compulsory for all public and

² Government employees can be covered either under Law 32 or Law 79. The distinction determines the relative contributions paid by employee and employer.

³ According to HIO Annual Report 1997.

private sector employers and employees. However, since 1984, companies have been allowed to waive the employee premium if they purchase comparable care elsewhere.

The level of copayments charged for services delivered (Law 32) is extremely low, typically less than LE 1, and only small amounts of revenue are raised from this source. In fact premium levels and copayments have not been changed since the inception of the program. The low copayments have led to the perception that provision of services—drugs in particular—is “free,” which fosters overuse.

SHIP is financed by a system of individual premiums paid by enrolled students (LE 4 per child), a government contribution of LE 12 per child, and a cigarette tax of 10 piastres per packet (Table 7). Only registered students are eligible to enroll. Children who are not going to school, often those from the poorest families with the greatest burden of ill health, are not eligible. A ministerial decree issued in October 1997 extends coverage to children in the first year of their life. However, since the People’s Assembly did not enforce it by issuing a law, the program is being implemented on a voluntary basis.

Table 7. Beneficiary Premiums and Copayments

Beneficiary Group	Salary Contributions	Benefits and Copayments
Government - Law 32	Employer - 1.5%; employee - 0.5%	Complete with copayment GP visit: LE 0.05 Specialist: LE 0.10 Home visit: LE 0.20 Inpatient day: LE 0.25-0.50 Lab. test: LE 1.0 maximum Clinic service: 25% with LE 1.0 maximum Prescription: LE 1.0 maximum Prosthetics: 50%
Government - Law 79	Employer - 3%; employee - 1%	Complete coverage
Public/Private Sector - Law 79	Employer - 3%; employee - 1%	Complete coverage
Pensioners	1% of basic pension	Complete coverage
Widows		Complete coverage
Labor accident cases	Employer - 1%	Complete coverage
Students	Student - LE 4 per year MOF - LE 12 per student per year Cigarette tax - LE 0.10 per packet	30% copayment for outpatient drugs. No copayment for inpatient care and chronic disease.

Source: DOP and HIO

Note: Complete coverage means that no copayment is levied for both inpatient and outpatient care.

5.2 Number of HIO Beneficiaries in Alexandria

There were 1,934,874 beneficiaries enrolled under various social insurance schemes in Alexandria. Of these 877,066 were workers covered under Law 79, 184,105 were pensioners (also Law 79), 870,390 were school children covered under SHIP, and only 3,313 were under Law 32. As the analysis is restricted to Alexandria governorate beneficiaries in Matrouh and Behera are not included in these calculations. The regions are those within the Alexandria governorate and should not be confused with HIO's regional offices.

Table 8. Distribution of HIO Beneficiaries in Alexandria by Region (1997)

	Law 79: Workers	Law 79: Pensioners	Law 32	SHIP	Total
Region 1	95469	27774	0	230131	353374
Region 2	177302	43409	157	214482	435350
Region 3	255218	54692	0	161892	471802
Region 4	191324	28489	3156	40350	263319
Region 5	45125	9631	0	98115	152871
Region 6	112628	20110	0	125420	258158
Subtotal	877066	184105	3313	870390	1934874

Source: HIO, 1999

Note: Matrouh and Behera are not included in these figures.

5.3 Sources of Revenues

In FY97, HIO received LE 167,159,963 from various sources (Table 9). The primary sources of revenue were premiums (46.27 percent), transfers from HIO headquarters (24.47 percent), and premiums collected under Labor Accident (19.21 percent). Transfers from headquarters were under the SHIP program and amounted to LE 47 per enrolled school child. Copayments accounted for only 1.56 percents of total revenues. Other sources of revenue included charges recovered from uninsured for services provided to them, premiums to cover family members of beneficiaries, cost of upgrades in hospitals, and charges recovered from companies that opt out of HIO coverage.

Table 9. HIO Revenues, FY 97 (in LE)

Category	Amount	Percent
Premiums		
Law 79 (workers)		
Government workers	25410460	15.20%
Private and public sector workers	43866200	26.24%
Law 79 (pensioner and widows)	5319549	3.18%
Law 32	5122531	3.06%
Labor Accident		
Government workers	15288000	9.15%
Private and public sector workers	16819950	10.06%
Law 99 (SHIP)	3254132	1.95%
Copayments		
Law 32 (stamps' revenue)	525293	0.31%
Law 99 (SHIP)	2055986	1.23%
Transfers from headquarters		
Cigarette tax (SHIP)	27300000	16.33%
MOF participation (SHIP)	13605429	8.14%
Others Items (for law 79 and 32)		
Comprehensive treatment	170841	0.10%
Beneficiaries' families	54330	0.03%
Treatment for those not insured	1257224	0.75%
Regular checkups	17230	0.01%
210 decree (allows companies to opt out)	1119500	0.67%
Others (Law 32 and 79)	4877631	2.92%
Other items (for law 99)		
Hospital upgrade	65853	0.04%
Others (law 99)	1029824	0.62%
Total	167159963	100.00%

Source: HIO, 1999

Notes:

1. It was not possible to exclude revenues from Matrouh and Behera.
2. Comprehensive treatment refers to coverage for laborers below the age of 18. Factories have to pay HIO separately for this.
3. In Alexandria the primary beneficiary can purchase coverage for family members.
4. Regular checkups: Some companies contract with the HIO to perform regular checkups of their employees. This is due to the nature of the work they perform. Companies have to pay separately for these services.
5. Individuals who do not have insurance can use HIO facilities but have to pay out-of-pocket.
6. Decree 201 allows companies to pay 1% of salaries and opt out of HIO coverage.
7. Hospital upgrades refers to upgrades in hotel services at facility. This is paid for out-of-pocket.

5.4 Analysis of Expenditures

Table 10 provides the distribution of expenditures by type of provider and service. In FY97 the HIO spent a total of LE 152,445,601 or LE 41.7 per capita. Services provided at HIO facilities accounted for 89.8 percent of these expenditures and contracted services accounted for 10.20 percent of total expenditures. Contracted services accounted for only 5.25 percent of outpatient care. This is an important finding. Under SHIP private providers were allowed to enroll with the HIO to provide outpatient care and school children in principle had the ability to choose their primary health care provider. In spite of this just 1 percent of outpatient expenditures occurred through contracted providers. This either means that school children are satisfied with the quality of care at HIO clinics and hence do not choose to go to private providers or the HIO has restricted the enrollment of private providers in order to contain costs. With regard to inpatient care, contracted providers accounted for a larger percentage of expenditures under SHIP (28.91 percent) as compared with expenditures under Laws 79 and 32 (17.65 percent). Outpatient care accounted for 67.75 percent of total expenditures and inpatient care for 32.25 percent.

Table 10. Distribution of Expenditures by Type of Provider (in LE)

				Distribution of Expenditures		
	HIO	Contracted	Total	HIO	Contracted	Total
Outpatient Care						
Law 79 and 32	64922498	5086713	70009211	92.73%	7.27%	100.00%
Law 99 (SHIP)	32945347	333685	33279032	99.00%	1.00%	100.00%
Subtotal Outpatient	97867844	5420398	103288242	94.75%	5.25%	100.00%
Inpatient Care						
Law 79 and 32	29853246	6398171	36251417	82.35%	17.65%	100.00%
Law 99 (SHIP)	9174328	3731613	12905941	71.09%	28.91%	100.00%
Subtotal Inpatient	39027575	10129784	49157359	79.39%	20.61%	100.00%
Total Expenditures	136895419	15550182	152445601	89.80%	10.20%	100.00%

Table 11 gives the breakdown of expenditures by line item. The percentage of expenditures on outpatient and inpatient care differs slightly from the preceding table because investment expenditures (chapter 3) are shown separately. Salaries accounted for 26.94 percent of total expenditures, drugs for 49.14 percent, other recurrent costs for 10.6 percent, and capital expenditures for 3.12 percent. Examining expenditures by type of scheme one observes that under Laws 32 and 79, 62.27 percent of costs went towards paying for drugs whereas under SHIP drugs accounted for only 29.97 percent of expenditures. This is probably due to the effect of a higher copayment under SHIP as well as differences in the kinds and severity of illness across the groups covered under the schemes.

Table 11. Distribution of Expenditures by Line Item (in LE)

Category	Law 79 and 32	Law 99	Total	Percentage
Outpatient				
Chapter 1	12522148	16644239	29166387	19.13%
Chapter 2				
Drugs	45142551	9171015	54313566	35.63%
Others	5713904	5037678	10751582	7.05%
Contracted expenditures	5086713	333685	5420398	3.56%
Subtotal Outpatient	68465316	31186617	99651933	65.37%
Inpatient				
Chapter 1	8677358	3224619	11901977	7.81%
Chapter 2				
Drugs	17041245	3550890	20592135	13.51%
Others	3531426	1880144	5411570	3.55%
Contracted expenditures	6398171	3731613	10129784	6.64%
Subtotal Inpatient	29250029	8655653	48035466	31.51%
Chapter 3	2147112	2611090	4758202	3.12%
Total	99862457	42453360	152445601	100.00%

Source: Analysis of HIO Data, 1999

Note: This is expenditure for Alexandria governorate only. Does not include Matrouh and Behera.

Table 12 shows the cost per outpatient visit and inpatient admission by type of provider. The average cost of an outpatient visit at a HIO facility was LE 26.16. An interesting finding was that an outpatient visit under SHIP at a HIO facility cost three times as much as an outpatient visit under Laws 79 and 32. The data available does not allow a more detailed analysis of the underlying causes for outpatient visits. The average cost per outpatient visit at a contracted facility was LE 429.24 with an outpatient visit under Laws 79 and 32 costing LE 436.89 and that under SHIP costing LE 338.77. The high cost per visit at contracted providers probably reflects the fact that the HIO only refers cases that require specialized treatment to these providers.

As regards inpatient admissions the average length of stay at a HIO hospital was 3.56 days while it was 10.85 days at contracted providers. Once again the significantly longer length of stay with contracted providers might either reflect the severity of the case or it might reflect a tendency of private providers to keep patients longer at the facility. The cost per admission at a HIO hospital was LE 466.76 under Laws 79 and 32 and LE 445.70 under SHIP. At contracted providers these costs were LE 849.47 and LE 3584.64 respectively. It is evident that the cost per admission at HIO facilities is significantly lower than that at contracted facilities.

Table 12. Cost per Visit and Admission by Type of Provider

	HIO	Contracted
Outpatient Care		
Law 79 and 32	20.31	436.89
Law 99 (SHIP)	60.54	338.77
Subtotal Outpatient	26.16	429.24
Inpatient Admissions		
Law 79 and 32	466.76	849.47
Law 99 (SHIP)	445.70	3584.64
Subtotal Inpatient Admissions	461.62	1181.59
Days of Stay	301850	93014
Average length of stay	3.56	10.85

Table 13 shows the revenues and costs per beneficiary under the different schemes. Prima facie the HIO seems to be losing LE 17.39 per beneficiary under Laws 70 and 32 and making a marginal profit of LE 1.30 under SHIP. However, a more detailed analysis of the SHIP data shows that of the LE 54.36 that HIO received per beneficiary under SHIP, LE 47 was received as a transfer from HIO headquarters. The contribution of the students by way of premiums and copayments therefore amounted to only LE 7.36. The transfer from headquarter is higher than the national per capita amount per school child received from the Ministry of Finance and cigarette tax. Thus, without the additional transfer from HIO headquarters the SHIP program in Alexandria might incur a deficit as well.

Table 13. Revenues and Cost per Beneficiary, FY 97 (in LE)

Beneficiary Group	Average Revenue	Average Cost	Surplus/Deficit
Workers Law 79 and 32	82.43	99.82	-17.39
SHIP	54.36	53.06	1.30

Source: HIO, 1999

6. Alexandria University Hospitals

6.1 Overview

University hospitals are among the major providers of care in Alexandria. They comprise an important part of the tertiary care system as well as providing facilities for teaching and research. University hospitals are under the direct authority of the Alexandria University, which is part of the responsibility of the Ministry of Higher Education. University hospitals in general are considered by the public to provide high quality services, which may explain why they are better able to generate resources than are other providers.

Although the majority of services provided by university hospitals are free, it is common in all universities in Egypt to have specialized centers or units that charge their patients. These units usually have separate accounts and could easily be missed by the MOF, which is the data source for this study. Although this could under estimate the figures cited in this report, other distortions are known to occur. All senior doctors are faculty members and receive their salaries from the Faculty of Medicine; therefore their salaries are not included in the hospital accounts. Only residents and house officers⁴ in addition to nurses and other supporting staff constitute chapter one expenditures in university hospitals.

The fee schedule for university hospitals in Alexandria is as follows:

- . Payments received for providing health care services
 - . Full payment for services rendered in “units of special nature” located in university hospitals
 - . Economic treatment departments charge LE 3 for an outpatient visit between 2 and 4 in the afternoon. The charge is LE 65 for hospital admissions including operation and 15 days of stay to be renewed if there is a need for it
 - . Tickets for people visiting admitted patients, either LE 2 or LE 4 depending on the time of the visit

University professors receive 30 percent of the fees collected and the hospitals keep 70 percent. This is then distributed as a bonus for other doctors.

Data was collected from the MOF and university hospitals in Alexandria. The difference between these two numbers was too large to be reconciled, with the MOF showing significantly higher expenditures. It was finally decided to use the MOF figures for the analysis because they represent audited accounts that had been approved by the People’s Assembly.

⁴ House officers receive one year of obligatory training in the hospitals and therefore may not be considered as service providers.

6.2 Analysis of Expenditures

Total expenditures by Alexandria University hospitals amounted to LE 97.8 millions in FY97. MOF accounts for 74.3 percent of these expenditures at LE 72.7 millions. Self-funding provided 24.2 percent of these expenditures (LE 23.6 millions), and only 1.5 percent provided through donations and loans.

Salaries comprise 40 percent of the expenditures, not forgetting the reservations mentioned earlier. Chapter two expenditures totaled LE 47.6 million, or 48.6 percent of all expenditures (Table 14).

Table 14. Distribution of Alexandria University Hospitals' Expenditures by Budget Chapter, FY 97

	Chapter 1	Chapter 2	Chapter 3	Chapter 4	Total Expenditure	Per capita
LE millions	38,947,902	47,580,675	9,056,222	2,253,170	97,837,969	29.40
Percentage of total	39.8%	48.6%	9.3%	2.3%	100.0%	

Source: MOF

7. Alexandria Curative Care Organization

7.1 Overview

Egypt has six Curative Care Organizations (CCO). The Alexandria CCO is the second largest, running five hospitals. It was established in 1964 through nationalization of private hospitals. The CCO's are each run independently, but they come under the authority of the Minister of Health. All CCO's are hospital-based organizations; the Alexandria CCO runs 939 beds (Table 15).

Table 15. Alexandria CCO Hospitals, Selected Performance Indicators FY 97

Hospital	Al-Mwassah	Al-Mabbarrah	Al-Kebti	Ahmed Maher	Dar Al-Welada	Total
No. of beds	446	163	130	50	150	939
No. of admissions	10,946	3,417	1,178	602	5,016	21,159
No. of occupied nights	46,966	19,777	6,732	1,189	9,017	83,681
Bed occupancy rate	66.1%	36.1%	14.3%	10.2%	8.1%	
Cost per bed (in LE)	29,941	26,050	17,451	12,981	17,228	

Source: Alexandria CCO

Table 15 shows a number of performance indicators. Al-Mwassah is the largest of the five hospitals with the highest occupancy rate. The overall occupancy of Alexandria CCO is 41 percent. This performance is obviously poor, with three hospitals having bed occupancy rates ranging between 14.3 percent and 8.1 percent. The average cost per bed is LE 24,602 in FY97.

Fees are charged for services delivered, with four separate layers of pricing based on the class and grade of room for inpatient care, and with one set of prices for outpatient care. In addition, the Alexandria CCO provides some limited free emergency services, and it is supposed to maintain a fixed number of beds for free treatment of poor patients under arrangement with MOHP. For the emergency services and the free beds the CCO receives an annual grant out of the MOHP headquarters budget. The size of this grant is set in annual negotiations between the MOF and CCO management; it accounted for 10.4 percent of total revenues in FY97.

7.2 Sources of Revenue

The CCO is essentially self-financing for recurrent costs, earning revenues by providing services to individuals, HIO, MOHP, and companies on contracts. It is assumed that the bulk of the CCO's income is from institutional payers, however, the exact figures are not known. The CCO also receives some (local) donations which amounted to LE 0.2 million, i.e., less than 1 percent of its income in FY97 (Table 16).

Table 16. Sources of Alexandria CCO Income, FY 97

Source of Income	Amount (in LE)	% of Total
MOF	2,400,000	10.4%
Self-funding	19,701,188	85.3%
Donors and loans	204,000	0.9%
Others	349,050	1.5%
Total	23,101,620	100.0%

Source: Alexandria CCO

7.3 Expenditures

Total expenditures by Alexandria CCO were LE 23.1 million in FY97 which is equivalent to LE 6.94 per capita. Eighty-five percent of these were raised through user charges. Tables 17 and 18 present income and expenditure data for Alexandria CCO in FY96 - 97.

Table 17. Income and expenditures in Alexandria CCO FY 96 - 97

	FY 96	FY 97
Income (LE millions)		
Self-funding	14.04	19.70
Free services grant (MOF)	2.12	2.40
National Investment Bank	0.06	0.19
Donations (local)	0.39	0.20
Other	0.61	0.60
Total	17.22	23.10
Expenditures		
Operating expenditures (LE millions)	17.22	23.10
Expenditures on salaries (LE millions)	6.72	7.71
Expenditures on salaries (% of total)	39.1%	33.4%
Expenditures on drugs (LE millions)	3.41	~3.69
Expenditures on drugs (% of total)	19.8%	~16.0%
Expenditures per bed (nominal in LE)	18,592	24,602

Source: Alexandria CCO

Note: Drug expenditures in FY97 are an estimate based on actual drug expenditures in Alexandria CCO in FY96.

**Table 18. Distribution of Alexandria CCO Expenditures by Budget Chapter, FY 97
(actual in nominal LE and percentages)**

	Chapters					Per capita
	1	2	3	4	Total	
LE millions	7,714,653	11,018,537	306,090	220,142	23,101,620	6.87
Percentage of total	33.4%	47.7%	1.3%	1.0%	100.0%	

Source: Alexandria CCO

8. Household Expenditures

As noted in Section 1, household expenditure data are based on the Egypt Household Health Utilization and Expenditure Survey conducted in 1994—1995. The sampling frame of the survey was that of the DHS. It is therefore representative at the level of regions and not at the level of the governorate. However, since these EHHUES data are the most recent and reliable available, it was decided to use them to obtain preliminary results. The results should be interpreted with caution. At a later stage one might consider doing a survey that is representative at the district level in Alexandria in order to create baseline information against which the impacts of the intervention can be measured.

Table 19 shows the annual per capita utilization rates for outpatient care and hospital admissions. The annual utilization rate per capita was 4.83 visits for outpatient services, and 0.049 admissions for hospital services. This is significantly higher than the national average of 3.5 visits per capita for outpatient services, and .027 admissions for hospital services. The differences between Alexandria and national use rates persist across gender, age groups, and income categories. Females used 1.28 times as many outpatient visits per capita as males did. An important finding is the strong relationship between income and use rates. Individuals in the lowest income quintile made 3.07 visits per capita per year whereas individuals in the highest income quintile made 6.93 visits per capita per year. As regards hospital admissions, individuals in the lowest income quintile had .036 admissions per person per year and those in the highest income quintile had .056 admissions per person per year. Children younger than five years made more than six visits per child per year and those age 60 or older made annual per capita visits of 7.29 visits. The use rates for outpatient care in Alexandria are extremely high even by international standards. Another surprising finding is that individuals age 60 plus had a lower per capita hospital admission rate as compared to those in the age groups 40–49 and 50–59. One would normally have expected admission rates for the oldest age group to be higher. A possible explanation for this might be the fact that for most elderly there is no insurance once they retire and hence lower use rates might be more representative of the inability to pay for hospital care than of lower need.

Table 19. Annual Per Capita Utilization Rates for Outpatient Care and Hospital Admissions

	Alexandria Outpatient	National Outpatient	Alexandria Hospital Admissions	National Hospital Admissions
Total Sample	4.83	3.51	0.049	0.027
Gender				
Males	4.22	3.25	0.054	0.027
Females	5.42	3.75	0.044	0.027
Income Quintile				
Quintile 1	3.07	2.32	0.036	0.018
Quintile 2	3.88	2.91	0.049	0.023
Quintile 3	4.48	3.40	0.043	0.024
Quintile 4	5.83	3.79	0.061	0.036
Quintile 5	6.93	5.11	0.056	0.035
Age				
00-04	6.01	4.45	0.028	0.018
05-15	4.36	2.37	0.023	0.016
16-29	3.43	2.86	0.065	0.032
30-39	4.84	4.29	0.061	0.040
40-49	6.74	4.84	0.071	0.041
50-59	4.21	4.99	0.057	0.042
60+	7.29	4.89	0.053	0.031
Marital Status				
Married	5.81		0.067	
Widowed	0.72		0.062	
Single	2.58		0.056	

Source: EHHUES

Note: The survey was conducted in 1994. Therefore the utilization rates may or may not represent the situation in 1996. Further, it is important to note that the sample was representative at the regional level and not at the level of governorates. Therefore, these estimates should be viewed as preliminary estimates.

Table 20 shows the distribution of outpatient visits by type of provider. Overall 17.74 percent of outpatient visits took place at MOHP facilities, 15.74 percent at university hospitals, 14.63 percent at HIO or CCO clinics, 39.25 percent at private clinics, 9.76 percent at mosque clinics, and 2.88 percent at pharmacies. Thus less than 20 percent of the outpatient visits occurred at MOHP facilities. However, an analysis by income profile shows that for those in the lowest income quintile the MOHP remains the primary provider for outpatient care. For this group 62.5 percent of the visits took place at a MOHP facility. Not surprisingly, the use of MOHP facilities declines with income while the use of private facilities increases with income. In Alexandria, in addition to the MOHP and the private sector, the HIO, mosque clinics, and university hospitals are major providers of outpatient health services. Thus, any reform program has to include all these providers and cannot be restricted to merely one sector.

Table 20. Distribution of Outpatient Visits by Type of Provider (Percent)

	MOHP	University	HIO/CCO	Private	Pharmacy	Mosque	TOTAL
Total Sample	17.74%	15.74%	14.63%	39.25%	2.88%	9.76%	100.00%
Gender							
Male	16.42%	19.40%	18.91%	33.83%	3.98%	7.46%	100.00%
Female	18.80%	12.80%	11.20%	43.60%	2.00%	11.60%	100.00%
Income Quintiles							
Quintile 1: (<852 LE)	62.50%	8.33%	16.67%	4.17%	0.00%	8.33%	100.00%
Quintile 2: (852-1195)	36.11%	19.44%	19.44%	11.12%	5.56%	8.33%	100.00%
Quintile 3: (1195-1606)	17.91%	13.43%	20.90%	38.80%	2.99%	5.97%	100.00%
Quintile 4: (1607-2514)	17.54%	22.81%	10.53%	35.09%	2.63%	11.40%	100.00%
Quintile 5: (>2514 LE)	9.52%	12.86%	13.81%	50.47%	2.86%	10.48%	100.00%
Age							
00-04	29.09%	3.64%	1.82%	58.17%	3.64%	3.64%	100.00%
05-15	16.10%	41.53%	7.63%	23.73%	2.54%	8.47%	100.00%
16-29	21.05%	10.53%	5.26%	46.06%	2.63%	14.47%	100.00%
30-39	16.36%	10.91%	18.18%	41.83%	5.45%	7.27%	100.00%
40-49	16.44%	6.85%	36.99%	27.39%	1.37%	10.96%	100.00%
50-59	12.90%	3.23%	25.81%	41.93%	6.45%	9.68%	100.00%
60+	9.30%	0.00%	16.28%	60.47%	0.00%	13.95%	100.00%
Marital Status							
Married	15.46%	6.19%	23.20%	39.68%	2.58%	12.89%	100.00%
Widowed	9.09%	0.00%	27.27%	51.52%	3.03%	9.09%	100.00%
Single	22.64%	15.09%	7.55%	43.40%	3.77%	7.55%	100.00%

Source: EHHUES

Note: The survey was conducted in 1994. Therefore the utilization rates may or may not represent the situation in 1996. Further, it is important to note that the samples was representative at the regional level and not at the level of governorates. Therefore these estimates should be viewed as preliminary estimates.

Table 21 shows that the per capita expenditure on health was LE 145.92. This is equivalent to \$43.04. Of this, LE 88.10 is spent on outpatient care, LE 10.42 on inpatient care, and LE 47.40 on the purchase of drugs. As with utilization rates, expenditures per capita in Alexandria are higher than the national average. An important finding of the analysis is the large disparity that exists in per capita expenditures across income quintiles. Individuals in the lowest income quintile spent only LE 36.60 per capita on health care. Of this, LE 31.32 was the cost of drugs. On the other hand individuals in the highest income quintile spent LE 358.82 per capita on health. The tenfold difference between the lowest and highest income quintile points to potential inequities in the system and access problems for low-income individuals. Analyzing per capita expenditures by age group shows that the lowest expenditures are for the age group 16–29 and the highest are for individuals age 60 or older. Across all age groups over half of out-of-pocket expenditures goes to paying for drugs.

Table 21. Annual Per Capita Out of Pocket Expenditures on Health (in LE)

	Outpatient Expenditures				Inpatient Expenditure		Total Expenditures
	Doctor Fees	Drugs	Investigation	Total	Hospitalization	Drugs	
Total Sample	24.49	50.86	12.75	88.10	10.42	47.40	145.92
Gender							
Males	24.47	43.30	8.78	76.55	8.56	41.67	126.78
Females	24.55	58.27	16.75	99.57	12.08	52.92	164.57
Income Quintiles							
Quintile 1	4.91	14.31	0.05	19.27	0.41	16.92	36.60
Quintile 2	15.71	30.11	8.34	54.16	3.43	27.00	84.59
Quintile 3	16.40	39.33	3.00	58.73	2.19	46.44	107.36
Quintile 4	26.82	55.39	7.00	89.21	21.93	54.00	165.14
Quintile 5	62.86	114.30	64.52	241.68	24.02	93.12	358.82
Age							
00-04	28.97	64.61	0.00	93.58	1.81	4.56	99.95
05-15	24.15	38.72	11.00	73.87	1.30	9.96	85.13
16-29	14.78	32.62	2.47	49.87	14.03	20.40	84.30
30-39	21.83	57.45	22.89	102.17	19.11	35.04	156.32
40-49	26.96	58.17	23.86	108.99	16.69	80.40	206.08
50-59	24.84	49.17	18.48	92.49	20.75	187.32	300.56
60+	54.53	127.40	31.57	213.50	6.84	176.76	397.10
Marital Status							
Married	27.19	57.58	14.76	99.53	19.58	83.38	202.49
Widowed	4.50	12.11	2.74	19.35	0.14	184.80	204.29
Divorced	0.00	0.00	0.00	0.00	0.00	11.28	11.28
Single	13.00	32.56	20.54	66.10	12.34	24.36	102.80

9. Occupational Syndicates

Several groups of professionals and workers in Egypt are organized into occupational associations known as syndicates. These are all officially recognized and regulated representative organizations. Most offer some limited assistance with medical services to their members.

A few of the syndicates offer organized systems of medical assistance in the form of health insurance schemes. The oldest of these schemes (established 1988) is that run by the Medical Union, which consists of four syndicates: physicians, dentists, pharmacists, and veterinarians. This was soon followed by engineers, then lawyers and agricultural syndicates in FY93. All these schemes are run at a national level, with a central financial department in Cairo. It was therefore difficult to obtain governorate specific expenditures, and an estimate had to be made. The only exception is the commercial syndicate, where each branch of the syndicate arranges its own health insurance scheme; in FY97 the Alexandria branch had no such scheme.

Membership in any of these schemes is voluntary. From the beginning of the Medical Union scheme in 1988, through 1993, coverage increased from 17,600 members to 28,000. The majority of these members reside in Cairo (75 percent) and Alexandria (20 percent). A similar increase in coverage was achieved in other schemes.

All schemes provide comprehensive benefits, including outpatient and inpatient services with contracted providers. There is a premium paid by beneficiaries, which varies with age, and is higher for relatives (parents, spouse, and children) of a syndicate member. Copayments are charged for inpatient and almost all outpatient services. The minimum copayment is 20 percent for inpatient services (Engineers Syndicate), and this could increase according to the scheme and quality of service provided. There is an annual ceiling on total reimbursements. The ceiling is relatively low, reaching LE 3,000 for Medical Union and LE 4,250 for Engineers Syndicates in FY96. This ceiling however, increases modestly in certain cases, e.g., treatment in intensive care, and cardio-surgery and neuro-surgery units, to reach LE 5,500 and LE 6,000 respectively. Hospitalizations and major outpatient services are only reimbursed if pre-approved by the scheme. Drugs are not covered except in the case of inpatient treatment and cancer chemotherapy, with few exceptions. All schemes receive substantial subsidies from their respective syndicates.

It was not possible to get Alexandria-specific information on expenditures by syndicates. For purposes of this study, incomes and expenditures were allocated based upon population proportion. A more detailed analysis of syndicate expenditures in Alexandria could be undertaken in the second round of the health expenditure study. Their share of total health expenditures is small.

Table 22. Allocation of Expenditures by Syndicates, FY 97 (in LE)

FY 96/97	Engineers	Medical Union	Agriculture	Lawyers	Others	Total 96/97	Alex 96/97
Income							
Syndicate Self Funding	5,500,000	3,398,558		9,412,587		18,311,145	1,059,876
Members Shares	6,612,090	5,304,720		1,343,333		13,260,143	767,517
Others	1,582,007					1,582,007	91,569
Total Income	13,694,096	8,703,278	389,660	10,755,920	5,000,000	38,542,954	2,230,923
Expenditures							
Money Paid for Hospitals	7,014,061	5,713,068		10,321,878		23,049,007	1,334,111
Money Paid for Clinics	5,292,969	3,838,707				9,131,676	528,555
Drugs	310,771	610,061		434,042		1,354,874	78,422
Total Expenditures	12,617,801	10,161,837	606,234	10,755,920	5,000,000	39,141,791	2,265,585

Note: The allocation was made based on population proportion.

Annex. Population Distribution in Alexandria by Gender and Sub-Division

Table A1. Population Distribution in Alexandria by Gender and Sub-Division

Division		Total Number of Families	Males	Females	Total Population Number
El-Montaza	urban	199,672	438,768	422,077	860,845
El-Raml	urban	163,581	341,332	330,157	671,489
Seedy Gaber	urban	47,682	96,942	92,811	189,753
Bab sharq	urban	44,361	85,403	83,701	169,104
Moharm Baik	urban	75,127	154,106	150,215	304,321
El-Atareen	urban	12,482	24,699	24,440	49,139
El-Manshia	urban	7,444	13,836	13,048	26,884
Karmouz	urban	38,001	76,625	71,145	147,770
El-Laban	urban	18,350	34,658	33,219	67,877
El-Gomrok	urban	27,224	50,020	48,487	98,507
Mina El-Basal	urban	70,294	150,671	142,578	293,249
El-Dekhaila	urban	54,127	100,302	95,296	195,598
El-Amairia	urban	52,095	112,083	99,773	211,856
Alexandria port police administration	urban	0	824	0	824
Borg El-Arab	urban	6,415	17,949	16,015	33,964
Borg El-Arab El-Gaidida	urban	1,682	3,934	3,082	7,016
Total Governorate		818,537	1,702,152	1,626,044	3,328,196