Document of
The World Bank

Report No: ICR00001162

INTENSIVE LEARNING IMPLEMENTATION COMPLETION AND RESULTS REPORT
(IDA-30760)

ON A

CREDIT

IN THE AMOUNT OF SDR 66.8 MILLION
(US$ 90.0 MILLION EQUIVALENT)

TO THE

ARAB REPUBLIC OF EGYPT

FOR A

HEALTH SECTOR REFORM PROGRAM

March 28, 2010

Human Development Sector
MNC03
Middle East and North Africa Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective 3/16/2010)

Currency Unit = Egyptian Pound (EGP)
EGP 1.00 = US$ 0.18
US$ 1.00 = EGP 5.44

FISCAL YEAR
July 1 – June 30

ABBREVIATIONS AND ACRONYMS

AfDB/AfDF	African Development Bank / African Development Fund
AWP	Annual Work Plans
BBP	Basic Benefit Package
CAS	Country Assistance Strategy
CCO	Curative Care Organization
CIS	Clinical Information System
DANIDA	Danish International Development Assistance
DCA	Development Credit Agreement
EMP	Environmental Management Plan
EU	European Union
FH	Family Health
FHF	Family Health Fund
FMS	Financial Management System
GOE	Government of Egypt
GPCC	Governorate Program Coordination Committee
HISDP	Health Insurance Systems Development Project
HPF	Health Policy Forum
HIO	Health Insurance Organization
HSRP	Health Sector Reform Program, or Health Sector Reform Project
IA	Implementing Agency
ICR	Implementation Completion and Results Report
IDA	International Development Association
IEG	Independent Evaluation Group
ISR	Implementation Status and Results Report
M&E	Monitoring and Evaluation
MCIT	Ministry of Communication and Information Technology
MIS	Management Information System
MOH	Ministry of Health
MOPIC	Ministry of Planning and international Cooperation
MOSS	Ministry of Social Solidarity

NHIF	National Health Insurance Fund
NTI	National Training Institute
NICH	National Information Center for Health
OM	Operations Manual
NGO	Non-governmental Organization
PAD	Project Appraisal Document
PDO	Project Development Objective
PHC	Primary Health Care
PPMC	Program Planning and Monitoring Committee
SA	Special Account
SFD	Social Fund for Development
TOR	Terms of Reference
TSO	Central Administration of Technical Support (formerly, Technical Support Office)
TST	Technical Support Team
USAID	United States Agency for International Development

Vice President:	Shamshad Akhtar
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Project Team Leader:	Sami Ali
ICR Team Leader:	Sami Ali

ARAB REPUBLIC OF EGYPT
Health Sector Reform Project

CONTENTS

A. Basic Information			
Country:	Egypt, Arab Republic of	Project Name:	Health Sector Reform
Project ID:	P045175	L/C/TF Number(s):	IDA-30760
ICR Date:	03/29/2010	ICR Type:	Intensive Learning ICR
Lending Instrument:	SIM	Borrower:	GOVERNMENT OF EGYPT
Original Total Commitment:	XDR 66.8M	Disbursed Amount:	XDR 63.7M
Revised Amount:	XDR 63.7M		
Environmental Category: B			
Implementing Agencies: Ministry of Health (MOH)			
Cofinanciers and Other External Partners: African Development Bank (AfDB) European Commission (EC) US Agency for International Development (USAID)			

B. Key Dates				
Process	**Date**	**Process**	**Original Date**	**Revised / Actual Date(s)**
Concept Review:	11/07/1997	Effectiveness:	09/19/1998	06/24/1998
Appraisal:	02/06/1998	Restructuring(s):		06/15/2004 10/01/2007
Approval:	05/21/1998	Mid-term Review:		12/13/2001
		Closing:	06/30/2004	03/31/2009

C. Ratings Summary	
C.1 Performance Rating by ICR	
Outcomes:	Moderately Satisfactory
Risk to Development Outcome:	Substantial
Bank Performance:	Moderately Satisfactory
Borrower Performance:	Moderately Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)			
Bank	**Ratings**	**Borrower**	**Ratings**
Quality at Entry:	Unsatisfactory	Government:	Moderately Satisfactory
Quality of Supervision:	Moderately Satisfactory	Implementing Agency/Agencies:	Moderately Satisfactory
Overall Bank Performance:	Moderately Satisfactory	**Overall Borrower Performance:**	Moderately Satisfactory

C.3 Quality at Entry and Implementation Performance Indicators			
Implementation Performance	**Indicators**	**QAG Assessments (if any)**	**Rating**
Potential Problem Project at any time (Yes/No):	No	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	No	Quality of Supervision (QSA):	None
DO rating before Closing/Inactive status:	Moderately Satisfactory		

D. Sector and Theme Codes		
	Original	**Actual**
Sector Code (as % of total Bank financing)		
Compulsory health finance	30	
Health	70	100
Theme Code (as % of total Bank financing)		
Child health	25	40
Gender	25	40
Health system performance	50	20

E. Bank Staff		
Positions	**At ICR**	**At Approval**
Vice President:	Shamshad Akhtar	Kemal Dervis
Country Director:	A. David Craig	Khalid Ikram
Sector Manager:	Akiko Maeda	Jacques F. Baudouy
Project Team Leader:	Sami Ali	George Schieber
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F. Results Framework Analysis

Project Development Objectives (from Project Appraisal Document**)**
The specific project development objectives are to:
* Improve population health status and well being in three pilot Governorates through universal overage to a basic package of primary health care and public health services.

* Improve access to, efficiency, and quality of primary health care services in three pilot Governorates.

Revised Project Development Objectives (as approved by original approving authority)
The revised PDOs are: (i) To expand health coverage with a basic package of primary health care and public health services to the poor population in two pilot Governorates and improve access and efficiency of primary health care services through rationalization of health infrastructure in two pilot Governorates.

(a) PDO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Expansion of Coverage with a package of primary health care services. Number of beneficiaries registered in the Family Health Fund to receive the basic benefit package of PHC services			
Value quantitative or Qualitative)	0	2.173 million persons (100%)		2.431 million persons (112%)
Date achieved	06/30/2001	03/31/2009		03/31/2009
Comments (incl. % achievement)	Achievement: 112% of the target (121% for Alexandria and 108% for Menoufia).			
Indicator 2 :	Expansion of coverage of primary health care services to the uninsured. Number of uninsured beneficiaries registered in the Family Health Funds to receive the basic benefit package of PHC services			
Value quantitative or Qualitative)	0	1.087 million persons (100%)		1.356 million persons (125%)
Date achieved	06/30/2001	03/31/2009		03/31/2009
Comments (incl. % achievement)	Achievement: 125% of the target (170% for Alexandria and 104% for Menoufia).			
Indicator 3 :	Expansion of coverage of primary health care services to the poor. Number of poor beneficiaries as defined by the exemption policy registered in the FHF to receive the basic benefit package of PHC			
Value quantitative or Qualitative)	0	0.495 million persons (100%)		0.579 million persons (117%)
Date achieved	06/30/2001	03/31/2009		03/31/2009
Comments (incl. % achievement)	Achievement: 117% of the target (121% for Alexandria and 114% for Menoufia).			
Indicator 4 :	Improved accessibility to primary health care services. Percentage of population with improved physical access to the basic benefit package of PHC services			
Value	0	3.622 million		2.992 million

quantitative or Qualitative)		persons (100%)		persons (83%)
Date achieved	06/30/2001	03/31/2009		03/31/2009
Comments (incl. % achievement)	Achievement: 83% of the target (107% for Alexandria and 72% for Menoufia).			
Indicator 5 :	Improved accessibility of primary health care services to the poor. Percentage of poor population with physical access basic benefit package of PHC services			
Value quantitative or Qualitative)	0	1.831 million persons (100%)		1.884 million persons (103%)
Date achieved	06/30/2001	03/31/2009		03/31/2009
Comments (incl. % achievement)	Achievement: 103% of the target (90% for Alexandria and 113% for Menoufia).			
Indicator 6 :	Enrollment of beneficiaries in the FHF			
Value quantitative or Qualitative)	0	2.173 million persons (100%)		1.406 million persons (65%)
Date achieved	06/30/2001	03/31/2009		03/31/2009
Comments (incl. % achievement)	Achievement: 65% of the target (49% for Alexandria and 72% for Menoufia).			
Indicator 7 :	Enrollment of uninsured beneficiaries in the FHFs			
Value quantitative or Qualitative)	0	1.087 million persons (100%)		0.350 million persons (32%)
Date achieved	06/30/2001	03/31/2009		03/31/2009
Comments (incl. % achievement)	Achievement: 30% of the target (26% for Alexandria and 35% for Menoufia).			
Indicator 8 :	Enrollment of poor beneficiaries in the FHFs			
Value quantitative or Qualitative)	0	0.495 million persons (100%)		0.380 million persons (77%)
Date achieved	06/30/2001	03/31/2009		03/31/2009
Comments (incl. % achievement)	Achievement: 77% of the target (53% for Alexandria and 94% for Menoufia).			

(b) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Efficiency / Rationalization of delivery of primary health care services. Number of family health clinics constructed/ renovated in compliance with the			

	governorates health plans			
Value (quantitative or Qualitative)	0	1141 clinics (100%)		1,103 (97%)
Date achieved	06/30/2001	03/31/2009		03/31/2009
Comments (incl. % achievement)	Achievement: 97% of the target (105% for Alexandria and 92% for Menoufia).			
Indicator 2 :	Efficiency of services family clinics service delivery. Average no of daily encounters per physician			
Value (quantitative or Qualitative)	4	24		11.9 (50%)
Date achieved	06/30/2001	03/31/2009		03/31/2009
Comments (incl. % achievement)	Achievement: 50% of the target (62% for Alexandria and 37% for Menoufia).			
Indicator 3 :	Utilization of immunization services. Percentage of facilities with >95% coverage of completely vaccinated children in the first year.			
Value (quantitative or Qualitative)	0	100%		100%
Date achieved	06/30/2001	03/31/2009		03/31/2009
Comments (incl. % achievement)	Target achieved in both Alexandria and Menoufia.			
Indicator 4 :	Utilization of antenatal care services. Average number of ANC visits per pregnant women			
Value (quantitative or Qualitative)	3.35	5		2.7 (54%)
Date achieved	06/30/2001	03/31/2009		03/31/2009
Comments (incl. % achievement)	Achievement: 54% of the target (62% for Alexandria and 52% for Menoufia).			

G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	06/18/1998	Satisfactory	Satisfactory	0.00
2	10/09/1998	Satisfactory	Satisfactory	6.00
3	01/21/1999	Satisfactory	Satisfactory	6.00
4	05/04/1999	Satisfactory	Unsatisfactory	6.00
5	10/14/1999	Satisfactory	Unsatisfactory	6.00
6	03/27/2000	Satisfactory	Unsatisfactory	6.01

7	04/14/2000	Satisfactory	Unsatisfactory	6.01
8	08/03/2000	Satisfactory	Unsatisfactory	6.01
9	01/29/2001	Satisfactory	Unsatisfactory	6.01
10	05/09/2001	Satisfactory	Satisfactory	6.01
11	11/01/2001	Satisfactory	Satisfactory	6.01
12	01/07/2002	Satisfactory	Satisfactory	6.01
13	04/29/2002	Satisfactory	Satisfactory	6.01
14	10/28/2002	Unsatisfactory	Unsatisfactory	6.01
15	04/15/2003	Unsatisfactory	Unsatisfactory	6.01
16	06/30/2003	Unsatisfactory	Satisfactory	6.01
17	12/24/2003	Unsatisfactory	Satisfactory	8.93
18	04/19/2004	Unsatisfactory	Satisfactory	12.71
19	06/29/2004	Satisfactory	Satisfactory	14.23
20	12/22/2004	Satisfactory	Satisfactory	18.66
21	04/29/2005	Moderately Satisfactory	Moderately Satisfactory	34.77
22	08/14/2005	Moderately Satisfactory	Moderately Satisfactory	36.83
23	06/08/2006	Moderately Satisfactory	Moderately Satisfactory	68.95
24	12/28/2006	Moderately Satisfactory	Moderately Satisfactory	87.98
25	03/09/2007	Moderately Satisfactory	Moderately Satisfactory	89.32
26	11/18/2007	Moderately Satisfactory	Moderately Satisfactory	91.95
27	06/17/2008	Moderately Satisfactory	Moderately Satisfactory	96.03
28	12/30/2008	Moderately Satisfactory	Moderately Satisfactory	97.58
29	04/09/2009	Moderately Satisfactory	Moderately Satisfactory	97.61

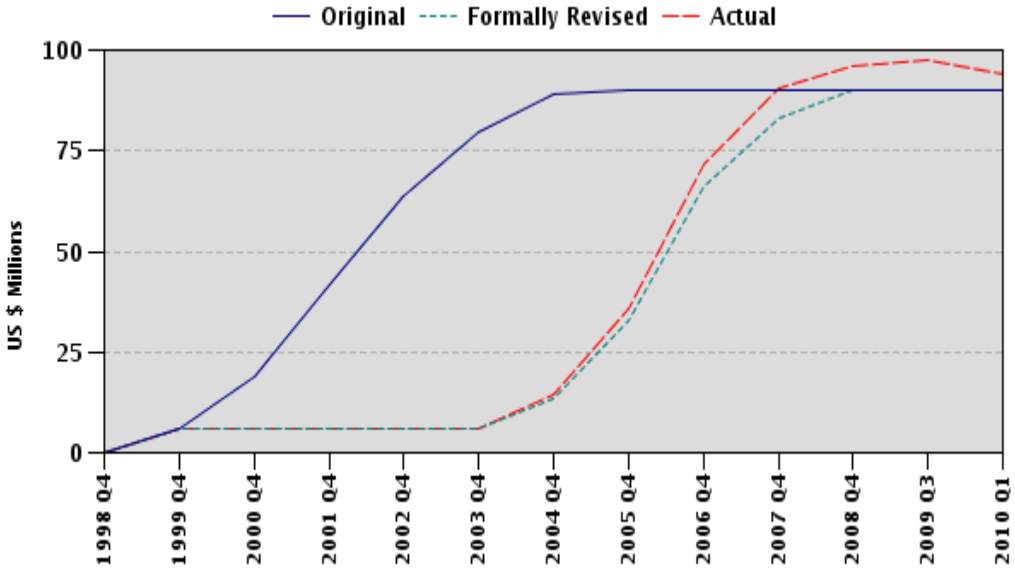
H. Restructuring (if any)

Restructuring Date(s)	Board Approved PDO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in USD millions	Reason for Restructuring & Key Changes Made
		DO	IP		
06/15/2004	Y	U	S	13.60	
10/01/2007		MS	MS	91.69	

If PDO and/or Key Outcome Targets were formally revised (approved by the original approving body) enter ratings below:

	Outcome Ratings
Against Original PDO/Targets	Unsatisfactory
Against Formally Revised PDO/Targets	Satisfactory
Overall (weighted) rating	Moderately Satisfactory

I. Disbursement Profile



1. Project Context, Development Objectives and Design

(this section is descriptive, taken from other documents, e.g., PAD/ISR, not evaluative)

1.1 Context at Appraisal

(brief summary of country and sector background, rationale for Bank assistance)

1.1.1 The Country Assistance Strategy (CAS) for Egypt placed high priority on reinforcing the social agenda to address poverty and the transitional costs of adjustment while maintaining the record of sound macroeconomic management that has contributed to the resumption of strong economic growth in recent years. The incidence of poverty in relative terms had declined significantly over the past 50 years, but high population growth rates as well as regional disparities in access to essential social services and income-earning opportunities have meant that the absolute number of households living in poverty has continued to rise. The Government recognized that rapid economic growth was essential to achieve a sustained reduction in the level of poverty, but this needed to be complemented by improvements in the quality and coverage of key social services, including universal access to a minimum critical package of health care services, in a fiscally sustainable manner.

1.1.2 The Bank's Project Appraisal Document (PAD), dated April 24, 1998, included the following information on the health sector. Health outcomes were problematic and worse than the lower middle income (LMI) average as illustrated by high national rates for child and maternal mortality and wide disparities between rural and urban areas. There were significant equity problems in access to services, by both income and geographic grouping. Public spending was regressive. Sector organization, management and financing were fragmented, with responsibilities shared but not coordinated among the Health Insurance Organization (HIO), the Ministry of Health (MOH), the Ministry of Social Affairs (MOSA), other Government Agencies and private services. Overall spending was low: with just 3.7 percent of GDP (US$38 per capita) spent on health care, Egypt spent less than other LMI countries. The delivery system was characterized by substantial excess capacity and inefficiency. Lack of basic equipment, supplies and drugs in MOH primary facilities meant that, despite impressive physical access (e.g., 95 percent of the population being within five kilometers of a facility), effective access was limited. Finally, efficiency varied widely, with costs per hospital day and per admission varying by three and four to one, respectively, in MOH and HIO hospitals. Spending and consumption of pharmaceuticals were as much as 50 percent higher than in other LMI countries, and use was frequently excessive and inappropriate. As with physical capacity, there were both surpluses and imbalances of medical personnel. While Egypt had 1.6 physicians per thousand population, three to four times the number in other comparable income countries, there was a shortage of primary care physicians relative to the number of specialists, and an absolute shortage of skilled nurses. Quality also needed to be improved.

1.1.3 Two other health projects financed by the Bank were implemented concurrently with the HSRP: the National Schistosomiasis Control Project, which became effective in

June 1993 and closed in September 2002, and the Population Project, which became effective in June 1998 and closed in March 2005. The outcome of both projects was rated "moderately satisfactory" by the Independent Evaluation Group (IEG) of the World Bank.

1.1.4 The HSRP was developed by the Government with the assistance of the Bank and other donors to address underlying structural problems in the various sector domains which collectively determine national health outcomes as well as the equity, efficiency, quality, and long-run financial sustainability of the health sector. The reform program proposed a complete overhaul of all aspects of the health system. The Bank-financed project would assist the Government of Egypt (GOE) in implementing the first five-year phase of its comprehensive Health Sector Reform Program (HSRP). Phase I focused on universal insurance coverage at the primary care level in selected governorates and on the primary care delivery system reforms; these areas were selected by the Government because they would be relatively affordable and establish the basis for future reform phases.

1.2 Original Project Development Objectives (PDO) and Key Indicators (*as approved***)**

1.2 1 According to the Project Appraisal Document (PAD) dated April 24, 1998, the specific project development objectives were to: (i) improve population health status and well being in three pilot Governorates through universal coverage with a basic package of primary health care and public health services; and (ii) improve access to efficiency, and quality of primary health care services in three pilot Governorates. The Development Credit Agreement (DCA), dated May 22, 1998, had a different definition of the PDO: "to assist the Borrower in initiating the phased implementation of universal health coverage and primary care delivery system rationalization". However, the project description in the DCA referred to three Governorates, and a supplemental letter to the DCA on Monitoring Indicators repeated exactly the two objectives of the above-mentioned PDO in the PAD.

1.2.2 With respect to health status, according to the main text of the PAD, it was expected that the project would contribute to Egypt's medium-term plan to reduce: (i) infant mortality rate from 38/1000 to 29/1000; (ii) under-five mortality from 84/1000 to 64/1000; and (iii) deaths of women due to pregnancy and delivery from 160/100,000 to 90/100,000. Since other factors will also affect these indicators, for purposes of monitoring the effects on health status of universal coverage to primary health care and public health services in the three Governorates, it was proposed to monitor levels and trends in these measures before, during and after the project, and compare these indicators to other comparable Governorates where there was no Bank project intervention.

1.2.3 With respect to measuring the effects of the project on access to, quality of, equity, and efficiency of primary health care services, according to the PAD, use of a needs-based Master Plan, retraining physicians to practice family medicine, and

operationalizing the insurance entities in the pilot areas would be used as process measures for these indicators. Increased use rates for primary care services would also be expected, monitored, compared pre- and post-project implementation, and compared to other Governorates.

1.2.4 Annex 1 of the PAD and the Supplemental Letter to the DCA on Monitoring Indicators did not provide any baseline values or quantitative targets for the selected indicators.

1.3 Revised PDO (as approved by original approving authority) and Key Indicators, and reasons/justification

1.3.1 In connection with the June 2004 project restructuring, the PDO was modified to read as follows: "The objectives of the project are to expand health coverage with a basic package of primary health care and public health services to the poor population in two pilot Governorates and improve access and efficiency of primary health care services through rationalization of health infrastructure in two pilot Governorates". The revised PDO was approved by the Bank's Board of Directors on a no objection basis in June 2004.

1.3.2 New performance indicators were developed to monitor the achievement of the revised PDOs. In order to capture the main elements of the revised PDOs, the indicators included three indicators on accessibility, four on coverage and four on enrollment for the general population, the uninsured and the poor. Indicators on the utilization rate, the average number of daily encounters per physician and the average number of antenatal care visits per pregnant woman would be used to monitor efficiency. For the indicators that are related to the Family Health Funds (FHFs) that were established under the project, the baseline values were zero. Drawing on the lesson of original objectives that were too ambitious, the targets were set at levels that could be realistically achieved.

1.3.3 In the first five years, the project suffered many implementation problems and delays. In particular, Parliament rejected a new law proposed by Government to unify the existing health insurance laws and achieve universal coverage. As of May 1, 2004, only 13 percent of the credit amount had been disbursed (with half of the disbursements made in the last six months). If the project were to close on the original closing date of June 30, 2004, it would not achieve its objectives and would close with unsatisfactory performance. The GOE proposed to revise the PDO by removing "universal coverage" as an explicit development objective and to reduce the scope of the first objective from three to two Governorates.

1.4 Main Beneficiaries

(original and revised, briefly describe the "primary target group" identified in the PAD and as captured in the PDO, as well as any other individuals and organizations expected to benefit from the project)

1.4.1 By supporting the Government's long-term comprehensive reform program, the project would ultimately benefit the entire population. According to the PAD, the project design would ensure that in the medium term the poor will benefit more than those who already enjoy adequate access to basic primary care. First, the initial stage of phasing in universal coverage to a basic package of primary health care services would largely benefit the poor, children, women and other underserved vulnerable groups. Second, project activities in facility rehabilitation would be predicated on a needs-based Master Plan emphasizing poor, underserved areas. Third, the types of primary care and basic public health programs to be supported disproportionately benefit poor groups. Finally, because the poor are less able to substitute private for public services, project activities which help to improve quality and availability of services and rationalize the payment system in public delivery would therefore have an immediate impact on the poor.

1.4.2 Some project activities benefited all groups: basic curative and investigation services and a referral system to rationalize utilization of secondary care services. However, specific groups were targeted under this project: the public health, primary care and universal coverage initiatives will substantially benefit women, children and other disadvantaged population groups. In January 2008, the DCA amendment introducing a performance-based financing arrangement was intended to target the poor and the uninsured.

1.5 Original Components (*as approved*)

1.5.1 The project (estimated cost including contingencies: US$387.0 million) had two components:

Component 1: Provide universal access to a basic package of primary health care (PHC) services (estimated cost including contingencies: US$347.3 million), with three subcomponents:

a) Implement Governorate PHC Insurance System (US$22.8 million);
b) Improve quality and efficiency of PHC delivery system (US$299.0 million); and
c) Improve public health programs (US$22.5 million).

Component 2: Reform of the Health Insurance Organization - HIO (estimated cost including contingencies: US$39.7 million).

1.5.2 According to the PAD, taken together, the two project components would begin the process of introducing universal coverage for a comprehensive package of services to be administered by a single national health insurance entity. During Phase I, universal coverage for a basic primary health care package would be implemented in the three pilot Governorates. Phase I would also address reforming the organization and management of broad-based MOH public health programs, which either are included in the PHC benefit package or provide the requisite complementary services to the basic primary health care benefit package. In the long run, a restructured HIO would become the National Health Insurance Fund (NHIF), a national insurance entity administering the country's social health insurance system. *According to the PAD, to administer*

introduction and operation of the basic primary health care package in pilot Governorates during Phase I of the reform (which includes HIO restructuring at the national level), Governorate level HIO subsidiaries would be used. To ensure efficient and effective delivery of quality services, the delivery system would also be rationalized. This process would entail testing and adjustment of primary health care system reforms in Phase I pilot Governorates, followed by extension of those reforms to the entire nation in later phases.

1.5.3 The project would support a shift in investment policy away from its current urban and tertiary emphasis by focusing major investments on primary care facilities largely in underserved areas, coordinated with EU support on training and capacity building of staff for the new family health service model. Establishment of needs-based Master Plans as the framework for facility rehabilitation and human resource development supported by the project would serve as the mechanisms to effectuate this shift. At the same time, by improving HIO's operational efficiency, the project would support extension of access to a basic primary health care package through the insurance system.

1.5.4 It is noteworthy that, in the description of the project, both the PAD and the DCA did not include a component for Project Management, which turned out to be needed early on in project implementation.

1.6 Revised Components

1.6.1 With the June 2004 restructuring, Component 1 dealt with only two (instead of three) pilot Governorates: Alexandria and Menoufia[1].

1.6.2 In May 2006, the GOE requested and was granted an extension to utilize some savings to finance a rapid response to address the Avian Influenza crisis. A new sub-component 1.4 for Avian Influenza activities was added with an allocation of US$3.10 million. Since this new sub-component, including public health activities, was consistent with the revised PDOs in expanding public health services, there was no need to change the PDOs.

1.6.3 In January 2008, the DCA was amended to introduce a new sub-component 1.5 for a performance-based financing arrangement to improve the performance of the project by linking disbursements to actual enrollment and utilization of services by the poor and uninsured in the Family Health Funds. This amendment to the DCA went through a level two restructuring, which was approved by the Bank' Regional Vice President, with no change in the PDOs.

[1] Part A of Schedule 2 of the DCA on "Description of the Project" mentioned specifically the three Governorates of Alexandria, Menoufia and Sohag. In the PAD and the DCA, the distinction between the "Project" financed by the IDA credit and the "Program" financed also by co financiers is not that clear. To the extent that the DCA dealt only with the "Project" financed by the IDA credit, Part A should also have been revised when the DCA was amended in June 2004.

1.6.4 A component on project management (Component 3) was added in the early years of the project to cover expenditures incurred by the TSO for managing the project. However, the DCA was not amended to reflect that change.

1.7 Other significant changes
(in design, scope and scale, implementation arrangements and schedule, and funding allocations)

1.7.1 Because of lack of political support and the inability of the Family Health Funds (FHFs) that were established in the Governorates to function as full-fledged insurance entities[2], the overall reform of the social health insurance system could not materialize. In the original project design, the HIO was to be fully engaged, but its role was significantly reduced at the request of the former Minister of Health. Only some activities were carried out to support and upgrade the existing HIO, both in capacity building of HIO leaders and supporting HIO IT infrastructure.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry
(including whether lessons of earlier operations were taken into account, risks and their mitigations identified, and adequacy of participatory processes, as applicable)

2.1.1 In the HSRP Strategy Paper (1997), the GOE articulated its long-term reform vision as the achievement of universal coverage with basic health services for all its citizens.

2.1.2 According to the PAD, the Bank's focus in this project would be on the Government's chosen priorities for the first five-year phase of the reform: universal coverage for a basic package of primary health care, including rationalization of the primary health care delivery system, and reform of the HIO. The piloting of reforms in a limited number of Governorates was a very positive aspect of project design, since reform involves changing the incentives for both health providers and patients. Based on agreed selection criteria, the Governorates chosen by the GOE were: Alexandria, Menoufia, and Sohag, and represented one Governorate from each of Egypt's major subdivisions (i.e., Urban Governorates, Lower Egypt, and Upper Egypt) excluding the sparsely populated Frontier Governorates.

2.1.3 Similarly, the HIO, which then covered one-third of the population, would be reformed to improve its efficiency of administration and service delivery. At the time of appraisal, it was running a 40 percent deficit and was not financially sustainable in the

[2] According to Egypt's Health Sector Reform and Financing Review dated February 2004, the development of the FHFs was constrained by the legislative environment governing the health sector in Egypt, which prohibits any agency outside the HIO from collecting premiums or capitated payments from individuals or families. The FHFs ended with an awkward legal and institutional status. However, the FHFs introduced some insurance concepts in PHC: contracting PHC facilities, concept of enrollment in FHF for coverage by PHC services, and cost-sharing of enrolled beneficiaries, both insured and uninsured.

long-term. It would also be transformed to become the future single national health insurance entity by enhancing its role to function through new Governorate level subsidiaries as the insurance entity administering the basic primary health care benefit package in the three pilot Governorates.

2.1.4 At the time the credit was made, the Bank had relatively limited experience in comprehensive health sector reform programs focusing on insurance reform and universal coverage. It should be noted that such a comprehensive health system reform approach was identified as a strategic priority in the 1997 World Bank Strategy for Health, Nutrition and Population, and the project design was intended to reflect a movement in that direction.

2.1.5 The design of the project was informed by sector work carried out by the Government with the assistance of donors, including the Bank. However, institutional and stakeholder analyses and consultations that were carried out did not flag possible resistance and solutions. Risk assessments and mitigation plans were inadequate, with unwarranted optimism about capacity and political commitment. Project preparation did not analyze the political economy of the proposed reforms, which would have provided a better understanding of the political challenges facing the proposed reforms. Since health reform usually takes place over a long period, there would certainly be changes in the leadership of the sector that would affect the ownership of and commitment to reforms.

2.1.6 The design of the project had two components for universal access to a Basic Benefit Package (BBP) of PHC services and for reform of the HIO (both components were listed specifically in the PAD and the DCA). It did not include a component for project management, which turned out to be needed early on in the project implementation.

2.1.7 The reform of the HIO (component 2) should not have been put under the umbrella of the MOH, but should have been a component under the management of the HIO itself with its own Special Account; also, it probably would have been better to put sub-component 1.1 (implement governorate insurance system) under the management of the HIO. Actually, this was the original design of the project, but it was strongly opposed by the Minister of Health at the time who insisted on reducing the role of HIO. A lesson learned is that in order to maximize the chances of success of a health reform project dealing with both health and insurance issues, the leadership role must be effectively shared between the Ministry of Health and the organization in charge of health insurance.

2.1.8 Finally, there was no implementation manual that spelled out clearly and in sufficient detail, at least for the first year of the project, what had to be done, who was supposed to do what, when and at which cost. This turned out to be major problem for the insurance part of the Project. An Operations Manual was “being developed” at the time the credit was signed, but it had many shortcomings (for example, it did not include a chapter on Monitoring and Evaluation). That 1998 draft manual was never finalized because the original project design was changed by the decision of the former Minister of Health to reduce HIO involvement.

2.1.9 In theory, the HSRP provided a rational basis for reform; technically, the right issues had been identified, and there was a strong government interest and commitment to reform, represented by the presence of a dynamic Minister of Health, which suggested that this was a good time to initiate the reform process. The project design was also in line with the Bank's global Health Sector strategy (approved in 1997) which supported the implementation of such a system-wide reform project. However, in retrospect the project design proved to be too complex and ambitious in scope to be carried out in the context of a five-year investment project. Moreover, the project was not ready for implementation, but the Bank decided to move forward with the project in light of the possibility of supporting a system wide reform. Consequently, the first five years of the project were focused on completing the preparatory activities (e.g., completion of the Master Plans and establishment of project implementation capacities), which explains the very low disbursements rates during the first five years (the original project period). The project's quality at entry is rated "Unsatisfactory".

2.2 Implementation
(including any project changes/restructuring, mid-term review, Project at Risk status, and actions taken, as applicable)

2.2.1 Throughout the project period, co-financiers (EC, USAID and AfDB) were important players in the health sector. The Ministry of Health (MOH) had the overall responsibility for management and implementation of the HSRP, with the assistance of a Central Department for Technical Support (TSO) at the central level and Technical Support Teams (TSTs) in the pilot Governorates. To ensure continuity, technical quality, and effective coordination between the many organizations involved in planning and implementing the reforms, the MOH was to be assisted by a Health Policy Forum (HPF) and a Program Planning and Monitoring Committee (PPMC), but it seems that these entities did not play an active role in project implementation.

2.2.2 There was high-level commitment and participatory analytical work from the MOH for health reforms in the preparation and approval stages of the project; the IDA Credit was made effective in one month, which is very unusual in Egypt. However, changes in leadership of the sector affected the ownership of and commitment to reform. For the first four years or so of project implementation, there was no local reform team with the willingness, technical capacity and political support to lead the process. During project implementation, there were three Ministers of Health and five Managers of TSO, and there were also changes at the governorate level. Also, it took a long time to select and train TSO staff. The management capacity of the TSO was weak in the early years of project implementation.

2.2.3 There was opposition from MOH and other entities to efforts to transform the HIO into a single-payer plan and to separate finance from the delivery of health services. Although the PAD indicated that Governorate level branches or subsidiaries of the HIO would serve as the insuring entities for the primary health Care BBP, this did not happen. Instead, as early as 1999, Family Health Funds (FHFs) that by law could not collect

premiums and capitated payments from individuals and families were established in the pilot Governorates, supposedly as "insurance" entities, but they could not really function as insurance entities (for more details, see Annex 2 on Outputs by Component). Since, in addition, Parliament rejected the insurance law proposed by the Government, the insurance reforms could not be implemented as planned, while expansion of family health services continued.

2.2.4 The mid-term review (MTR) in December 2001 assessed the project progress with reference to the original project objectives and design and concluded that the original project objectives remained valid but that an extension of the project closing date might be necessary to complete all the proposed activities. The MTR therefore did not identify the need for restructuring and revision of the PDO, which was only identified at a later stage (in 2004).

2.2.5 The Master Plans (MP) for the Governorates were financed by a trust fund administered by the Bank (Alexandria) as well as by the IDA Credit (Menoufia and Sohag). Data collection and verification and the mapping of existing facilities took a long time, so that altogether the preparation of the MPs took three years. This delayed the start of the reconstruction/remodeling of health facilities. That process was also delayed with the liberalization of the Egyptian Pound in January 2003 which led to significant increases in the local currency costs of imported materials. Civil works contractors who had fixed price contracts in Egyptian pounds had to interrupt their work until adjustments could be made to the contract prices. From 2003 to 2006, contractors were also reluctant to enter into new contracts until prices stabilized.

2.2.6 In 2003, Ministerial Decree 147 was issued to increase revenues for health care by authorizing Family Health Units (FHU) and Centers (FHC) to collect user fees and drug copayments from beneficiaries. The introduction of fees and copayments had a negative effect on the utilization rate of FHUs and FHCs. The decree did not yield substantial revenues since the fee structure covered only a small portion of the actual cost of providing a basic benefit package of services, and drug copayment were set at one-third of the market price of the drugs. Also, the decree did not provide any risk pooling mechanism as fees are collected at the time of service provision.

2.2.7 In 2003/2004, after a long period of slow implementation and disbursement problems, the MOH and project management successfully completed a Remedial Action Plan (RAP). In June 2004, the Project was formally restructured to abandon the objective of universal coverage and focus more on the poor and the uninsured, while reducing the number of pilot Governorates from three to two.

2.2.8 In 2005, the reform process received a major impetus when on July 6 President Mubarak announced a new medium-term framework for reforming the health sector. This called for: (a) improving the management capacity and financial sustainability of the HIO; (b) expanding the coverage of primary care services under the FHF in all governorates; (c) improving the performance of all state-owned hospitals; (d) expanding access to health services to all uninsured Egyptian citizens through the introduction of a

mandatory Social Health Insurance (SHI) program; and (e) merging all these components into a national SHI system over the medium term.

2.2.9 One of the basic ideas under the project was to begin with a new system of family based primary health care, the first level of care people approach when they have a health problem. With this "Family Health Model"[3], families rather than individuals are registered with specific doctors and facilities in their home neighborhood. In 2005, the MOH adopted the family health model, developed under the project, to be the service delivery model rolled out in all primary health care facilities in Egypt.

2.2.10 While the project was successful in rationalizing primary health care services, improving access and expanding health coverage to the general population, the required payment of registration fees turned out to be a key financial constraint in increasing the enrollment of the poor and the uninsured population. The Government aimed to raise the ceiling on the number of exempted poor and requested assistance to finance the corresponding registration fees and co-payments through the project. In order to address this issue, in September 2007, the Bank approved an extension of the project for 18 months to develop appropriately targeted exemption of registration fees payments and health services co-payments for the poor and uninsured population enrolled in the existing Family Health Funds (FHF) in the two pilot governorates of Alexandria and Menoufia. This extension provided an opportunity to improve the beneficiary enrollment scheme and to refine the adopted exemptions scheme as well, in collaboration with the Ministry of Social Solidarity (MOSS).

2.2.11 In January 2008, the HSRP Credit Agreement was also amended to introduce a Performance-Based Financing arrangement to improve the performance of the project by linking disbursement to actual enrollment and utilization of services by the poor and uninsured in the FHF. Accordingly, a new Project Operations Manual was prepared, establishing the detailed rules and procedures for the enrollment and exemption of target groups, in collaboration with the Ministry of Social Solidarity (MOSS), and for the verification of the process by independent auditors. Performance agreements and health services provision contracts between the different parties (MOH, FHF and Health Services Providers) were finalized. The MOH contracted the Center of Social and Criminal Research to develop a social targeting mechanism in the two pilot governorates under the supervision of the MOSS. However, this performance-based financing

[3] The Family Health Model is a consolidated Beneficiary-Centered care model, dealing with Family within the context of community as the focus of high quality service delivery through a qualified Family Physician as a "gatekeeper" who deals with 80 percent-90 percent of cases providing a BBP including special services for vulnerable groups. Family Health facilities should be accredited before contracting with the FHF on the basis of performance-based payments. The FHF provides service accessibility to the poor population counteracting the cost-sharing financial barrier. Implementation of the Family Health Model follows a step-wise approach through (i) Infrastructure Development, including prototype building and prototype medical and non-medical equipment list to fulfill the BBP requirements, (ii) Human Resource Development, including: Staff Pattern, Job Description and Training Programs and (iii) implementation of standard operating systems as Standard Practice Guidelines, Essential Drug List, Family Folders, Clinical Information System and Referral System.

arrangement was introduced late in the project cycle. Although it was discontinued, it is an important experience on which the Government can build. It could be followed by a proxy means testing for social targeting and payments with the Ministry of Social Solidarity (MOSS) identifying the poor, the Ministry of Finance (MOF) providing the budget for the exemption of the poor, and the Ministry of Health providing health services.

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

2.3.1 According to a 2009 IEG Report on "Improving Effectiveness and Outcomes for the Poor in Health, Nutrition, and Population", M&E are critical for implementing and monitoring health reforms and for demonstrating impact. A strong and consistent M&E system is important for understanding whether the proposed reforms will work, given that they involve changing the incentives for both providers and patients; hence, the idea to first launch reforms in pilot regions as was the case for this project. Based on these results, decisions can be made on a wider replication of successful reforms. Evaluation of pilot reforms and rapid dissemination of results can also demonstrate to skeptics that the reforms are feasible, weakening political resistance.

2.3.2 According to the PAD, the TSO would be responsible for monitoring progress against agreed performance indicators and for undertaking an extensive (independent) evaluation of the reform and the project interventions. However, that very important aspect of the project was not at all prepared. The TSO's main M&E functions were described in very general terms. The agreed performance indicators were listed in Annex 1 of the PAD and in a supplemental letter to the DCA, but these documents did not provide baseline values or quantitative targets for the indicators. The draft 1998 Operations Manual did not include any specific chapter on M&E.

2.3.3 From December 2002 to June 2003, a consulting firm assisted MOH in developing and testing an M&E system to follow HSRP progress and evaluate its impact, and in the process trained Egyptian staff. The system was based on the original project, with universal coverage and three Governorates. It had to be revised when the objective of universal coverage was abandoned and the number of pilot Governorates was reduced from three to two in connection with the June 2004 restructuring. New key performance indicators (as shown in Section 3.2 and in Annex10) were developed and refined over time to monitor the achievement of the revised PDOs.

2.3.4 The development of the MIS and Clinical Information System (CIS) at the level of the FHFs and health facilities is discussed in Annex 2 on outputs by component. The implementation of the MIS and CIS has been unsatisfactory. Basically, the CIS is not operational. The MIS system that has been put in place does not include a connection between the FHFs and the health facilities.

2.4 Safeguard and Fiduciary Compliance
(Focusing on issues and their resolution, as applicable)

Environment

2.4.1 The Environmental Category was B. The only project input with a potential environmental impact was the rehabilitation of public health facilities. The capacity to handle medical and non-medical waste was incorporated into the sector norms and standards, and the Master Plans and detailed designs of health facilities took into account the requirements for waste treatment and disposal capacity in health facilities.

2.4.2 An environmental safeguards review carried out in 2006 found out that health facilities are following, to an acceptable level, the environmental requirements in terms of using anti-bacterial finishing materials for floors, walls and ceilings; having dedicated temporary storage of medical wastes; having an internal sewage network connected to the public sewerage network (if existing) or to a bottom and sides-sealed holding tanks; raising awareness of staff on the danger and risk of exposure to health care waste; and putting in place waste handling procedures. There were variations in the levels of implementation of good environmental practices[4] depending on the level of training and awareness of the staff and the strictness of management in implementing those practices. Health facilities have an incentive to comply with environmental safeguards since this is a requirement for accreditation. In addition, the FHFs conduct quarterly supervision to the contracted facilities.

Procurement

2.4.3 TSO's task was complicated by having to deal with many donors with different regulations, but it did manage. Regarding procurement under the IDA Credit, in addition to the usual post reviews, two independent procurement reviews were carried out in 2006 and 2009. There was no case of misprocurement, and the reviews showed that procurement by the TSO has been satisfactory.

2.4.4 According to the TSO, the Bank procurement specialists provided very good service to the TSO. There were very good communications between the Bank and the TSO, which was able to consult the Bank informally before requesting the Bank's non objection. The Bank made available standard bidding documents in Arabic that the TSO used for National Competitive Bidding (NCB).

Financial management

[4] Generally, the situation was better in Alexandria than Menoufia, and the further away from urban centers, the less satisfactory the conditions were.

2.4.5 There has been no major issue regarding financial management of the project by the TSO. The TSO had a well functioning accounting and reporting system and a sound control structure, with a financial management manual describing clearly the responsibilities of the experienced financial staff. Financial reports have been clear and acceptable to the Bank. Audit reports have been submitted on time and unqualified.

2.4.6 The Financial Management (FM) capacity that was built during this project is providing an acceptable launching point for the new Health Insurance Systems Development Project (HISDP) as the latter is benefiting from the FM system as well as the expertise of the FM Officer of the closed HSRP.

2.5 Post-completion Operation/Next Phase

(including transition arrangement to post-completion operation of investments financed by present operation, Operation & Maintenance arrangements, sustaining reforms and institutional capacity, and next phase/follow-up operation, if applicable)

2.5.1 There has been progress in strengthening primary health care and family services and defining a basic package of primary health care and public health services. This progress will be continued with the rolling out of the Family Health Model in all the governorates, financed by GOE and other donors. However, efforts to introduce universal coverage and to transform the HIO into a single-payer plan and to separate finance from health delivery have failed. The system remains highly fragmented, with about two dozen entities providing and financing health care.

2.5.2 On December 22, 2009, the Executive Directors of the World Bank approved a Loan of US$75.0 million to Egypt (Loan No. 7828-EG) for a Health Insurance Systems Development Project (HISDP) to support the Government's program to establish an efficient and effective national social health insurance system. The PDO of the HISDP is to assist the Government of Egypt in improving the financial sustainability and efficiency of its social health insurance operations.

2.5.3 The HISDP represents a natural extension of the ongoing collaboration between Egypt and the World Bank on health sector reform and builds on the activities and lessons of the HSRP. The HISDP will finance the establishment of the single national health insurance Payor's IT-enabled operations as part of the new national health insurance program (in Suez, Sohag, and Alexandria Governorates). The HISDP consists of a single component, entitled Health Insurance Payor Operations & Management Information System, which will finance three tightly integrated contracts. These are: (a) Main Business System Contract - delivering an integrated package of business process development, application software, operational and management training, and extended technical support services; (b) Hardware Platform Contract - delivering the necessary computing and communications technologies to operationalize the new business functions in the three pilot governorates; and (c) Verification and Validation (VV) Contract, whereby a specialized health insurance firm will deliver hands-on support to the new Egyptian Payor for decision-taking, activity coordination, technical / substantive

advice, and verification and validation services. The new business system will be introduced gradually across the three pilot governorates.

2.5.4 The HIO will be the implementing agency of the HISDP and a project implementation unit (PIU) financed by Government funds will be established for fiduciary management of the project and for monitoring and evaluation.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

(to current country and global priorities, and Bank assistance strategy)

3.1.1 The project remains relevant to the current country priorities and the Bank assistance strategy.

3.1.2 According to the latest Country Assistance Strategy (CAS) for the period FY06-FY09, dated May 20, 2005, the key development objectives of the GOE were the "achievement of high and sustainable GDP growth" and the "alleviation of poverty and attenuation of income disparities". The Bank Group proposed to help the GOE achieve its goals by aligning its support over the next four years (FY 06-09) to three key strategic objectives, namely, facilitating private sector development, enhancing the provision of public services, and promoting equity.

3.1.3 With regard to enhancing the provision of public services, Bank Group support would include: (i) improving the quality and efficiency of the existing government health care delivery system by reducing fragmentation, introducing greater managerial autonomy and accountability, and contracting of services when appropriate; (ii) placing greater emphasis on prevention and primary care; and (iii) enhancing management of public funds, including the HIO, through the introduction of modern information systems and management practices.

3.1.4 With regard to promoting equity, Bank Group support would aim, *inter alia*, to improve access to healthcare for the poor and those who do not have employment-based health insurance coverage. This would be done in a cost effective manner. According to the CAS Results Framework, it would involve increased public investments in family health services in priority underserved regions, and development of institutional arrangements to support the expansion of health insurance coverage in primary care.

3.2 Achievement of Project Development Objectives

(including brief discussion of causal linkages between outputs and outcomes, with details on outputs in Annex 2)

3.2.1 The table below shows the trend in key performance indicators for the two governorates of Alexandria and Menoufia after the restructuring, and Annex 10 presents the end of project results separately for Alexandria and Menoufia. The data show that the revised PDOs have been achieved with respect to the two main objectives: expanding

health coverage with a BBP of PHC services to the poor, and improving access and efficiency of PHC services through rationalization of health infrastructure.

Objective 1 – Expanding health coverage with a basic package of primary health care and public health services to the poor population in two pilot governorates.
Rating: Significant.

3.2.2 At project closing, 2.4 million beneficiaries were registered and covered by the FHFs to receive the BBP of PHC services; this represented 112 percent of the end of project target. In the last few years, the two FHFs succeeded in identifying 0.6 million poor persons, and the coverage for the poor represented 117 percent of the end of project target (121 percent for Alexandria and 114 percent for Menoufia).

Objective 2 – Improving access and efficiency of primary health care services through rationalization of health infrastructure in two pilot governorates.
Rating: Modest

3.2.3 At project closing, the package of PHC services was physically available to 3.0 million persons (representing 83 percent of the end of project target – 107 percent for Alexandria and 72 percent for Menoufia), including 1.9 million poor persons (representing 103 percent of the end of project target – 90 percent for Alexandria and 113 percent for Menoufia). The performance would have been better if a greater number of FH facilities had been accredited and contracted by the FHFs (out of the 331 facilities, only 241 had been contracted, representing 73 percent of the end of project target).

3.2.4 Although the improvement in the physical accessibility of the poor and the uninsured is significant, financial accessibility to the BBP of PHC services remains a concern. Efforts begun in the last eighteen months of the project to enroll the poor (about 0.4 million were enrolled, or 77 percent of the end of project target) in the FHFs in Alexandria and Menoufia need to be continued and increased, particularly in Alexandria.

3.2.5 Regarding the rationalization of health infrastructure and the efficiency of services, 1,103 FH clinics have been constructed or renovated in compliance with the governorate health plans; this represents 97 percent of the end of project target (105 percent for Alexandria and 92 percent for Menoufia). At 2.3 visits per person per year, the average utilization rate for both governorates is 92 percent of the end of project target of 2.5; Alexandria (3.3/ visits/ person/ year) is performing much better than Menoufia (1.2/ visits/ person/ year). On the other hand, the efficiency has deteriorated over the last three years or so. Maybe because of a lack of incentives or maybe because of overstaffing, the average number of daily encounters per physician is only about 12, or 50 percent of the end of project target (62 percent for Alexandria and 37 percent for Menoufia). An explanation is that family physicians work mainly on curative and emergency visits which constitute only about 55 percent of facility utilization. In any event, recently MOH revised the standard roster of family physicians and changed it from 500 families per physician to 1,000/1,200 families per physician.

Key Performance Indicators for Both Governorates				
Outcome / Impact Indicators	**Value**	**November 2006**	**September 2008**	**March 2009**
Accessibility – General Population. Population with access to the BBP of PHC services based on planned capacity of operational FH facilities (constructed / renovated) based on national standards.	Target	3,622,000	3,622,000	3,622,000
	Actual	2,230,000	2,530,000	2,992,238
	Achievement %	62%	70%	83%
Accessibility – Poor. Poor population with access to the BBP of PHC services based on planned capacity of operational FH facilities (constructed / renovated) in poor areas as identified by the governorate health plans.	Target	1,831,391	1,831,391	1,831,391
	Actual	1,456,622	1,718,476	1,883,548
	Achievement %	80%	94%	103%
Accessibility - Clinics complied with health plans. Number of FH clinics (constructed / renovated) in compliance with the governorate health plans.	Target	1,141	1,141	1,141
	Actual	839	981	1,103
	Achievement %	74%	86%	97%
Coverage – General Population. Total number of beneficiaries covered by the FHF to receive the BBP of PHC services.	Target	2,173,200	2,173,200	2,173,200
	Actual	1,847,667	1,956,063	2,430,991
	Achievement %	85%	90%	112%
Coverage – Uninsured. Total number of uninsured beneficiaries covered by FHF to receive BBP.	Target	1,086,600	1,086,600	1,086,600
	Actual	1,056,462	1,072,307	1,355,514
	Achievement %	97%	99%	125%
Coverage – Poor (identified). Total number of poor beneficiaries identified by any identification method (social workers / MOSS / NGOs / geographical targeting).	Target	825,000*	495,000*	495,000*
	Actual	75,385	417,038	578,603
	Achievement %	9%	84%	117%

Key Performance Indicators for Both Governorates				
Outcome / Impact Indicators	**Value**	**November 2006**	**September 2008**	**March 2009**
Coverage – Facilities contracted by the FHFs. Number of FH facilities contracted by the FHFs, compared to the total; number of MOH PHC facilities.	Target	331	331	331
	Actual	205	205	241
	Achievement %	62%	62%	73%
Enrollment- General Population. Active enrollment in the FHFs based on renewal of family health folders.	Target	2,173,200	2,173,200	2,173,200
	Actual	1,087,235	1,275,897	1,406,018
	Achievement %	50%	59%	65%
Enrollment – Uninsured. Active enrollment of uninsured beneficiaries based on renewal of family health folders.	Target	1,086,600	1,086,600	1,086,600
	Actual	296,029	410,930	548,484
	Achievement %	27%	38%	50%
Enrollment – Poor. Number of enrolled poor beneficiaries (insured and uninsured).	Target	n.a.	495,000*	495,000*
	Actual	n.a.	141,182	380,159
	Achievement %	n.a.	29%	77%
Enrollment – Exempted poor (uninsured).	Target	n.a.	247,500	247,500
	Actual	n.a.	141,182	188,146
	Achievement %	n.a.	57%	76%
Efficiency – Utilization rate. Average number of visits per person per year.	Target	2.5	2.5	2.5
	Actual	1.6	2.2	2.3
	Achievement %	64%	88%	92%
Efficiency- Average number of daily encounters per physician.	Target	24	24	24
	Actual	25	13	11.9
	Achievement %	104%	54%	50%
Efficiency – ANC utilization rate. Average number of antenatal care visits per pregnant woman.	Target	5	5	5
	Actual	3.7	3.0	2.7
	Achievement %	74%	60%	54%

* With the approval of the Bank, the MOH revised the end of project target for the poor from 825,000 to 495,000 based on the assumption that 60 percent of all the poor in both governorates would be covered by primary health care services, in line with the assumption made after the June 2004 restructuring that the project would cover 60 percent of the general population of both governorates having access to primary health care services.

Other achievements

3.2.6 Under the project major innovations in service delivery were introduced in Egypt. The Family Health Model (FHM) was adopted for the first time. Integrated services were provided under the same roof for the entire family, requiring less time and transportation and offering better quality of care. Both physicians and patients valued the concept of continuity of care (being seen by the same FH physician and having a single medical record). The FHM covers four main areas: building and equipment; medical and non-medical supplies; drugs; and human resources. A FHM implementation manual was developed under the reform; MOH now has standards for buildings and equipment. The introduction of the family health practice, a specialty that is new to Egypt, can in the long run rectify the surplus of specialist physicians and support a more holistic and integrated approach to patient care. Government demonstrated its commitment to the FHM by declaring it as the national primary health care model. The fact that the FHM is now being implemented in the whole country is the greatest achievement of the HSRP.

3.2.7 Performance-based incentive systems were also adopted for the first time in Egypt. Incentives were tied to institutional factors (e.g., attainment of accreditation status, enrollment levels and patient satisfaction). Incentives of up to 250 percent of base salary were then distributed to employees based on job type, years of experience, academic qualifications and on-the-job performance. They succeeded in increasing provider accountability to quality standards and reform goals. The reform program thus demonstrated that health provider behavior can be favorably modified to serve national health sector goals. This experiment was limited to public (MOH and HIO) providers. Subsequently, the performance-based incentive systems were replaced in September 2008 by a new mechanism of fees for services.

3.2.8 Quality of care and appropriateness of clinical practices were supported through a facility accreditation process. All facilities went through an accreditation process established by the MOH Quality Improvement (QI) Directorate. The QI Directorate published and disseminated a set of clinical practice guidelines for all components of the BBP, which were used for training of providers at the sites.

3.2.9 The service delivery component of the HSRP has succeeded in increasing patient satisfaction and demand for PHC services by utilizing a holistic family health approach to patient care. The surveys conducted in 2009 showed that reformed and accredited health facilities are providing somewhat better quality services than the non reformed and the non accredited ones. An issue identified by the surveys is that beneficiaries have a limited understanding of their entitlements, which has had a negative impact on the demand for services. The MOH is exploring new approaches to improving patient communication and outreach programs to address these shortcomings.

3.2.10 Another promising development was the introduction of the performance-based financing arrangement linking disbursement to actual enrollment and utilization of services by the poor and uninsured in the FHFs. This financing arrangement was a pilot

that aimed to increase the utilization of health services by the poor beneficiaries after the achieved improvements in service accessibility. This pilot was developed in collaboration with the team implementing the Plan Nacer in Argentina which has a similar incentive scheme in place, and thus represents the important role the project played in global knowledge transfer. Although the arrangement was closed at the end of the project, it provides an important implementation experience on which the Government can build future programs. The Government is currently developing a new social targeting mechanism to exempt the poor from premiums and co-payments: they will benefit greatly from reviewing the experiences and lessons learned from this financial arrangement.

3.3 Efficiency

(Net Present Value/Economic Rate of Return, cost effectiveness, e.g., unit rate norms, least cost, and comparisons; and Financial Rate of Return)

3.3.1 As shown in Annexes 1 and 2 of the ICR, three-quarters of the IDA Credit[5] were used to finance the construction/rehabilitation, equipping and furnishing of health facilities. In the HSRP, the preparation of Master Plans (MP) was used as a basis for rationalizing health infrastructure investment, and the design of FHUs and FHCs[6] financed by the IDA Credit was based on the standards and guidelines of the MP. However, because the MOH used the services of different international and national consulting firms that led to different interpretations in applying these standards and guidelines in the pilot governorates, there were some deviations from the MPs. Annex 3 presents the deviations in the net areas of the health facilities financed by the IDA Credit in the Alexandria and Menoufia Governorates.

3.3.2 The MOH decided to take advantage of the experience under the project to revise the national standards and guidelines of health planning for service delivery of the Family Health Model. The objective was to reach a consensus on a FHM which is affordable for a roll out in new governorates based on a set of minimum acceptable standards. The new standardized model is a modified FHU2. The revised standards and guidelines were integrated within the accreditation and licensing system of family health facilities. The MOH also updated the governorate health plans.

3.3.3 The conclusion is that the construction/rehabilitation carried out for the 117 health facilities financed by the IDA Credit served a very useful purpose to determine the most cost effective design for the 2,500 facilities to be renovated and equipped by the end of June 2010, financed by the national budget.

3.3.4 An impact evaluation carried out in 2006 showed that, as an integrated package, the HSRP occasioned a shift from secondary to primary care. Although patient satisfaction

[5] US$71.91 million (out of US$94.69 million) were used to finance sub-component 1.2 to improve quality and efficiency of PHC delivery system.

[6] FHU1, FHU2, FHU3, FHU 4 and FHC.

differed across regions, a high accreditation score as well as family health training and infrastructure investment seemed to satisfy patients. A greater availability of drugs and a higher referral rate also played a role.

3.4 Justification of Overall Outcome Rating
(combining relevance, achievement of PDOs, and efficiency)
Rating: Moderately Satisfactory

3.4.1 As restructured in June 2004, the HSRP aimed to improve access to a basic package of primary health care and public health services to the poor population in two pilot Governorates (Alexandria and Menoufia). Under the project, the Ministry of Health adopted the Family Health Model which helped to introduce an integrated primary health care system, and is the model being rolled out in all primary health care facilities in Egypt. The investment carried out for the 117 health facilities financed by the IDA Credit served a very useful purpose to determine the most cost effective design for the 2,500 facilities to be renovated and equipped in all governorates, with GOE financing. The project laid a strong foundation for further development of the primary health care services in Egypt. In terms of expanding health coverage, the total number of beneficiaries covered by the Family Health funds to receive the basic benefit package (BBP) of primary health care (PHC) services reached 2.431 million persons, representing 112 percent of the end of project target (the target is 2.173 million persons of the 6 million population in the two pilot governorates); and the number of poor beneficiaries with access to the BBP of PHC services has reached 1.884 million persons, representing 103 percent of the end of project target (the target is 1.831 million persons). The 1,103 family health clinics constructed or renovated in compliance with the governorates health plans represent 97 percent of the end of project target of 1,141 clinics. Infrastructure investments under the project were also pro-poor: more than 30 percent went to the poorest deciles of districts, and about 50 percent to the poorest three deciles. The utilization rate of facilities is satisfactory overall, but the average number of daily encounters per physician has decreased over the last three years. Through this project, MOH, in collaboration with MOSS, developed a social targeting mechanism to conduct an identification of the poor in rural and urban areas. Using this mechanism, the percentage of poor beneficiaries (insured and uninsured) who enrolled in the BBP of PHC services increased from 15 percent in 2007 to 77 percent of the end of project target (0.495 million persons) in 2009. The Government will need to continue working on refining the targeting and enrollment mechanisms for the poor, in order to improve the newly adopted exemption scheme and to ensure increased health insurance coverage for the poor in the future. The Government has indicated its commitment to gradually increase its financing of the registration fees for the poor through general revenues.

3.4.2 Since the PDOs were formally revised (approved by the Board) when only US$13.6 million (about 15 percent of the IDA Credit) were disbursed, the outcome rating must take into account both the original and the formally revised objectives or targets[7]. As

[7] ICR Guidelines – OPCS – August 2006 (last updated on 2/9/2007) - Page 25 and Appendix B.

shown in the Table below, the weighted value of 4.55 corresponds to a rating between "Moderately Satisfactory" and "Satisfactory"; the overall rating is rounded to "Moderately Satisfactory", which is the same as the PDO rating in the last ISR.

	Against original PDOs	Against revised PDOs	Overall
1. Rating	Unsatisfactory	Satisfactory	-
2. Rating value*	2	5	-
3. Weight**	15%	85%	100%
4. Weighted value	0.30	4.25	4.55
5. Final rating (rounded)			Moderately Satisfactory
*Highly Satisfactory = 6; Satisfactory = 5; Moderately Satisfactory = 4; Moderately Unsatisfactory = 3; Unsatisfactory = 2; and Highly Unsatisfactory = 1. **% disbursed before/after PDO change			

3.5 Overarching Themes, Other Outcomes and Impacts
(if any, where not previously covered or to amplify discussion above)

3.5.1 Over the last ten years (1998-2008), steady progress has been made in improving the health status of the population. Annex 11 shows the trend in health indicators for Egypt, and for Alexandria and Menoufia. The under-five mortality rate fell from 31.5 to 24.2 (a reduction of 23 percent) in Alexandria, and from 30.5 to 17.3 (a reduction of 43 percent) in Menoufia. Maternal care has also improved. The maternal mortality rate fell from 93.7 to 50 (a reduction of 47 percent) in Alexandria, and from 98.3 to 45.4 (a reduction of 54 percent) in Menoufia. Generally, the health indicators show greater improvements in Menoufia than in Alexandria. There are many factors that influenced the improvements in health indicators, and the HSRP is only one of them. Actually, during the same period 1998-2008, the whole country also made good progress on its health outcomes, especially in reducing mortality among women, infants and children, and Egypt is likely to achieve the MDG targets by 2015. It is interesting to note that improvements in under five mortality rate and infant mortality rate have been significantly greater in Menoufia than Alexandria. There is one possible contributing factor. Alexandria is an urban governorate that attracts the population of neighboring governorates seeking medical care for complicated cases, so that some mortality cases registered in Alexandria actually belong to the neighboring governorates, which may inflate the mortality rates registered in Alexandria.

3.5.3 In 2006 and 2007, the World Bank shared with the Minister of Health a number of recommendations in a series of workshops on facets of social health insurance as follows: (i) use the development of the Benefit Package as the pillar for incremental transition; (ii) phased transition from supply-sided budget to social insurance financing including alternative sources of financing; (iii) introduction of capacity for strategic purchasing; (iv) separate provider-purchaser functions in HIO and MOH; and, (v) SHI models in

other regions such as Latin America and Central Europe. More recently, the Ministries of Finance and Investment have requested the Bank's collaboration on refining the actuarial models for assessing revenues and expenditures and developing projections on overall fiscal impact for the social health insurance. Under the Health Insurance Reimbursable Technical Assistance (RTA), the Bank is providing technical advice on (a) actuarial modeling and estimation of the fiscal and economic impact of the different policy options under consideration in the new Social Health Insurance (SHI) Law; and (b) policy advice on the content and design of the SHI Law. An independent review of the actuarial modeling of the financial and fiscal implications of the different reform scenarios was performed by an actuarial firm contracted by the Ministry of Finance.

(a) Poverty Impacts, Gender Aspects, and Social Development

3.5.4 The project deals with primary health care (PHC) and is, therefore, particularly important for women and children.

3.5.5 The main change resulting from the June 2004 restructuring was to focus on the poor. As mentioned above, the emphasis on the poor and the uninsured has been successful. For the two Governorates of Alexandria and Menoufia, at project closing significant progress had been made on accessibility, coverage and enrollment:

a) Accessibility: 1.884 million poor people had access to the BBP of PHC services based on the planned capacity of operational family health facilities (constructed / renovated) in poor areas as identified by the governorate health plans.
b) Coverage: 0.579 million poor beneficiaries had been identified by any identification method (Social workers / MOSS / NGOs / Geographical Targeting).
c) Enrollment: 0.380 million poor beneficiaries (insured and uninsured) had been enrolled.

3.5.6 Good progress has been made in Menoufia to enroll in the FHF almost all (94 percent) the identified poor, but in Alexandria the percentage is less than fifty percent. The Government has indicated its commitment to gradually increase its financing of the registration fees for the poor through general revenues.

(b) Institutional Change/Strengthening
(particularly with reference to impacts on longer-term capacity and institutional development)

3.5.7 It is important to differentiate between the delivery model and the financing. As mentioned above, the FHM has been endorsed by the Government as the primary health care model for the whole country, and is likely to be sustainable. On the other hand, the future of the Family Health Funds (FHFs) that have been established is uncertain at this stage. The Government is reviewing the experiences of the FHF as a basis for the design of the new health insurance system and primary care services which will be rolled out in the next phase of the health insurance reform program. A new health insurance law and a new social targeting mechanism funded by the MOF for exempting the poor are under

preparation by the Government. The Government requested and, in December 2009, the Bank approved the Health Insurance Systems Development Project (IBRD – US$75.0 million) in preparation for the new phase of the reform process. The introduction of Master Plans and the rolling out of the Family Health Model (FHM) are having a lasting impact on the rationalization of health facilities. The adoption of standards and guidelines strengthened the operational capacity of Family Health Centers (FHCs) and Family Health Units (FHUs). Also, the accreditation system has been institutionalized as part of the quality assurance system; it is a strong incentive for FHCs and FHUs to provide health services of good quality.

(c) Other Unintended Outcomes and Impacts (positive or negative)

3.5.8 The Family Health Model presents many advantages, but it could also have a negative impact on some programs, such as the family planning activities that were also financed by the Bank. According to a report by the Independent Evaluation Group (IEG) of the World Bank[8], there are indications that reproductive health and family planning services have been diluted in the Basic Benefit Package (BBP). Family doctors are not as well trained as the specialists who had provided these services under the vertical program. Also, under the new family health clinic design, there is no special room designated for family planning clients, who are seen in any one of the regular service delivery rooms. Finally, there were concerns that there were fewer women physicians catering to family planning clients, which is an important factor to many clients and their husbands. However, according to two research projects carried out in 2007 and 2008[9], the reduction in family planning services was not related to the family health model but rather to other communication and organizational factors.

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops
(optional for Core ICR, required for ILI, details in annexes)

Management and Service Quality in Primary Health Care Facilities in Alexandria and Menoufia at the Completion of the Health Sector Reform Project

3.6.1 The Health Sector Reform focused on supply-side improvements. Since there are issues in the quality of service and management in both reformed and non-reformed public primary care facilities, regarding for example availability of supplies, correct payment exemptions for the poor, and consequently, utilization by the population, surveys were conducted in the governorates of Alexandria and Menoufia to: (i) give an overview over the performance of primary care facilities in the light of the objectives of the HSRP; (ii) account for the basic health needs of the population in the catchment areas

[8] Project Performance Assessment Report – Population Project (Cr. 2830-EGT) – IEG – June 25, 2008

[9] (a) Evaluation of impact of the provider incentive payments on reproductive health services: Egypt's Health Reform Program – Social Research Centre of American University in Cairo, 2007, in collaboration with WHO; and (b) Study on reproductive health impact of family health model pilots in Egypt – El Zanaty and Associates, 2008, in collaboration with UNFPA.

of these facilities, and assess how these needs are met by the primary care facilities; and (iii) highlight a few avenues of promising governance initiatives identified by facilities or the communities in their catchment area. The survey report entitled "Management and Service Quality in Primary Health Care Facilities in Alexandria and Menoufia at the Completion of the Health Sector Reform Project" is an integrated study of public primary health service delivery in the reform governorates of Alexandria and Menoufia that were financed by the World Bank. The report is based on a quantitative survey covering all 362 primary health care facilities, as well as 5,417 households, conducted between March and December 2009. Furthermore, the study integrated the findings of a qualitative study, comprised of a series of in-depth interviews with providers and beneficiaries, as well as eight focus group discussions in four different facilities. The executive summary of the survey report is included in Annex 5 of the ICR. The main findings are summarized below.

3.6.2 *The Demand for Primary Health Care*. Nearly 40 percent of the sample report has been ill or injured in the past 6 months. In general, a very large fraction of individuals sought care when they were ill. Access to healthcare appears to be no problem in terms of transport, but was possibly a problem in terms of finance. The most common providers of care were private doctors. However, when people did seek care at health facilities, over 95 percent of respondents indicated a "positive" opinion (extremely satisfied or somewhat satisfied).

3.6.3 *Availability of Non medical Infrastructure*. A very high percentage of public primary health care facilities have access to electricity, working phones and a water outlet. Only two-thirds of the facilities, however, reported that water is always available. Comparing different types of facilities shows that MOH ranks below HIO clinics in the availability of all non medical supplies except for overnight beds. Further, within MOH facilities, many of the supplies were found more regularly in reformed than in non-reformed facilities and in urban facilities compared to rural facilities.

3.6.4 *Availability of medical infrastructure.* Many facilities lack basic supplies to conduct Diabetes Mellitus treatment or educate patients. Supplies specifically needed for CHD/hypertension treatment can only be found in very few facilities. Almost 9 out of 10 facilities are in possession of basic measurement instruments for treating children. Materials to educate mothers about child health issues, on the other hand, could only be found in half of the facilities. Supplies for sick child treatment are more frequently available in MOH clinics compared to HIO clinics. Most of the facilities seem well equipped to conduct basic antenatal services. Generally, in terms of availability of medical infrastructure, reformed facilities are doing better than non-reformed facilities, and accredited facilities are doing better than non-accredited facilities.

3.6.5 *Allocation of Human Resources*. Most of the facilities serve a catchment area of 30,000 people or less. The median facility has 50 health workers who each carry out – on average – 90 consultations per year. The ratio of health workers to beneficiaries is much higher in Menoufia than in Alexandria. Furthermore, there are fewer health workers per beneficiaries in reformed facilities than in non-reformed facilities and in accredited

facilities compared with non-accredited facilities. There is a difference in composition of staff between facilities in Alexandria and Menoufia with a higher share of specialists, and doctors in general, compared to non-medical staff in Alexandria. Furthermore, the share of specialists is slightly higher in non reformed facilities compared to reformed facilities. There are major differences in the socio-demographic composition of the different categories of employees. In particular, doctors and pharmacists are much younger, less experienced and have been at the facility they currently work in for a much shorter period of time compared to nurses and, in particular, administrative staff.

3.6.6 *Presence and Absence of Staff.* Primary care facilities are officially available 24 hours. But, while all offer a morning shift, only 24 percent offer an afternoon shift and 4 percent offer a shift after 8 pm. Absenteeism is a problem which affects about half the full-time staff. Female staffs are less absent than men, and a higher education level is consistently and significantly linked with higher absence rates. Facility management, outside quality supervision, infrastructure, a cost audit system on site, and positive personnel incentives all matter for better staff presence.

3.6.7 *Structural Observations of Doctors*. The average Diabetes consultation is missing many of the elements that are part of the ministerial FHM guidelines for Diabetes Mellitus treatment. When consulting and examining CHD/hypertension patients, basic procedures appeared to be carried out to a large extent. The observation of antenatal treatments showed that very basic procedures are carried out often; more advanced but essential procedures are missing in many cases. Of the different examinations required by the guidelines of sick child treatment, very few were observed across the board. The lack of observance of basic hygiene practices by doctors throughout the consultations is alarming.

3.6.8 *Constraints to Improvement*. In the views of facility management, the three most severe constraints to improving the quality of services at the facility level are the low motivation of staff (viewed as a constraint by 43 percent of all managers), general lack of supplies (39 percent) and the (non) availability of qualified staff (37.5 percent). Other important issues mentioned by the interviewees were lack of drugs (29.3 percent), and general problems with the quality of buildings (21 percent), plumbing infrastructure (14.4 percent) and non-medical supplies, i.e., furniture (13 percent).

3.6.9 *Payments*. Official payments differ by type of facility. The average de facto examination fee at public primary care units is above the official co-payment for reformed units, and many facilities charge for home visits. The vast majority of people (97 percent) have never heard of the payment exemption for poor people in reformed facilities. Interestingly, the exemption policy appears to work better at NGO and private facilities and rural hospitals. Eighty-four percent of the primary facilities in the sample report offering an exemption for the poor, but the decision-making process on exemption differs noticeably between facilities.

3.6.10 *Institutions of Quality Supervision and Governance*. Over 85 percent of all facilities in Alexandria and Menoufia have a system for determining client opinion about

the facility or services. And over one-third of the facilities that collect client information reported they have made changes as a result of client opinion. Accredited facilities have a higher rate of collecting feedback compared to non-accredited facilities, the same can be observed when comparing reformed with non-reformed facilities. There are several informal governance institutions that can potentially influence the facilities' work, such as media, religious organizations or NGOs.

Stakeholders' Workshop

3.6.11 On January 21, 2010, an HSRP Stakeholders Workshop hosted by the Ministry of Health and the World Bank was held in Cairo to discuss the preliminary results of the report "Management and Service Quality in Primary Health Care Facilities in Alexandria and Menoufia at the Completion of the Health Sector Reform Project".

3.6.12 The main purpose of the workshop was to discuss issues with the goal to come up with suggestions and policy recommendations that address the issues in the short, medium, and long term. Based on the report, the following eight areas were identified as major issues regarding the quality of primary health service delivery in Alexandria and Menoufia: (i) exemption of the poor; (ii) limited continuity of care; (iii) lack of technicians/training to operate high tech equipment; (iv) hygiene practices; (v) insufficient adherence to guidelines; (vi) opening hours of facilities; (vii) lack of drugs; and (viii) competition between FHU and other facilities.

3.6.13 A summary of the workshop discussions is included in Annex 6 of the ICR. While it is clear that some issues could only be solved through increases in operating budgets and long term, sustained reforms (for example, reform of HR policies), there is scope for short term measures, including awareness/outreach campaigns, better quality supervision, upgrading of guidelines, etc., that could be more easily implemented.

4. Assessment of Risk to Development Outcome
Rating: Moderate

4.1 The FHM is likely to be sustainable, but the future of the FHFs is uncertain at this stage. The risk to development outcome must be assessed in two areas.

4.2 First, there is the question of the sustainability of the accessibility, coverage and enrollment of the poor for the BBP of PHC services. The Government has indicated its commitment to gradually increase its financing of the registration fees for the poor through general revenues. But the financial burden will need to be fiscally sustainable. The Government recently undertook an actuarial analysis to estimate the fiscal impact of the different scenarios for the design of the new health insurance program, and to ensure that the scope of the new insurance program would be affordable. The MOF and MOSS have also established a joint team to review the design of the social targeting mechanisms, for which the experiences gained under this project would be valuable.

4.3 Second, there is the question of the maintenance of the health facilities that have been rehabilitated under the project. Maintenance is the responsibility of the health districts. However, at the central level, accreditation could be withdrawn (and has actually been withdrawn in some cases) if facilities are not properly maintained.

4.4 In view of the risks and uncertainty regarding project sustainability, the risk to development outcome is assessed as "substantial".

5. Assessment of Bank and Borrower Performance

(relating to design, implementation and outcome issues)

5.1 Bank Performance

(a) Bank Performance in Ensuring Quality at Entry

(i.e., performance through lending phase)

Rating: Unsatisfactory

5.1.1 At the time the IDA Credit was approved for this project, the Bank had relatively limited information on measuring the impact of comprehensive health sector reform programs focusing on insurance reform and universal coverage. Therefore, the statement in the 1998 PAD that the value added of Bank support to this project was the "Bank's economic focus and experience in areas such as health care financing, insurance issues, provider payment issues, and general system reform issues" [10] was an overly optimistic assessment of the Bank's potential contribution and underestimated the political challenges which could reduce the effectiveness of the Bank intervention.

5.1.2 Although the Bank spent about US$450,000 on project preparation and appraisal, the project was not well-prepared. The Bank PAD was deficient in many respects. It contained very little information on the contents of the components and implementation assignments and responsibilities. An Operations Manual "was being developed" at the time the project was appraised, but the draft was incomplete (for example, it did not include a separate chapter for monitoring and evaluation). According to the agreed minutes of negotiations of the credit, the Operations Manual should have been finalized by December 31, 1998, but apparently it was never finalized. Annex 1 of the PAD did not provide any baseline values and any quantitative targets for the selected monitoring indicators. There was no component for project management, and there were inconsistencies between tables on project financing.

5.1.3 At the time of project preparation, the Bank team had some reason to believe that there was government ownership and commitment and, therefore, that the preparation efforts would lead to a satisfactory project. However, as discussed in Section 2.1 on quality at entry, the project was not ready for implementation when it was submitted to the Bank's Board of Executive Directors. The Bank performance in ensuring quality at entry is rated "Unsatisfactory".

[10] Section 13 on page 11 of the PAD on "Value added of Bank support in this project".

(b) Quality of Supervision
(including of fiduciary and safeguards policies)
Rating: Moderately Satisfactory

5.1.4 Regarding the quality of supervision by the Bank, one has to distinguish between the period before and after project restructuring.

Before the project restructuring

5.1.5 When the FHFs were established (as early as 1999), the Bank failed to ensure that the insuring entities established at the level of each Governorate were branches or subsidiaries of the HIO, as was envisaged in the PAD. It should have been clear at that time that the legal and institutional status of the FHFs would not allow them to function as full-fledged "insuring" entities. A component for project management was added in the early years of project implementation; that was the right thing to do, but the DCA (which listed two components only) should have been amended accordingly.

5.1.6 During the first five years of implementation, the Bank seemed to lack a clear vision and/or a sound strategy for getting the project on track. During that initial period, the Bank spent about US$700,000 of budget on supervision which is a substantial sum for the activities that were carried out, essentially focusing on the strengthening of the TSO, and the implementation of the Master Plans (including the one for Alexandria that was financed by a Trust Fund). These activities were a continuation of the preparatory work. The ISRs were not candid and realistic in reporting issues and ratings. Considering the money spent and the results, this initial part of supervision would deserve a rating of "Moderately Unsatisfactory".

After the project restructuring

5.1.7 The June 2004 restructuring (at about the time of the original closing date) was indeed a turning point for the project. From that time on, the performance of the Bank improved and the ratings were realistic. During that period of another five years, the Bank spent about US$450,000 on supervision. The quality of supervision by the Bank after restructuring deserves a rating of "Satisfactory" because of the proactivity of the Bank and efforts by the supervision team in dealing with implementation issues and in helping the Government to salvage the project.

5.1.8 The following actions and initiatives are worth mentioning:

a) The Bank focused on the poor, and serious efforts were made to set targets for accessibility, coverage and enrollment and to monitor the achievement of those targets.
b) The Bank supported the development of the Family Health Model by MOH.
c) The Bank allocated financing for the response to the Avian Flu crisis.

d) The Bank introduced an innovative performance-based financing arrangement to address the problem of inadequate attention to targeting the poor and to introduce new incentives to change provider behavior.
e) The Bank supported the WBI Flagship Program on Health Sector Reform and Sustainable Financing which was well received by the counterparts, and helped to enhance knowledge and capacity among key policy makers and managers in many of the critical areas being addressed by the project. [11].

5.1.9 Overall, the quality of supervision is rated "Moderately Satisfactory".

(c) Justification of Rating for Overall Bank Performance
Rating: Moderately Satisfactory

5.1.7 The rating for the Bank performance in ensuring quality at entry is in the unsatisfactory range and the rating for quality of supervision is in the satisfactory range. Therefore, in accordance with the ICR Guidelines, the overall Bank performance is rated "Moderately Satisfactory" because the overall project outcome is rated in the satisfactory range.

5.2 Borrower Performance
(a) Government Performance
Rating: Moderately Satisfactory

5.2.1 According to the PAD, there was a high level ownership of the strategy by the GOE since the HSRP was developed by the GOE with technical assistance from the Bank, USAID, EU, and DANIDA. It reflected the perspective and priorities of the Government and was the Government's first attempt to develop a comprehensive and analytically based health reform program. The Minister of Health and Population and his principal deputies were all deeply involved with the development of the strategy. The fact that the Government managed to get the project effective in one month (when it usually takes six to nine months in Egypt) may be viewed as an indication of the Government commitment to the project and its interest in starting the process of reform as soon as possible.

5.2.2 Government should bear some responsibility (but to a much lesser degree than the Bank, because usually Borrowers rely on the Bank's "expertise" on project readiness for implementation) for the lack of readiness of the project for implementation. As mentioned earlier, many factors affected implementation; changes in management are one of them. During project implementation, there were three Ministers of Health and five Managers of TSO, and there were also changes at the governorate level. As to ownership and commitment, it turned out that the situation was not as clear as described in the PAD. In fact, at the beginning of the project, the MOH had no ownership of the Master Plans, and insisted on decreasing the fund allocation for the HIO and on putting the control of the governorate health insurance funds under the MOH. For quite some

[11] The Flagship Course had a positive impact on participants; most of the course participants are now the leaders who are implementing the current social health insurance reform either in the HIO or the MOH.

time, the TSO was very weak; it could not attract and retain qualified staff and implemented activities in a chaotic manner.

5.2.3 It is probably because of change in management that GOE did not implement the project as planned. The PAD stated clearly that the insurance entities in the governorates should be branches or subsidiaries of the HIO, but this did not happen. The FHFs that were established could not function as "insurance" entities.

5.2.4 The implementation capacity improved considerably in recent years. The TSO, which was quite weak at the beginning of the project, developed into a competent entity and managed project implementation effectively. Consequently, there were no major issues on procurement and financial management, and the TSO managed to construct and equip a sizable number of health facilities. GOE should be given credit for the development of the Family Health Model (FHM) and the decision to implement it in the whole country. The GOE should also be commended for: (i) developing the facilities Accreditation System based on quality of care and appropriateness of clinical practices, (ii) updating the National Standards and Guidelines of health planning for service delivery of the Family Health Model (FHM), and (iii) developing and implementing a social targeting mechanism to conduct an identification of the poor in rural and urban areas. The fact that the FHM was endorsed as the primary health care model for Egypt is the most important result from the project. In addition to the funds provided under this project, the MOH mobilized additional resources from other donors as well as its own budget in rolling out the FHM to 2,500 health facilities.

(b) Implementing Agency or Agencies Performance
Rating: Moderately Satisfactory

5.2.5 The implementing agency was the MOH which is part of Government. The assessment of MOH's performance is included in the above discussion of Government performance.

(c) Justification of Rating for Overall Borrower Performance
Rating: Moderately Satisfactory

5.2.6 The above assessments show that in the early years of the project the government performance was unsatisfactory. The situation improved significantly following the restructuring and the strengthening of the TSO, and the Government can be given credit for strong commitment and achievements during the latter part of the project. On balance, the Overall Borrower Performance is rated "Moderately Satisfactory".

6. Lessons Learned
(both project-specific and of wide general application)

1) In order to maximize the chances of success of a health reform project dealing with both health and insurance issues, the leadership role must be shared between the Ministry of Health and the organization in charge of health insurance.

2) Institutional and stakeholder analyses are essential during the design of the reforms and to inform decisions during implementation about when to intervene and when not to. Stakeholder consultations can help to flag possible resistance and solutions. Information and outreach to all stakeholders and the public to explain the reforms, the benefits of the reforms, and how the public will be affected should be an integral part of the reform process.

3) Much more stringent criteria should be used to assess project readiness for implementation in order to avoid premature submission of projects for Board Approval.

4) The presence of a local reform team with the willingness, technical capacity and political support to lead the process is also important to ensure success.

5) Since health reform usually takes place over a long period, it is important to assess fully the political economy of reform and to prepare a proactive plan to address this issue, including generating evidence that reforms work and enlisting key stakeholders in the system that are vested in the reforms and likely to remain on place.

6) The piloting and sequencing of reforms are important implementation modalities to maximize the chances of success.

7) Collaboration between several Ministries may be essential to develop an effective tool to identify the poor. There is a need for clear criteria to identify the poor and outreach/awareness campaigns to inform people about the exemption policy and the procedures to be followed.

8) The implementation of training plans for health personnel is crucial to ensure that expensive, high tech equipment can be operated for the benefit of the patients.

9) Awareness/advocacy campaigns are important to inform and/or remind health personnel and patients of the importance of following basic hygiene procedures.

10) Treatment guidelines should be regularly updated and structural observations of compliance with those guidelines should be part of the quality supervision of health facilities.

11) The shift pattern of health facilities should be re-evaluated periodically and opening times should be adapted to the needs of the community.

12) There is a need to streamline the payment and fee regime across all facilities, and to explain the fee structure to beneficiaries while highlighting the services offered by the reformed facilities.

13) Close monitoring of prescriptions and education of patients on proper drug usage could reduce waste and minimize the recurrent problem of the lack of essential drugs.

14) A functioning Monitoring and Evaluation (M&E) System is critical for implementing and monitoring health reforms and for demonstrating impact.

7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners

(a) Borrower/implementing agencies

A summary of the Borrower's ICR is included in Annex 7.

(b) Co financiers

A summary of the contributions of the European Commission (EC), the US Agency for International Development (USAID) and the African Development Bank (AfDB) to the ICR is included in Annex 8.

(c) Other partners and stakeholders
(e.g. NGOs/private sector/civil society)

None

Annex 1. Project Costs and Financing

(a) Project Costs by Component (in USD Million equivalent)

Components	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Component 1 - Provide Universal Access to a Basic Package of Primary Health Care (PHC) Services:	**269.00**	**278.07**	**103.4%**
1.1 - Implement Governorate PHC Insurance System	20.50	45.00	219.5%
1.2 - Improve Quality and Efficiency of PHC Delivery System	227.20	186.11	81.9%
1.3 - Improve Public Health Programs.	21.30	43.56	204.5%
1.4 – Avian Influenza	-	3.35	n.a.
1.5 – Enrolment of the uninsured and payment of the registration fees and co-payments	-	0.05	n.a.
Component 2 – Reform of the Health Insurance Organization (HIO)	**38.10**	**5.13**	**13.5%**
2.1 – HIO Management Information Systems	n.a.	3.92	n.a.
2.2 – HIO capacity building	n.a.	0.83	n.a.
2.3 – Upgrading HIO training centers	n.a.	0.38	n.a.
Component 3 – Project Management	**n.a.**	**18.88**	**n.a.**
Total Baseline Costs	307.10	302.08	98.4%
Physical Contingencies	22.30	0.00	0.00
Price Contingencies	57.60	0.00	0.00
Total Project Costs / Financing Required	**387.00**	**302.08**	**78.1%**

Source: MOH – Central Administration of Technical Support (TSO)

Annex 1. Project Costs and Financing (continued)

(b) Financing

Source of Funds	Type of Co financing	Appraisal Estimate (USD millions)	Actual / Latest Estimate (USD millions)	Percentage of Appraisal
Borrower (GOE)		97.00	21.89*	22.6%
US: Agency for International Development (USAID)	Parallel	80.00	16.38**	20.5%
EC: European Commission	Parallel	120.00	151.27***	126.1%
AfDB – African Development Bank	Parallel	-	17.85	n.a.
IDA - International Development Association (IDA)		90.00	94.69	105.2%
TOTAL		**387.00**	**302.08**	**78.1%**

Source: MOH – Central Administration of Technical Support (TSO)

* The contribution of the Borrower includes expenditures paid at the central level for technical support, but does not include expenditures that have been paid at the Governorate level (El Dewan El Aam, El Modiria, Districts, Health Districts).

** The above-mentioned figures on the contributions of Co Financiers are the amounts that TSO has entered into the project accounts as having been used to finance the project. These amounts may be quite different from the Co Financiers records of their contributions. For example, USAID estimates that its financing of the health sector reform in the form of grant funds totaled US$102.6 million. This is due to the fact that, in project documents, the delineation between the “Project” (the first five-year phase of a comprehensive health sector reform program) financed by the IDA Credit and some Co Financiers and the larger “Program” is not very clear.

*** The contribution of the European Commission (EC) does not include about US$21 millions that have been allocated for technical assistance, supervision, evaluation and auditing that have been spent directly by the European Commission.

Annex 1. Project Costs and Financing (continued)
(c) Details of financing of project costs by components

Component		Financiers				
	Total	GOE	EC	AfDB	USAID	IDA
	In US$ Million					
Component 1 – Provide universal access to a basic package of Primary Health Care (PHC) services						
1.1 – Implement Governorate PHC insurance system	45.00	-	37.98	-	-	7.02
1.2 – Improve quality and efficiency of PHC delivery system	186.11	16.40	72.74	13.67	11.39	71.91
1.3 – Improve public health programs	43.56	0.79	33.80	2.28	2.20	4.49
1.4 – Avian Influenza	3.35	-	-	0.25	-	3.10
1.5 – Enrolment of the uninsured and payment of the registration fees and co-payment	0.05	-	-	-	-	0.05
Sub-total Component 1	**278.07**	**17.19**	**144.52**	**16.20**	**13.59**	**86.57**
Component 2 – Reform of the Health Insurance Organization (HIO)						
2.1 HIO Management Information Systems	3.92	-	-	-	-	3.92
2.2 – HIO Capacity Building	0.83	-	-	-	-	0.83
2.3 – Upgrade HIO Training Centers	0.38	-	-	-	-	0.38
Sub-total Component 2	**5.13**	**-**	**-**	**-**	**-**	**5.13**
Component 3 – Project Management	**18.88**	**4.70**	**6.75**	**1.65**	**2.79**	**2.99**
TOTAL	**302.08**	**21.89**	**151.27**	**17.85**	**16.38**	**94.69**
Percentage	100%	7.2%	50.1	5.9%	5.4%	31.4%

Source: MOH – Central Administration of Technical Support (TSO)

Annex 2. Outputs by Component

1. According to the PAD, the HSRP financed by the IDA Credit would assist the GOE in implementing Phase I of Egypt's Comprehensive Health Sector Reform Program.

2. According to the PAD, under Component 1, Phase I of the HSRP would phase in universal coverage for a basic benefit package (BBP) of primary health care and public health services. The BBP would consist largely of cost-effective primary health care services as well as necessary emergency and basic curative care services[12]. Concomitantly, organization and management of broad-based MOH public health programs, which are either included in the primary health care BBP or provide the requisite complementary services to the BBP, would also be reformed. The project would assist the GOE to refine the BBP, establish the public insurance entity to finance it, ensure access to, and contracting mechanisms to pay for delivery of the BBP, and undertake needed reforms in the organization and management of complementary public health services in the pilot Governorates as well as nationally. Governorate level insurance entities would be established and made operational. This would include training staff, setting up all insurance functions (e.g., revenue collection, enrollment, distributing health cards, contracting with medical care providers, claims processing, monitoring quality, etc.), purchasing necessary equipment, and constructing or renovating appropriate office facilities. *According to the PAD, branches or new subsidiaries of the HIO would serve as the insuring entities for the primary health care BBP*. Financing would be separated from the provision of services. The project would also assist in the reorganization, restructuring, and rationalization of the primary care delivery systems in the pilot Governorates so that both the financing and delivery of primary health care are assured. The component would finance technical assistance, training, equipment and facilities needed to begin phasing in universal insurance coverage for the BBP in the pilot Governorates.

3. According to the PAD, Component 2 would reform the Health Insurance Organization (HIO) to adapt its existing institutional structure to provide the primary care benefit package in the pilot Governorates, as well as to prepare it for its transition to the National Health Insurance Fund (NHIF) in the later phases of the reform. The component would support enhancing management capacity, implementation of MIS, development of incentive-based contracting mechanisms, putting HIO's currently insured population on a sound actuarial basis, development of automated claims processing and enrollment systems, and other measures. The component would finance technical assistance, training, equipment, and construction needed to achieve the actuarial and functional reforms at HIO which will enable it to administer nationwide implementation of the

[12] The bulk of curative care services would continue to be provided through MOHP, HIO, CCO and Teaching Hospital facilities outside the basic package and new insurance mechanism. Most curative care financing and delivery reforms, as well as major changes in the overall medical education system and pharmaceutical sector, would take place in the reform's second phase.

primary health care BBP (as the NHIF) as well as its future role as the country's national social health insurance fund.

4. This Annex 2 on outputs by component will first discuss the achievements, or lack thereof, by component and sub-component. For each, it will then describe the outputs due to the financing from the IDA Credit.

Component 1 – Provide Universal Access to a Basic Package of Primary Health Care (PHC) Services
Original IDA allocation: US$79.7 million; actual/latest estimate: US$86.57 million

5. The first component consisted of three subcomponents to assure implementation of the insurance mechanisms for and service delivery of the PHC BBP to the populations in the three pilot Governorates. The three sub-components were: (1) implementing the PHC insurance systems in the three pilot Governorates; (2) improving quality and efficiency of PHC delivery systems; and (3) improving public health programs. EC was the main financier for Component 1.

6. The three Governorates (Alexandria, Menoufia and Sohag) that were selected at the beginning for implementation of the HSRP represented the three major regions in Egypt (Urban, Lower and Upper Egypt), as each has different characteristics and constitutes a different market. The selection within each region was based on criteria such as level and depth of poverty; health status; concentration of women, children and other vulnerable groups; commitment to reform; administrative capacity; existing delivery capacity; presence of the HIO; and representativeness and replicability.

7. When the project was restructured in June 2004, the number of pilot Governorates was reduced from three to two (Alexandria and Menoufia), and the objective of "universal coverage" was replaced by an objective of expanding coverage to *the poor population* in the Governorates.

8. The service delivery activities of the Project were successful, but the Governorate PHC insurance system could not be implemented as planned.

Sub-component 1.1 – Implement Governorate PHC Insurance System
Original IDA allocation: US$16.30 million; actual/latest estimate: US$7.02 million

9. As mentioned above, the PAD indicated that branches or new subsidiaries of the HIO would serve as the insuring entities for the primary health care BBP. This did not happen, probably because the HIO was not an implementing agency for the Project. Instead, Family Health Funds (FHFs) were established as insurance entities in the pilot Governorates. The concept was that the FHFs would develop as insurance agencies that collect and hold capitated payment from enrolled beneficiaries, and that they would integrate funding from public and private sources and separate financing from provision of services. However, existing laws prohibit any agency outside the HIO from collecting premiums or capitated payments from individuals or families. The FHFs were established

with the legal status of an account in a bank called the "Family Health Fund" for the Health Sector Reform Program (Ministerial decree 294 of 1999). From an institutional perspective, the FHFs are managed by the MOH; each FHF is affiliated with the respective Governorate Health Directorate and the central FHF is fully integrated into MOH's Central Administration of Technical Support (TSO). As such, the FHFs ended with an awkward institutional and legal status.

10. Financing of the services under the project has remained fragmented. The bulk of the costs of the FH providers are still covered by their mother organization s, with the role of the FHFs limited to disbursements of provider incentives based on performance criteria. The costs of the FHFs' administration and incentive disbursement are covered by HSRP funds from the Ministry of Finance and donors (essentially the European commission, which provided the equivalent of US$38 million). The costs of providing BBP services go directly from the MOH and the HIO to their FH facilities. Also, nominal collections from patients (visit fees or copayments) go directly from providers to the MOH or the HIO without passing through the FHFs. In Alexandria and Menoufia, the FHFs have a contract with HIO, so that HIO pays a capitated amount to the FHFs to cover the insured population with BBP. For the FHUs contracted with FHF, visit fees and copayments go from providers to FHF. The FHFs pay a fee for service to the contracted facilities, based on performance criteria.

11. The HSRP failed to:

- Consolidate financing from MOH, HIO and private sources through the FHFs (using the single payer approach).
- Separate financing from provision of services, since the MOH and the HIO still pay the costs of providing the BBP directly to their facilities.
- Create new sources of revenue and to channel the significant private out-of-pocket expenditures that individuals pay for ambulatory care into the public system.

12. In summary, Governorate level insurance entities were not established and made operational. The concept of the FHFs providing full cost PHC insurance through a capitation payment system for members of families registered for continuous care at the health facilities never materialized. This failure is probably due to the fact that the whole project was under the umbrella of the MOH, instead of including the HIO as well as implementing agency for the part of the project dealing with insurance.

IDA Financing (actual/latest estimate: US$7.02 million)

13. To support the establishment and operation of the FHFs, the IDA Credit financed the development and deployment of the Clinical Information System (FHF-CIS) and the Family Health Fund Information System (FHF-MIS) software applications. The IDA Credit financed consulting services, training and IT equipment; the bulk of the money was spent on the FHF-CIS. The development of the CIS and FHF applications was in two phases, and to date the CIS has been installed in 73 family health facilities in Alexandria

and in 102 facilities in Menoufia. Several versions had to be installed to try to correct many system errors. The latest CIS version (9.4) was delivered in early November 2008 and was installed in the facilities in Alexandria and Menoufia. This version has resolved most of the minor reported system errors; however, it did not address the major problems reported by users which are affecting the core functionality of the system and impeding the operational capacity of the CIS modules. Most of the facilities are not running all of the CIS modules. The majority of users are not relying on the system due to problems in the development and implementation of the business rules of the financial modules and in most of the lookup tables of the systems (particularly problems with pharmaceuticals and identification of poor and uninsured). At project closing, a final version of the CIS was being developed under the supervision of the Ministry of Communication and Information Technology (MCIT). The MOH (the end-user and owner of business rules) and the MCIT (the contract manager and provider of IT technical assistance) must reach a management agreement through which both ministries can contribute in their capacity to manage CIS repeated problems, and assume ownership of the system by the MOH. It is also important to establish, within the National Information Center for Health (NICH), an appropriate permanent unit with managerial and technical capacity to take over the management of the CIS after the MCIT hands it over to the MOH. Such unit shall have the mandate of continuously upgrading the system, linking it with the Family Health Funds and later with the Social Health Insurance system, expanding the deployment of the system in other governorates and providing users with technical assistance.

Sub-component 1.2 – Improve Quality and Efficiency of PHC Delivery System
Original IDA allocation: US$60.30 million; actual/latest estimate: US$71.91 million

15. The service delivery component of the project has been implemented with success. The primary health care delivery system in the pilot Governorates was restructured and rationalized, together with the introduction of two major innovations in service delivery: the family health model and the performance-based incentive system.

16. Rationalization of health infrastructure investment was introduced based on *Master Plans* that targeted the gaps in population coverage in the pilot Governorates. Preparation of the Master Plans was financed by a Trust Fund administered by the Bank (Alexandria) and by the IDA Credit (Menoufia and Sohag). Master Plans utilized a socioeconomic vulnerability index[13] to target the most vulnerable (poorest and lower middle quartiles) populations in each of the three governorates. Needs were assessed at the district level, then district health plans were consolidated into governorate Master Plans. Rehabilitation, extension and construction of health facilities were undertaken based on the health needs of the poor population in the catchment areas, thus improving access, efficiency and equity in service provision. Based on the Master Plans, new facilities were established and existing facilities were rehabilitated and re-equipped. The facility infrastructure at the

[13] The social vulnerability index used eight socioeconomic indicators: illiteracy ratio, unemployment ratio, income dependency ratio, inaccessibility to electricity, inaccessibility to potable water, average family size, household crowding factor and the population size of the village.

district level (including MOH, HIO and participating private sector providers[14]) was consolidated into three types of facilities, namely, family health units (FHU), family health centers (FHC) and district hospitals. A total of 1,103 FH clinics (411 in Alexandria and 692 in Menoufia) were constructed/renovated in compliance with the Governorate health plans. Under-utilized facilities should have been closed but, since this was not easy from a political point of view, in practice very few were closed.

17. Staffing levels and patterns in the facilities were revised against the Master Plans. Imbalances in human resources were addressed, and new health manpower needs were met through the MOH or the HIO. Staffs (physicians, nurses and other primary care personnel) were trained. Physicians were trained in Family Medicine so that the family physician, assisted by a community nurse and a social worker, would provide services in the BBP to a specific family roster and act as the gatekeeper of the system. In addition, facility directors received some basic training in accounting, human resource management, continuous quality improvement and medical records.

18. Essential drug lists were developed and implemented.

19. New *facility management systems* (medical record system, provider payment systems and information systems) that support efficient operations were implemented with varying degrees of success. Family-based medical records and patient tracking systems were introduced, and FH facilities started collecting some performance indicators (e.g., number of visits per physician, waiting time, etc.) from medical records and encounter forms on a regular basis. An appointment system was established to reduce unnecessary waiting time for patients. However, as mentioned above, implementation of the Clinic Information System (CIS) at the Family Health (FH) facility level was not satisfactory.

20. Attempts were made to develop an organized *referral system* that starts at the FHU level, where family doctors refer patients for investigations or specialists at the FHC, and to the district hospital for more specialized care. A structured system for referrals was institutionalized in Menoufia through the Ministerial Decree 231; this is a high rationalization of secondary care services.

21. Quality of care and appropriateness of clinical practices were supported through a facility accreditation process. All facilities went through an accreditation process established by the MOH Quality Improvement (QI) Directorate. The QI Directorate published and disseminated a set of clinical practice guidelines for all components of the BBP, which were used for training of providers at the sites.

22. According to the Egypt's Health Sector Reform and Financing Review of February 2004, two major innovations in service delivery were introduced:

- The *Family Health Model* was adopted for the first time in Egypt. The Family Health Model is a consolidated Beneficiary-Centered care model, dealing with

[14] However, private sector participation has been insignificant.

Family within the context of community as the focus of high quality service delivery through a qualified Family Physician as a "gatekeeper" who deals with 80 percent-90 percent of cases providing a BBP including special services for vulnerable groups. Family Health facilities should be accredited before contracting with the FHF on the basis of performance-based payments. The FHF provides service accessibility to the poor population counteracting the cost-sharing financial barrier. Implementation of the Family Health Model follows a step-wise approach through (i) Infrastructure Development, including prototype building and prototype medical and non-medical equipment list to fulfill the BBP requirements, (ii) Human Resource Development, including: Staff Pattern, Job Description and Training Programs and (iii) implementation of standard operating systems as Standard Practice Guidelines, Essential Drug List, Family Folders, Clinical Information System and Referral System. Integrated services were provided under the same roof for the entire family, requiring less time and transportation and offering better quality of care. Both physicians and patients valued the concept of continuity of care (being seen by the same FH physician and having a single medical record). A Family Health Model implementation manual was developed under the reform; MOH now has standards for buildings and equipment. The introduction of the family health practice, a specialty that is new to Egypt, can in the long run rectify the surplus of specialist physicians and support a more holistic and integrated approach to patient care. **The fact that the family health model is now being implemented in the whole country is the greatest achievement of the HSRP**.

- *Performance-based incentive systems* were also adopted for the first time in Egypt. Incentives were tied to institutional factors (e.g., attainment of accreditation status, enrollment levels and patient satisfaction). Incentives of up to 250 percent of base salary were then distributed to employees based on job type, years of experience, academic qualifications and on-the-job performance. They succeeded in increasing provider accountability to quality standards and reform goals. The project thus demonstrated that health provider behavior can be favorably modified to serve national health sector goals. This experiment was limited to public (MOH and HIO) providers. Subsequently, the performance-based incentive systems were replaced in September 2008 by a new mechanism of fees for services.

23. The service delivery component of the HSRP has succeeded in increasing patient satisfaction and demand for PHC services (although the introduction of fees and copayments put a brake on demand) by utilizing a holistic family health approach to patient care. It should also have increased provider satisfaction and productivity, but this is not the case; the average number of daily encounters per physician shows a downward trend and, at project closing, represented only 50 percent of the end of project target. An explanation is that family physicians work mainly on curative and emergency visits which constitute only about 55 percent of facility utilization. In any event, recently MOH revised the standard roster of family physicians and changed it from 500 families per physician to 1,000/1,200 families per physician.

IDA Financing (actual/latest estimate: US$71.91 million)

24. The IDA Credit financed the geographic information GIS; the Master Plans for two Governorates (Menoufia and Sohag); consulting services, civil work contracts, and purchase of equipment for the health facilities constructed/renovated in Alexandria and Menoufia; and small amounts for consulting services and training.

25. The development of the governorate Master Plans took longer than planned, which led to delays in the initiation of civil works contracts associated with the upgrading of the PHC infrastructure facilities. Construction and rehabilitation activities also faced long delays for several reasons. The most important reason is the instability in the prices of construction materials that followed the January 2003 liberalization of the Egyptian Pound against foreign currencies; the value of the US dollar went up from 2.6 EGP to about 5.0 EGP. Many contractors who had signed fixed price contracts in Egyptian pounds before the liberalization could not complete the on-going works without contract price adjustments. Also, most contractors were very cautious about bidding for new works because the prices of construction materials continued to increase through 2004/2006. Other reasons were problems with land acquisition and disputes, utilities (electricity, water and sewage) and demolishing permits for old health facilities.

26. The IDA Credit financed 117 health facilities (49 in Alexandria and 68 in Menoufia) that were constructed/renovated in compliance with the Governorate health plans. All these 117 facilities have been furnished, equipped and staffed, and are operational.

Sub-component 1.3 – Improve Public Health Programs
Original IDA allocation: US$3.10 million; actual/latest estimate: US$4.49 million

27. The sub-component strengthened the National Communicable Disease Surveillance System at the Central, Governorate and District levels.

IDA Financing (actual/latest estimate: US$4.49 million)

28. The IDA Credit financed equipment and furniture for MOH laboratories, training activities and participation in various workshops.

Sub-component 1.4 – Avian Flu
Original IDA allocation: US$0.00 million; actual/latest estimate: US$3.10 million

29. This sub-component was added in May 2006 in response to a government request to utilize some savings to address the avian influenza crisis. The allocation out of the IDA Credit was US$3.10 million which have been fully disbursed. This IDA financing was in addition to resources from a global trust fund on Avian Influenza administered by the Bank. The AfDB also provided US$0.25 million for this sub-component.

30. As of January 2009, Egypt had identified 53 human cases of Avian Influenza of which 23 cases ended in death. Egypt is considered a high risk country given antiquated

farm behaviors and the large number of people raising poultry in their homes. If the disease moves to an epidemic stage, it would have a large impact on the economy and movement of people and commerce.

IDA Financing (actual/latest estimate: US$3.10 million)

31. The IDA Credit financed equipment and supplies, consulting services, workshops and training activities to strengthen the disease surveillance system and the public health response, in order to minimize the threat posed by the virus to humans and poultry in the country.

Sub-component 1.5 – Enrolment of the poor and uninsured and payment of the registration fees and co-payments.
Original IDA allocation: US$0.00 million; actual/latest estimate: US$0.05 million

32. This component was added in January 2008 through an amendment of the DCA in order to improve the performance of the Project by linking disbursements to actual enrolment in the Family Health Funds (FHFs) and utilization of services by the poor and uninsured.

33. While the project was successful in rationalizing primary health care services, improving access and expanding health coverage to the general population, the required payment of registration fees turned out to be a key financial constraint in increasing the enrollment of the poor and the uninsured population. The Government aimed to raise the ceiling on the number of exempted poor requested assistance to finance the corresponding registration fees and co-payments through the project. In order to address this issue, in September 2007, the Bank approved an extension of the project for 18 months to develop appropriately targeted exemption of registration fees payments and health services co-payments for the poor and uninsured population enrolled in the existing Family Health Funds (FHF) in the two pilot governorates of Alexandria and Menoufia. This extension provided an opportunity to improve the beneficiary enrollment scheme and to refine the adopted exemptions scheme as well, in collaboration with the Ministry of Social Solidarity (MOSS).

34. In January 2008, the HSRP Credit Agreement was also amended to introduce a Performance-Based Financing arrangement to improve the performance of the project by linking disbursement to actual enrollment and utilization of services by the poor and uninsured in the FHF. Accordingly, a new Project Operations Manual was prepared, establishing the detailed rules and procedures for the enrollment and exemption of target groups, in collaboration with the Ministry of Social Solidarity (MOSS), and for the verification of the process by independent auditors. Performance agreements and health services provision contracts between the different parties (MOH, FHF and Health Services Providers) were finalized. The MOH contracted the Center of Social and Criminal Research to develop a social targeting mechanism in the two pilot governorates under the supervision of the MOSS. However, this performance-based financing arrangement was introduced late in the project cycle. It was discontinued when only

US$0.05 million were disbursed for this sub-component. The Government agreed to finance registration fees for the poor through general revenues.

IDA Financing (actual/latest estimate: US$0.05 million)

35. The IDA Credit financed a survey to identify the poor population in Alexandria and Menoufia. The survey was carried out by the National Center for Social and Criminal Researches.

Component 2 – Reform of the Health Insurance Organization (HIO)
Original IDA allocation: US$10.3 million; actual/latest estimate: US$ 5.13 million

36. Component 2 did not achieve its original objective of reforming the HIO to adapt its existing institutional structure to provide the primary care benefit package in the three pilot Governorates, as well as to prepare it for its transition to the National Health Insurance Fund (NHIF) in the later phases of the reform. The component was financed exclusively by the IDA Credit, and only half of the original IDA allocation was spent. The component consisted of three sub-components: (1) improving the HIO MIS; (2) HIO capacity building; and (3) upgrading HIO training centers.

Sub-component 2.1 – HIO Management Information System (MIS).
Original IDA allocation: n.a.; actual/latest estimate: US$3.92 million

37. The HIO-MIS that was designed, installed and used extensively in the 1990s was becoming obsolete. It was increasingly difficult and costly to maintain, and it was in great danger of collapsing. To deal with this situation, a two track approach was adopted:

- Track 1 – A short-term track to keep the existing HIO-MIS from collapsing by modernizing the oldest, and most failure-prone hardware parts. The implementation of track 1 improved the maintainability, speed and reliability of the overall system and its equipment.
- Track 2 – A longer-term track to enhance and add functionality to the system. It was intended to develop the next generation of HIO-MIS that will be able to deal with the complexities of insurance coverage in the future. From a technical point of view, it involved a shift to modern client-server (PC-based) technology and adds internet and other modern communication and network technologies. Track 2 was organized into two phases: (i) to provide the overall system studies and specifications, and (ii) to implement the solution. Although IT equipment was delivered to the HIO and installed in sites, track 2 was not implemented successfully; hence, the need for additional interventions and financing under the recently approved Health Insurance Systems Development Project (HISDP).

IDA Financing (actual/latest estimate: US$3.92 million)

38. The IDA Credit financed IT equipment; renovation of HIO units, and furniture and office equipment; and operational supplies.

Sub-component 2.2 – HIO Capacity Building
Original IDA allocation: n.a.; actual/latest estimate: US$0.83 million

39. The sub-component included two major training activities implemented by the National Training Institute (NTI): the capacity building program (CBP) and the WBI Flagship Program.

40. The CBP was designed to bring senior and middle managers of the HIO to the framework of the HSRP and build capacity for change. It included 12 workshops for about 600 managers followed by a "core Program" of six intensive management and leadership development programs for the promising 300 motivated mangers who are likely to play key roles in the process of change. Results have been extremely encouraging with the majority of participants motivated to continue through the core programs.

41. In partnership with the National Training Institute, the World Bank Institute (WBI) Flagship Program on Health Sector Reform and Sustainable Financing [15]included the delivery of seven training courses with 280 participants and two senior policy seminars with 100 participants. The aim was to build a constituency of health care managers and decision-makers in Egypt, who share common understanding of the challenge and paradigms of health sector reform, and appreciate the advantages and disadvantages of different reform options.

IDA Financing (actual/latest estimate: US$0.83 million)

42. The IDA Credit financed the CBP and the Flagship program.

Sub-component 2.3 – Upgrade HIO Training Centers
Original IDA allocation: n.a.; actual/latest estimate: US$0.38 million

[15] The principal goal of the Flagship Program of the World Bank Institute (WBI) is to provide intensive, state-of-the-art knowledge and training on options for health sector development, including lessons learned and best practices from country experience. The overall course aims to complement Bank lending with learning by developing national capacities to: (i) better appreciate options for improving the performance of national health systems with emphasis on improving the health of the poor; (ii) better appreciate inter-sectoral issues that impact on health system performance and reproductive health; (iii) empower Bank client countries to implement policies and programs that will render their national health systems more equitable, efficient, qualitative and financially sustainable; and (iv) strengthen the capacities of national institutions and networks of professionals in Bank client countries and regions so they can take the lead in designing, implementing and sustaining programs that aim to improve performance of the health system. The program is widely offered at regional level through regional partner institutions as well as through customization at the country level.

43. The target was to upgrade, equip and operationalize 11 HIO training centers. This target was completely achieved in 2006.

IDA Financing (actual/latest estimate: US$0.38 million)

44. The IDA Credit financed training center rehabilitation; furniture and office equipment; and IT equipment.

Component 3 – Project Management
Original IDA allocation: US$ 0.00 million; actual/latest estimate: US$ 2.99 million

45. This component 3 was not included in the original project documents (PAD and DCA). It was added in the early years of the project. The DCA should have been amended, but there no indication that this was done. The component was financed by GOE, EC, AfDB and USAID, in addition to IDA.

IDA Financing (actual/latest estimate: US$2.99 million)

46. The IDA Credit financed the construction of TST offices; equipment for the TSO and TST offices; staff of the TSO engineering unit; TSO Monitoring and Evaluation; operating costs (bank charges); and external financial audits.

Annex 3. Economic and Financial Analysis
(including assumptions in the analysis)

1. As shown in Annexes 1 and 2 of the ICR, three-quarters of the IDA Credit[16] were used to finance the construction/rehabilitation, equipping and furnishing of health facilities. In the HSRP, the preparation of Master Plans (MP) was used as a basis for rationalizing health infrastructure investment and the design of FHUs and FHCs financed by the IDA Credit. Because the MOH used the services of different international and national consulting firms that led to different interpretations in applying these standards and guidelines in the pilot governorates, there were some deviations from the MPs. As a result, in some places family health facilities were spacious and of higher standards, and in other places some were sub standards.

2. The National Standards and Guidelines which were prepared in parallel with the Master Plan of Alexandria Governorate identified 4 levels for the family health units (FHU 1, 2, 3, 4) and family health center (FHC), the number of family health clinics for each level and the minimum net area required for the physical spaces of the health facilities. The deviations in the net area of the health facilities are presented in the tables below for Alexandria and Menoufia Governorates and summarized in the two charts that follow the tables.

3. For Alexandria health facilities, 34 out of 49 complies with the minimum requirements with a deviation of less than 30 percent and only 4 out of 49 showed non-compliance with a deviation of more than 50 percent.

4. For Menoufia health facilities, 65 out of 68 complies with the minimum requirements with a deviation of less than 30 percent and no facilities showed non-compliance with a deviation of more than 50 percent.

5. After the implementation of the FHM in the remodeled facilities and the calculation of the utilization rates of the population in the catchments area of the health facilities, an updated version of the National Standards and Guidelines of health planning for service delivery of the Family Health Model (FHM) was agreed upon between the MOH and the World Bank team. The new standardized model is a modified FHU 2 (with two family health clinics). The revised standards and guidelines were integrated within the accreditation and licensing system of family health facilities.

6. The conclusion is that the construction/rehabilitation carried out for the 117 health facilities financed by the IDA Credit served a very useful purpose to determine the most cost effective design for the 2,500 facilities to be renovated and equipped by the end of June 2010, financed by the national budget.

[16] US$71.91 million (out of US$94.69 million) were used to finance sub-component 1.2 to improve quality and efficiency of PHC delivery system.

(1) Alexandria Governorate
Deviations in Net Area of Health Facilities

No.	Name of Facility	Type of Facility	Remodel Type	No. of Clinics		Net Area (m2)		Deviation %
				MP	Actual	MP	Actual	
1	Amrawy	FHU4+C	N	9	9	1161	1907	64%
2	Goan	FHU4	D&R	9	9	650	840	29%
3	Mandara	FHU4+C	D&R	9	9	1165	1554	33%
4	Kurdahi	FHU4+C	N	7	5	1138	2500	120%
5	Derbala	FHU*	N	1	1	218	171	-21%
6	Sidi Bishr Bahari	FHU4	N	9	9	665	793	19%
7	Sidi Bishr Qibli	FHU4	R	9	9	665	792	19%
8	Mohsen	FHU2	R	5	5	505	244	-52%
9	Abu –Sir	FHU1	R&E	3	3	461	430	-7%
10	Baheej	FHU1	R&E	3	3	460	337	-27%
11	Borg El Arab El Refia	FHU1	R&E	3	3	460	443	-4%
12	ElGharbaneyat	FHU1	D&R	3.	3	462	577	25%
13	El Mafrouza Gharb (Ebn Sahlan)	FHU3	N	7	7	588	796	35%
14	El Metrass South	FHU4+C	R&E	9	9	1334	1189	-11%
15	El Dekhela	FHU4+C	D&R	9	9	1333	1443	8%
16	El Zeraa el bahary K26	FHU*	N	1	1	210	296	41%
17	El Zeraa el bahary K21	FHU2	N	5	5	510	588	15%
18	Hemlees	FHU*	R	1	1	209	147	-29%
19	Karmouz	FHU2	R	5	5	505	244	-52%
20	El Mafrouza Gharb (Karantina)	FHU2	N	5	5	509	510	0%
21	El Metrass El werdian	FHU3	D&R	7	7	589	789	34%
22	El Kabary	FHU4+C	D&R	9	7	1161	1039	-11%
23	El Hawaria	FHU1	D&R	3	3	463	525	14%
24	El Nasseriah	FHU3+C	N	7	7	1244	1496	20%
25	El Wady	FHU2	R&E	5	5	507	611	21%
26	Abdel Kader	FHU2	R	5	3	506	294	-42%
27	Bangar el Sokkar	FHU3	D&R	7	7	586	705	20%
28	El Gomrok	FHU2	R&E	5	5	508	619	22%
29	Abiss 2	FHU4+C	R	9	7	1286	920	-28%
30	Danna	FHU2	N	5	5	510	694	36%
31	Bakkous	FHU4+C	R&E	9	9	2221	1830	-18%

No.	Name of Facility	Type of Facility	Remodel Type	No. of Clinics		Net Area (m2)		Deviation %
				MP	Actual	MP	Actual	
32	Haggar Nawatia	FHU4+C	N	9	9	1289	1486	15%
33	EL Matar	FHU*	R	1	1	209	226	8%
34	El Mafrouza Shark	FHU3	D&R	7	7	588	796	35%
35	Zawyet AbdElKader	FHU4	N	9	9	665	793	19%
36	Danna El Gedida & Ezbet Watania	FHU2	N	5	5	510	694	36%
37	El Hadra Qibli	FHU3	N	7	6	587	635	8%
38	El-Seuif	FHU4+C	R&E	9	9	1206	1392	15%
39	Abiss 7	FHU3	N	7	9	713	1010	42%
40	Abiss 10	FHU2	D&R	5	5	507	611	21%
41	Orabi	FHU1	N	3	3	463	535	16%
42	El Bassra	FHU1	R&E	3	3	459	280	-39%
43	Phelistine	FHU1	R&E	3	3	462	516	12%
44	El Gazair	FHU2+C	R	5	5	1196	1147	-4%
45	El Galaa	FHU1	R&E	3	3	459	455	-1%
46	Baghdad	FHU1	N	3	3	463	535	16%
47	El Amereya	FHU4	D&R	9	7	655	792	21%
48	El Wakkad	FHU1	R&E	3	3	464	530	14%
49	Haress	FHU1	D&R	3	3	464	607	31%

Source: MOH – Central Administration of Technical Support (TSO)

N: New
D&R: Demolish and Rebuild
R: Remodel
R&E: Remodel and Extension

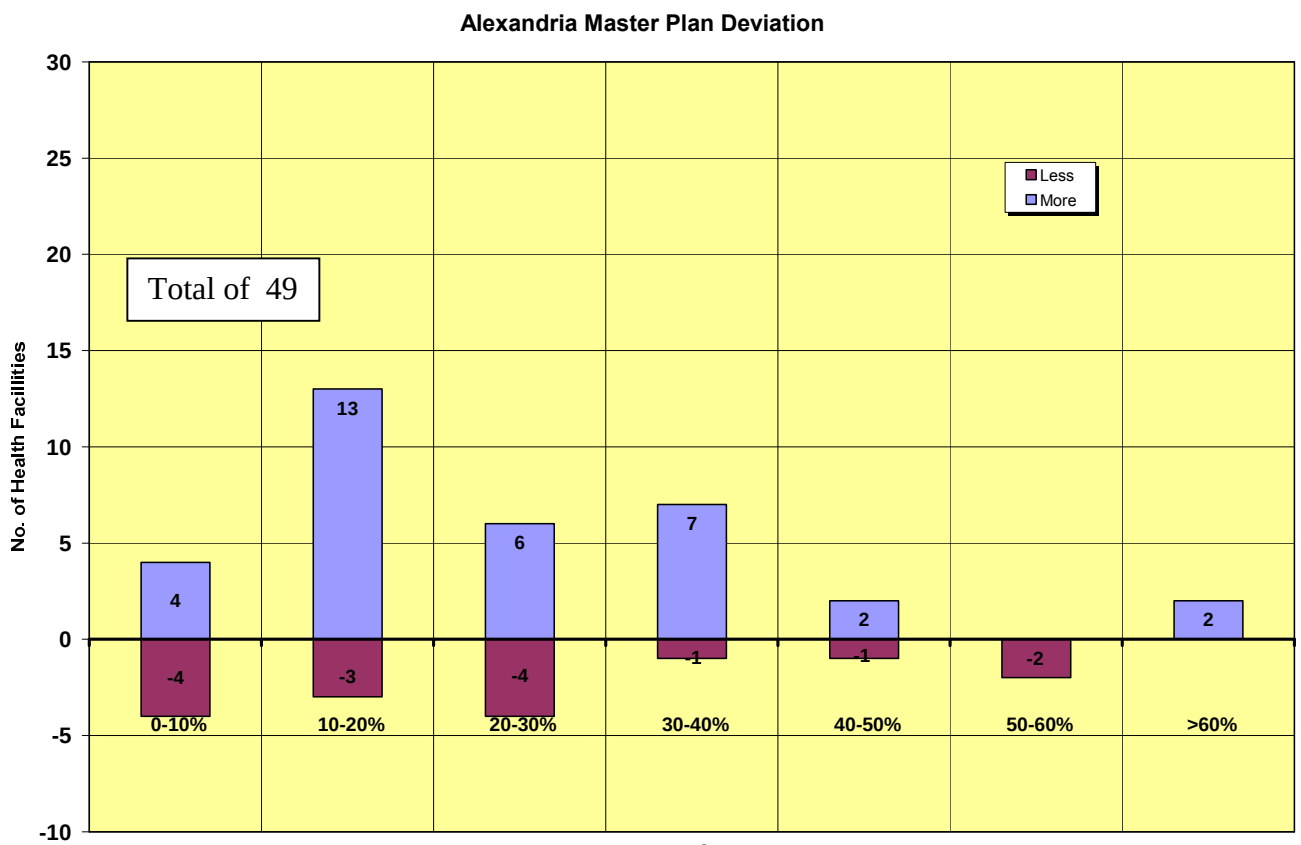
(2) Menoufia Governorate: Deviations in Net Area of Health Facilities

No.	Name of Facility	Type of Facility	Remodel Type	No. of Clinics		Net Area (m2)		% Deviation
				MP	Actual	MP	Actual	
1	Kafr Mit Abssy	FHU1	R	3	3	459	328	-28%
2	Samadon	FHU4+C	R	9	7	1159	998	-14%
3	Shenoufa	FHU1	D&R	3	3	459	484	5%
4	Estebary	FHU1	D&R	3	3	459	484	5%
5	Qwesna Center	FHU4+C	R	9	9	1159	1447	25%
6	Kashdoukh	FHU2	R	5	5	504	633	26%
7	Shubra Bas	FHU4	D&R	9	4	678	671	-1%
8	Tamalay	FHU4+C	D&R	9	4	1159	817	-29%
9	Teta	FHU4	R	9	8	678	1008	49%
10	Menouf	FHU4+C	R	9	7	1201	1135	-5%
11	Mit Fares	FHU3	D&R	7	7	740	832	12%
12	Ashlim	FHU2	D&R	5	5	631	773	23%
13	Taha Shubra	FHU4	D&R	9	9	805	823	2%
14	Delhmo	FHU2	D&R	5	5	631	655	4%
15	Abu Rakaba	FHU3	D&R	7	7	740	901	22%
16	Baraneya	FHU3	D&R	7	7	740	893	21%
17	Farhonia	FHU4	D&R	9	9	805	822	2%
18	El-Anjab	FHU2	D&R	5	5	631	655	4%
19	El-Khor	FHU2	D&R	5	5	631	700	11%
20	Ramlet El-Anjab	FHU2	D&R	5	5	631	655	4%
21	Kafr El-Hema	FHU4	D&R	9	9	805	822	2%
22	Ashmon Center	FHU4+C	D&R	9	9	1286	1628	27%
23	Manial Deweb	FHU1	D&R	3	3	586	691	18%
24	Shoshay	FHU2	D&R	5	5	631	655	4%
25	Koros	FHU4	D&R	9	9	805	822	2%
26	Abu Nishaba	FHU1	D&R	3	3	586	649	11%
27	El-Salam	FHU2	D&R	5	5	631	763	21%
28	Abshish	FHU2	D&R	5	5	631	718	14%
29	Abu Snita	FHU1	D&R	3	3	586	649	11%
30	Bahnay	FHU2	D&R	5	5	631	700	11%
31	Bir Shams	FHU2	D&R	5	5	631	655	4%
32	Mit Wasta	FHU3	D&R	7	7	744	893	20%
33	Bemem	FHU2+C	R&E	5	5	1112	1307	18%
34	Kamayesa	FHU2	D&R	5	5	631	662	5%
35	Al-Eraqia	FHU3	D&R	7	7	740	901	22%
36	Kafr Denshawy	FHU2	D&R	5	5	631	718	14%
37	Danasour	FHU2	D&R	5	5	631	700	11%
38	Sersemos	FHU1	D&R	3	3	586	649	11%

No.	Name of Facility	Type of Facility	Remodel Type	No. of Clinics		Net Area (m2)		% Deviation
				MP	Actual	MP	Actual	
39	Khdadba	FHU4+C	D&R	9	9	1286	1634	27%
40	Damhog	FHU2	D&R	5	5	631	718	14%
41	Kafr Sheik Sheata	FHU1	D&R	3	3	586	691	18%
42	Salamon	FHU1	D&R	3	3	586	691	18%
43	Mesherif	FHU2	D&R	5	5	631	700	11%
44	Kafr Abhanas	FHU1	D&R	3	3	586	649	11%
45	Kafr Taha Shubra	FHU2	D&R	5	5	631	700	11%
46	Kamshish	FHU3	D&R	7	7	740	901	22%
47	Kafr Bani Iran	FHU2	D&R	5	5	631	700	11%
48	Dabaiba	FHU3	D&R	7	7	740	832	13%
49	El-Remaly	FHU2	R&E	5	5	631	716	14%
50	Shanshour	FHU4+C	R&E	9	7	1286	1501	17%
51	Lebisha	FHU1	D&R	3	3	586	654	12%
52	Shama	FHU4+C	R&E	9	9	1287	1367	6%
53	Kafr Ghadra	FHU3+C	D&R	7	7	1221	1605	31%
54	Kafr Shubra Zenki	FHU1	D&R	3	3	586	610	4%
55	Mit Afifi	FHU3+C	D&R	7	7	1221	1605	31%
56	Talbant Abshish	FHU1	R&E	3	3	586	696	19%
57	Saqiet Monkady	FHU1	D&R	3	3	586	649	11%
58	Tahaway	FHU4+C	R&E	9	7	1286	1501	17%
59	Sadat Center	FHU4+C	D&R	9	9	1286	1628	27%
60	Kafr Dawood	FHU4+C	D&R	9	9	1286	1628	27%
61	Monshat Sultan	FHU4	N	9	9	805	958	19%
62	Damalik	FHU2	R&E	5	5	631	775	23%
63	Deberky	FHU3	D&R	7	7	740	893	21%
64	Hamool	FHU2+C	R&E	5	5	1112	1392	25%
65	Kafr Fisha	FHU3	D&R	7	7	740	893	21%
66	Kafr Remah	FHU1	R&E	3	3	586	688	17%
67	Bakhaty	FHU2+C	R&E	5	5	1112	1392	25%
68	KafrBelmeshet	FHU1	D&R	3	3	586	649	11%

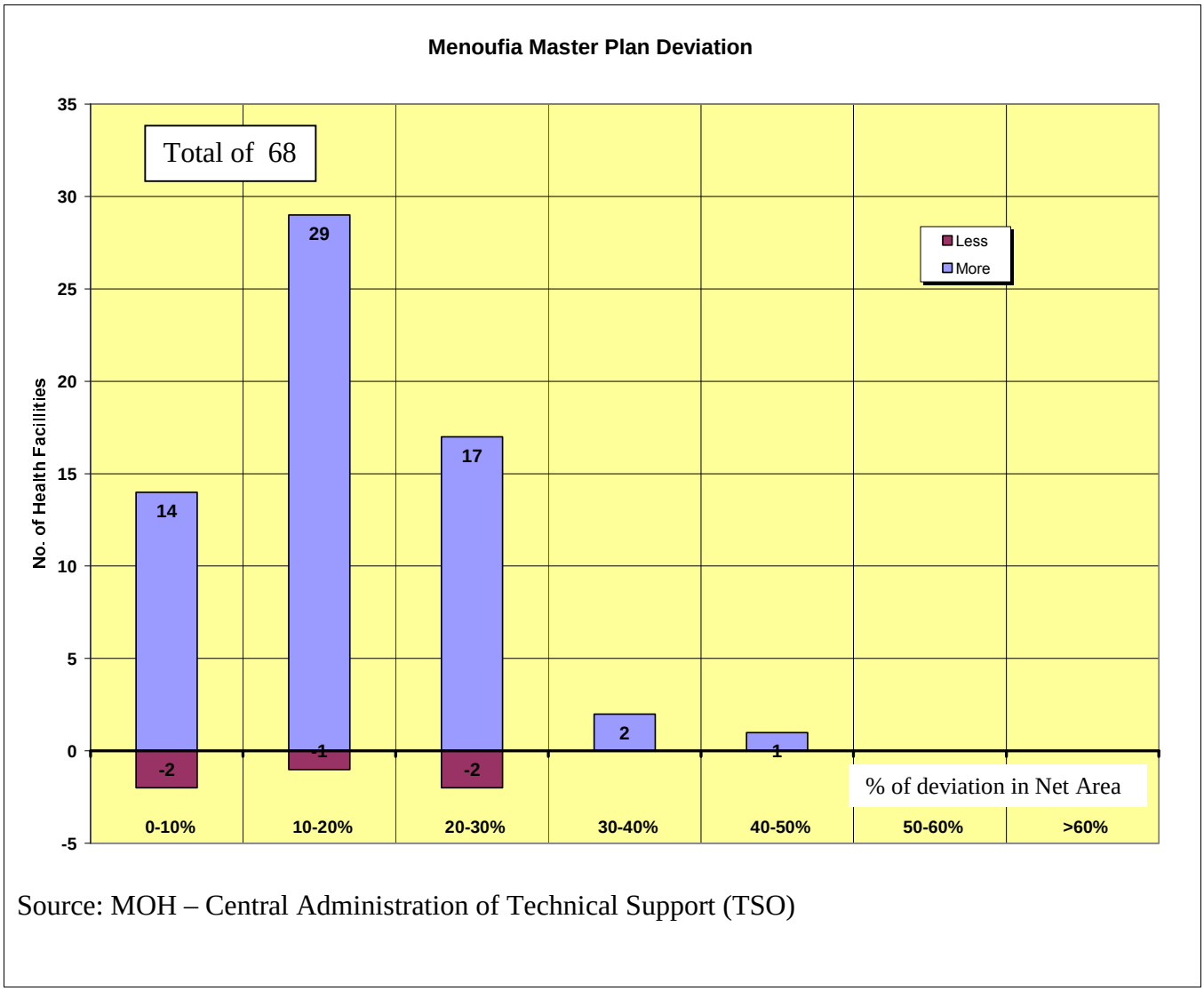
Source: MOH – Central Administration of Technical Support (TSO)

N: New
D&R: Demolish and Rebuild
R: Remodel
R&E: Remodel and Extension



Source: MOH – Central Administration of Technical Support (TSO)

% of deviation in Net Area



Source: MOH – Central Administration of Technical Support (TSO)

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
Lending			
George Schieber	Health Sector Manager	MNSHD	TTL
Bassam Ramadan	Senior Economist	MNSHD	Economics
Albert Sales	Senior Health Specialist	MNSHD	TTL
Egbe Osifo	Health Specialist	MNSHD	Health
Rekha Menon	Health Economist	MNSHD	Economics
Atsuko Aoyama	Health Specialist	MNSHD	Health
Eileen Sullivan	Program Assistant	MNSHD	Operations
Mariam Claeson	Senior Public Health Specialist	MNSHD	Health
Ramesh Govindaraj	Lead Pharmaceutical Specialist	MNSHD	Pharmacy
Akiko Maeda	Health Finance Specialist	MNSHD	Health Financing
Nicole Klingen	Economist	MNSHD	Economics
Sahar Ahmed Nasr	Economist	MNSHD	Economics
Mahmoud Gamel El Din	Senior Procurement Specialist	MNA	Procurement
Luca Frontini	Economist	MNSHD	Economics
Micheline Faucompré	Senior Language Staff Assistant	MNSHD	ACS
Supervision/ICR			
George Schieber	Health Sector Leader	MNSHD	TTL
Bassam Ramadan	Senior Economist	MNSHD	Economics
Mariam Claeson	Senior Public Health Specialist	MNSHD	Health
Akiko Maeda	Lead Health Specialist	MNSHD	TTL
Eileen Sullivan	Operations Analyst	MNSHD	Operations
Nicole Klingen	Health Economist	MNSHD	Economics
Imad Saleh	Procurement Specialist	MNA	Procurement
Robert Bou Jaoude	Financial Management Specialist	MNAFM	Finance
Dennis Streveler	MIS Specialist	MNA	MIS
Vasilios Demetriou	Senior Implementation Specialist	MNA	Architect
Alaa Hamed	Senior Health Specialist	MNSHD	TTL
Sameh El-Saharty	Senior Health Policy Specialist	MNSHD	TTL
Hisham Waly	Senior Financial Management Specialist	MNAFM	Finance
Mohamed Yahia Ahmed Said Abd El Karim	Financial Management Specialist	AFTFM	Finance

Sally Abdelnabi	Temporary	MNC03	ACS
Francisca Ayodeji Akala	Sr Public Health Spec.	MNSHD	Health
Firas Raad Zaid Al-Hussein	Sr Health Spec.	MNSHD	Health
Sami Ali	Senior Operations Officer	MNSHD	TTL
Cristian C. Baeza	Lead Health Policy Specialist	LCSHD	Health
Suzy Edward Bazerghi	E T Temporary	MNC03	ACS
Gaston Mariano Blanco	Social Protection Specialist	LCSHS-DPT	Social protection
Nadia El Gohary	E T Temporary	MNC03	ACS
Dina Mohamed Samir El Naggar	Sr Communications Officer	MNAEX	Communications
Akram Abd El-Aziz Hussein El-Shorbagi	Sr Financial Management Specialist	MNAFM	Finance
Karim Kamil Fahim	Auditor	IADDR	Finance
Jean-Jacques Frere	Sr Public Health Specialist	MNSHD	Health
Mahmoud Gamal El Din	Senior Operations Officer	MNSHD	Operations
Rebekka E. Grun	Economist	MNSHD	Economics
Maged Mahmoud Hamed	Sr Environmental Spec.	MNSSD	Environment
Atter E. Hannoura	Consultant	MNSSD	
Sahar Mohamed Hegazy	Program Assistant	MNC03	ACS
Nehad Morsi Kamel	Consultant	MNSHD	
Badr Kamel	Senior Procurement Specialist	MNAPR	Procurement
Maiada Mahmoud Abdel Fatt Kassem	Consultant	MNAFM	Finance
John C. Langenbrunner	Lead Economist, Health	EASHD	Health Economics
Rony A. Lenz	Consultant	MNSHD	
Moez Makhlouf	Consultant	MNAFM	Finance
Ayat Soliman	Sr Natural Resources Mgmt. Specialist	MNSSD	
Mario Antonio Zelaya	Consultant	MNSSD	Implementation
Luca Etter	Junior Professional Associate	MNSSP	Economics
Paul Geli	Consultant	MNSHD	ICR

(b) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	USD Thousands (including travel and consultant costs)
Lending		
FY97		144.38
FY98		293.02
FY99		14.19
FY00		0.00
Total:		451.59
Supervision/ICR		
FY97		0.00
FY98		7.58
FY99		233.20
FY00	61	153.21
FY01	35	63.03
FY02	33	154.33
FY03	20	102.55
FY04	23	72.79
FY05	31	101.72
FY06	32	112.25
FY07	27	109.64
FY08	20	56.63
FY09	17	0.00
Total:	299	1166.93

Annex 5. Beneficiary Survey Results

Management and Service Quality in Primary Health Care Facilities in Alexandria and Menoufia, at the Completion of the Health Sector Reform Project

Executive Summary of Survey Report

Introduction

Motivation

1. The Egyptian Ministry of Health and Population (MOH) has been engaged in a paradigm shift of health policy from a supply-side to a demand-side focus. At the center of this is the new national health insurance program, announced in 2005, which aims to serve as a catalyst to effect a transition from a system driven by budget inputs to a "money follows the patient"- demand-based system. This program is also the logical next step after the recent Health Sector Reform (1997-2005), which focused on supply-side improvements. Meanwhile, various sources of evidence[17] have suggested issues in the quality of service and management in both reformed and non-reformed public primary care facilities, regarding for example availability of supplies, correct payment exemptions for the poor, and consequently, utilization through the population.

2. Holding the above two developments in perspective suggests exploring the potential for demand-side mechanisms to improve service delivery issues. The present report attempts to mark a first step in this direction, and: (1) to provide an objective, unbiased assessment of the performance of primary facilities in the Alexandria and Menoufia governorates; (2) to analyze the quality perceptions, health situation, utilization and economic situation of households living in the catchment areas of the facilities; (3) to examine the management processes of different institutions involved in primary care; and (4) to understand the association of the recent Health Sector Reform Program with any observed differences.

The Health Sector Reform Program

3. In 1997, the Government of Egypt (GoE) launched the Health Sector Reform Program (HSRP) which addressed both the delivery and the financing of primary health services and came to a close over 2006. The service delivery component included interventions regarding the renewal of infrastructure and equipment; human resource development, centered around family health training; and quality assurance, through a system of accreditation standards and a regular inspection schedule for facilities. The financing

[17] E.g. Egyptian Service Provision Assessment 2004, Health Insurance Survey 2006, HSRP quarterly monitoring data, HSRP Implementation Supervision Reports.

component envisaged the re-channeling of funds from direct financing to contracted financing through Family Health Funds (FHF) at the governorate level. The financing component also envisaged affiliating the uninsured with a non-linear price system at the point of delivery, requiring a one-off payment for opening a file and a co-payment for each visit.

Methodology and Objectives of the Report

4. The present report is the preliminary results account of four types of surveys conducted in the governorates of Alexandria and Menoufia, since July 2009, (i) a quantitative survey of 362 primary health care facilities, both reformed and non-reformed (ii) a quantitative survey of 5417 households (15 per facility) in their catchment area, (iii) qualitative interviews and focus groups with a subset of these facilities and households and (iv) qualitative institutional expert interviews. The surveys were designed in cooperation between the TSO of the MOH and the World Bank, and are described in more detail in Annex 1 of the Survey report.

5. The objective of this results account is threefold. It attempts to

(i) give an overview over the performance of primary care facilities in the light of the objectives of the HSRP;
(ii) account for the basic health needs of the population in the catchment areas of these facilities, and how these needs are met by the primary care facilities in our sample; and
(iii) highlight a few avenues of promising governance initiatives, identified by facilities or the communities in their catchment.

Main findings

The Demand for Primary Health Care

6. To assess the demand for primary health care, we examined self-reported prevalence of illnesses and use of health care services, as well as respondents' experiences with the health services they sought.

7. Nearly 40 percent of the sample report having been ill or injured in the past 6 months. Those with lower levels of schooling were more likely to report having been ill or injured. Cancer prevalence rates were low. But 5.41 percent of the sample report having been diagnosed with diabetes. About 7.5 percent of the sample reported they have had high blood pressure in the past 12 months.

8. In general, a very large fraction of individuals sought care when they were ill. Ninety five percent of adults reportedly sought care when they were ill in the six months prior to the interview.

9. Access to healthcare appears to be no problem in terms of transport, but possibly in terms of finance. The average travel time to the main health facilities visited was slightly less than one hour. However, 33 percent of non-users said there were occasions when money kept them from going to see a doctor or visit a health care facility. Only 50 percent of household heads reported that they have health insurance. 43 percent reported that they were registered in the Family Health Model, although the fraction enrolled was considerably lower in Alexandria than in Menoufia. When comparing utilization with insurance status, it does not appear that a lack of health insurance is the driving factor in determining whether people use care.

10. The most common providers of care were private doctors. Among all health care users, nearly 47 percent had seen a private doctor in the past 6 months. When people did seek care at health facilities, reliance on medication was not frequent. On the topics of friendliness and availability of staff, qualifications, cleanliness and comfort level of facilities and waiting areas, and location of facilities, over 95 percent of respondents indicated a "positive" opinion (extremely satisfied or somewhat satisfied).

The Supply of Public Primary Healthcare: Availability and Quality of Care

Availability of Non medical Infrastructure

11. Almost all (98 percent) public primary health care facilities in Alexandria and Menoufia have access to electricity. Working phones were available in 76.2 percent of the facilities and a water outlet is generally available in 93 percent of all facilities.

12. Only two thirds of the facilities, however, reported that water is always available. While almost all facilities have a toilet which can be used by patients, the interviewers found that only 30.2 percent of the observed facilities offer soap and only 3.5 percent of the facilities offer toilet paper in their bathrooms.

13. Comparing different types of facilities shows that MOH ranks below HIO clinics in the availability of all non-medical supplies except for overnight beds.

14. Further, within MOH facilities there is a difference between reformed and non reformed facilities. Many of the supplies were found more regularly in reformed than in non reformed facilities and in urban facilities compared to rural facilities. In particular, facilities in urban areas tend to have better infrastructure when it comes to working phones (88.2 versus 78.6 percent of facilities are reachable by phone), water availability (88.1 versus 56.6 percent of facilities) and waiting areas for patients (97.6 versus 88.9 percent of facilities).

Availability of medical infrastructure

15. Many facilities lack basic supplies to conduct Diabetes Mellitus treatment. Overall, only 31.2 percent of all facilities in Alexandria and Menoufia possess a working ECG, 40.5 percent a machine to measure blood pressure ad hoc, 48.4 percent could find a

working reflex hammer, 30.6 percent have insulin ampoules on stock, and 34.8 percent have a minimum of 5 2 or 3ml disposable syringes. The numbers are similarly low, or even lower, for aides to educate patients, such as MOH guidelines (observed in 33 percent of all facilities) or leaflets for patients (15.3 percent) and other visual aids for teaching patients (7.8 percent). Almost all supplies for Diabetes Mellitus treatment are more likely to be found in reformed facilities than in non reformed facilities.

16. Supplies specifically needed for CHD/hypertension treatment can only be found in very few facilities; only 4.1 percent of the facilities had fibrates, 2.4 percent statins and 23.3 percent blood thinning medication. While still on an overall low level, the availability of supplies for CHD/hypertension treatment is significantly higher in accredited facilities as compared to non-accredited facilities, as well as in reformed facilities compared to non-reformed ones. There is no significant difference in the availability of supplies for CHD/hypertension treatment between facilities in Alexandria and Menoufia or between urban and rural facilities.

17. Almost 9 out of 10 facilities are in possession of basic measurement instruments for treating children such as infant scale (90.1 percent of all facilities), child scale (88.4 percent) or a functioning thermometer (93.3 percent). Materials to educate mothers about child health issues, on the other hand, could only be found in half of the facilities, or less (34.2 percent of facilities could show to the interviewers a IMCI mother cards). Supplies for sick child treatment are more frequently available in MOH clinics compared to HIO clinics. Furthermore, accredited facilities are more likely to be in possession of supplies for child health services than non accredited facilities.

18. Most of the facilities seem well equipped to conduct basic antenatal services. A table for ANC exam could be found in 93.5 percent of all facilities. Furthermore, over two-thirds of facilities had available supplies such as spotlight source (70.7 percent), clean gloves (80.4 percent), safety box for needles (80.1 percent), or decontamination solution for clinical equipment (78.3 percent).

Human Resources

Allocation of Human Resources

19. The population of Alexandria and Menoufia is served by 362 public primary health care facilities, with most of the facilities serving a catchment area of 30,000 people or less. The median facility has 50 health workers which each carry out – on average – 90 consultations per year. The ratio of health workers to beneficiaries is much higher in Menoufia, with one health worker for 336 inhabitants, than in Alexandria, where there is a health worker for 1193 inhabitants. Furthermore, there are fewer health workers per beneficiaries in reformed facilities than in non reformed facilities and in accredited facilities compared with non accredited facilities. Non-reformed and non-accredited facilities tend to be smaller and are more often placed in rural areas than reformed and accredited facilities.

20. From the 18,253 staff working in public primary health care facilities, about 20 percent are trained medical professionals, of which approximately half are general practitioners, and each 25 percent specialists and pharmacists. There is a difference in composition of staff between facilities in Alexandria and Menoufia with a higher share of specialists, and doctors in general, compared to non-medical staff in Alexandria. Furthermore, the share of specialists is slightly higher in non-reformed facilities compared to reformed facilities.

21. There are major differences in the socio-demographic composition of the different categories of employees. In particular, doctors and pharmacists are much younger; less experienced and have been at the facility they currently work in for a much shorter period of time compared to nurses and, in particular, administrative staff. Overall, primary health care in Alexandria and Menoufia has a very female dominated workforce; 64.8 percent of doctors and pharmacists, 72 percent of administrative staff and almost 98 percent of nurses are female. The staff working in primary health care facilities comprise a locally recruited workforce; almost 60 percent of administrative staff, 54.6 percent of nurses and 32.5 percent of doctors and pharmacists were born within 5 km of the facility they work in.

Presence and Absence of Staff

22. Primary care facilities are officially available 24h. But while all offer a morning shift, only 24 percent offer an afternoon shift and 4 percent offer a shift after 8pm.

23. The survey included three surprise visits during the morning shift to monitor staff presence and found that 42 percent of full time staff were absent at least once, 14 percent were absent twice or more.[18] The highest presence in all three visits was observed in administrative staff (66 percent), nurses (64 percent), social workers (64 percent), lab technicians (62 percent), and other staff (62 percent). In the econometric analysis, professional categories appear to explain absences to a large extent, certainly more than any other variables that we can measure.

24. Other correlations with individual characteristics show that female staff are less absent than men, and a higher education is consistently and significantly linked with higher absence rates. Unless we control for professional categories, in which case education becomes insignificant. People on term contracts show significantly lower absence rates than people on open-ended contracts.

25. People born within 5 km of the facility are less frequently absent (64 percent present all three visits) than those who were born further away (51 percent). A similar relation holds for those who live near the facility. Further, staff from cities above 100k are significantly more absent and staff in rural areas shows a better presence pattern. Staff whose relatives visit the facility, can be found present more often (64 percent present each time vs. 50 percent).

[18] The presence of part time staff was not included in the analysis.

26. Facility management, infrastructure, a cost audit system on site and positive personnel incentives all matter for better staff presence. Staff in HIO run facilities is most present on all three visits (73 percent, and only 8 percent absent twice or more), while MOH or NGO management does not seem to matter for staff presence (56 percent present all three visits). Facilities that judge the lack of major infrastructure, such as medical equipment, clean water or electricity an important issue, also report somewhat higher staff absences. The more a facility is making use of a cost audit system, the better the presence record of staff. As for the consequences of performance reviews, it is possible that positive incentives work best, with salary increases and promotions being associated with better average presence records.

27. Facilities experience some outside quality supervision from both formal (government supervision) and informal (mukkadem, media, mosques) institutions. Many of these have a positive association with presence. Most facilities are regularly visited by supervisors from the Health District, and in the case of contracted facilities, also from the Family Health Fund. Those who are not receiving these visits show higher absences. Facilities that cooperated with the religious institution to announce their vaccination campaign show somewhat better staff presence than those who did not. Staff of (the very few) facilities where local media are reportedly critical show a better presence record than where local media is very positive or does not play a role. A relationship with or visits by the Mukkadem show no influence. Perhaps surprisingly, the presence of, and relationships with NGOs do not seem to be associated with the staff presence pattern, at least not positively.

Quality of Care: Structural Observations of Doctors

28. We have obtained structural observations of diabetes mellitus, hypertension/CHD, sick child and antenatal treatments through letting trained doctors sit in as surveyors on actual medical consultations. During the observation, the qualified surveyor compares a checklist with the actions actually performed by the doctor and ticks the accomplished items.

29. The average Diabetes consultation is missing many of the elements that are part of the ministerial FHM guidelines for Diabetes Mellitus treatment. In less than half of the observed consultations did the doctor examine the patient for sensations or reflexes (33.9 percent of observations), examine arms and hands or feet and legs for pulsation (20.2 percent and 23.7 percent, respectively), or examine the back of the thorax with a stethoscope (43.8 percent). Only 12.6 percent of doctors asked about the patient's smoking habits and 36.5 percent of all consultations mentioned the need for the patient to exercise.

30. MOH facilities have a higher rate of following guidelines of Diabetes Mellitus treatment than facilities run by the HIO. Furthermore, providers in facilities in Alexandria and in urban facilities have a higher rate of conducting standard procedures for diabetes treatment than facilities in Menoufia and facilities in rural areas. When it

comes to informing the patient about his or her illness or answering the patient's questions, however, this observation does not hold, and indeed, providers in facilities in Menoufia are more likely to talk about health behavior with the client than their colleagues in Alexandria. Reformed and accredited facilities have a higher rate of carrying out standard procedures for diabetes treatment than non reformed and not accredited facilities.

31. When consulting and examining CHD/hypertension patients, basic procedures appeared to be carried out to a large extent. For all components of the treatment, the guidelines were followed at a higher rate by providers in MOH facilities compared to HIO facilities. Furthermore, facilities in Alexandria have a significantly higher rate of carrying out standard procedures compared to facilities in Menoufia. There is no clear trend when comparing reformed facilities with non reformed facilities, as well as accredited facilities with non accredited facilities.

32. The observation of antenatal treatments showed that very basic procedures are carried out often; more advanced but essential procedures are missing in many cases. There is no distinct difference in the performance of antenatal care between HIO and MOH facilities, and between facilities in Alexandria and facilities in Menoufia. Furthermore, the comparison between accredited and non-accredited units is inconclusive.

33. Of the different examinations required by the guidelines of sick child treatment, very few were observed across the board. The observance of most examinations and consultations is slightly higher in MOH facilities compared to HIO facilities. When comparing sick child consultations in Alexandria and Menoufia or in urban and rural clinics, there are no clear differences. Most examinations are more likely conducted in reformed than in non reformed facilities.

34. The observance of basic hygiene practices by doctors throughout the consultations is alarming. In only 22.4 percent of all observations did the provider wash their hands with soap and water prior to engaging with the patient. The numbers are on a similar low level for the usage of disposable gloves and the change paper or sheet on the examination table, at 23.1 and 19.7 percent, respectively.

Constraints to Improvement

35. In the view of facility management the three most severe constraints to improving the quality of services at the facility level are the low motivation of staff (viewed as a constraint by 43 percent of all managers), general lack of supplies (39 percent) and the (non) availability of qualified staff (37.5 percent). Other important issues mentioned by the interviewees were lack of specific equipment such as drugs (29.3 percent), and general problems with the quality of buildings (21 percent), plumbing infrastructure (14.4 percent) and non medical supplies, i.e., furniture (13 percent).

Payments

36. Official payments differ by type of facility. In all MOH primary facilities in Menoufia and contracted facilities in Alexandria, patients will co-pay: 10 LE to inscribe in the family health unit and to open a family folder, 5 LE in Alexandria and 10 LE in Menoufia for annual renewal of the folder, 3 LE per examination, 35 percent of the medical treatment (drugs and other therapy), and 50 percent upon repeat treatment. Home visits are officially not part of the package provided by contracted facilities. Non-reformed Primary Health Care Units, and HIO units do not usually charge at the point of service. However, they apply an official fee of 10 LE per home visit.

37. Some people are officially exempt from payment at the point of service. For people who are already insured in the HIO but seek treatment in FHU, the HIO reimburses for treatment. Poor people, as identified through household enumeration and poverty criteria, are supposed to be exempt from any fees in reformed units in both governorates.

38. Nearly 80 percent of the people in our sample paid something at their last doctor's visit. The share of people charged is actually not much lower at reformed public facilities (71-79 percent) than in private facilities (85 percent). Patients have paid on average 27 LE for just the doctor's examination at their last visit (24 LE if registered in the FHM, 18 LE at the HIO.).

39. The average de facto examination fee at public primary care units is above the official co-payment for reformed units, ranging from 4 LE (Urban Health Unit) to 8 LE (Rural Health Unit). Among the reformed facilities, 9 percent of FHC and 16 percent of FHU are reported to have charged patients more than the official examination fee.

40. Many facilities charge for home visits. Out of all patients, 65 percent report having paid extra for a home visit, i.e., exceeding the usual visit fee. The average amount per home visit was reported substantially higher in Alexandria (45 LE) than Menoufia (19 LE), and lower (19 LE) for those registered in the FHM, vs. those not registered (35 LE).

41. The vast majority of people, 97 percent, have never heard of the payment exemption for poor people in reformed facilities. When enrolling for the FHM, 61 percent of the FHM enrollees report a status research into their wealth and income situation, 39 percent did not receive any enquiry whatsoever. 77 percent of those who enrolled paid a fee, 23 percent were exempted. Out of those who enrolled in the FHM, 33 percent believed they should have been exempted, i.e., 10 percent more than those who actually have been exempted.

42. At their last visit to a facility, 24 percent of those registered in the FHM were exempted. Of these, 34 percent were covered by HIO, 30 percent reported to have paid at another visit, and 17 percent believed the service was free for everyone. Only 12 percent believed themselves exempt due to either FHM enrollment or status research. Six percent believe they have been exempted because they know the personnel at the facility. Interestingly, the exemption policy appears to work better at NGO and private facilities and rural hospitals. 84 percent of cases exempted at an NGO clinic and 81 percent

exempted at a private doctor note FHM membership or status research as reason for exemption.

43. 84 percent of the primary facilities in our sample report offering an exemption for the poor, but the decision-making process on exemption differs noticeably between facilities. The person to make the final decision for exemption is in around 40 percent of facilities the Social Worker, 27 percent use another person, and 27 percent do not have an official person to decide this.

Institutions of Quality Supervision and Governance

44. Over 85 percent of all facilities in Alexandria and Menoufia have a system for determining client opinion about the facility or services. Amongst those, a suggestion box to collect client opinion is the most frequently used instrument (67 percent) while 62 percent percent of this group of facilities carries out patient surveys. There is some traction and follow-up after client feedback. Almost half (46.5 percent) of the facilities that collect client information have been able to show a report that shows how they are collecting patient information, and a bit over one-third of the 85.6 percent of the facilities that collect client information reported they have made changes as a result of client opinion. Accredited facilities have a higher rate of collecting feedback compared to non accredited facilities, the same can be observed when comparing reformed with non reformed facilities.

45. There are several informal governance institutions that can potentially influence the facilities' work, such as media, mukkadems, religious organizations or NGOs. In many public primary health care facilities in Alexandria and Menoufia, the town administration is involved in one way or another with the facility. Further, more than a third of primary care facilities appear to have a fruitful relationship with the religious institutions in their neighborhood. 37 percent of facilities reported that the mosques and churches in their neighborhood helped them announce their vaccination campaign, while 27 percent of facilities knew and talked to the Imam and 22 percent were confident he mentioned the facility in Friday prayer. Press and media, however, had rarely any relationship to the facility. Almost two-thirds (64.4 percent) of all facilities do not have an NGO in the area where they operate.

Annex 6. Stakeholder Workshop Report and Results
(if any)

1. On January 21, 2010, an HSRP Stakeholders Workshop hosted by the Ministry of Health and the World Bank was held in Cairo to discuss the preliminary results of the report "Management and Service Quality in Primary Health Care Facilities in Alexandria and Menoufia at the Completion of the Health Sector Reform Project". The report is an integrated study of public primary health service delivery in the reform governorates of Alexandria and Menoufia that were financed by the World Bank. It is based on a quantitative survey covering all 362 primary health care facilities, as well as 5,417 households, conducted between March and December 2009. Furthermore, the study integrated the findings of a qualitative study, comprised of a series of in-depth interviews with providers and beneficiaries, as well as eight focus group discussions in four different facilities.

2. The report identified eight major issues which were discussed during the workshop with the goal to come up with suggestions and policy recommendations that address the issues in the short, medium, and long term. The following areas were identified as major issues regarding the quality of primary health service delivery in Alexandria and Menoufia: (i) exemption of the poor; (ii) limited continuity of care; (iii) lack of technicians/training to operate high tech equipment; (iv) hygiene practices; (v) insufficient adherence to guidelines; (vi) opening hours of facilities; (vii) lack of drugs; and (viii) competition between FHU and other facilities.

3. *Exemption of the poor***.** The report has shown that the exemption of the poor, which is an important part of the HSRP, is facing major bottlenecks in implementation and is applied insufficiently. On the user side, awareness of the policy amongst the population is very limited. In the household survey, only 3 percent of respondents have heard of the exemption policy. On the provider side, application of the policy is very arbitrary; the process of exempting poor people has not been streamlined and the decision-making process is unclear. The discussion showed that there is a need for: (a) clear criteria amongst which the poor can be identified by the facility, and subsequently exempted, using the poverty targeting designed by the Ministry of Social Solidarity (MOSS); and (b) outreach / awareness work to inform people about the exemption policy and the overall process for enrolment in the Family Health Model (FHM). During the discussion, several participants mentioned the potential to use the social worker and Reada Rifya at the facility level more frequently to interact with the community about exemption/insurance issues, as well as potential outreach through religious organizations and NGOs, if applicable.

4. *Limited continuity of care / high turnover of physicians***.** The survey found that there is a huge gap between the age structure and years of experience of physicians and

pharmacists compared to administrative staff and nurses in the facilities. While over half of physicians working in primary health care facilities in Alexandria and Menoufia have been working at their current position for less than a year, 83 percent of administrative staff has been with the facility 10 years or more. The qualitative survey confirmed that the turnover of physicians is very high and the problem is accelerated by the fact that many physicians take leave from the facilities to work in the private sector. The workshop agreed that only a long term, sustained reform of HR policies for physicians which would include a substantial improvement in salaries and incentives for doctors could solve this issue. However, the workshop also identified a number of short and medium term measures: (a) improve the filing system to allow for a smooth transition between two physicians; (b) limit the time lag between departing and arriving physicians at the facility to allow for a structured transition; and (c) in collaboration with universities, improve training and status of "Family Physician" by awarding the profession the status of a specialist.

5. *Training not aligned with infrastructure at facility / lack of technicians / training to operate high tech equipment*. Many facilities that have been equipped under the HSRP have now in place equipment (e.g., x-ray machines) that cannot be operated due to a lack of technicians/trained staff. The workshop touched on many aspects of this issue, including the questioning of whether high tech equipment is really needed in primary health care facilities and the potential need to review the Master Plans. Another problem – which is related to the lack of continuity of care mentioned above - is that the high turnover of staff leads to a low return on investment in training for physicians as they are likely to leave the facility within a short period after the training. Potential short term measures that were proposed included: (a) the implementation of a HR policy where technicians are shared between several facilities to guarantee that high tech equipment can be used at least on certain days; and (b) the revision of training plans for family physicians to make sure that more doctors are qualified to use high tech equipment. The establishment of medical technical institutes in every governorate was mentioned as a potential long term measure.

6. *Inconsistent adherence to hygiene practices / standards*. The report found that the lack of observance of basic hygiene practices by doctors is alarming. In only 22.4 percent of structural observations of client consultations did the provider wash his/her hands with soap and water prior to engaging with the patient. The numbers are on a similarly low level for the usage of disposable gloves and the change of paper or sheet on the examination table, at 23.1 and 19.7 percent, respectively. As possible short term measures, the workshop suggested: (a) awareness/advocacy campaign to remind doctors of the importance of following basic hygiene procedures, using visual aides, ideally located in areas where they can also be seen by the patients; and (b) the use of liquid soap in dispensers attached to the wall, as theft of hygiene materials seems to be a major issue.

7. *Insufficient and very variable adherence to guidelines for CHD and diabetes consultations*. The quality index developed in the report which measures the adherence to guidelines for treatment of sick child, antenatal, CHD and diabetes on a scale from 0 (no element of guidelines was observed) to 1 (all elements of guidelines were observed)

revealed that, on average, the adherence to CHD/hypertension and diabetes guidelines was much lower than adherence to antenatal or sick child treatment guidelines. Furthermore, the variance within the different health issues was much higher for these two problems. Some participants cautioned that strict adherence to guidelines may be very costly in some cases. The workshop concluded that there is a need to (a) update the guidelines by the MOH for CHD/hypertension and diabetes treatment. Furthermore, there were suggestions to (b) include structural observations as part of the quality supervision of the facilities and to link it to incentives. As a long term measure, it was suggested that (c) guidelines taught at medical faculties in universities may be revised and improved.

8. *Few facilities operate a second or third shift; staff presence is variable and insufficient.* The report has shown that there is a large discrepancy between the desired visiting times of most beneficiaries and the opening hours of many facilities. Almost half of the respondents stated that they prefer to visit the facility in the evening; however, only 24 percent of facilities work in the afternoon and 4 percent are available after 8pm. Furthermore, the survey found that out of the three visits of the survey team at each facility (at least one of them unannounced), 42 percent of full time staff were absent at least once, and 14 percent were absent twice or more. Absence is more of an issue with physicians compared to administrative staff or nurses. Amongst the proposed measures for improvement were: (a) an overhaul of the opening times policy, keeping in mind that many facilities are too small to implement a 24 hour or even multiple shift opening policy; (b) the introduction of an "on call" system where physicians can be reached easily by the users; and (c) re-evaluate the shift pattern currently in place and adapt opening times to the needs of the respective community. In order to avoid absenteeism, it was suggested that the allocation of physicians should take into account the hometown of doctors and consider a policy where no doctor is relocated to a facility in the proximity of their home, as absence is more of an issue with physicians working close to their hometown.

9. *Lack of medicines, in some cases, MOH essential drug list medications; procurement of drugs considered major concern of facility managers*. Only a limited number of drugs of the already compacted essential drug list for primary care are regularly available - many others are not available or are available only in a minority of cases, as the report has shown. Moreover, several facility managers have mentioned that the procurement of essential drugs is a major issue of concern. In particular, many have complained that the quantity ordered by the facility seldom reaches the facility but that, in many cases, only a fraction of the drugs demanded by the facility are delivered. While most of the participants have agreed that at the core of this problem is the limited budget available to purchase drugs, some alternative suggestions came up in the discussion: (a) close monitoring of prescriptions and education of patients on proper drug usage could reduce waste; and (b) updating the essential drug list, especially regarding non communicable diseases, was proposed.

10. *FHM system bypass by other MOH clinics and private clinics because of fee regime*. With the population at large confused about the fee regime at the reformed FHU, there is a risk of bypassing of the FHM by patients that prefer using the non-reformed clinics.

Furthermore, the bypass is also an issue on the supply side as the incentive payments by the FHF to providers in reformed facilities have substantially been decreased, creating a competitive advantage for non reformed facilities in attracting physicians. On the supply side, the workshop participants agreed that a standardized incentive regime across all MOH facilities needs to be installed. On the demand side, there is a need to: (a) streamline the payment and fee regime across all facilities in a district; and (b) subsequently implement a clear communication campaign to explain the fee structure to beneficiaries and highlight the services offered at the reformed facilities.

Health Sector Reform Program Implementation Completion Report "MOH Version"

May 2009

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Project Identification Card

Project Name:	Health Sector Reform Project
Executing Agency:	MOH
Funding Agency:	World Bank "IDA"
Type of Fund:	Loan

The Project Approved by the Bank on:	May 21, 1998
The Project effective Date:	June 24, 1998
The original closing date:	June 30,2004
Presidential Decree:	Decree 147 in 1998
The original credit amount:	SDR 66.8 million (US$90 million equivalent)
The Actual closing Date:	31 march 2009

Geographical Scope of Implementation:

- Original Scope: Alexandria, Menoufia and Sohag Governorates
- Revised Scope: Alexandria and Menoufia Governorates

Introduction

Comprehensive development and modernization of health system is one of Egypt's priorities and pursued objectives. MOH pursued different steps for improving the quality of health care services available for all Egyptians; adults, children, the poor and the well-off.

HSRP has 6 Strategies and 5 Principles. The Strategies include: Institutional Development, Infrastructure Development, Human Resource Development, Services Provision Reform, Financing Reform and Pharmaceutical Reform. HSRP aims to implement its strategies within the following principles: Universality, Quality, Equity, Efficiency and Sustainability.

Given the interests of the Ministry of Health as well as the strategic importance of Egypt in the Region (both politically and size wise), the Bank, EC, USAID, and DANIDA (D4) were particularly interested in assisting the GOE in the development of a comprehensive but phased reform strategy .

The HSRP was announced as a national plan by the President Hosni Moubark on 6th of July 2005. This statement provides an important policy framework for the health sector reform.

Project Description and Development Objectives

In early 1996 the MOH initiated a reassessment of the health sector situation and recognize a need to explore alternatives for a comprehensive reform. As a result of these discussions, the government adopted HSRP for Egypt which lays out a framework for undertaking a comprehensive reform of the health sector over the medium and long term . The Funding Partners Assisting the GOE in the development of a comprehensive but phased reform strategy which could also serve as the base to coordinate the support of all donors

The HSRP was developed by the Government of Egypt with the assistance of the World Bank and other donors to address underlying structural problems in the various sector domains which collectively determine national health outcomes as well as the equity, efficiency, quality, and long-run financial sustainability of the health sector.

Donor Collaboration During Implementation of Health Reform

- DANIDA and Bank focused on development and implementation of a needs-based Master Plan
- USAID focused on the service delivery model
- EC focused on training and HR
- Bank and USAID focused on MIS

- EC and Bank focused on construction and rehab, both in Alexandria, and Minoufia, EC in Sohag
- The African Development Bank ultimately invested in Suez and Qena based on the same reform program

The WB project assists the GOE in the phased implementation of universal coverage and primary care delivery system rationalization, beginning in three Governorates. Criteria for selection of Governorates include: level and depth of poverty; income; health status; concentration of women, children and other vulnerable groups; commitment to reform; administrative capacity; existing delivery capacity; presence of the HIO in the Governorate; presence of other donor primary care activities; and, representativeness and replicability. The Governorates chosen by the GOE are: Alexandria, Minoufia, and Sohag, and represent one Governorate from each of Egypt's major subdivisions (i.e., Urban Governorates, Lower Egypt, and Upper Egypt) excluding the sparsely populated Frontier Governorates.

Similarly, the HIO, will be reformed to improve its efficiency of administration and service delivery. It will also be transformed to become the future single national health insurance entity by enhancing its role to function through new Governorate level subsidiaries as the insurance entity administering the basic primary health care benefit package in the three pilot Governorates (Alexandria, Menoufia and Sohag) and Later in two additional Governorates (Qena and Suez).

The project will assist the GOE to refine the basic package, establish the public insurance entity to finance it, ensure access to, and contracting mechanisms to pay for delivery of the package, and undertake needed reforms in the organization and management of complementary public health services in the pilot Governorates as well as nationally. It will also assist in the reorganization, restructuring, and rationalization of the primary care delivery systems in the pilot Governorates so that both the financing and delivery of primary health care are assured (Component 1). The second component will reform the HIO so that it can be transformed into the National Health Insurance Fund (NHIF) (Component 2).

Project Components

PROJECT COMPONENT 1 -PROVIDE UNIVERSAL ACCESS TO A BASIC PACKAGE OF PRIMARY HEALTH CARE (PHC) SERVICES

This component consists of three subcomponents that will assure implementation of the insurance mechanisms for and service delivery of the PHC benefit package to the populations in the three pilot Governorates.

PROJECT COMPONENT 2 -REFORM OF HIO

This component will finance the costs of reforming the HIO to adapt its existing institutional structure to provide the primary care benefit package in the three pilot Governorates as well as to prepare it for its transition to the National Health Insurance Fund (NHIF) in the later phases of the reform.

Benefits And Target Population

By supporting the Government's long-term comprehensive reform program, the project will ultimately benefit the entire population. Project design will ensure that in the medium term the poor will benefit morethan those who already enjoy adequate access to basic primary care. First, the initial stage of phasing in universal coverage to a basic package of primary health care services will largely benefit the poor, children, women and other underserved vulnerable groups. Second, project activities in facility rehabilitation will be predicated on a needs-based Master Plan emphasizing poor, underserved areas. Third, the types of primary care and basic public health programs to be supported disproportionately benefit poor groups. Finally, because the poor are less able to substitute private for public services, project activities which help to improve quality and availability of services and rationalize the payment system in public delivery will therefore have an immediate impact on the poor.

Project Development Objectives

The Government's long-term Health Sector Reform Program (HSRP) is intended to improve the population's health status, ensure equity (physical and financial accessibility for all population groups), improve the efficiency and quality of services, and promote the system's long-run financial sustainability. The Bank project will assist the GOE in implementing the first five-year phase of its comprehensive Reform Program.

The specific project development objectives are:

- Improve population health status and well being in three pilot Governorates through universal coverage to a basic package of primary health care and public health services.
- Improve access to, efficiency, and quality of primary health care services in three pilot Governorates.

With regards the Project Development Objectives (PDOs), the expansion of coverage with the basic package of PHC and public health services in 2003, show a slow progress in the two pilot governorates (Alexandria and Menoufia). Achieving universal coverage was a challenge, particularly that the law proposed by Government to unify the existing insurance laws and achieve universal coverage was not passed by the parliament.

In 2004, It was noted that changes in the project scope and its components are needed and major progress for expanding formal health insurance coverage cannot be achieved by June 30/2004 closing date..so there was an agreement for restructuring the project by: (i) modifying the PDOs to ensure that the project will be completed satisfactory, (ii) reducing the no of health facilities that need to be constructed /rehabilitated and equipped from 151 to 127 health facilities, and (iii) reallocating funds between the different budget categories. the Government request for extension was submitted on March-August /2004.

There are two changes proposed to the PDOs related to the scope of health coverage, which is meant to be "universal" in "three governorates". The suggested changes will aim at targeting the poor population in two governorates instead of three. The cause for change is that there have been delays in passing the universal health insurance law, and without a new Law unifying the existing insurance laws and mandating universal coverage, it will not be feasible to achieve the objective of universality, at least, during the project life.

On June 2004, the WB senior management approved the request of the GOE to extend the project by two years and restructure the project as mentioned above. To help ensure that the revised PDOs would be achieved, credit proceeds will be reallocated from training, most of which has been financed now by the European Commission, to civil works and goods.
The GOE and the World Bank agreed to restructure the project by:

- Modifying the PDOs to ensure that the project will be completed satisfactorily.
- Developing a Remedial Action Plan (RAP) to accelerate implementation.

The revised PDOs, are to:

- expand health coverage with a basic package of primary health care and public health services to the poor population in two pilot Governorates (Alexandria and Menoufia Governorates)
- improve access and efficiency of primary health care services through rationalization of health infrastructure in two pilot Governorates.

On September 2007, the bank received a formal request from the Minister of International Cooperation to extend the project by 18 months to:

(i) allow for sufficient time to increase the enrollment of the poor and the uninsured
(ii) establish criteria, detailed rules and procedures for enrollment and verification of enrollment of the target groups and to test them
(iii) strengthen the purchasing capacity of the FHFs in Alex. and Menoufia.

The credit extension would allow the introduction of direct payment of premiums and copayments for the poor and the uninsured population for health services using output-based disbursement, which is intended to improve the performance of the project by directly linking disbursement against actual enrollment of the poor in the family health insurance program.

The project aims at allowing the HSRP to achieve its objectives in general and the PDO in particular through pushing forward two main elements of HSRP which are the financial reform and the institutional reform. Both elements, financial and institutional reform, will be achieved through allowing the development of a real purchaser of health care services within the health sector in Egypt.

In January 2008, the HSRP Credit Agreement was amended to introduce Performance-Based Financing arrangement to improve the performance of the project by linking

disbursement to actual enrollment and utilization of services by the poor and uninsured in the FHF.

Accordingly, a new project operations manual was prepared establishing the detailed rules and procedures for the enrollment and exemption of target groups in collaboration with the Ministry of Social Solidarity (MOSS). Moreover, MOH contracted with the Center of Social and Criminal Research to use a social targeting mechanism in both pilot governorates and sanction of the results by MOSS.

Regarding the expansion of coverage of PHC services to the poor population in both governorates, Alexandria and Menoufia, the project target was 825,000 poor people in both governorates. This target was recalculated based on the assumption that 60 percent of all the poor in both governorates would be covered by PHC services, to be in line with the assumption - set after the project restructuring in June 2004 – that the project would cover 60 percent of general population of both governorates having access to PHC services to 321,000 poor people in Menoufia and 174,000 poor people in Alexandria, i.e. a total of 495,000 poor people in both governorates to be covered by basic benefits package PHC.

Achievement Of The Project Development Objectives

The MOH has made good progress in achieving the Project Development Objectives (PDO's) in terms of:
(i) expanding health coverage with a basic benefit package of primary health care and public health services, with a focus on the poor population in Alexandria and Menoufia governorates (the percentage of beneficiaries covered by the primary health services has reached 2,430,991 beneficiaries representing 112 percent of the end of project target; and the percentage of poor beneficiaries covered by the primary health services reached 578,603 poor beneficiaries, which exceeded the end of project target by reaching 117 percent)

(ii) improving access and efficiency of primary health care (the accessibility of the general population to primary health care has reached 2,992,238 population representing 83 percent of the end of project target, the accessibility of the poor population reached 1,883,548 which exceeded the end of project target by reaching 103 percent, and the number of family health clinics constructed or renovated in compliance with the governorates health plans has reached 97 percent of the end of project target).

Coverage, accessibility, and utilization of family health services by the general population

In the two pilot Governorates, Alexandria and Menoufia, the Family Health Funds increased the coverage with a basic package of primary health care (PHC) to 2.43 million persons, representing 112 percent of the end of project target; i.e. those who were registered to receive family health services. Enrollment; i.e. those who paid a registration fee or being exempted, those who are insured, and those who renewed their subscription after at least one year, reached 1.4 million persons, representing 65 percent of the end of

project target. This enrollment will be increased due to the acceleration in the accreditation of newly completed facilities. To date, 241 facilities out of a total 331 facilities in Alexandria and Menoufia were contracted by the Family Health Funds. Moreover, the package of PHC services became physically accessible to 2.99 million persons, representing 83 percent of the end of project target.

Coverage of the uninsured population

From those who were registered, 1.35 million were uninsured persons, representing 125 percent of the end of end project target. From these uninsured, 0.33 million remained enrolled after one year of subscription, representing 30 percent of the end project target. As previously noticed, almost two thirds of those who remained enrolled (0.75 million persons representing 58 percent of those enrolled) are already insured beneficiaries of the HIO. This confirms that HIO beneficiaries are still opting to utilize Family Health Facilities, with the FHFs acting as purchasers on behalf of the HIO. The Alexandria FHF is getting reimbursed by the HIO for these services. But Menoufia FHF is only partially reimbursed by the HIO.

Coverage and accessibility of the poor

The package of services became accessible to 1.9 million persons living in poor areas, representing 103 percent of the end of project target. The two Family Health Funds, in collaboration with the Ministry of Social Solidarity (MOSS), have made good progress in the identification of the poor by identifying a total of 0.57million poor persons, representing 117 percent of the end of project target. The number of enrolled insured and uninsured poor in the two funds is about 0.38 million poor persons, representing 77 percent of the end of project target. Moreover, out of the uninsured poor enrollees, who are assumed to be half of the poor beneficiaries, 0.18 million persons are exempted from paying registration fees and co-payments, representing 38 percent of the end of project target. This means that efforts are still needed to increase the number of exempted poor in the Family Health Funds in Alexandria and Menoufia, to receive a basic benefit package of primary health care services.

Rationalization and efficiency of Health Services

The number of family health clinics that were constructed or renovated in compliance with the governorates health plans has reached 1103 clinics, representing 97 percent of the total clinics constructed or renovated. Moreover, the service utilization rate is at an average rate of 2.3 visits/ person/ year, representing 90 percent of the end of project target.

Project Components

The primary health care delivery system in the pilot Governorates will be restructured and rationalized on the basis of a needs-based Master Plan. The project will support consolidation, rehabilitation and re-equipping of the poorly functioning MOH primary health care facilities up to the district hospital level so that the current facilities can transition to become family health units, family health centers, and district hospitals.

The Project has two components

Component 1.
Universal Coverage for Basic Primary Health care (PHC) Services

Subcomponent 1.1 Establish Governorate Health Insurance System

For effective and efficient delivery of the primary care benefit package". So the insurance entities ,the FHFs, were established in the three pilots Gov. The FHF received funding from three primary sources. The HIO contributed an annual payment of 13 LE per insured beneficiary enrolled in a family health family unit. The ministry of finance (MOF) has also allocated 15 million LE to the three FHFs. But only about half the MOF amount has been made available to the FHFs. The EC is contributing about Euro 37 million. The financing of the funds is primarily intended to cover the start up costs rather than be a continuing source for sustaining operations.

To support establishing and operating FHF, the World Bank focused on development and deployment of Clinical Information System (FHF-CIS) and the Family Health Fund Information System (FHF-MIS) software applications.

1.The development of the CIS And FHF applications was planned to be implemented in two phases:

(i) Phase 1 : to assess user requirements, provide technical assistance and international experience, prototype and finally deliver system analysis and design.
(ii) Phase 2: to select international software development firm experienced in the field to develop the CIS and FHF based on the quality deliverables of Phase 1.

Summary of Current Status of the Clinical Information System

To date, the CIS has been installed in 73 family health facilities in Alexandria and in 102 facilities in Menoufia, while in the initial deployment plan the CIS was to cover a total of 311 facilities, 94 of which were in Alexandria and 217 facilities in Menoufia. These targets have been lately reduced to 287 facilities (89 in Alexandria and 198 in Menoufia). The installation of the IT equipments and networks in the remaining facilities has not been completed, which means that these remaining facilities are not yet ready to run the CIS. The latest CIS version (9.4) was delivered in early November 2008 and was installed in the facilities in Alexandria and Menoufia. This new version has resolved most of the minor reported system errors, however, it did not address the major problems reported from users which are affecting the core functionality of the system and impeding the operational capacity of the CIS modules. Most of the facilities are not running all of the CIS modules and that the majority of the users stopped depending on the system due to reported unsolved problems in the development and implementation of the business rules of the financial modules and in most of the lookup tables of the systems; namely those of the pharmaceuticals modules. A final version of the CIS is being developed, under the supervision of the Ministry of Communication and Information Technology (MCIT), and will be delivered in April 2009 to address the above mentioned problems.

Subcomponent 1.2: Improve quality and efficiency of PHC delivery system

- As of April 30, 2005, the civil works for only 5 health facilities financed by IDA have been completed.
- The civil works activities in this project faced long delays for several reasons. The most important reason was due to the problems facing the construction industry sector in Egypt since January 2003 due to the instability in the prices of construction materials because of the liberation of EGP against foreign currency, many contractors faced financial problems for old projects and were very cautious to bid for new projects as the materials prices continue to increase through 2004/2006. Other reasons such as: problems of land acquisition and disputes, utilities (electricity, water, and sewage), demolishing permits for old health facilities had also influenced the delay of civil works activities.
- Several important actions were taken to overcome the problems mentioned above: some facilities were cancelled from funding; WB agreed to finance the Prime Minister decree for the compensation of old civil works contracts to help the contractors complete the in-going projects.

The final list of approved health facilities for WB finance for civil works is currently equal to (117) facilities: 49 in Alexandria and 68 in Menoufia. The detailed attached reports for the civil works activities shows that all facilities in Menoufia were completed (100 percent), and 47 facilities were completed in Alexandria (95.9 percent).

Summary Status of operational Bank financed family health facilities

As of March 10, 2009, the civil works of 116 out of 117 health facilities, representing 99 percent of the total number of facilities financed by IDA, have been completed. The contractual problems and issues with the contractors that were causing delays in the completion of health facilities construction were resolved. The construction of the remaining facility, located in Alexandria Governorate, is expected to be completed by end of March 2009. Out of the 116 completed facilities 115 are operational, furnished and staffed. Moreover, the MOH decision to apply the family health unit prototype in all governorates resulted in the reduction of the quantities of medical and non-medical equipment in the newly constructed family health facilities which lead to a surplus in the quantities of delivered equipment. Therefore, it is recommended the MOH to prepare a revised distribution plan to redistribute the surplus of equipment among the existing family health facilities.

Subcomponent 1.3: Strengthening Public Health Programs

National Communicable Disease Surveillance System

The activity under this subcomponent aim at strengthening the disease diagnosis and surveillance capacity of MOH laboratories at the central level governmental and district level.

Progress on Avian Flu Activities. The implementation of avian flu activities is completed. The planned training activities have been completed and the equipment and supplies have been delivered.

Subcomponent 1.4: Performance-Based Financing
A Performance-Based Financing arrangement had been introduced to improve the performance of the Project by linking disbursement to actual enrollment and utilization of services by the poor and uninsured beneficiaries in the FHF in Alexandria and Menoufia governorates.

From October 1, 2007 till end of March 2009 the project would allow payments for enrollment fees and co-payments for the poor and the uninsured population for health services using outputs-based disbursement, which is intended to improve the performance of the project by directly linking disbursement against actual enrollment of the poor in the family health insurance program.

Identification and Enrollment of the Poor:
It was agreed that the poor identification process will be carried-out through awarding of the contract for identification of the poor to the Center of Social and Criminal Research to conduct the identification of the poor. This center is the key governmental body responsible for identification of the poor nationwide and its results are used by the Ministry of Social Solidarity (MOSS) to target social services to the poor such as social assistance pensions.

Based on the Center's analytical report for rural Menoufia, almost 54.6 percent of the sample examined of the poor identified by the Menoufia Family Health Fund was confirmed to be poor or extremely poor. However, a substantial percent (30.6 percent) of the sample was found to be near poor. Given the shallow nature of poverty in Egypt, the MOH concluded that about 85 percent of the verified sample could be considered extremely poor, poor, or near poor. On the basis of this conclusion, the MOH has decided to consider the group of the identified beneficiaries in rural Menoufia by the FHF as poor and that this group would be eligible for enrollment. This group amounting to 220,639 persons was exempted and was provided cards that allow them access to four free visits per year in family health facilities.

Due to the delay in the identification and exemption process of the poor beneficiaries in the Family Health Funds, which is currently progressing in collaboration with the Ministry of Social Solidarity (MOSS), and since the Project closing date is on March 31, 2009, the World Bank concurred with the MOH request to cancel the Performance Based Financing using the Project funds and to continue progressing in the achievement of the enrollment, exemption and utilization of services targets for the poor by ensuring registration and co-payments exemptions for this target group using the government funds, in order to ensure the sustainability of the primary health care coverage for the poor. The government had indicated its commitment to financing the premiums for the poor, identified by the MOSS, through general revenues. It is clear how it is important to

prepare a study on the fiscal impact of exempting the poor in Alexandria and Menoufia and to submit to the Ministry of Finance.

Component 2:

Reform of the Health Insurance Organization

Subcomponent 2.1: HIO Management information System

In cooperation with USAID, the Government of Egypt built the HIO-MIS to automate the health services of the HIO clinics and hospitals. The system was designed in the early 1990's, delivered in the middle of 1990's, and used extensively in the late 1990's. The Health Insurance Organization (HIO) has a large investment in Information Technology and implemented management information systems that support some key business areas: The health services of the HIO clinics and hospitals. The information services are provided through a set of information and computer centers organized to support the different levels: The HIO Main Information Center (HIO-IC), The HQ Computer Center, The Branch Computer Center, The Clinic / Hospital Data Processing Center, Number of automated units: 90.

As technology changes rapidly, HIO-MIS became old and obsolete quickly. It is increasingly difficult and costly to maintain and to do further development. In mid 2002 and after some years of neglect, during which no more than the basic maintenance operations were done to the HIO-MIS, it was estimated that system collapse could happen in as little as 18 months from that date. This situation was due to the highly obsolete hardware platform of HIO system (H/W is no longer supported by the original vendors). To deal with this situation, a solution of two tracks was adapted:

Track 1: A short-Term Track to keep the existing HIO-MIS from collapse by modernizing the oldest, and most failure-prone hardware parts.
Track 2: A Longer-Term Track to enhance and add additional functionality to the system. The two tracks project was discussed in details with the chairman of the HIO, Dr. Mustafa Abdel Aty on October 17 2002 and he agreed to proceed with the two tracks plan.

TRACK 1 IMPLEMANTATION

The endpoint of Track1 efforts would yield saving the HIO-MIS from collapse, Operating modern servers (about 74 servers) and printers (about 370 printers) in all locations where the HIO-MIS system is running, Improving to some degree the management reporting system. But the essential work in this direction will be done in Track 2.
Briefly, the implementation of Track1 improved the maintainability, speed, and reliability of the overall system and its equipments. One success story in track1 was the experimentation of client-server solution at some new health locations (the 9 holes in ALEX and CAIRO branches) rather than the used host-based solution. The HIO team has changed successfully all the Oracle applications

interfaces to be used on PCs by QWERTY keyboard and mouse. But we would still be left with "host-based" system, which uses dummy terminals (about 1500 terminals where the HIO-MIS is applied) rather than Client-Server based system.

TRACK 2 IMPLEMANTATION

This longer-term track is suggested to develop the next generation of HIO-MIS that will be able to deal with the complexities of insurance coverage in the future. Since track 2 will take several years, It is not likely to be completed by closing date of the project. The basic objectives of Track II are summarized as follows:
From a Business Standpoint: Adds much more functionality which allows HIO leaders to use modern financial and clinical management techniques to manage the HIO fund, and to assure its fiscal sustainability and viability, Aids the clinical locations (clinics, hospitals) to run in a much more efficient manner, Adds convenience to the patients, to meet the expectations of the public, Helps evaluate quality and aids quality managers in measuring and improving it, Adapts the HIO-MIS to comply with the potentially new business model for health insurance.

In Summer 2004 track 2 was organized into two Phases, Phase **1** Providing the overall system studies and specifications. **Phase 2** Implementing the solution specified in phase 1.

Phase 1: Providing the overall system studies and specifications

This phase is to prepare the studies and specifications required for phase 2 and any other expected future phases and/or tracks. It aims at constructing the information architecture and the strategy relevant to the overall objectives and needs of the HIO and its 5 levels: headquarter HQ, Branches B, Stores S, Hospitals H, and Clinics C. The RFP has been bid locally and according to the WB instructions, and gained by Automation Consultants. The work of Automation Consultant has continued about five months. But for some reasons, Automation has been apologized about finishing phase 1 completely and undertaken by our local consultant.

Phase2: Implementing the solution

Due to the new trials of implementing a new Insurance and Health care business model in HIO, the implementation of the solution divided into two steps: **1-** Building the infrastructure that support the new technologies and protect the system from collapse. **2-** Building the predefined applications that go with the new HIO business model and constrained by its rules. TOR prepared for the first step in lots and according to the WB international bidding instructions (BID# 46). A project manager assigned to follow up the daily work of implementation. Currently Procured goods for 91 clinics and branches are delivered to the HIO. equipment technically accepted and distributed to the sites, networks and equipment completely installed in sites.

Procurement of HIO IT equipment:

The contracts for the supply of IT equipment for HIO were awarded to the suppliers. The

supply of the equipment of US $ 1.7 million is completed by the end of September 2005.

The installation is completed primarily handed over with comments from the technical committee, Vendor is currently review and fix the technical comments, expected to be completed at the end of September, 2007.

Subcomponent 2.2 HIO Capacity Building

The Capacity Building Programme was designed to bring the senior and middle managers of the Health Insurance Organisation to the framework of the Health Sector Reform Programme and evoke the interest and create momentum and build capacity for change. The CBP was structured as two phases, the first includes 12 workshops for 600 managers followed by 6 intensive management and leadership development programme for the promising 300 motivated managers who are likely to play key roles in the proves of change.

This programme has been financed by the World Bank credit and supplemented by the European Commission where the material development was undertaken.

Participants of the HIO were intended to come from the central level (40 percent) and the different branches (60 percent) to create a balanced training opportunity for current and potential leaders in the system and to create a form for communication, interaction and networking within the HIO.

The overall performance of the workshops were monitored session by session and a monitoring and evaluation report was produced for each group. The net result is extremely encouraging and the majority of participants were motivated to continue through the core programmes.

World Bank Institute (WBI) Flagship Programme on Health Sector Reform and Sustainable Financing. 7 courses were attended by 40 participants with a total number of 280 participant and additional 2 senior policy seminars attended by 50 participants with a total number of 100 participants

Subcomponent 2.3 HIO Training Centers Upgraded and Operational

The target was to upgrade, equip and operationalize 11 HIO training centers. This target was completely achieved in 2006

Project Performance Measures

In order to monitor and evaluate the effectiveness of the family health care model and family health fund , a contract with a qualified international consulting firm was approved at January 2003. The system was used to track the progress on key HSRP outputs and outcome indicators. The ME system development was finished in August 2003. The project matrix of Key Performance Indicators was revised and updated based on the consultant report.

Within the scope of the World Bank Project, specific indicators were selected to measure the performance of project as Key Performance Indicators (KPIs). These indicators were selected to represent different areas of performance, and were classified as follows:

Summary of the Project Achievement of Targets

Principles	Outcome / Impact Indicator	Dec. 2003	Dec. 2004	Nov. 2005	Nov. 2006	Sep. 2007	Sep. 2008	Mar. 2009
Accessibility	Accessibility - General Population	*	3%	51%	62%	70%	70%	83%
	Accessibility - Poor	*	*	*	80%	94%	94%	103%
	Clinics complied with health plans	*	*	*	74%	80%	86%	97%
Coverage	Coverage - General Population	20%	50%	69%	85%	87%	90%	112%
	Coverage – Uninsured	25%	53%	74%	97%	106%	99%	125%
	Coverage - Poor (Identified)	*	*	*	9%	48%	84%	117%
	Facilities Contracted with FHF	22%	51%	53%	62%	61%	62%	73%
Enrollment	Enrollment - General Population	*	*	*	50%	54%	59%	65%
	Enrollment – Uninsured	*	*	*	27%	40%	38%	30%
	Enrollment - Poor (insured + uninsured)	*	*	*	*	15%	29%	77%
	Exempted Poor (uninsured)	*	*	*	*	51%	57%	38%
Efficiency	Utilization Rate	72%	68%	72%	64%	88%	88%	90%
	Average Daily Encounter for Family Physicians	58%	46%	*	104%	67%	54%	50%
	ANC Utilization Rate	56%	56%	*	74%	62%	60%	54%

* The indicator hasn’t been measured in this time.

Lessons learned and Future Recommendations

1) No single institution can adequately address both demand and supply issues simultaneously. Effective partnerships at all levels of governance are important to

achieving stated goals. This is particularly important where improving service delivery model alone is not an effective mechanism to tackle the needs of the poor. Intersectoral integration efforts are needed to deal with providing essential health services to the poor. Nominally, at least the following main bodies are involved:

- Ministry of Social Solidarity: Identification of Poor
- Ministry of Finance: Provide needed fund to exempt the poor
- Ministry of Health: Provide quality services
- NGOs: Facilitate process of identification of poor,

The project experience in piloting such kind of integration was very promising in Alexandria and Menoufia Governorates

2) Single unified tool for poor identification has been developed through shared efforts of 3 Ministries, fulfilling the national requirements from all perspectives, which is a very positive point and this kind of intergovernmental efforts is strongly recommended to continue. MOSS should use this tool in its future surveys and collected data would be available to relevant governmental bodies.

3) Unified standardized service delivery model was shows to be effective in improving health outcomes in coverage areas, but continuous periodical evaluation is needed to address the updates.

4) Regarding the provider payment mechanisms, the mixed payment mechanism shows to be the most effective and efficient payment system combined with integration with district supervision teams for continuous improvement and quality assurance.

5) Legislative support is very important to achieve and sustain decentralization, as appeared from hospital autonomy piloting which was more effective and sustainable through the ministerial decree 120 year 2000, rather than the DPO experiment which was not supported by legal framework.

6) Project management and implementation staff should act as change agents or facilitators of the process of change. They should work through the Health System bodies - MoH departments, HIO, and Mudireya - so that there is greater ownership, understanding and commitment to the changes.

7) It’s very important to strengthen the referral system by providing necessary motivational and legislative support.

8) Legislative frames for regulating health services purchasing should not be overlapping with provider regulatory mechanisms.

Annex 8. Comments of Co financiers and Other Partners/Stakeholders

Co financiers include the European Commission (EC), the US Agency for International Development (USAID) and the African Development Bank (AfDB).

I. European Commission (EC)

Source: Paper provided by the EC Office in Cairo

Since 1998, the EC provided substantial financing for two programs: the Health Sector Reform Program (Euro 110 million) and the Health Sector Policy Support Program (Euro 88 million).

Health Sector Reform Program (HSRP)

For a total amount of Euro 110 million, the Health Sector Reform Program (HSRP), launched in 1998, was successfully concluded on 30 June 2007. In total, the Program– implemented in five pilot Governorates (namely Alexandria, Suez, Qena, Menoufia and Sohag) achieved significant successes.

Under its "hard" component, the European Commission rehabilitated/constructed (i.e. construction of Family Health Units in rural areas) and equipped with medical and non-medical equipment (e.g. medical and non medical equipment, x-ray machines, laboratory equipment, etc. as well as furniture) a total of 125 clinics, 71 of which in the particularly poor Governorate of Sohag in Upper Egypt.

Under its "soft" component, medical and paramedical staff has been given specialized training and a Family Health Fund (FHF) was established providing a high quality primary health package of services. Moreover, medical and paramedical staff was given specialized training and, further to the handing-over and accreditation by the Ministry of Health (MOH) of the clinics to the authorities at Governorate level, the Family Health Units are being made fully operational.

The European Commission also contributed with Euro 26,000,000 to the Family Health Fund model which has been adopted by the MOH as the model for the rolling-out to several other governorates at national level and also constitutes one of the pillars for the implementation of the new EC funded Health Sector Policy Support Program (HSPSP).

Health Sector Policy Support Program (HSPSP)

Launched in December 2006 for a total amount of Euro 88 million, the HSPSP represents the first experiment of budget support program in the health sector in Egypt.

The program builds on experiences gained and evidence collected during the HSRP and on policy adopted by the President for the Egyptian health system development (officially-stated strategy presented by President Mubarak on 7th of July 2005). The overall objective of the program is "to accompany the reform of health sector in its

strategic short, medium and long term objectives by developing and rolling-out an Integrated Health System, centered on the Family Health Model and, to promote good governance and fiscal, financial, institutional and technical sustainability".

The program is organized on 16 activities, framed in 4 main components, and will be implemented gradually in 3 phases, to which 3 disbursement tranches of about Euro 30 million are attached.

The main purpose of the program is:

- To reframe the Ministry of Health reinforcing its role as regulator and policy maker.
- To reshape existing health Insurances (and other heath purchasers) into a single Social National Health Insurance that will be the sole payer for the primary health care and will be subsidized to cover health expenditures of the poor.
- To roll out the Family Health Model in 10 Governorates (5 of the former HSRP and: Beheira, Kafr El Sheikh, Fayoum, Beni Sweif, Menya).

Two tranches were currently disbursed for a total amount of Euro 60 million.

II. US Agency for International Development (USAID)
Source: Paper provided by the USAID Office in Cairo

Support for Health Sector Reform (1994-2010)

Conceptual Framework. The original concept of Primary Health Sector Reform was developed by the Ministry of Health (MOH) with USAID support in the mid-1990's and by 1997 was formalized in the "D-4" document of MOH, which defined the whole Health Sector Reform program. USAID was the first donor in this area in 1994, and was later joined by European Union (EU), World Bank and others in 1996-97.
National Health Accounts, conducted three times in Egypt with USAID support, provided the evidence base as well as the rationale and political support for reform. The USAID supported "Egypt Household Health Care Use and Expenditure Survey (1994-95)" provided further stimulus and built political support for reform concepts due to concerns that the poor were paying a larger proportion of their income for health services than the rich and that in general, the population favored private providers over government services.

Family Health Model. Extensive investments by USAID/Egypt in clinical and managerial staff development to support of MCH and FP services since the early1990's built the capacity for PHC services in the network of clinics and program management capacity within Governorate offices. This service delivery capacity became the basis of the integrated and broadened Family Health Model. Additionally, the initial introduction to Egypt of the "family medicine" concept was through the Suez Canal Health Training Project (supported by USAID in the early1980's), which emphasized graduating doctors who were focused on community and family medicine.

USAID was the first donor to help the MOH pilot test the financing mechanisms envisioned in health sector reform in the Suez pilot project, which operationalized the Family Health Fund. At the PHC level, the current system operating to generate revenues allows for segregating highly subsidized services (morning hours) from "economic" services provided after 2:00 pm. All revenue generated from the system goes into a clinic level Service Improvement Fund (SIF) that is used to pay incentives as well as provide operational costs for the clinic (repairs, drugs, cleaning, etc). USAID/Egypt is currently assisting the MOH with programs to activate use of SIFs, which provide an important source of money for clinic operations.

The concept of quality assurance was first introduced in Egypt by USAID through its family planning and child survival projects. Under Health Sector Reform activities a Quality Improvement Office was established by the MOH with resources from USAID; accreditation standards and systems were also developed with USAID/Egypt support.

On-going USAID assistance is assisting the HIO transform itself into a specialized agency for health insurance. During the mid-1990's USAID supported the development of an extensive set of procedural manuals for HIO hospitals, later shared with all MOH hospitals, which constituted guidelines for the services and procedures for each department within hospitals. USAID also supported the development of an HIO management information system, which is still in use today - although currently being modified to allow for additional new functions such as claims processing and reimbursements needed for its new role.

Health Information Systems. The current primary level HIS system is largely made up of components of the FP and MCH information systems developed through the Population/Family Planning and MCH projects. While problems still exist, PHC units are reporting and the quality is improving. Data use is variable with more evidence of data use at District and Governorate levels. There appears to be more awareness of service statistics at clinic and hospital level as compared with 15 years ago but the level of use of the data is probably variable. National officials clearly depend on the EDHS data for decision making, but also quote program figures from service statistics. Feedback loops are not always good, especially from the national level downwards.

The new "Clinical Information System" (CIS), which is part of the health reform process, has been developed and is functional in the FHM facilities within the five pilot governorates, but is not yet widely in use elsewhere. CIS, developed by the Ministry of Communication and Information Technology, is based in part, on an earlier model tested in the Suez pilot with USAID/Egypt resources. Called the Feedback Analytic and Comparison Tool (FACT) CIS will be expanded gradually to cover all FHM facilities in the future.

Cash transfers. Two Cash Transfer Support Programs were developed to provide development support. The MOH received up to $15 million per year by meeting specific benchmarks and used the funds without restriction for MOHP priorities. In 2007,

USAID/Egypt and the Ministry of Health developed a $110 million Cash Transfer Program, which recognized the restructuring of the health sector to increase efficiency and improve effectiveness within a sustainable financial and regulatory framework. The Ministry of Health focused on policy formulation and population-based public health programs, intending to phase out its role as a direct provider of health services. Key to this reform plan was redefining the MOH's role as a regulator, establishing quality norms and standards, and a mechanism of accreditation and licensing to enforce standards. USAID support was based on three areas: reform of the social health insurance system; rationalization of policies to increase the efficiency of the healthcare system; and, improvement in the recruitment and development of health care professionals. As of March 2010, no funds have been disbursed.

III. African Development Bank (AfDB)
Source: Draft Project Completion Report of the AfDB

The Project

The project (P-EG-IBZ-001) was designed as a fully aligned support to the overall health sector reform programme of the Government, in parallel with support from the European Commission, the World Bank and USAID. The project entailed features of a policy-based operation, with the disbursement of AfDB funds (one loan and one grant) in tranches against fulfilment of predetermined conditions and execution in accordance with AfDB rules by the Technical Support Office.

The loan (UA11.0 million) and grant (UA1.0 Million) were approved on 28th October 1998, signed on 11 July 2000 and effective on 14 November 2001. The grant was disbursed in three tranches and the loan in two tranches. The implementation of the program started at the beginning of April 2002. The main factor which contributed to start up delays was the long design phase in developing the Health Master Plan. The closing date of the project was postponed five times during project execution; the project finally closed on December 31, 2008, five years after the original due date.

The AfDB intervention covered three districts in two governorates. In line with the sector goal of improving the health status and well-being of all citizens, the project objective was to introduce health sector reforms in selected pilot districts of Qena (Qous and Nagga Hammady districts) and Suez (El Ganaien District) governorates in order to ensure universal coverage of the population with a defined cost-effective package of quality primary health care and public health services.

The main components of the AfDB's support were: (1) Health Care Services, to enhance the quality and efficiency of care through capacity building, systems development and investments in health facilities; (2) Public Health Programs, to strengthen public and environmental health systems in villages particularly with respect to ensuring water and food safety and the reduction of fatalities due to road accidents; (3) Sustainable financing through health insurance, in particular establishment of the Family Health Fund as a

purchaser of health services; (4) Governorate and District Health Administrations, to strengthen their capacity under a decentralization approach.

Achievement of outputs

(1) Expected output: Quality and efficiency of PHC services improved.
Actual output: Over 50 training activities undertaken through about 500 training sessions covering all staff (representing about 9,500 trainees in total) in the supported districts; 47 PHC facilities constructed/rehabilitated and 24 ongoing; equipment in the process of being procured; treatment guidelines and protocols designed and adopted; essential drug list established and regularly revised. Leading to the management of cases in accordance with standard norms and availability of means of service delivery.

(2) Expected output: Cost-effective public health programs strengthened (several public health programs provide cost-effective services to the target population).
Actual output: Disease prevention activities for infectious diseases and environmental impacts on a routine basis (in particular water sample testing); advocacy undertaken through community based health workers (in particular family planning; income generating activities; etc.); food safety measures enforced through facility-based health inspectors; road safety measures adopted and enforced.

(3) Expected output: Primary health care insurance systems introduced (unified health insurance law implemented).
Actual output: Family Health Fund functional since 2004; facilities accredited and facility contracting by the FHF in the process of being completed. However, the health insurance law is still awaiting passage into law by Parliament.

(4) Expected output: Governorate and District Administrations strengthened
Actual output: District health Master Plans developed and implemented; more responsibilities for health services management have been decentralized to the Governorate and District levels; supervision under the referral system strengthened and existence of good practices such as visiting specialists at primary facilities and visiting generalists in district hospitals; computer-based case management system.

Annex 9. List of Supporting Documents

1) Project Appraisal Document (PAD) – Health Sector Reform Program – April 24, 1998.
2) Agreed Minutes of Negotiations – April 23, 1998.
3) Development Credit Agreement – Credit No. 3076-0 – EGT - Health Sector Reform Project – May 22, 1998.
4) Supplemental Letter - Credit No. 3076-0 – Monitoring Indicators.
5) Health Sector Reform Program – Phase 1 – Draft Operations Manual – April 1998.
6) PSRs and ISRs.
7) Aide Memoires.
8) Memorandum and Recommendation of the President to the Executive Directors on a proposed project restructuring and amendment to the DCA for the HSRP – May 2004.
9) HSRP – Amendment Letter to the DCA – June 2004.
10) HSRP – Amendment Letter to the DCA – January/February 2008.
11) Egypt's Health Sector Reform and Financing Review – February 2004 – World Bank – Sameh El-Saharty, Sr. Health Policy Specialist and Task Team Leader; Joseph Antos, Health Financing Advisor; and Nihal Hafez Afifi, Health Systems Management Consultant.
12) FHF Manual – Health Finance and Insurance Group – April 2004.
13) FHF Manual – Central Family Health Fund – Updated 2007.
14) Family Health Model System Review – Issues and Methodology – January 2005 – *Agence Européenne pour le Développement et la Santé.*
15) Country Assistance Strategy (CAS) – Report No. 32190-EG - May 20, 2005 - The World Bank - MNA Region.
16) Impact Evaluation of the Egyptian Health Sector Reform Project –August 2006 – Rebekka Grun, Javier Ayala and others.
17) Project Performance Assessment Report (PPAR) – Population Project (Cr. No. 2830-EGT) – IEG – The World Bank - June 25, 2008.
18) Project Performance Assessment Report (PPAR) – National Schistosomiasis Control Project (Cr. No. 2403-EGT) – IEG – The World Bank - June 25, 2008.
19) Disbursement Plan as of 23/4/2009 – TSO.
20) Egypt: Positive Results from Knowledge Sharing and Modest Lending – An IEG Country Assistance Evaluation 1999-2007 – The World Bank Group - 2009.
21) Independent Procurement Review – Narayanaswami Viswanathan - 2009
22) Improving Effectiveness and Outcomes for the Poor in Health, Nutrition, and Population – An Evaluation of World Bank Group Support since 1997 – IEG – The World Bank - 2009.
23) Management and Service Quality in Primary Health care Facilities in Alexandria and Menoufia at the Completion of the Health Sector Reform Project – World Bank – MNSHD – January 2010.

Annex 10. Key Performance Indicators at End of Project (March 31, 2009)

Outcome / Impact Indicators	Value	Alexandria	Menoufia	Both Governorates
Accessibility – General Population. Population with access to the BBP of PHC services based on planned capacity of operational FH facilities (constructed / renovated) based on national standards.	Target	1,125,000	2,497,000	3,622,000
	Actual	1,200,238	1,792,000	2,992,238
	Achievement %	107%	72%	83%
Accessibility – Poor. Poor population with access to the BBP of PHC services based on planned capacity of operational FH facilities (constructed / renovated) in poor areas as identified by the governorate health plans.	Target	804,369	1,027,022	1,831,391
	Actual	724,717	1,158,831	1,883,548
	Achievement %	90%	113%	103%
Accessibility - Clinics complied with health plans. Number of FH clinics (constructed / renovated) in compliance with the governorate health plans.	Target	391	750	1,141
	Actual	411	692	1,103
	Achievement %	105%	92%	97%
Coverage – General Population. Total number of beneficiaries covered by the FHF to receive the BBP of PHC services.	Target	675,000	1,498,200	2,173,200
	Actual	818,778	1,612,213	2,430,991
	Achievement %	121%	108%	112%
Coverage – Uninsured. Total number of uninsured beneficiaries covered by FHF to receive BBP.	Target	337,500	749,100	1,086,600
	Actual	574,096	781,418	1,355,514
	Achievement %	170%	104%	125%
Coverage – Poor (identified). Total number of poor beneficiaries identified by identification method (social workers/ MOSS/ GOs/geographical targeting).	Target	174,000	321,000	495,000
	Actual	211,343	367,260	578,603
	Achievement %	121%	114%	117%

Annex 10. Key Performance Indicators at End of Project (March 31, 2009) (continued)

Outcome / Impact Indicators	Value	Alexandria	Menoufia	Both Governorates
Coverage – Facilities contracted by the FHFs. Number of FH facilities contracted by the FHFs, compared to the total; number of MOH PHC facilities.	Target	104	227	331
	Actual	73	168	241
	Achievement %	70%	74%	73%
Enrollment- General Population. Active enrollment in the FHFs based on renewal of family health folders.	Target	675,000	1,498,200	2,173,200
	Actual	333,258	1,072,760	1,406,018
	Achievement %	49%	72%	65%
Enrollment – Uninsured. Active enrollment of uninsured beneficiaries based on renewal of family health folders.	Target	337,500	749,100	1,086,600
	Actual	252,883	295,601	548,484
	Achievement %	75%	39%	50%
Enrollment – Poor. Number of enrolled poor beneficiaries (insured and uninsured).	Target	174,000	321,000	495,000
	Actual	77,340	302,819	380,159
	Achievement %	44%	94%	77%
Enrollment – Exempted poor (uninsured).	Target	87,000	160,500	247,500
	Actual	13,937	174,209	188,146
	Achievement %	16%	109%	76%
Efficiency – Utilization rate. Average number of visits per person per year.	Target	2.5	2.5	2.5
	Actual	3.3	1.2	2.3
	Achievement %	132%	48%	92%
Efficiency- Average number of daily encounters per physician.	Target	24	24	24
	Actual	14.9	8.9	11.9
	Achievement %	62%	37%	50%
Efficiency – ANC utilization rate. Average number of antenatal care visits per pregnant woman.	Target	5	5	5
	Actual	3.1	2.6	2.7
	Achievement %	62%	52%	54%
Note - The assumption after the June 2004 restructuring was that the Project would cover 60 percent of the general population and 60 percent of all the poor in both governorates, having access to primary health care services.				

Source: MOH – Central Administration of Technical Support (TSO)

Annex 11. Health Indicators for Egypt, and Alexandria and Menoufia

Indicators	**1998**	**2008**	**% Reduction or Increase**
Under five mortality rate per 1,000 live births			
Egypt	38.7	22.8	-41%
Alexandria	31.5	24.2	- 23%
Menoufia	30.5	17.3	- 43%
Infant mortality rate per 1,000 live births			
Egypt	29.1	18.0	-38%
Alexandria	26.6	19.7	- 26%
Menoufia	22.9	13.0	- 43%
Neonatal mortality rate per 1,000 live births			
Egypt	n.a.	n.a.	n.a.
Alexandria	17.7	10.7	- 40%
Menoufia	8.3	6.1	- 27%
Maternal mortality rate Per 10,000 live births			
Egypt	96.0	55.0	43%
Alexandria	93.7	50.0	- 47%
Menoufia	98.3	45.4	- 54%
Percentage of births attended by skilled health personnel			
Egypt	n.a.	n.a.	n.a
Alexandria	75.9%	93.9%	+ 24%
Menoufia	64.0	88.3	+ 38%
Antenatal care coverage			
Egypt	n.a.	n.a.	n.a.
Alexandria	42.7	45.6	+ 7%
Menoufia	68.4	73.1	+ 7%
Data Sources: National Information Center for Health (NICH) – MOH Maternal Mortality Surveillance System – MOH Prime Minister's Cabinet – Information and Decision Support Center (IDSC) – Egypt's Achievements Report 2008			

MAP

ARAB REPUBLIC OF EGYPT

- SELECTED CITIES AND TOWNS
- GOVERNORATE CAPITALS
- NATIONAL CAPITAL
- RIVERS
- MAIN ROADS
- RAILROADS
- GOVERNORATE BOUNDARIES
- INTERNATIONAL BOUNDARIES

GOVERNORATES IN NILE DELTA:

1 KAFR EL SHEIKH
2 DAMIETTA
3 PORT SAID
4 ALEXANDRIA
5 BEHEIRA
6 GHARBIYA
7 DAGAHLIYA
8 MENOUFIYA
9 SHARGIYAH
10 QALIUBIYA
11 ISMAILIA
12 CAIRO

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