

HEALTH SECTOR REFORM AND THE FAMILY HEALTH MODEL

A CASE STUDY IN REFORM MANAGEMENT

Maha El Rabbat, MBCh, PhD, *Faculty of Medicine, University of Cairo, Egypt*

Thomas Bossert, PhD, *Harvard School of Public Health*

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EVOLUTION OF THE FAMILY HEALTH MODEL

The Egyptian Health Sector Reform Program introduced the Family Health Model (FHM) in 1999 to strengthen the existing primary health care (PHC) service delivery system. The FHM revised the basic package of integrated services in the PHC facilities, including rural Family Health Units (FHUs), which served catchment areas of less than 20,000 population, and urban Family Health Centers (FHCs), which served the larger populations of Egypt's cities. The model was initially piloted in three governorates, and as of 2008, it was being implemented in 26 governorates. In 2009, preparation for further scale-up was on its way to cover 4,591 PHC units and centers throughout Egypt.

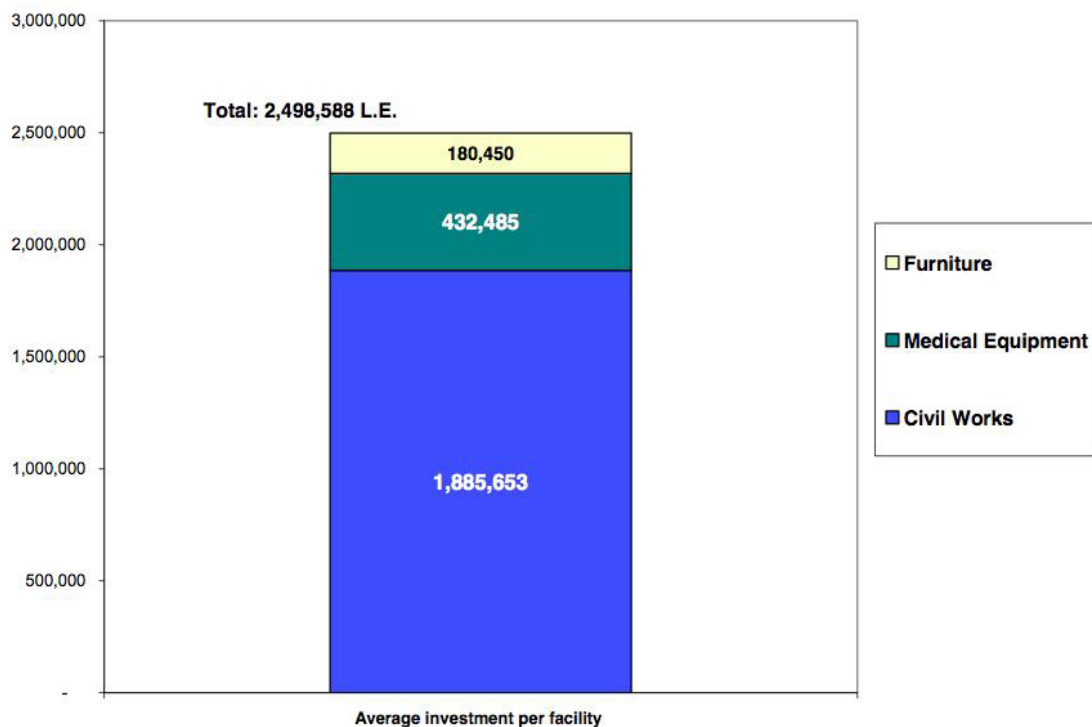
While the original PHC model involved only basic PHC services, the FMH expanded services to include family planning, maternal and child health, EPI (Expanded Program on Immunization) and IMCI (Integrated Management of Childhood Illnesses). This new approach focused on:

- Strengthening the physical infrastructure
- Raising the capacity of staff in the new service areas
- Improving quality of services



The catchment area for the rural FHU was established as 1,000–1,200 families per doctor, while in urban areas the FHC was to serve a catchment area of 20,000–100,000 individuals (approximately 4,000 to 20,000 families) and also serve as a referral site for neighboring smaller units in the same health district, usually for 5–7 units. To reach this higher standard of access entailed remodeling facilities, new construction, and new equipment and supplies. According to a study done in 2006, the average total infrastructure investment per facility was 2.5 million Egyptian pounds (LE) (US\$41,667) in the pilot phase. Most of this was spent on civil works (see Figure 1).

FIGURE 1: INFRASTRUCTURE INVESTMENT BY FACILITY



Source: Grun and Ayala (2006)



Initially, the program developed a new comprehensive training package for facility staff. The training was based on a team-based Family Health Practice model for both physicians and nurses, and for the various non-medical specialists in the facilities, such as pharmacists, lab technicians, sanitarians, and social workers. The training involved increased clinical skills of all staff to include the wider package of services. It also involved training in teamwork and in educating patients in self care.

The reform also involved substantial administrative changes to digitalize medical records and revise family folders. These efforts involved significant new training of staff. By 2011, all PHC units and centers had completed the system of family registrations; however, many of the other aspects of the actual implementation of FHM as implemented in the pilots were still to be scaled up.

A quality assurance department was developed centrally for the accreditation of PHC facilities (units and centers) and hospitals with clear accreditation standards. When a facility was ready, an accreditation team (physician, nurse, and other paraprofessionals) spent two days assessing the facility. Reaccreditation required achieving 80 percent of standard requirements.

The Ministry of Health and Population (MOHP) focused efforts on facilities that served the 1,000 poorest villages. As of December 2009, there were 2,172 facilities implementing the FHM; of these, 1,605 (74 percent) had been accredited. The target was to have 2,500 accredited units (out of the total 4,591 PHC facilities) by the end of 2011. By May 2011, 3,000 facilities were implementing the new FHM, of which 2,121 were fully accredited.



HUMAN RESOURCES FOR FAMILY HEALTH

The Manager of PHC at the MOHP was newly appointed by the Minister of Health in 2007, at a time when the Minister authorized the consolidation of efforts for a rapid integration of family health services. The Manager realized that for effective integration to occur, they had to involve all types of PHC services. She, together with managers and partners in the ministry, modified the standards of care for the FHM centers and units for family planning and reproductive health, maternal and neo-natal health, child health, and adolescent health. The standards were seen by stakeholders and physicians themselves as comprehensive; however, there were complaints that there was insufficient training to build adequate clinical skills of the staff to reach the new standards. To support the implementation of the new standards, new training programs were developed. Newly appointed physicians would receive 36 days of training focused on simplified Clinical Practice Guidelines with algorithms for most common diseases, practice in the use of sonograms and ECGs, and the requirements of the new Essential Drug List. This training was perceived by many physicians as inadequate because it did not address some key skills, especially in reproductive health services. There were also failures to provide adequate training for supervisors in the new “integrated” supervision approach. This approach replaced the “vertical” supervision teams of different clinical specialties and now required supervisors to have knowledge in areas that they had not supervised before. The Manager of PHC developed a system with incentives that seconded pediatrics, internal medicine, and obstetrics specialists from urban areas to serve in the rural health units three days a week.



The Manager also modified the integrated supervision that had replaced the vertical supervision teams. She had 60 central supervisors who were supported by governorate- and district-level supervisors. The original PHC supervision checklist had been output-based and did not assess clinical performance. It did not include more important quality of care (QoC) indicators and focused only on physicians and nurses without including other members of the Family Medicine team such as pharmacists, dentists, and community workers. The Manager of PHC decided to improve the supervision system in several steps. She developed supplementary checklists based on QoC indicators, orienting supervisors who did not have a Family Medicine background in the key concepts of QoC, and encouraging supportive training visits. Since there continued to be gaps in quality, every few months she changed the items on the checklists to focus on improving areas where weaknesses in performance had appeared. She also introduced a new incentive scheme for supervisors that used the same indicators of performance that were used in the established system for bonus payments to service providers. In the established bonus system, if the units got more than 75 percent of the indicators, the facilities would get 100 percent of the bonus incentive; if they achieved only 61–75 percent, they would get 50 percent of the bonus. Those who achieved less than 61 percent would get no bonus. To encourage the supervisors to actively promote quality improvements according to this bonus incentive scheme, the Manager tied the bonus of the supervisors to the average monthly score of units in the supervisor's district.

Client satisfaction surveys were also introduced and conducted during the monthly supervision visits by central authorities. The results were double checked personally by the Manager to emphasize the importance of responding to patient perceptions of quality. The results showed an improvement in patient satisfaction on several quality measures, although there remained problems of the availability of drugs, female physicians, and specialists like ophthalmologists.



OVERCOMING OBSTACLES TO IMPLEMENTATION

On paper, the program was well designed and popular among MOHP staff; however, multiple problems emerged in program implementation. For instance, the referral system was still weak and service providers at peripheral levels complained that clients often bypassed the primary care level to reach the more favored specialized secondary and tertiary levels. This prevented the PHC providers from being in the loop on information about patients who needed follow-up. To address this problem, the Manager of PHC created offices at the district level that would be responsible for registering all referral cases and reporting the situation on a monthly basis to the district authorities to take actions if the cycle of referrals and counter-referrals was not up to standards.

Although the health management information system (HMIS) was deemed to produce adequate information for key vertical programs, the lack of effective integration of information for the key components of the FHM had resulted in poor utilization of existing information. It was difficult to overcome the structural organization of vertical programs at the national level in ways to promote comprehensive service, integration, and continuity of care that were key objectives of the FHM. To address this problem, the Manager of PHC together with the Director of the National Information and Communication Center of the MOHP tried to improve data collection and utilization. They tried to create a more open exchange of information and to consolidate data at the national level in order to facilitate sharing across sections/departments. The



new HMIS was also designed to give effective feedback to governorates about their performance. The Manager of PHC also developed a new comprehensive Family Health Folder that included in one place all the forms required for each vertical program, allowing easier data collection for each family visit.

These initiatives were hobbled by the lack of adequate financing. The Manager of PHC had hoped that passage of the anticipated Social Health Insurance Law would mobilize additional funds; however, that law languished in parliament. She had hoped that there would be provisions for cost sharing with patients who could afford to pay. The PHC services were dependent largely on tax revenues that supported MOHP services, supplemented by a share from the Health Insurance Organization (HIO), which covered 40 percent of the population. Although between the budget years of 2001/02 and 2007/08 the MOHP more than tripled its spending on PHC, from 1.1 billion LE in 2001/02 to 3.66 billion LE in 2007/08; the Manager of PHC knew that the need exceeded this funding level.

To support her argument that the MOPH services were not adequate, the Manager used data from the 2008 Egypt Demographic and Health Survey (DHS) (El-Zanaty and Way 2009), which continued to show that a majority were using the private sector for key PHC services other than family planning (Table I).

TABLE I: SITE OF SERVICE DELIVERY

Source of Service	Modern Family Planning Methods	Antenatal Care	Acute Respiratory Infection	Diarrhea
Public %	59.6	19.1	28.7	29.1
Private%	40.3	54.5	63.6	59.5

Source: Egypt DHS 2008



ACHIEVEMENTS AND CHALLENGES IN HEALTH STATUS INDICATORS

Trends showed that the maternal and child health situation has improved in Egypt as a whole. The most striking improvement was in the use of antenatal care and assisted deliveries. In 2008, nearly 66 percent of women had the recommended minimum of four antenatal care visits, compared to 37 percent in 2000. Substantially more women received the assistance of qualified staff during delivery, respectively 79 percent and 61 percent in the same years. On the national level, vaccination coverage and use of medical treatment improved for children. Childhood mortality markedly declined from 52 per 1,000 live births in 2000 to 28 in 2008. However, the nutrition status of women and children appears to have not improved. While there were fewer cases of undernourishment, malnourishment, as measured through anemia, was on the rise. Table 2 shows both tremendous gains achieved in health and utilization indicators, and challenges that still exist.

Although as of 2010 there were no health status and utilization data available to demonstrate the impact of her own activities, the Manager of PHC was proud of the achievements of the Family Medicine program. She was especially proud of the reforms she had initiated in improving the information system, supervision, and the performance incentive program for quality improvement. She was confident that the improvements shown in the DHS were due at least in part to the FHM.



TABLE 2: MOH HEALTH INDICATORS PROGRESS TO DATE, 2008

Indicator	2000 (1)	2007 (1)	2008 (2,3)	Targets for 2017 (1)
Total fertility rate	3.5	2.5	3.0	2.1
Contraceptive prevalence rate	56.1%	63.1%	60.3%	73.1%
Family planning unmet need	11.2%	6%	9%	0
Maternal mortality ratio (per 100,000 live births)	84	65.9	55	40
Births assisted by a medical provider	60.9%	72.9%	78.9%	90%
% coverage of mothers with regular antenatal care (4+ visits)	36.7%	54.5%	66.0%	80.0%
Median age at first birth (years)	21.6	22	22.9	22.4
Infant mortality rate (per 1,000 live birth)	42.5	33.3	25	24.7
Under 5 mortality rate (per 1,000 live birth)	52	43.1	28	30.4
Under 5 with stunted growth	23%	15.1%	29%	10%

Source: (1) MOHP (2001), (2) Egypt DHS 2008, (3) MOHP, 2009



QUESTIONS

1. How was the FHM different from the traditional primary care services?
2. What are the advantages and disadvantages of the FHM?
3. What were the implementation problems of the model that the Manager of PHC sought to overcome?
4. Discuss each of the Manager's initiatives and evaluate their ability to resolve the problems she faced:
 - a. Revising norms and standards
 - b. Establishing integrated supervision
 - c. Developing an enhanced supervision checklist.
 - d. Improving the HMIS
5. If primary care budgets were increased threefold, why was she not satisfied?
6. Did the DHS survey show that the FHM was a success?
7. What additional activities would you suggest to the Manager of PHC do to improve the primary care system in the coming years?



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For more information about Health Systems 20/20 please contact:
Health Systems 20/20 | Abt Associates Inc. | www.abtassociates.com
4550 Montgomery Lane | Suite 800 North | Bethesda, MD 20814 | USA
E-mail: info@healthsystems2020.org | www.healthsystems2020.org