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وزارة الصحة العراقية
Iraqi Ministry of Health
Founded 1920 تأسست

BASELINE ASSESSMENT REPORT 2011

USAID Primary Health Care Project in Iraq (PHCPI)

December 2011

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CONTENTS

List of Acronyms

ARI	Acute Respiratory Illness
CME	Continuing Medical Education
CHW	Community Health Worker
COP	Chief of Party
CS	Convenience Sampling
CVD	Cardio Vascular Disease
DG	Director General
DHMT	District Health Management Team
DOA	Department of Agriculture
DOE	Department of Education
DOEnv	Department of Environment
DoH	Department of Health
DoPW	Department of Population and Welfare
DPT	Diphtheria
EPI	Expanded Program on Immunization
FGD	Focus Groups Discussion
GDP	Gross Domestic Product
HMIS	Health Management Information System
HR	Human Resources
IAH	Intersectoral Action for Health
IDP	Internally Displaced People
IMCI	Integrated Management of Childhood Illness
IMR	Infant Mortality Rate
MCH	Maternal and Child Health
MDGs	Millennium Development Goals
MMR	Maternal Mortality Rate
MoH	Ministry of Health
M&E	Monitoring and Evaluation
MSI	Management Systems International
NCD	Non-communicable Diseases
NGO	Non-governmental Organization
PHC	Primary Health Care
PHCPI	Primary Health Care Project in Iraq
PPS	Population Proportionate to Size
PS	Purposive Sampling
TB	Tuberculosis
QA	Quality Assurance
QI	Quality Improvement
SCM	Supply Chain Management
SOP	Standard Operating Procedures
SRS	Stratified Random Sampling
URC	University Research Co., LLC
USAID	United States Agency for International Development
WHO	World Health Organization

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EXECUTIVE SUMMARY

The health status of the Iraqi people has significantly declined over the past two decades. Due to war, oppressive regimes, and international isolation, the health care system has been badly damaged. Recognizing the need for supportive improvements to better the health of Iraqis, the United States Agency for International Development (USAID) funded the Primary Health Care Project in Iraq (PHCPI) to assist in strengthening the primary health care (PHC) systems, including management, clinical capability and community involvement. To best understand the current PHC situation in Iraq, the PHCPI implemented a baseline assessment to determine how best to support future improvements in the PHC system.

The main objective of the baseline assessment was to generate information to identify health gaps and strengths. This information will serve as a basis for monitoring and improving PHC management systems, clinical practices and community involvement in order to achieve the PHCPI objective of better health for Iraqis.

The baseline assessment was designed to be conducted at four levels of the Iraqi health system (National, District, Health Facility/ Hospital and Community). Several resources, including WHO's 2011 "*Integrated District Health System based on Family Practice Approach Assessment Guidelines and Tools*", were used as references in the development of this assessment. The assessment measured both quantitative and qualitative information from a variety of health facilities and stakeholders. Seven assessment modules were applied in the assessment. Collectively, the assessment efforts reached 11 department of health (DoH) district governors (DG), 11 medical syndicates, 7 international donors, 11 PHC Department Directors, 11 Planning Department Directors, 10 Human Resource Training Department Center (HRTDC) Directors, 10 District Directors, 74 PHC clinics, 14 District Hospitals, 12 community groups, 12 private health facilities and 681 PHC clients. The baseline assessment provided rich details relating to the state of the primary health care system in Iraq. Summary of the key findings are as follows:

National Level

- Presence of statistical data and reports at MoH level, however, limited information on maternal health status and vulnerable groups.
- Inadequate information on specific diseases like HIV/AIDS, STIs, and cancer, especially breast and cervical cancer.

Provincial Level

- Commitment to PHC is strong, but limited collaboration with key stakeholders.
- Presence of strategies and plans with clearly articulated PHC goals.
- Human and financial resources are the main constraints to effective PHC implementation.
- Presence of training plans, but limited training facilities and resources (trainers and training materials), as well as the need for in-service training programs.
- Presence of allocations for maintenance of PHC facilities, but no clear policies and plans in place for execution (e.g. health care waste management).
- Inadequate policies on main areas of PHC services.
- Presence of joint programs between international donors and MoH; however, most of the programs neglect community involvement.
- Professional health associations reach out to the public with education and information; however, limited collaboration with PHC facilities.

District Level

- Limited collaboration and coordination, especially with external stakeholders and communities.
- Presence of reported regular supervision of facilities.
- Presence of referral system, but lack of communication with and feedback from the higher level.

PHC Facility Level

- Inappropriate staffing at many facilities.
- Need for management and administrative guidelines and operating procedures.
- Equipment exists, but there is a need for specific supplies especially for laboratories.
- Presence of treatment guidelines for limited areas of clinical care - need for revisions and development of PHC oriented guidelines.
- Presence of medical records, but not comprehensive.

Community Level

- Presence of health promotion programs, but not focused on all PHC areas.
- Inequitable treatment reported.
- Limited programs for women and youth.
- Lack of awareness-raising programs for private sectors and community/patients on health related issues.
- In some areas, large number of private providers practicing with potential to provide services to Internally Displaced People (IDPs) and other groups.

BACKGROUND

The health status of the Iraqi people has significantly declined over the past two decades. The under-five mortality rate is now 44 per 1000 live births, with the majority of these children dying from pneumonia, diarrheal disease, and premature birth.[1] Child malnutrition has increased steadily, with incidence of low birth weight exceeding 10%. Maternal mortality rates have increased to 84 per 100,000 live births as access to quality antenatal and safe delivery services has declined.[2] As the country moves forward with stabilization and reform, ensuring access to routine, high quality, and equitable healthcare has emerged as a critical need and the Government of Iraq has committed to improving the quality of PHC services. To assist with these efforts, USAID awarded University Research Co. LLC (URC) in partnership with Management Systems International (MSI) the four-year PHCPI. PHCPI has been designed to provide support to the Iraqi Ministry of Health (MoH) to achieve its strategic goal of better quality PHC services.

PHCPI will help the Iraqi MoH to put in place key building blocks to support the delivery of quality PHC services at the community and facility levels. The PHCPI will help the MoH in strengthening PHC services, especially those that target reductions in maternal and neonatal mortality, so that the country can meet its Millennium Development Goals (MDGs) by 2015.

The PHCPI aims to support at least 360 PHC clinics throughout Iraq's 18 provinces by:

- Strengthening health management systems;
- Improving the quality of clinical services; and
- Increasing community involvement to increase demand for and use of PHC services.

PHCPI conducted a rapid baseline assessment in order to obtain information on the current situation of PHC service provision in Iraq and to provide guidance on the quality improvement interventions to apply in Iraq.

1 WHO. Iraq health profile, 2009. http://www.who.int/gho/countries/irq.pdf.

2 The above indicators were taken from the Iraqi Ministry of Health Annual Report, 2010 and MoH Statistics records 2010.

METHODOLOGY

Purpose and Objectives of Assessment

The purpose of the baseline assessment was to assess the functionality of the existing PHC system including: identifying its strengths and weaknesses, classifying priorities, and recognizing interventions that will accomplish the objectives of the PHCPI.

The main objective is to generate information that will serve as a basis for monitoring and improving PHC management systems, clinical practices and community involvement. Specific objectives of the assessment are:

- To uunderstand the health status and health problems of the population and the level of political commitment;
- To determine/review the current health system management systems/procedures and identify gaps;
- To assess the existing set of clinical protocols/programs relating to PHC and identify needs;
- To identify community partnerships' current interaction with PHC services and how they can be improved; and
- To use the collected information to prioritize interventions and plan for improvements in PHC services.

Source of Information and Areas of Assessment

The assessment relied on quantitative and qualitative information. Quantitative information was compiled through available documents (published and unpublished), existing health databases, survey reports, and facility records (i.e. health management information systems (HMIS)). Qualitative information was collected through interviews with key health system stakeholders (including health officials at the national and district levels, donors, health staff at hospitals and clinics, managers of private health organizations/facilities, community based health organizations, and PHC clients), focus group discussions and observations of 74 clinics within 13 districts throughout Iraq. (For detailed information on which data source applies to which module, please refer to the Assessment Module Appendix 1). Overall the assessment covered the following aspects:

- Health status of the population at the national, provincial and district level;
- Policy commitment to PHC services;
- Breadth of health services offered;
- Health management systems including infrastructure, HMIS, logistics management, etc;
- Clinical protocols;
- Continual medical education processes;
- Community partnerships that affect health services;
- Human resources – their availability, skills, distribution, etc;
- Physical resources – their condition and availability;
- Interaction between different levels of the health system
- Coordination/Interaction of public and non-governmental health facilities; and
- Patient satisfaction

Assessment Implementation Steps

The baseline assessment was carried out by the PHCPI M&E team in collaboration with MoH during June-September 2011. To ensure the quality of the data and its applicability to inform project interventions, survey teams were trained on data collection and how to use the survey tools, managing survey activities and survey forms as well as data entry and how to conduct interviews and focus group discussions (FGDs) and participate in data analysis.

For this reason, the assessment guidelines were partitioned into five steps:

- Preparing to conduct assessment
- Training of M&E team and PHC service coordinators
- Conducting and supervising the assessment
- Data entry and analysis
- Report writing

Assessment Framework

The baseline assessment was designed to be conducted at four levels of the Iraqi health system (National, District, Health Facility/Hospital and Community). The assessment measured both quantitative and qualitative information. Quantitative information was captured through available documents (published and unpublished), use of existing health databases, survey reports, and facility records (HMIS). Qualitative information was collected through interviews with key health system stakeholders (including the health officials at the national and district levels; donors; health staff at hospitals and clinics; managers of private health organizations/facilities; community based health organizations; and PHC clients), focus group discussions and observations of 74 clinics within 13 districts throughout Iraq.

Table 1 gives a visual depiction of the areas of assessment, levels of assessment, the corresponding tool (there were seven tools) and the assessment methodology.

Table 1. Components of the PHCPI baseline assessment

Area of assessment	Level of assessment	Assessment tool	Assessment methodology		
			Review of documents	Interview/ focus group discussion	Field visit & observation
Health status of population	National	National Indicator Matrix Module 1	Existing data from surveys, HMIS, reports, research		
	District	Districts Indicator Matrix Module 3	Existing data from surveys, HMIS, reports, research		
Policy commitment to PHC services	National	Questionnaire Module 2		Interview with policy makers	
Breadth of health services	District	Indicator matrix Module 3	District records	Interview with district team	
	District	Questionnaire Module 4	Review of HMIS	Interview districts managers/team	
	Hospital/ PHC facility	Questionnaire Module 5 & 6	Review of HMIS	Interview facility team	
	Community	Questionnaire Module 7	Review of HMIS	Interview community providers	
Health management systems	District	Questionnaire Module 4	Records of districts	Interview districts managers/team	
	Hospital/ PHC Facility	Questionnaire Module 5 & 6	Facility records	Interview with hospital & PHC team	Facility observations
	Community	Questionnaire Module 7		Interview and FGD with community providers and groups	
Clinical protocols & service delivery	District	Questionnaire Module 4	Records of districts	Interview districts managers/team	
	Hospital/ PHC Facility	Questionnaire Module 5 & 6	Guidelines	Interview with facility teams	
	Community	Questionnaire Module 7		Interview with community providers and community members	
Continual medical education processes	District	Questionnaire Module 4	Records of districts	Interview districts managers/team	
	Community	Questionnaire Module 7	Training records	Interview with community providers	
	Hospital/ PHC Facility	Questionnaire Module 5 & 6		Interview with hospital & PHC team	
Community partnerships that affect health services	Community	Questionnaire Module 7		FGD with selected community groups	
Available HR, skills, distribution and retention, etc	Hospital/ PHC Facility	Questionnaire Module 5 & 6		Interview with hospital & PHC team	
	District	Questionnaire Module 4	Review of job descriptions	Interview with district team	
Patient satisfaction	Community	Questionnaire Module 7		FGD & interview with community members	
Physical resources, and their condition, and availability	District	District Matrix Indicator Module 3	Existing data from surveys, HMIS, reports, researches		
	District	Questionnaire Module 4	Records of districts Health Department	Interview with district team	
	Hospital/PHC	Questionnaire Module 5 & 6		Interview with hospital & PHC team	
	Community	Community Assessment Tool Module 7		FGD with selected community group	
Interaction between different levels of the health system	District	Questionnaire Module 4		Interview with district team	
	National	Questionnaire Module 2		Interview with national stakeholders	
Coordination/ Interaction of public & non-governmental health facilities	Hospital/PHC	Questionnaire Module 5 & 6		Questionnaire with hospital & PHC team	Interview with hospital/ facility in-charge

Sampling

During project start-up, the PHCPI field team worked with the MoH in setting the criteria for selecting the 360 PHC clinics to be covered by the project. They selected 10-15 PHC clinics in each district. The selection criteria included: the size of each clinic's catchment area, current conditions of the clinic, target population in the district, especially vulnerable groups (such as internally displaced persons (IDPs)), type of PHC clinic (primary, sub-center or model clinics), political commitment of the local health authorities as well as geographical coverage to ensure clinics inclusion in all possible areas. After employment of these criteria, it was determined that the PHCPI would target 360 clinics among the 18 provinces.

PHCPI considered the project target clinics, districts and provinces when finalizing sample size. Our team employed the following sampling methods in determining our sample framework: Convenience Sampling (CS), Stratified Random Sampling (SRS), and Population Proportionate to Size (PPS) methods and Purposive Sampling (PS).

In the first stage, we used CS method where we identified five regions across Iraq based on geographical and socio-political characteristics. Each region consisted of a specific number of provinces.

In the second stage, we selected nine provinces using SRS (by geographic location/population) to ensure that the sample is representative of the population of the 18 provinces in the project.

In the third stage, we selected 14 districts from among the 9 provinces, covering 196 clinics. We divided these clinics into main, sub and model clinic clusters. Then we used the PPS method to select our final sample clinic size.

- **Main Clinics PPS:** We determined that every district covered would have three main clinics assessed, which led us to select 42 main clinics for sampling.
- **Sub Clinics PPS:** We selected 12 sub clinics out of the possible 47 by using PPS
- **Model Clinics PPS:** We selected 21 model clinics out of 34 identified by using PPS.

The final sample for the baseline was a total of 75 PHC clinics. For the detailed breakdown of the clinics sampled please refer to Appendix 1: Sampling Frame. The modules not focusing on PHC clinics targeted specific stakeholders based on their knowledge of and position in relation to the PHC system: health officials at the national and district levels, donors, health staff at hospitals and clinics, managers of private health organizations/facilities, community based health organizations, and PHC clients. Their insights will provide the context for PHC activities. For a list of each stakeholder to be targeted please reference Appendix 3: Assessment Modules.

Box 1. Baseline population coverage

The baseline assessment team reached 13 districts, 62 primary and model clinics, and 12 sub clinics.

We interviewed 11 DoH DG, 11 medical syndicates, 7 international donors, 11 PHC Department Directors, 11 Planning Department Directors, 10 HRTDC Directors, 10 District Directors, 74 PHC clinics, 14 District Hospitals, 12 community groups, 12 private health facilities and 681 PHC clients.

Based on these facilities geographic coverage, our team's assessment represents health service data that affects 21,131,000 Iraqis or two-thirds of the population of Iraq.

This sampling approach enabled the most efficient deployment of efforts and use of resources while ensuring that results can be generalized to all PHC clinics. This sampling scheme for PHC clinics allowed for a balance of cost, logistics and HR, and precision of data given time constraints.

Data Collection

Seven assessment tools were applied in the assessment. The instructions for managing the data collection for each of the tools can be found in Appendix 3: Assessment Modules. Table 2 below shows the number of participants or facilities reached with qualitative assessment tools per province.

Table 2. Respondents by assessment tool

Qualitative Assessment Tools	Participants or Facilities per province (by alphabetical order)									
	1	2	3	4	5	6	7	8	9	Total
Module 5: Primary health care facility assessment	6	6	3	23	6	7	7	9	7	**74**
Module 6: District hospital	1	1	2	2	1	4	1	1	1	**14**
Module 7a: Community involvement assessment										**12**
Module 7b: Non-governmental facilities										**12**
Module 7c: Client exit interviews	50	28	69	90	54	230	42	56	62	**681**

Data Processing and Analysis

A special sub-set of surveyors was trained to review, compile and code the data collected in order to determine overall obstacles to the health of Iraqis. As the data is largely qualitative, substantial time was taken with the MoH team prior to data collection, to determine the process for coding the qualitative data. Data was analyzed based on the systems strengthening approach and the PHCPI three main objectives of strengthening management systems, clinical protocols and community partnerships.

Figures 1 and 2 and Box 2 provide an overview of the PHCPI Results and Assessment frameworks. We identified the presence or absence of critical building blocks needed to achieve the three main results of the project. The baseline assessment framework aided us in finding gaps in the current systems and practices in place.

Box 2. Baseline assessment framework

- Baseline assessment tools and protocol developed and translated into Arabic.
- 14 survey teams identified and trained (teams were comprised of MoH and PHCPI staff).
- Management plan with time table developed.
- Pilot survey conducted in 2 districts (Baghdad Rusafa & Babil).
- Data collected and analyzed.

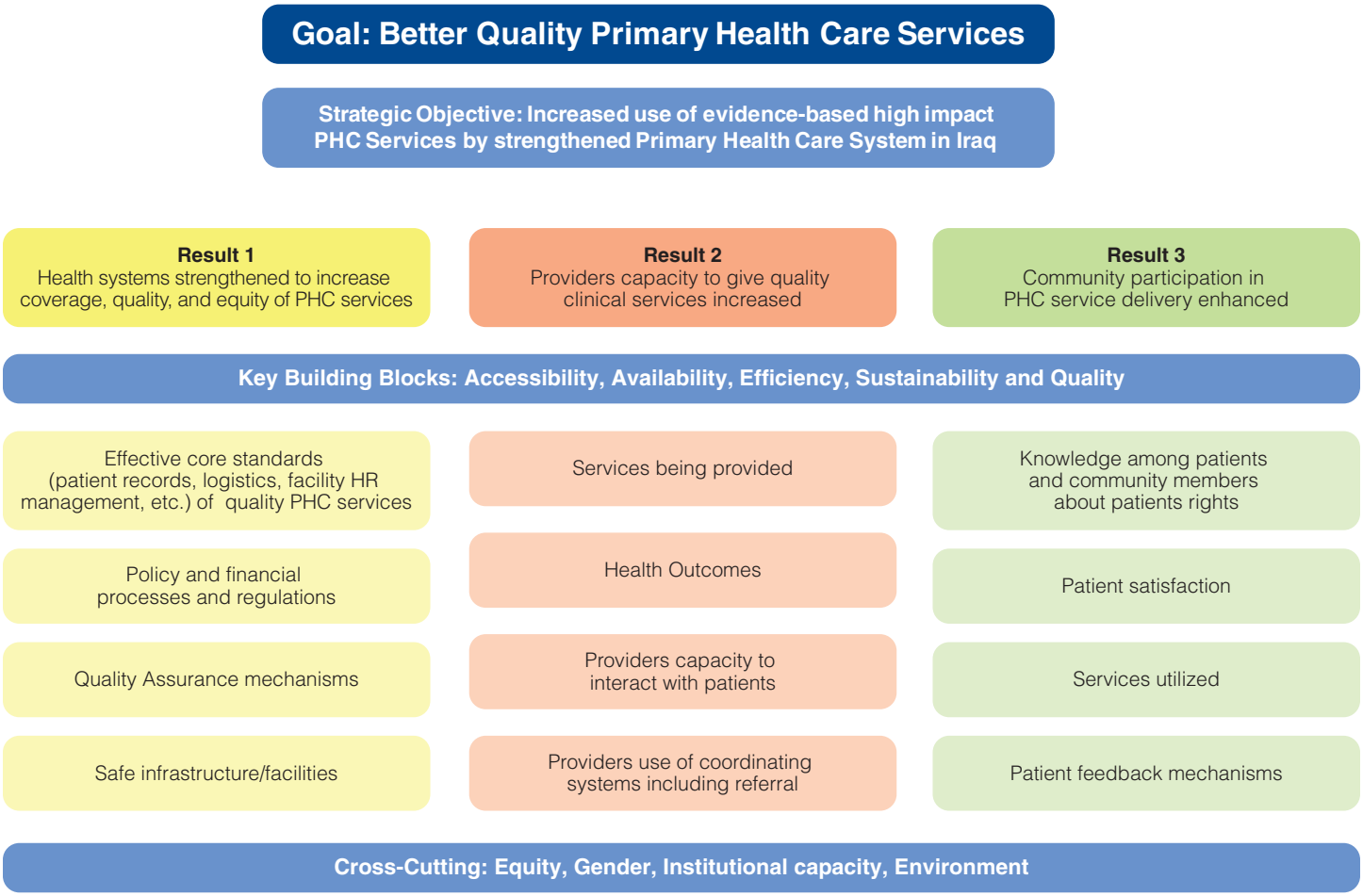
Figure 1. USAID/PHCPI Project results framework

The baseline assessed the effectiveness of priority health programs and services utilized, such as maternal and child health. The analysis enabled our team to understand availability, access, coverage, quality, equity and efficiency of health services. The following additional issues were considered when analyzing questionnaires:

- Clinical protocols
- PHC services provided and quality of PHC
- Training
- Management practices
- Physical infrastructure
- Payment systems
- Supervision
- HMIS
- Supply chain management
- Referrals
- Community involvement
- Patient knowledge of PHC system
- Patient involvement in PHC system
- Patient satisfaction with PHC system

In addition, data was collected and analyzed for cross cutting issues of equity, gender, institutional capacity and environment.

Figure 2. Iraq PHCP assessment framework



Assessment Limitations

The baseline assessment provides a set of tools for a rapid yet comprehensive assessment of the health system at the district as well as PHC facility level and for analyzing the findings in relation to the health needs and requirements of the community. It provides an overview of the system, pointing out areas requiring strengthening and/or corrective action. Such an assessment cannot replace in–depth systems and policy analysis. However, it helps identify problems and issues in order to prioritize interventions for improving performance of the district health system. A few limitations of this approach are outlined below:

- The Baseline Assessment Survey did not look at the quality of services (provider-patient interactions), nor measure clinical or counseling skills of the providers.
- It did not assess the provision of private services at the public facilities (after hours service provision) and does not provide a comparison or analysis of how this affects the free services offered during the morning hours at the same clinics.
- Information collected from the facilities and stakeholders is limited to the health services provided in the sampling population selected for the assessment.
- Results are largely qualitative.
- The entire sample was not reached. 1 targeted clinic was under construction and less than 10 clients were interviewed at some clinics since they did not have many clients present.
- Community members were only surveyed if they were present at the clinic and so may be biased toward being satisfied enough to use PHC services.
- The baseline did not provide in-depth understanding of the socio-cultural dimensions of specific health issues.

Solutions

- PHCPI plans to collect data from each participating facility before initiating any interventions. A special tool is being adapted for this purpose. The facility assessments will look at private provision of services as well as collect data on other key elements included in the baseline survey. This will be followed up on a routine basis to allow the facility and the project to examine progress over time.
- An assessment will be conducted to assess knowledge, attitudes and skills of the health providers. This tool will be used in a sample of facilities in Jan/Feb 2012.
- A limited number of provider-patient interaction observations will be carried out in each region of the country to assess quality of provider-patient interaction skills in Jan/Feb 2012.

FINDINGS

The baseline assessment team reached 13 district health offices, 12 district hospitals, 62 primary and model clinics, and 12 sub clinics. Based on these facilities geographic coverage, our team's assessment represents health service data that affects 21,131,000 Iraqis, or two-thirds of the population of Iraq. From this data we are able to get a snapshot of the Iraq PHC situation, which will inform PHCPI's activities. Due to the size of the baseline and enormity of data we received, the following provides significant findings (presented by assessment module) on the gaps and challenges for the current PHC system and services. Interpretation of results can be found in the discussion section.

Module 1. National Indicators

For Module 1, the surveyors collected data on national indicators on the health status of the population in terms of morbidity and mortality; its demographic characteristics; socioeconomic status; availability of human resources and infrastructure; health care financing and selected PHC coverage indicators according to MoH statistics department records for 2010.[3] Some salient national health data is as follows in Box 3.

Box 3. National health indicators

Demographic Indicators

- Total population: 32,437,948
- Crude birth rate (per 1000): 40
- Crude death rate (per 1000): 4
- Population growth rate (%): 3.4%
- Total infertility rate (per 1000): 4.5

Socioeconomic Indicators

- Population with sustainable access to improved water source (%): 81%
- Population with sustainable access to improved sanitation (%): 84%
- Smoking prevalence among adults (age 15+): 15%
- Women as % of workforce (in the formal sector): 38%

Health Care Financing Indicators

- Total expenditure on health as percentage of GDP: 2.69%
- General government expenditure on health as % of total health expenditure: 74%
- Donor expenditure on health as % of total health spending: 1.22%
- MoH budget as % of government budget: 7.6%

Human and Physical Resources Indicators

- No. of physicians: 24,750 (Total)
- No. of Nursing and midwifery staff: 46,024 (Total)
- No. of PHC units and centers (public): 2,331(Total)
- Distribution of health care professionals in urban and rural areas: 54,898

Primary Health Care Coverage Indicators

- Antenatal coverage: 51%
- Births attended by skilled health personnel (%): 68.61%
- Pregnant women who received 4+ antenatal care visits (%): 27%
- No. of PHC centers outpatients: 40,853,636

Health Status Indicators

- Prenatal mortality rate (per 1,000 total births): 10%
- Infant mortality rate: 24 per 1000 live births
- Under 5 mortality rate (per 1,000 total births): 28.7
- No. specific information on Maternal mortality rate available (IFHS): 84

Selected Morbidity Indicators

- Incidence rate of Malaria per 1,000: 0.0001
- No. of reported cases of Hypertension: 1,201,400
- No. of registered cases of Diabetes Mellitus: 1,019,601
- No. of women who receive care during the last months of pregnancy: 22%

3 Indicator sources: MoH Annual Report 2010, National Health Account (NHA) Report 2010, and Basic Health Services Package (BHSP) 2009, IFHS 2009, COSIT 2008-2009, MoH statistics department records 2010, WHO Report 2009.

Module 2. Policy Commitment to the PHC Program

Module 2 was a questionnaire that collected provincial level information through interviews with the following stakeholders: 11 DoH DGs, 11 PHC Department (Dept.) Directors, 7 International Donors, 10 HRTDC Directors and 11 Planning Dept. Directors.

These indicators shed light on general polices, financing systems, planning, and regulatory processes in place to support the PHC system as well as the potential constrains in supporting PHC activities.

Political commitment

Political commitment to PHC program is important to support strong health system strengthening efforts. Most stakeholders interviewed said that PHC goals are clearly articulated in the national health policy strategy and communicated by the MoH. Most health officials were involved in health policy development; the least involved were planning department officials (Figure 3). Almost all DoH DGs (90%) reported having strategic plans articulating PHC goals.

Availability of resources

Almost all provincial stakeholders considered human and financial resources as well as community support as the main requirements to strengthen PHC services.

Inadequate distribution of resources seemed to be prevalent throughout the provinces. Results from other modules show there are human resource shortages (especially physicians) facing PHC staffing, while certain cadres (nurses) are overstaffed at some centers. DoH DG explained that the MoH has adopted a skeletal system for each health facility with standard staffing plans for each unit based on needs proportionate to the population size. According to all Planning Department Directors there is a joint plan with PHC Departments for distribution of health care professionals in PHC centers.

Almost three-quarters (72%) of Planning Department Directors said a main constraint for PHC services is lack of payment regulations and limited funds for PHC, while nearly all (91%) identified human resources as a major barrier (Figure 4).

The majority of Planning Department Directors (90%) said that there is specific budget allocation for maintaining equipment and services.

Almost all provincial stakeholders (91%) reported having guidelines, standards, and protocols for service delivery. However, they reported a need for planning, management/ administration and clinical standards and norms. Only 46% of provincial respondents reported existence of regulations to ensure quality performance. Planning Department Directors said they were all involved in supervising PHC clinics, but 28% said they do not complete assessment forms to evaluate PHC clinics.

Prioritizing services

The majority (91%) of Planning Department Directors stated that they use health indicators to set priorities for HR allocation. Provincial respondents reported malnutrition, diabetes and Cardiovascular Diseases (CVD) are the most common non communicable diseases while cholera, diarrhea and respiratory tract infections are the leading communicable diseases (Figure 5).

Figure 3. Provincial stakeholder's involvement in health policy development

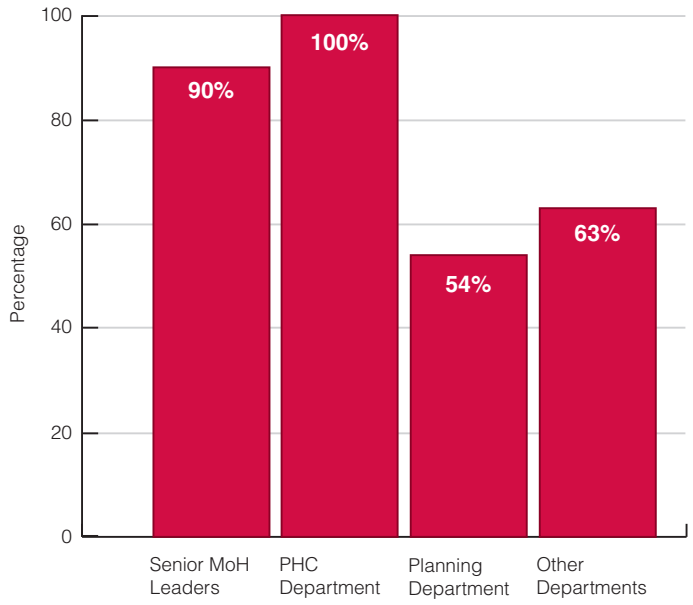


Figure 4. Percent of respondents identifying a resource as a significant barrier to achieving PHC goals

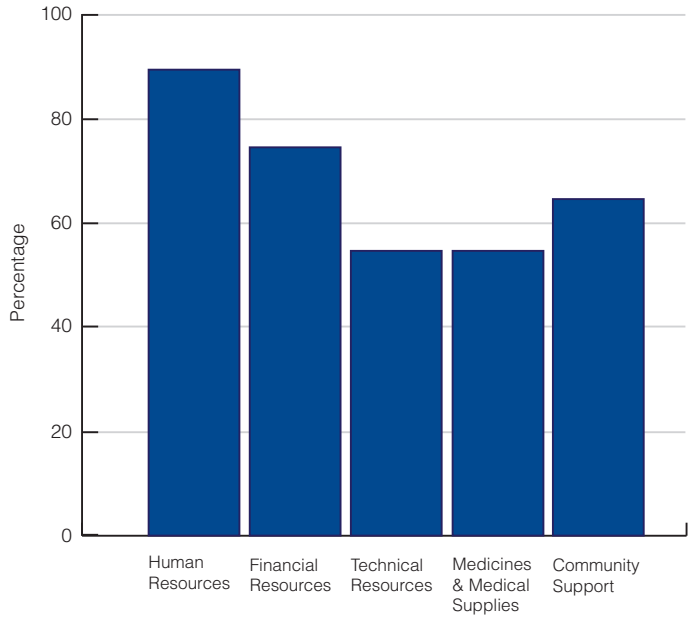
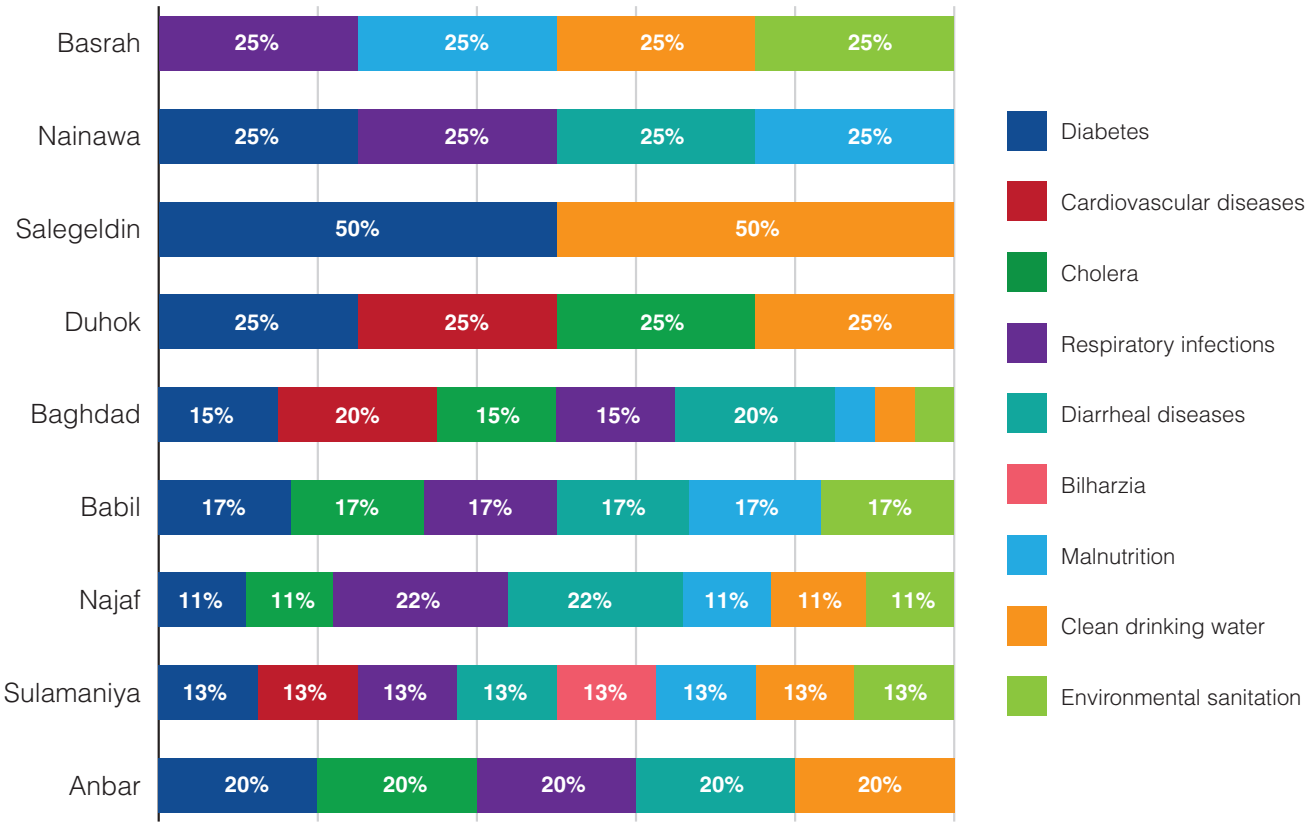


Figure 5. Percent of respondents identifying a disease as important for their province



Human resource development

Capacity building is important to ensure technical PHC gaps are being filled. The MoH central level is responsible for training and promotion for all MoH staff. At each DoH training unit there is supposed to be coordination with all health directorates at central and peripheral level. However, 50% of the DoHs included in the sample do not have training facilities.

All Planning Department Directors and over half of health professional associations (55%) said there is a system for continuing medical education (CME) and health education for PHC clinics. Nine out of 11 PHC Department Directors reported a need for technical training for PHC staff, but had mixed opinions when asked if current PHC training plans cover the following areas: communication, supportive supervision, team building, ethics and patient rights, health statistics and service quality.

All directors of human resources training department centers (HRTDC) reported that there are no PHC clinics involved in determining training needs and 10% reported that there are no mechanisms used to determine the efficiency and effectiveness of training programs. According to HRTDC Directors there is an equal use of classroom, observation, and in-service training; distant training efforts are the least utilized among training methodologies.

This innovative training method may be helpful to expand considering that half of DoHs reported do not have training facilities.

Partnerships with communities, health associations, and donors

In order to facilitate health system strengthening, all stakeholders must coordinate with one another to achieve PHC goals. The PHC Department Directors expressed their ambition of communicating with the ministry through the Internet. Most provincial stakeholders (73%) reported being involved in coordinating joint meetings among different entities regarding PHC. However, only two of the DoH DG's reported that there are examples of public private partnerships. Among health professional associations, 37% said that there is no public private collaboration regarding PHC policy. Moreover, results showed that provision of nutrition and health education were not high priorities within PHC programs.

Almost all provincial stakeholders (90%) acknowledge the important role of the community in PHC. However, of Planning Department Directors, 27% reported that there is no official mechanism to ensure the active engagement of civil society and the community in service delivery planning, eliciting population priorities, perceptions of quality, and barriers to seeking care. When PHC Department Directors were asked if the Department of PHC

coordinates with the PHC clinics and the community to evaluate the effectiveness of the services provided, 73% said yes; however, only 55% of DoH DG's reported they hold regular community meetings and 64% said they lead joint activities to strengthen community's role in PHC. Only 40% of PHC clinics said they regularly meet with community groups. Only 55% of provincial respondents reported having undertaken mapping exercises to identify coverage for vulnerable groups in the community. Moreover, results showed that community groups are not involved in PHC program design and service delivery. Almost 64% of PHC Department Directors said that their department coordinates with the PHC clinics in collecting data about patient satisfaction in order to improve services.

The baseline assessment found that health professional associations[4] currently play only a minor role in health service design and delivery. Six out of 11 health professional associations interviewed said they collaborate with MoH/DoH on setting the health policy agenda. However, one third (37%) of them revealed that there is no system in place for coordinating policy between private and public sectors. 82% of health professional associations reported that they are not involved in health research concerning PHC to determine how to improve health outcomes.

Approximately half (54%) of health professional associations' respondents reported that there are no clear regulations to ensure quality performance. Only 55% of health professional associations' respondents reported that systems are in place for Continuing Medical Education (CME). When asked if health professional associations reach out to the general public with information, education and communication to raise awareness and change behavior for priority PHC issues, 3 of 10 (30%) reported that they do not.

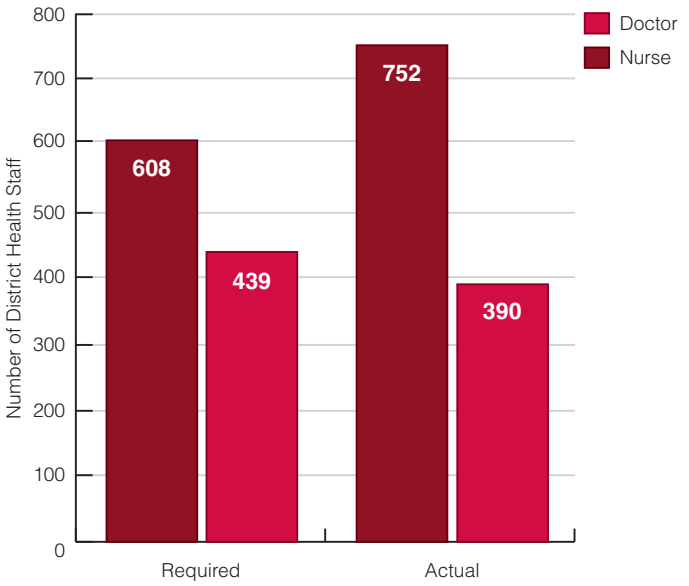
Almost three-quarters (70%) of donor representatives stated that there are joint programs with MoH designed to strengthen PHC systems. However, only a fraction (43%) of programmatic reports generated by donors is made available to the health community. Over half (57%) of donors said there are no campaigns conducted to strengthen community awareness on patients' PHC rights.

According to the international donors surveyed, family planning is the least attended health issue in programming. Furthermore, 71% of the provincial respondents reported that there is a joint program on the family practice approach between MoH and international donors, in which communicable disease and maternal and child health represent the main programs. The majority of Planning Department Directors reported lack of health programs that cover elderly, the disabled or displaced people.

Module 3. District Indicators

For Module 3, surveyors collected information from District Health Management Team (DHMT) records to get an overview of the district health situation. This records review shed light on the human resources for health situation among the districts. Based on staff need and ability, District Directors said districts have a role in transferring staff. However, based on the required HR staffing plan for the 13 districts sampled, results showed that clinical and administrative staff allocations are not based on needs. Even though data show a large number of doctors/nurses available in the sampled areas, often they are not evenly distributed at the service delivery points. Most PHCs have significant maldistribution of doctors, medical assistants, health promoters, lab staff, pharmacists, etc. Figures 6 and 7 below highlight key HR findings among the districts.

Figure 6. Number of district health staff required versus actually present



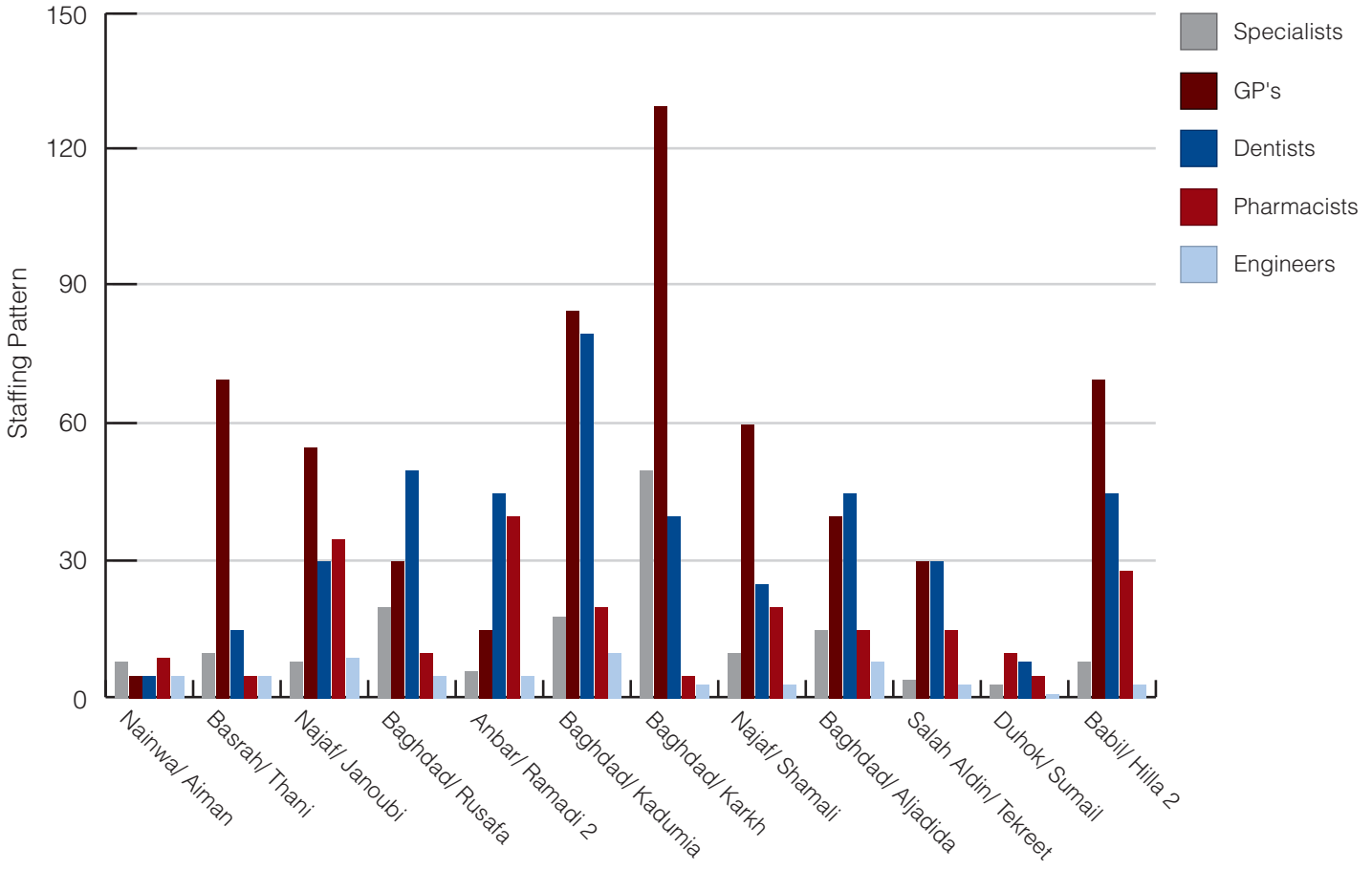
4 Health professional associations represent health/medical syndicates in the country. Syndicates represent providers such as: nurses, doctors, and pharmacists. These syndicates are able to participate in policy development and training of its members.

Table 3. Staffing pattern and availability of HR in the sample selected[5]

Job Title	Standard staff (number)	Actual found (number)	Leaves (long leaves more than 1 month/study leaves)
Medical Staff			
Physicians	439	390	56
Dentists	191	272	15
Pharmacists	89	121	4
Veterinarian	6	4	0
Medical assistant, Medical technician	780	743	17
Nurse	608	752	21
Preventive assistant	115	156	3
Health researcher	35	19	0
Lab assistant	479	425	26
Labs technician, Bacteriologist, biologist, chemist	69	45	4
Pharmacist assistant	316	317	14
Dentist assistant	80	22	1
Other (specify)	63	55	0
Engineering staff			
Electrical engineer	56	13	0
Civil engineer	12	10	4
Medical equipment engineer	10	5	0
Mechanical engineer	13	6	1
Electrical technician	69	35	0
Mechanical technician	26	12	0
Others (specify)	12	14	1
Administrative staff			
BA & Diploma	73	54	2
Statistician	97	48	0
Accountant, assist. Accountant	89	111	1
Stores official	71	7	0
Auditor	10	8	0
Postman	35	24	0
Artisan (repair/handyman)	183	263	3
Service worker	205	137	3
Driver	54	49	6
Guard	107	69	0
Gardener	73	4	0
Others (specify)	46	50	0

4 Districts records 2011 and MoH report 2010.

Figure 7. Staffing pattern in the sample districts



Module 4. District Health Management and Support Systems

For Module 4, surveyors interviewed district level health stakeholders including eleven District Directors and their District Health Management Teams (DHMT) regarding district health situation management and supporting systems.

Human resource management

Human resources (HR) are the most crucial health resource involved in PHC. In order for quality PHC services to be delivered there must be a quality system in place to manage HR. Job descriptions (JD) are one key management tool to ensuring proper management of HR, since supervisors can check if staff are fulfilling their JD during supervisory visits. District Health Managers (DHM) and the District Health Teams (DHT) reported that job descriptions at the district level do exist. However when data collectors asked to see the JDs, only one respondent could produce a JD.

Among all districts surveyed, there were 736 supervisory visits paid by district management to the health centers during the three month period from May-July 2011. District managers said they mostly use direct observation and records certification in supervisory visits. Almost all (92%) of district managers said they use assessment forms when supervising staff.

In order to ensure quality care is delivered, clinical service delivery systems must reflect the most accurate and up to date standards and guidelines. The majority of District Directors (79%) reported having clinical guidelines. Almost all (95%) districts reported the need for clinical services standards, and nearly as many districts (88%) noted the need for administrative and management standards for PHC centers. For example, 20% of districts stakeholders among all provinces except Baghdad reported lacking instructions on waste disposal.

Supply chain management

Quality supply chain management (SCM) systems enable effective and efficient use of resources such as drugs. Most districts officials (73%) said there is a system for medical equipment management. However, only 39% of districts received all the drugs requested for their facilities in the past six months (Figure 8). Nearly half (42%) of District Directors reported that there is not adequate space for drug storage.

Over half (69%) of the districts surveyed reported an estimated annual expenditure for equipment maintenance and repair. Those districts reported coordination between the Engineering Department and KEMADIA, a general company for marketing drugs and medical appliances, regarding maintenance, repair, and availability of spare parts for medical equipment. Those districts reported that there is a facility for repair of medical and non-medical equipment when broken.

Referral systems

Ensuring a continuum of care is also critical in delivering quality clinical services. However, 54% of districts reported there is no feedback communication from hospitals to PHC clinics. While most (11 of 13) of the districts reported feedback communication *between* district level facilities, only 25% of the health facilities use referral mechanisms. In Baghdad, 91% of health facilities use referrals from primary to secondary level of care.

Facility distribution

Results showed that within the 13 districts surveyed there are 143 public clinics versus 2372 private physician's clinics (PHC staff work in both facilities). Fifty percent of private providers reported providing PHC services. Figure 9 demonstrates the coverage of private facility infrastructure, with potential for expanding PHC coverage in the targeted districts services maternal and child health services.

In addition to PHC clinics, the facilities listed in Table 4 are available in the 13 districts surveyed.

This shows a huge private facility infrastructure and potential PHC coverage in the targeted districts. Expanding feedback communication and coordination among all different health facilities within districts could greatly expand PHC coverage.

Figure 8. Percent of districts receiving all drugs requested during the past six months

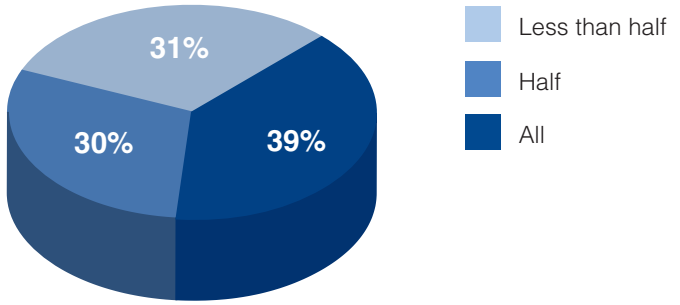


Figure 9. Collective number of private versus public health centers in the target districts

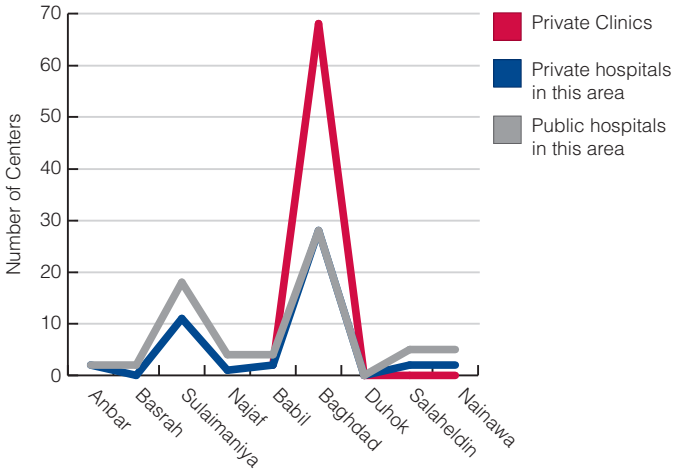


Table 4. Health facilities in target districts

Public hospitals in this area	45
Private hospitals in this area	43
Dentists' private clinics	768
Health insurance clinics	6
Private clinics	88
Private pharmacies	736
Private labs	559

Module 5. PHC Facility Assessment

For Modules 5 a and b, information was collected through interviews with the PHC facility manager and PHC team, observation of the PHC infrastructure, supplies and environment as well as a review of records in the 74 PHC clinics. This module includes information regarding the accessibility, availability, and quality of PHC resources, services, infrastructure and reasons for visits.

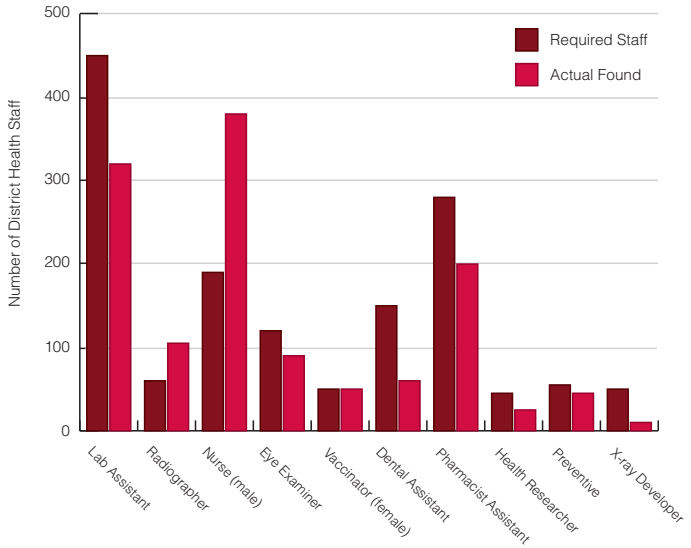
Human resource management

For each PHC clinic there is a standard HR staffing plan. However, only 56% of PHC clinics had available job descriptions for all units. Figure 10 shows the poor distribution among the required positions in the PHC clinics surveyed.

Supplies and equipment

According to Iraq PHC Law[6], there is a list of essential medicines. The MoH at the central level provides all health facilities with drugs and medical equipments according to the type of health facility (through KEMADIA). There is a free monthly ration to each PHC clinic delivered directly from KEMADIA. Results showed that the majority (95%) of PHC clinics had lists of essential medicines. However, almost half of sub PHC clinics (5 of 12) lacked instructions for procurement and inventory. 62% of sub clinics had lists of essential medical equipment. Of the PHC clinics surveyed, less than half had the following resources: radiology (40%), sonar (43%), and an ambulance (28%). In general, over half (68%) of the PHC clinics interviewed reported a need for medicines and 49% reported a need for medical supplies.

Figure 10. Number of staff in the PHC clinics required by the district HR plan compared to the actual found

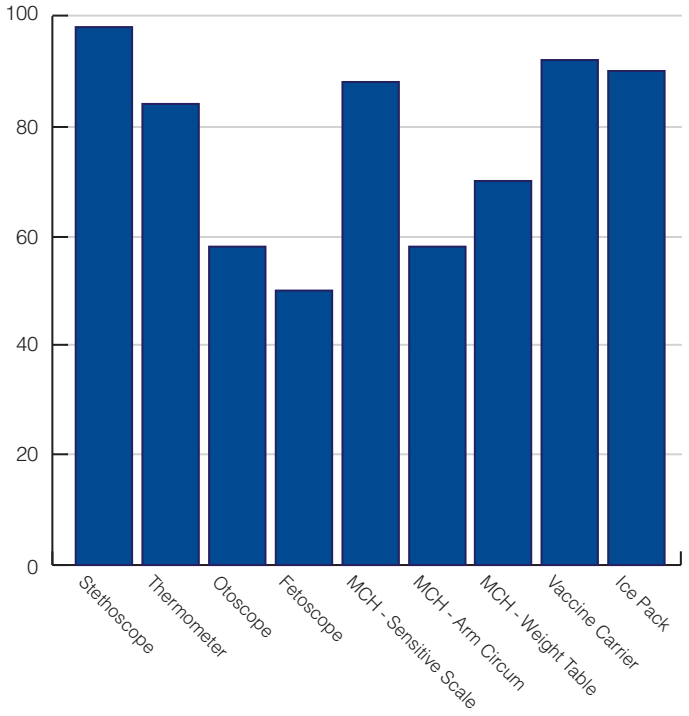


In the area of maternal and child health (MCH), 20% of PHC clinics reported not having folic acid or iron tablets for pregnant women. Most PHC clinics lacked the vaccines for BCG (66%) and PT (30%). All PHC clinics reporting delays in receiving medicines and only 39% of districts received all the medicines requested for their facilities in the past six months.

PHC clinics also reported lack of medicines for non-communicable and communicable diseases. For non communicable diseases, 44% of PHC clinics reported lack of hypertension medicine and 56% reported lack of diabetes medicines. For communicable diseases, 82% of PHC clinics did not have Bilaharzia drugs and 35% did not have drugs for cholera.

Of the PHC clinics observed, 77% of the main PHC clinics and half of the PHC sub clinics were in need of MCH supplies including: fetoscopes, tape measures, arm circumference strips. Half of facilities were also missing essential health promotion and nutrition supplies. For the majority of PHC clinics, emergency, x-ray and labor room supplies were missing. Figures 11-13 summarize the lack of necessary equipment among the PHC facilities surveyed.

Figure 11. Percent of PHCs with available equipment



6 Iraq Public Health Law No. 89. Last revised: 1981.

Figure 12. Percent of PHC clinics with laboratory equipment

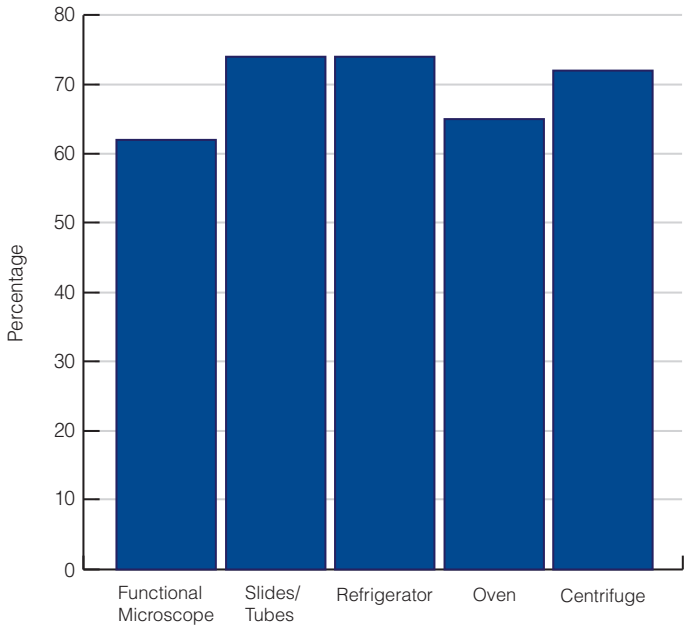
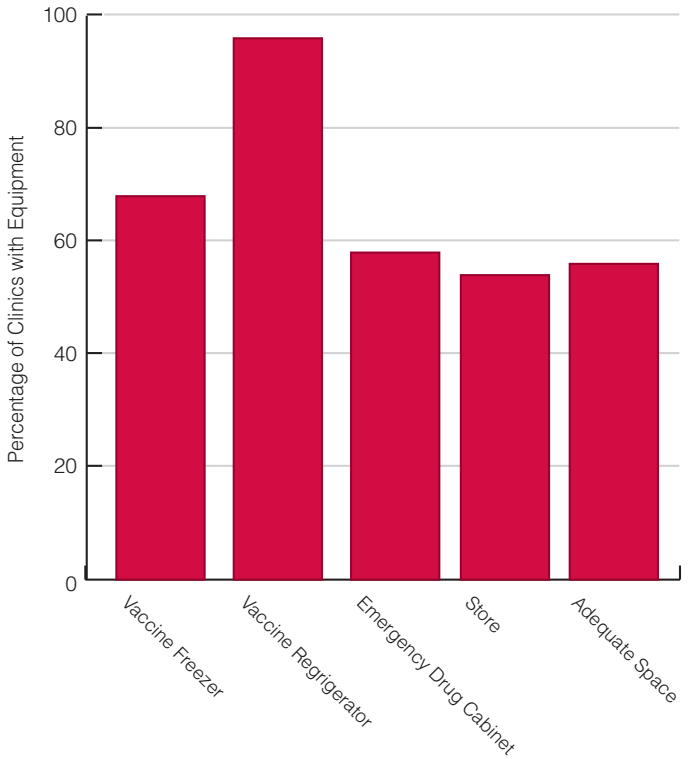


Figure 13. Percent of PHC clinics with pharmacy equipment

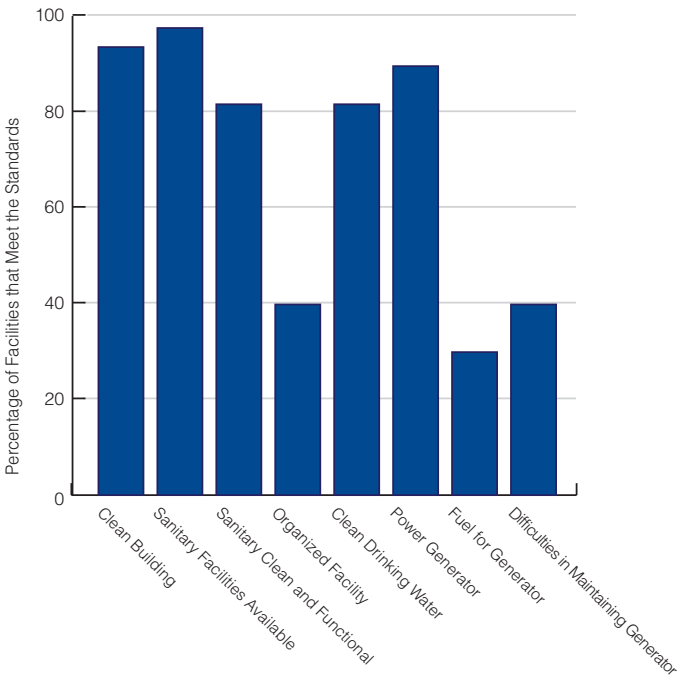


Operational standards

Beyond required HR, drugs and equipment there are also operational standards that ensure quality management of PHC clinics. Of the 74 PHC clinics surveyed, less than one percent reported having a labor or emergency room. Almost half of the clinics (49%) reported not having enough facility space. The following figure shows the percent of PHC clinics that reported having complied with certain operational standards such as clinic cleanliness.

While more than a third of PHC clinics (34%) reported needing rehabilitation of some sort because of issues ranging from having cracks in the water system (60%) to not having a power generator (6%), most PHC clinics (88%) said that there is no budget for the facility and so financing is done through operational advances.

Figure 14. Percent of PHC clinics that comply with certain operational clinical standards



Clinical standards and procedures

Of PHC clinics that said there were available service standards for staff, only 63% had standards available for physicians, 30% for nurses, and 44% for cleaning workers. Of PHC clinics, 68% of facilities did not have standards for family planning and 62.7% did not have standards for environmental safety. Figure 15 shows presence of certain guidelines among the 74 PHC clinics surveyed.

To ensure clinical standards are upheld there must be continuing medical education and supervision for providers. Almost all PHC clinics reported having staff that participated in training in the last six months. However, no PHC clinics reported having training centers. More than a third of PHC clinics reported that the main locations for trainings are at non-government facilities. Almost all of PHC clinics reported being supervised in the last six months, with 99% reporting having daily in-service supervision.

Charting and monitoring of program data is critical to manage facilities and patient care. Of the PHC clinics, 89% had a maternal health record and a child health record. However, only 61% had patients' record of early detection of diabetes and hypertension and 44% said that no one in their facility has been trained in HMIS reporting. Only 30% of monthly PHC data are entered electronically as 70% of facilities noted that they require computers and HMIS training. Sixty percent of PHC clinics reported getting no district feedback on their monthly assessments and only 45% said they use their own data analysis to improve health services.

Figure 15. Percent of PHC facilities with specific treatment guidelines

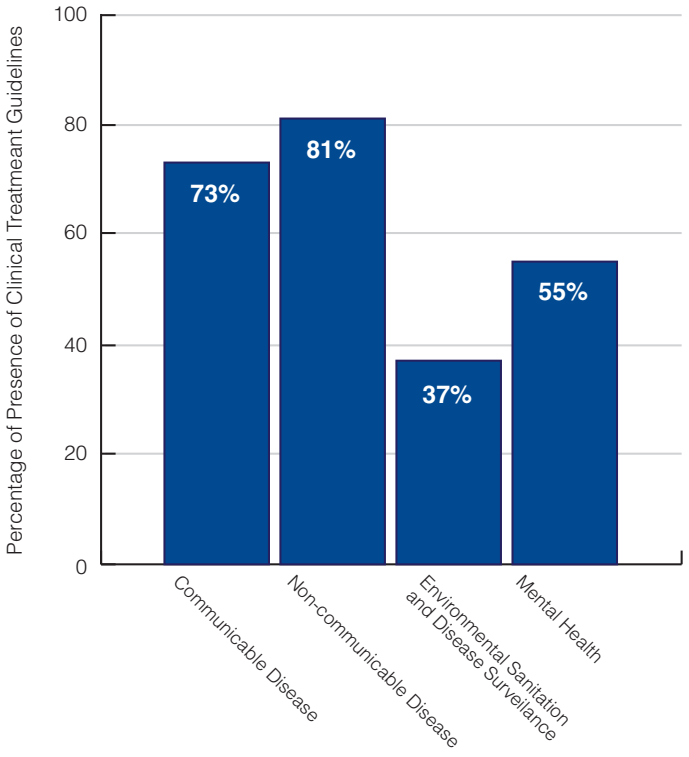


Figure 16. Percent of PHC directors that reported training in particular areas

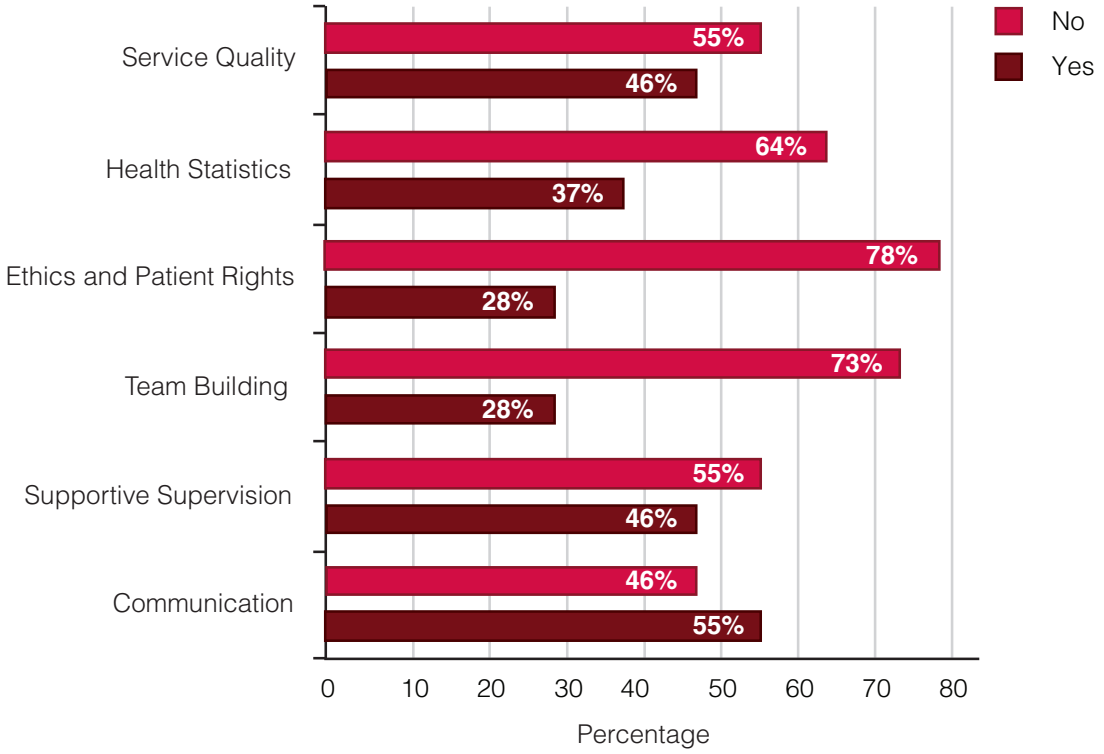
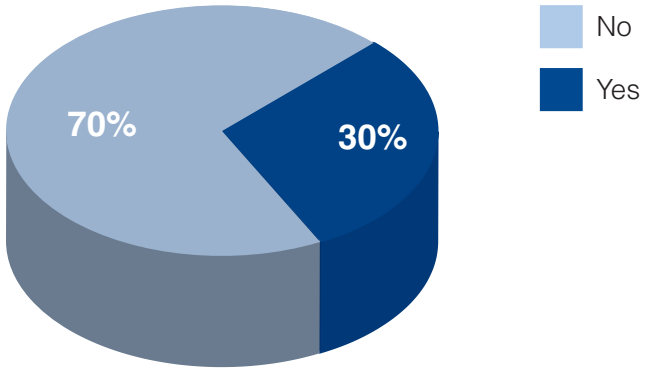


Figure 17. Presence of electronic records at PHC facilities



Referral systems

The MoH adopted a referral system in late 2008 to ensure a close relationship among all levels of the health system, to ensure people receive the best possible care closest to home, and to make cost-effective use of hospitals and primary health care services.

Most PHC clinics (85%) had a referral system record. However, 69% did not have an electronic archive or family inventory and 64% said they do not have any follow up mechanisms for the patients who are in need of continuous care. The most common reason for referral from PHC clinics was the lack of diagnosis equipment such as lab tests, x-rays, etc. Most PHC clinics directors (76%) expressed concern that the hospital's inability to respond might be the greatest obstacle in the referral system. However, 61% of patients said they do not follow up on referrals due to financial constraints.

Figure 18. Percent of PHC clinics reporting clinical reason for referral

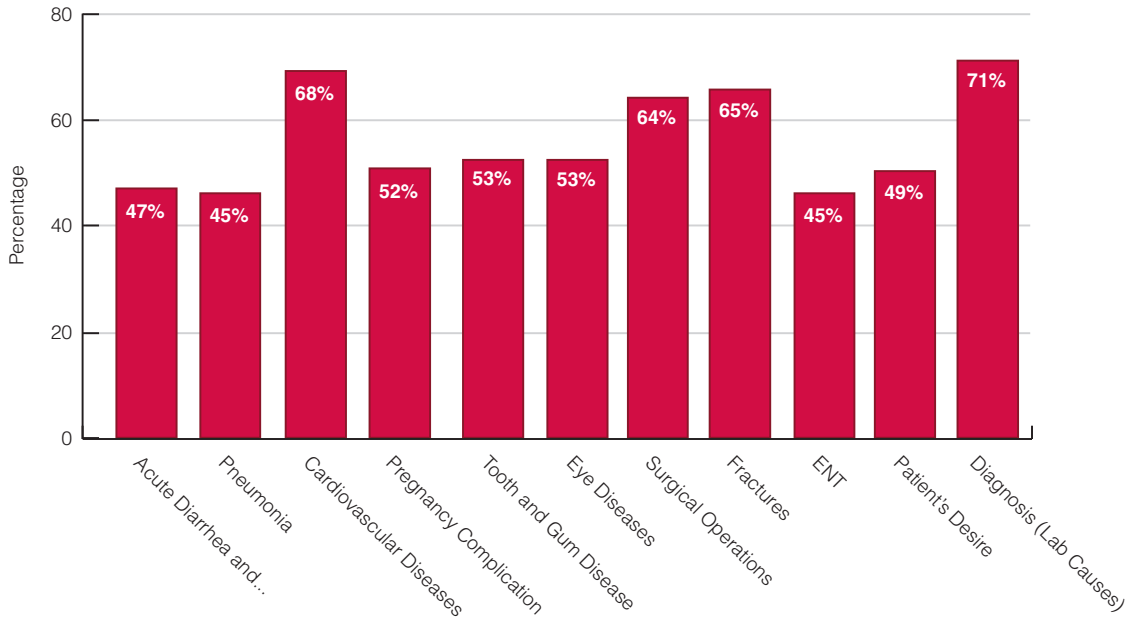
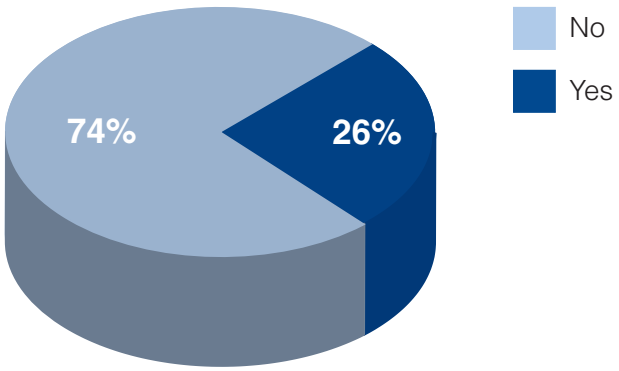


Figure 19. PHC clinics reporting use of the family medicine approach

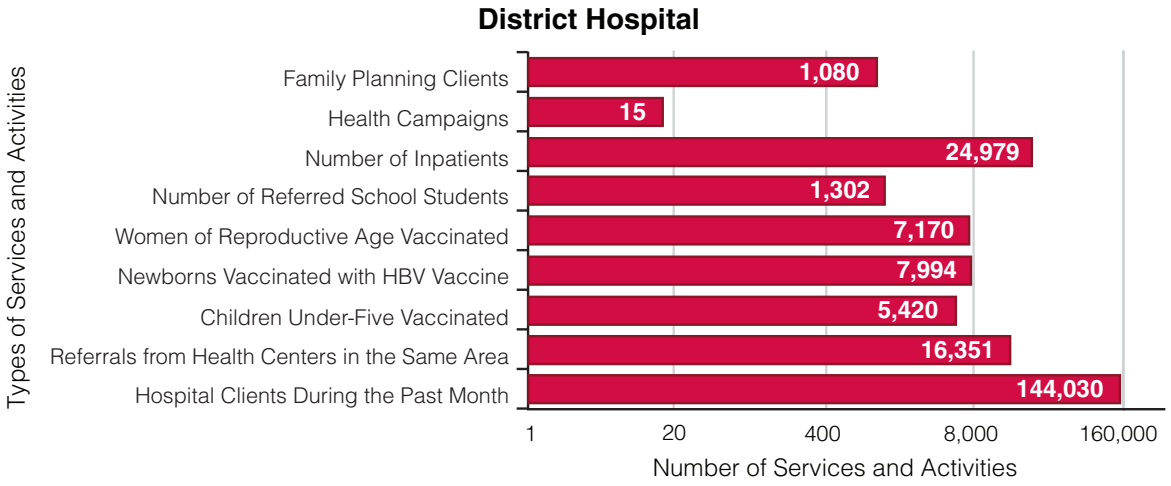


Module 6. District Hospital

For Module 6, surveyors interviewed 14 District Hospital Managers, reviewed their hospital records and observed the facilities to assess hospitals involvement in PHC, the physical infrastructure, human resources, services, drugs and supplies, HMIS and coordination with the PHC facilities (including referral and feedback).

The Basic Health Service Package outlines all services that are supposed to be provided at district hospitals. District hospitals reported internal medicine as the most common service provided, followed by surgical and then maternity services. The following chart is based off the Hospital HMIS and indicates that most patients were seen as in-patients.

Figure 20. Services provided at district hospitals



Of the district hospitals interviewed, 64% said there are national guidelines for treatment of diseases. More than three-fourths of hospitals (77%) reported using treatment standards in the personnel training. For example, 86% reported using treatment guidelines for outbreak investigation of communicable diseases.

All district hospitals reported being supervised in the last six months. All Hospital Directors said they have a person that regularly supervises their quality of clinical work. Most (71%) of supervisors reported using a supervisory checklist at hospital level. However, only 36% of hospital managers were trained on supervisory skills in the last year. All district managers said there is follow up based on training needs, but in the last six months only half (53%) of the district hospitals received visits from the training and staff development unit and the planning department.

Lack of necessary medical equipment was reported among district hospitals - 64% reported not having functional ECG or X-ray machines.

Of the district hospitals, 64% said there is coordination among hospitals, districts and health centers to coordinate joint activities. Almost all (93%) district hospitals interviewed said there was a mechanism for referral between PHC clinics and 71% said there is feedback between the hospital and the PHC clinic. Collectively the interviewed district hospitals received 16,351 referrals from PHC clinics in the last month. However, half said they do not communicate regarding vaccination campaigns, diabetes or hypertension investigation and vulnerable person follow-up.

A majority of the district hospitals (86%) said they do not communicate with the community to elicit health priorities for the hospital and 50% said there is no community engagement in making hospital policy.

Figure 21 shows that 36% of districts hospitals conduct outreach health campaigns. In addition, half of districts hospitals have records on vulnerable groups. It also demonstrates that 57% of patients pay for health services.

Module 7. Community Involvement Assessment

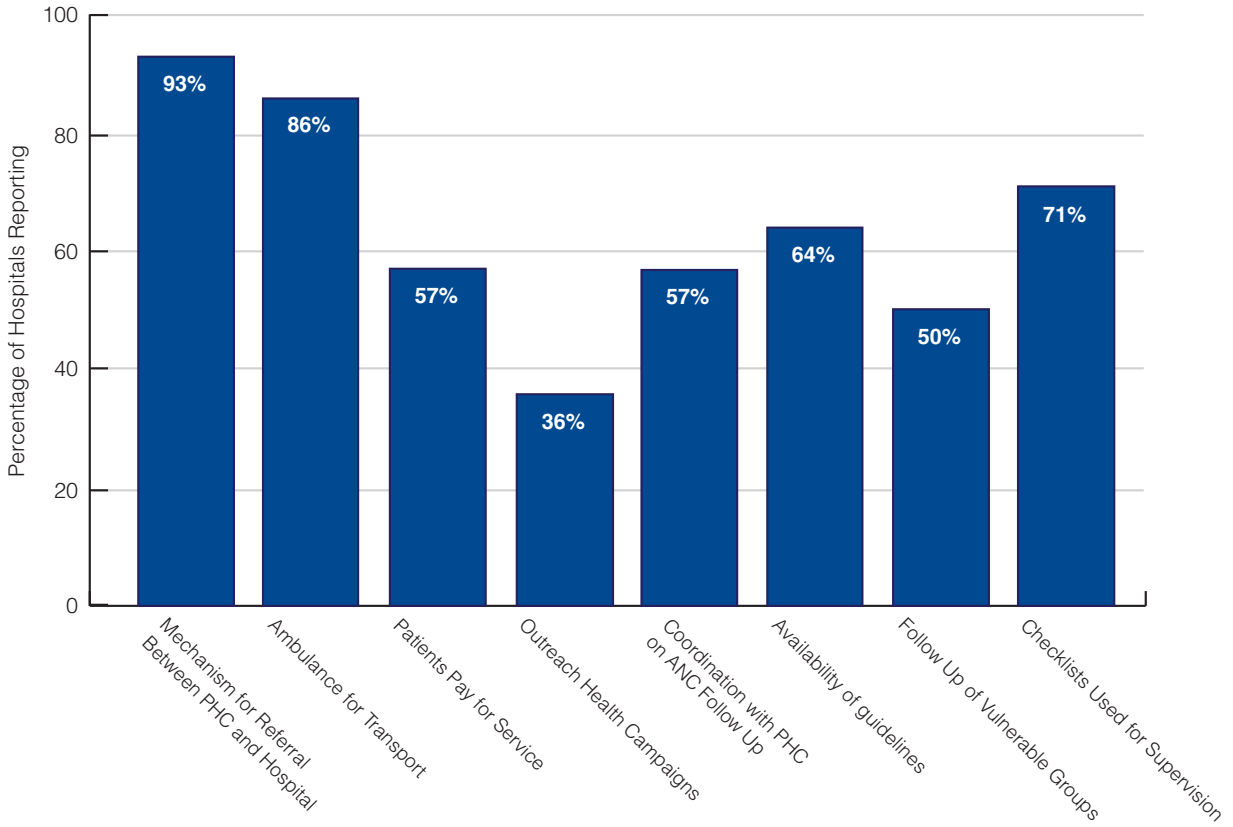
Module 7 was composed of three sub modules, all assessing community level health information.

- 12 *community health groups* were interviewed to assess the level of community involvement in and satisfaction with health services available at PHC facilities.
- 12 private sector providers were interviewed to assess the availability, accessibility and quality of health services/system offered by them and their interaction with public PHC facilities.
- 681 *PHC client exit interviews* were completed to understand patient experiences and perceptions regarding accessibility, availability, quality and personal interactions with PHC services.

Box 4. Community groups responses

	Yes	No
Community groups feel involved in creating health policy at the PHC facility level	17%	83%
Community groups involved in the referral system	25%	75%
Community participates in health activities	91%	9%
Community groups consider PHC services to be "Good"	83%	17%

Figure 21. Feedback between district hospitals and PHC clinics



Community health groups

For Module 7a, surveyors held focus group discussions (FGD) with 12 *community health groups* to assess their participation in providing PHC. The majority of community groups said that they are involved in policy formation at the central level and 17% at the PHC facility level. However, 58% of community groups reported that active community involvement requires policy support.

Community groups reported assisting mostly with the following health education programs: water and sanitation safety, vaccination, and nutrition. Only 25% of community groups said they are involved in the referral system.

91% of community respondents said they participate in health activities. Respondents indicated that the most active community participants are women, and the least active are youth and tribe sheikhs are the least involved in community health activities. Reports show that community participants are selected mostly due to their previous active role and community influence. Moreover, community participants noted that they are largely motivated by gratitude for health services and certificates for participating. Most community groups noted that they require technical administrative support to have active partnerships and over half of community groups (67%) said that health facilities' role in community engagement is to design the health programs that they carry out. Ten out of the 12 community groups interviewed considered available PHC services to be "Good."

Private providers

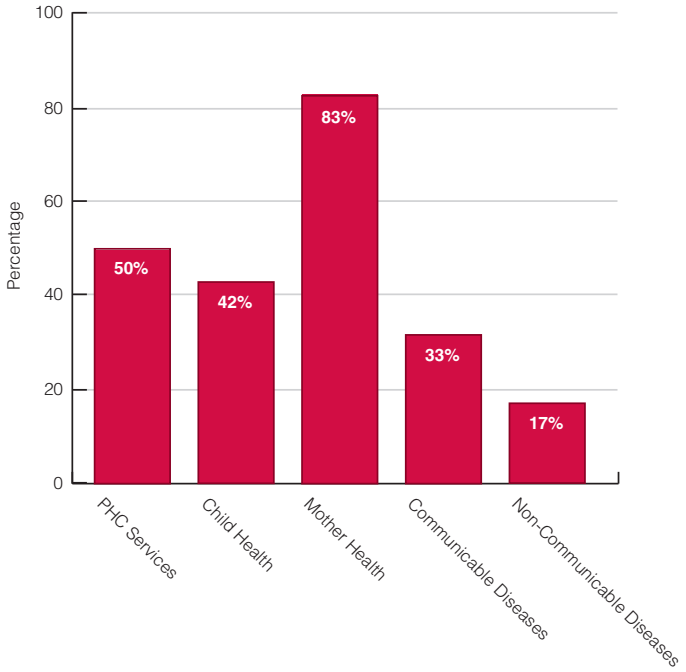
For Module 7b, surveyors interviewed 12 *non-governmental facilities* (e.g. private sector providers) to assess the availability, accessibility and quality of health services/system offered by them and their interaction with PHC facilities.

Fifty percent of private providers interviewed reported that they provide PHC services. However, most (83%) of private hospitals reported having no clinical guidelines and 33% said that there are no management regulations to establish new health facilities for the private sector. Yet all private providers reported having supervisory systems within their networks to evaluate their performance and receiving training, mostly from NGOs.

Figure 22 depicts the health services provided by private providers. The most common services provided are maternal health services.

All private providers said that they submit regular reports to the public sector concerning monthly activities and statistics, but did not report receiving feedback on them. Half of private providers said there is a plan in use to facilitate referral of patients to PHC

Figure 22. Patients reported reason for private sector visit



clinics and hospitals but only 8 of 12 said there is a record for referral between public and private facilities. 75% of private providers said there is coordination between public and private sectors. Most private providers (92%) said they do no elicit civil society input for their perceptions on health services and policy.

Client perceptions

For Module 7c, surveyors conducted 681 *PHC client exit interviews* to understand perceptions/patient experiences regarding accessibility, availability, quality and personal interactions with PHC services.

There are a number of health services offered throughout the PHC system and varying understanding of what is available. According to the 681 clients interviewed, the following services are offered at PHC clinics: maternal and child care, immunization, school health, nutrition, health education and family planning. Almost all clients (95%) said that the PHC clinic does not cover childbirth. Of the patients seen, 65% were visiting the PHC facilities for treatment services.

Half of patients said that only a portion of the medicines prescribed to them were available at the facility and that there was not adequate space at the PHC clinic. The majority of clients also noted that they did not feel men and women were treated the same at the clinic.

Almost all clients (91%) said they were satisfied with the services they received and 84% said they felt the PHC clinics offered all necessary health services.[7] Over half (61%) of clients perceived PHC clinics as clean. The majority of clients interviewed had paid to be seen at the PHC clinic and all attested that the PHC clinic user fees are reasonable. However, 61% of patients said they do not respond to the referral system due to financial cost. And while over half (63%) of clients said they understood the referral system, 64% could not explain why they were referred. Moreover, 34% of patients said they did not know about patients' rights.

Box 5. Client responses

	Yes	No	DNK
Patients feel that men and women are treated the same at PHC clinics.	12%	82%	6%
Patients know about patients' rights.	59%	34%	7%
Patients are satisfied with services received.	91%	9%	---

7 This data is corroborated by a similar study conducted by a USAID-supported health project in 2004: "Client Exit Survey on Satisfaction with Primary Health Care Services and Perception of Antenatal Care and Child Care in Basrah, Iraq". March 2004.

DISCUSSION

In this section, the baseline assessment key findings by level of services are presented within the project results framework.

Observation of Key Findings by Level of Services

The baseline assessment provided details relating to the situation of the primary health care system in Iraq. A summary of the key findings, organized by service level, is presented below. These findings include gaps in service delivery systems and overall strengths and weaknesses in the primary health care program. While many of these findings were anticipated by the surveyors, there were also instances in which the assessment highlighted stronger-than-expected delivery systems, or conditions which were more serious than previously thought.

National Level

PHC goals are on the national agenda, yet receive only limited budget allocations. While statistical data and health reports are generally available at the MoH level, there is a lack of data and information related to maternal health. There is also inadequate information on cancer, especially breast and cervical cancer, and on HIV/AIDS and STIs.

Provincial Level

The commitment to PHC is evident through strategies and plans with clearly articulated PHC goals. However, there are inadequate policies related to specific PHC services. The main constraints to effective PHC implementation are the lack of human and financial resources. Even the most prepared provinces lack medicines and medical supplies, technical resources, and community support. Guidelines and protocols exist but are not monitored, and most supervisors do not document their assessments. Provincial DoHs are responsible for training, but half do not have training facilities and many lack trainers and training materials.

There is also limited collaboration with key stakeholders. Medical syndicates reach out to the public with education and information, but have limited collaboration with PHC facilities. Public and private sectors likewise have limited collaboration. While there are joint programs between international donors and MoH on PHC, they tend to neglect community involvement.

District Level

Certain districts demonstrated a high level of awareness of key operational policies, highlighting the MoH's leadership development efforts. However, without improvements in planning and budgeting capacity at the district level, it will be difficult for the additional financial resources to be absorbed in a manner which will lead to tangible improvements.

Most districts have strategic plans containing PHC goals, but the barrier again was the lack of human and financial resources. Human resources are unevenly distributed, leaving gaps particularly for physicians, medical assistants/technicians, health researchers, lab workers, and dentists, as well as for most engineering and administrative categories. Clinical guidelines exist, and supervision takes place regularly. However, there is a lack of administrative and management standards. While there are allocations for maintenance of PHC facilities, implementation is weak due to lack of clear policies and plans in place in this regard (e.g. health care waste management).

Finally, the lack of collaboration and coordination among external stakeholders and the community remains a major weakness. A referral system exists, but is used inefficiently and is rarely accompanied by feedback or counter-referrals to PHCs.

PHC Facility Level

The health needs of Iraqis have changed considerably in recent years. In addition to basic primary health care services, there is a growing need for a range of mental health services, services for key chronic and non-communicable diseases, as well as critical obstetric, maternal, and neonatal health services. The assessment demonstrated weaknesses in PHC capacity to provide these services. The deficiencies are related to lack of policy or guidelines related to new or emerging threats, lack of targeted capacity-building programs to build skills in emerging health areas, and lack of infrastructure and equipment to diagnose and provide primary treatment (i.e., X-ray).

A key challenge is the uneven distribution of staff at the PHC level. There is a critical need for lab assistants, eye examiners, and dental assistants, while there is a significant nursing surplus. There is a need for in-service training, especially for paramedical staff and nurses in PHC. A second challenge is the lack of supplies and equipment, with frequent stock outs for essential drugs and laboratory supplies. Many facilities lacked storage room for drugs and supplies or sufficient rooms for treatment and care. PHCs have a significant need for clinical standards and improved reporting. Some treatment guidelines exist for

limited areas of clinical care, but they need to be revised to better orient them to the needs of PHC. Referrals are made but without much capability for follow-up. Without improvements in information and feedback systems between operational levels, it will be difficult for policy changes to be introduced and integrated at the local level.

The strength of PHC systems varied in districts with larger rural populations, which had experienced higher levels of civil unrest, or which had less funding. Due to the continued movement of displaced persons in some areas, districts and facilities faced increased difficulty calculating their catchment areas and planning service delivery requirements. Some of these challenges can be addressed through the introduction of targeted improvements; however, it is important to recognize that some elements of the PHC system will require considerable time before significant changes are observed.

Community (NGO, Community groups, local health committees and clients)

Interviews with community members and PHC clients indicated that a large number of patients pay even though program managers at higher level state that the services are free. The clients also reported inequitable treatment and limited programs for women and youth. Health promotion programs exist, but they are focused only on a few specific issues.

The private sector is a key provider of services and has strong potential to provide services to IDPs and other groups. However, there is a lack of training/awareness programs for private sector groups and poor coordination between these private sector organizations and the MoH.

Discussion by assessment results

Result 1. Management support systems strengthened to increase coverage, quality, and equity of PHC services

- **Policy:** While provincial stakeholders noted that there are health policies and national strategies that support PHC services, many of the key health stakeholders including the Planning Department Directors, private providers and community groups are involved only marginally or not at all in developing and supporting health policy. In addition, results showed that some regulations are in place, but enforcement is weak. Furthermore, stakeholders reported shortages of resources to achieve PHC goals. As a result, many stakeholders struggled to describe key elements of existing health policy, even those they are involved in implementing, and had difficulty relating their work to broader heath objectives. This most likely contributes to the lack of coordination between partners at different levels.
- **Human Resources:** Almost all provincial stakeholders noted HR shortages (especially among key cadres such as doctors) as a constraint to achieving PHC goals. However, records at the provincial, district and PHC level showed the presence of standard HR staffing plan, but highlighted that inadequate distribution of existing HR resources is a critical issue, with some clinics posting more personnel of certain cadres (i.e. nurses) than is indicated on HR plans. HR seemed to be sufficient in Baghdad as compared to the other provinces. This indicates a lack of coordination between PHC and Planning Departments to effectively plan and distributes personnel according to population/health facility needs, as well as the potential to strategically shift tasks to nurses to make use of the resources available through this cadre. Access to care in rural and distant facilities is inhibited by lack of competent personnel, and the quality of care is directly affected by lack of access to qualified personnel and provider behavior.
- **Finance systems:** Insufficient financial resources were cited by Planning Department Directors as a major barrier to strengthening PHC services. A majority of Planning Department Directors said the main constraint for PHC services is a lack of payment regulations and limited funds for PHC. While Baghdad appears to have sufficient resources, the rest of the provinces cited an absence of adequate financial resources for PHC programs.
- **Standards/Guidelines:** Almost all provincial and districts stakeholders noted the need for administrative and management standards for PHC centers. In some cases, lack of regulations or standards did not exist at all, in some cases they had not been updated or were otherwise incorrect, in some cases they were not communicated effectively. Pinpointing these inconsistencies and formulating clarification is vital to ensure proper enforcement of quality standards.
- **Equipment and infrastructure:** National public stakeholders reported little or no leveraging of private sector resources for expanding PHC service coverage. Lack of adequate infrastructure was noted by health stakeholders and clients alike; thus, there should be efforts to form public private partnerships with the private facilities in the districts to create space sharing efforts for drug storage and maximize impacts. Within the 12 districts surveyed there are 143 public clinics versus 2,372 private physician's clinics. National public stakeholders admit to little coordination with these vast private sector resources.
- **Medical HMIS:** Charting and monitoring HMIS is an evidence-based method to ensure quality of care. Currently, very little data is aggregated at the primary care level or used for program management. Despite an effort to move towards electronic records, few facilities are currently entering data electronically due to a lack of computers and inadequate training. Staff is not sufficiently equipped to utilize data generated at the facility level for planning, implementation and evaluation for improving PHC services. Currently, MoH policy is focused on first improving paper-based information systems, followed by a gradual transition to semi-automated systems that can pave the way for a strong technology-based HMIS. Moreover, the majority of Planning Department Directors

reported that the health maps[8] utilized to set priorities do not include information on the elderly, the disabled or the displaced. There was little information regarding IDP access to and utilization of services. Addressing the health needs of those populations is crucial to increase coverage and service uptake for this group.

- **Supply chain management (SCM):** The majority of clients come to PHC facilities seeking treatment; however, essential medicines and commodities are often lacking. Almost all respondents (from national, to facility to community) reported shortage of drugs and medical equipment. However, according to PHC facilities they receive monthly supplies of drugs directly from KEMADIA and they reported the presence of necessary medical equipment, especially facilities within Baghdad. Yet over half (67%) of the PHC clinics interviewed reported a need for more drugs and 49% reported a need for additional medical supplies. Half of sub PHC clinics (5 of 12) lacked instructions on procurement and inventory. A key intervention will be to support the PHC system to create and institute a standard supply chain mechanism (SCM) as well as SCM training for all necessary PHC staff.

Result 2. Delivery of evidence-based, quality PHC services

- **Health Status/Outcomes:** Based on national and district health data, Iraq's population has suffered due to decades of war and economic sanctions. This has resulted in a severe drop in Iraq's gross domestic product and consequently its public expenditure on health. Health services have deteriorated and the sector has faced continuous shortages in drugs and other supplies. Many health professionals have fled for safety to neighboring countries and abroad and the population's access to basic health services has become increasingly impaired. The most recent age-specific IMR and MMR are high, highlighting the need for strengthening MCH programs. While a 2008 MoH report showed that more than half of the population was living in urban areas, Iraq has recently been experiencing very high internal population movements, with more people moving to the more secure rural areas or fleeing the country altogether. Therefore, improving health systems in rural areas needs to become a priority to accommodate the growing populations living there.
- **Clinical services guidelines:** While the majority of provincial stakeholders noted the presence of guidelines, standards, and protocols for service delivery, districts and PHC facilities could not present many treatment guidelines that they utilize and less than half of medical syndicate respondents reported existence of regulations to ensure quality performance. Results from districts and facilities showed that respiratory infections are the leading communicable diseases in Iraq, whereas cardiovascular diseases and diabetes are among the non-communicable diseases. Therefore, updating and disseminating clinical guidelines on these diseases needs to be a priority.
- **Services utilized:** According to PHC teams and clients interviewed, preventive care (maternal and child health, immunization and school health) were offered at PHC facilities, but nutrition and health education were not adequately provided. In addition, 66% of patients seen were visiting PHC facilities for treatment services, as they can get most prescriptions at no charge. Many public facilities offer private services in the afternoon. The current survey did not examine this in depth; however, it should be noted that the provision of private services at the same facilities in the afternoon affects the quality of health services offered for free in the morning at the same facilities.
- **In-service training and capacity building:** More than half of PHC directors reported they had not received training in key areas including health service standards, information systems, communication and ethical management. The lack of knowledge and awareness of policies and guidelines indicated the need for in-service or refresher trainings for both providers and managers. Private sector providers in particular demonstrated a critical lack of knowledge of service standards and procedures. More than half of PHC directors reported a lack of training on supportive supervision and quality services, and critical gaps were noted in the routine implementation of supervision and mentoring systems as well as quality assurance and program management.
- **Continuing Medical Education (CME) program:** While half of professional health associations reported the presence of systems in place for CME programs, actual mechanisms for continuous building of provider knowledge and skills do not exist. Efforts to foster CME programs through legislation and effective coordination with syndicates and stakeholders are crucial to bring state of the art knowledge and skills to health care providers at all levels. Results also showed that there is an absence of training facilities at the PHC level. This highlights the need to integrate innovative health training methodologies into the PHC system. PHCPI should support the growing interest in pursuing distance education as a means of providing continuing medical education regarding the new treatment standards and regulatory processes.
- **Supportive supervision:** While more than half of supervisors reported using a supervisory checklist at the hospital level, only 36% of managers were trained on supervisory skills in the last year. This indicates the need for functional supportive clinical mentoring and supervision system at the hospital as well as PHC clinic level.

8 Health mapping is a way of collecting demographic and health data on the population within a catchment area and can be used in developing health priorities. Health maps are available at the district level (DoHs).

- **Coordination systems including referral:** Almost all provincial and district respondents interviewed said there is a mechanism in place for referral systems, and more than half said feedback does occur between hospitals and PHC clinics. However, half of hospital managers said they do not communicate regarding vaccination campaigns or health studies on specific diseases. In addition, hospital managers said that they do not coordinate with PHC clinics regarding the health services provided to vulnerable groups, especially IDPs, in their region/district. PHC clinics reported the most common reason for referral was lacking diagnosis equipment such as lab tests, x-rays, etc. Thus the referral burden can and should be alleviated by instituting better SCM at PHC clinics, which will facilitate the presence of necessary diagnostic equipment at all times, and by instituting a more comprehensive family medicine approach at the PHC service level. Improving HMIS and referral processes will also ensure continuity and greater access to appropriate care.

Result 3. Community participation in PHC service delivery enhanced

- **Patient satisfaction:** While most patient and community groups were satisfied with PHC services, they noted there is unequal access to PHC services at the facility level for women and men (i.e., women experience a range of barriers to access). PHC facilities must be involved in continuous improvement efforts to build satisfaction equally among all populations. In addition, the majority of clients said that they had paid to be seen at PHC clinics, but all attested that user fees are reasonable. However, 61% of them reported they do not follow up on referrals due to cost of services. The existing community groups are underutilized by PHC facilities in terms of linking to broader health promotion and awareness efforts.
- **Patients' rights:** The majority of patients had not been made aware of their rights when accessing PHC services. According to PHC Planning Directors, the area least covered by current PHC training plans is ethics and patient's rights. In addition, over half of donors said there are no campaigns conducted to strengthen community awareness on patients' PHC rights. This indicates lack of clear policies and regulations to support patients' rights to equitable, accessible, appropriate, effective and efficient health care. There must be an effort among all stakeholders to agree on and support awareness and respect of basic patient rights.
- **Partnerships with donors, health associations, and communities:** While 70% of the donors interviewed stated there are joint programs with MoH to strengthen PHC program, more than half of donors reported lack of campaigns to strengthen community awareness on PHC services. Furthermore, the assessment noted that only 43% of donor's reports are available to the health community and that there is a lack of coordination among different donors. This indicates lessons learned from existing international programs are not being disseminated and opportunities for scale up of successful initiatives are being missed. More needs to be done to ensure that complementary programs are coordinated to maximize impact on quality of care. Community participants noted that women are highly involved and motivated to participate in community health activities. However, it is important to map and engage all vulnerable groups (including IDPs) in community involvement regarding PHC in order to reach the most people. Better coordination efforts, such as supporting development of community health partnerships, will help get feedback on services and improve services accordingly.

CONCLUSION AND RECOMMENDATIONS

The baseline assessment identified several areas where management systems, clinical services and community involvement could be improved to better the health of Iraqis. Below is an overview of the recommendations based on assessment findings:

Result 1. Management support systems strengthened to increase coverage, quality, and equity of PHC services

- Develop policies/processes to promote coordination between PHC and Planning Directorates to improve the distribution of existing personnel resources to align population needs with HR staffing ability.
- Promote task shifting[9] for nurses, including the development and implementation of task shifting strategies, support comprehensive training of nurses on all areas of PHC.
- Explore strategies to strengthen personnel resources in underserved areas, i.e., incentive schemes.
- Improve the management and leadership skills of district teams and PHC managers.
- Revise management guidelines for equipment and medicine supply, storage, inventory, and reporting and revise/ update reporting schedules.
- Develop trainings (including via electronic media) in equipment monitoring and management for all relevant stakeholders.
- Develop/revise a comprehensive listing of user fees for PHC services and disseminate at the facility and community level, so that both patients and providers are aware of these expected fees.
- Develop/revise financial planning and management guidelines for provinces and districts, including reporting schedules and budgeting.
- Develop process to improve coordination among MoH and external donors to assist rational distribution of PHC funding.
- Explore innovative approaches to coordinate public and private resources.
- Strengthen referral and recording systems (including HMIS) among all levels

Result 2. Delivery of evidence-based, quality PHC services

- Design and disseminate clinical services and treatment guidelines among all health facilities and promote in-service training efforts to implement these guidelines in PHC facilities.
- Create distance training programs that enable highly regarded PHC providers to share key protocols in PHC service delivery among all Iraqi PHC providers in an efficient manner.
- Train providers in delivering patient focused services that consider a continuum of care through integration of referral processes and strong longitudinal patient records system.[10]
- Support the uptake of a family medicine approach to improve efficiency of services, reconcile gaps in care that result from understaffing, reduce unnecessary referrals, and strengthen overall health outcomes.

Result 3. Community participation in PHC service delivery enhanced

- Support the finalization and dissemination of patient rights throughout communities via various communications efforts such as providing free text messages to PHC clients that inform them of their rights and health promotion messages.
- Increase patient's awareness of available services in order to improve access to quality coordinated care.
- Create a strong network of community health partnerships (CHPs) that support patients' ability to receive quality health care.
- To ensure integration of Community Health Partnership with the health system, provide small grants to support the integration of community health organizations within the health system and motivate them to build capacity to better coordinate provision of quality care.
- Create a strong network of CHPs that support patients' ability to receive quality health care.

9 Task-shifting is defined by the WHO as the process of delegation whereby tasks are moved, where appropriate, to less specialized health workers. By reorganizing the workforce in this way, task-shifting can make more efficient use of available human resources. For example, when doctors are in short supply, a qualified nurse could often prescribe and dispense certain medications. See http://www.who.int/healthsystems/task_shifting_booklet.pdf. March 2007.

10 A longitudinal patient record is one that is comprehensive over time and includes all contact made with the health system in any delivery setting. Longitudinal patient records have been shown to improve communication among providers, coordination of care, and patient satisfaction, and to reduce medical errors.