evaluation division – may 2014

evaluation of the family health team approach

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About UNRWA
UNRWA is a United Nations agency established by the General Assembly in 1949 and is mandated to provide assistance and protection to a population of some 5 million registered Palestine refugees. Its mission is to help Palestine refugees in Jordan, Lebanon, Syria, West Bank and Gaza to achieve their full potential in human development, pending a just solution to their plight. UNRWA services encompass education, health care, relief and social services, camp infrastructure and improvement, microfinance and emergency assistance. UNRWA is funded almost entirely by voluntary contributions.

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# abbreviations

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<th>Description</th>
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<tr>
<td>DfID</td>
<td>Department for International Development</td>
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<td>FHT</td>
<td>Family Health Team</td>
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<td>GFO</td>
<td>Gaza Field Office</td>
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<td>HIP</td>
<td>Health Implementation Plans</td>
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<td>IMR</td>
<td>Infant Mortality Rate</td>
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<td>JFO</td>
<td>Jordan Field Office</td>
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<td>LFO</td>
<td>Lebanon Field Office</td>
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<tr>
<td>MCH</td>
<td>Maternal and Child Health</td>
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<td>MDG</td>
<td>Millennium Development Goal</td>
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<td>MMR</td>
<td>Maternal Mortality Rate</td>
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<tr>
<td>NCD</td>
<td>Non Communicable Disease</td>
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<tr>
<td>NGO</td>
<td>Non-Government Organization</td>
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<tr>
<td>PHC</td>
<td>Primary Health Care</td>
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<tr>
<td>SFO</td>
<td>Syrian Field Office Syria Syrian Arab Republic</td>
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<tr>
<td>UNRWA</td>
<td>United Nations Relief and Works Agency for Palestine Refugees in the Near East</td>
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<tr>
<td>WBFO</td>
<td>West Bank Field Office</td>
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Between 2006 and 2010 UNRWA went through an Organizational Development process that allowed the agency to shift the responsibilities of individual departments giving them the ability to undertake reforms. Continuing this process the UNRWA health department started developing a comprehensive reform effort in 2009. The impetus behind this reform was the changing needs of the Palestine refugee population. Demographic pressures put an additional burden on the whole system and behavioural practices imposed a larger NCD burden on the health system. Along with these needs the health department took into account their resource constraints and identified the FHT approach as a key element of the reform of the health system. The evaluation covers the FHT approach that is currently being implemented by the UNRWA health department. The evaluation was conducted in October and November of 2013 using a mixed team approach with external experts supported by UNRWA evaluation division staff.

Overall results are positive and consistent with experiences in other similar settings. These results are that the FHT approach increases the overall health status of the population and the FHT approach increases the level of services and decreases costs over time. These two categories of results were found consistently in UNRWA FHT approach implementation. Given the way the system in UNRWA is set up and given demographic pressures, costs did not decrease in the short-run. However, the evaluation team believes that there is a high probability that the programme will substantially contribute to containing costs in the medium term. Therefore, UNRWA health delivery system can be considered cost effective.

The health reform implementation process was handled well, with no serious obstacles encountered. However, the evaluation team identified some areas where the implementation can be improved with respect to the roll out of the remaining health centres. In particular the training necessary to create a cadre of skilled general practitioners was initially underestimated, and will need revisiting moving forward. The ability of the different managerial levels of the UNRWA health department to adequately support the roll-out was also underestimated while at the same time some area health staff were underutilized.

The e-Health system which is a key part of the overall reform process, experienced certain challenges that pose a reputational risk for the health department, and consequently for the FHT approach. The health department already recognizes this risk, and the evaluation encourages the health department to address this with a high level of priority.

Below are the key findings and recommendations of the evaluation:

**Findings**

**Finding 01**: The Family Health Team approach is set up well, organized well and working well, compared with other health systems in similar settings.

**Finding 02**: The Family Health Team approach is highly relevant to Palestine refugees. It is the most appropriate approach to providing primary health care. UNRWA is the main provider of health care to Palestine refugees and primary health care is the most important element in the health system.

**Finding 03**: e-Health has a great potential to further improve efficiency. It is an essential tool supporting the Family Health Team system. However, the potential has not yet been fully realized.

**Finding 04**: UNRWA always has been efficient and the Family Health Team approach improves this further.¹

**Finding 05**: The effectiveness of services in health centres using the traditional approach primarily relied on the dedication of the senior medical

¹ Throughout its history UNRWA has for most of the time been providing services in a very efficient way. This has been confirmed by the comparative DFID study. The FHT approach is no exception. During the evaluation one client commented that she now has more time to do other things.
officer. The Family Health Team approach has reduced the reliance on the senior medical officer.

**Finding 06:** As a result of the Family Health Team approach the work environment for staff is professionally more rewarding.

**Finding 07:** The health department collects numerous data points. However, not all of the data is used, and there are still some gaps in the data which are available.

**Finding 08:** The Family Health Team approach is to a large extent achieving its planned objectives and results.

**Finding 09:** While the design of the elements of the Family Health Team approach was good, more careful planning of the actual processes could have enhanced overall implementation.

**Finding 10:** Impact of the Family Health Team approach overall is positive even in the short-term. Screening, diagnosis and treatment of non-communicable diseases as well as outreach activities have improved.

**Finding 11:** It is probable that the Family Health Team approach is sustainable; however, there are two risk factors that can jeopardize its implementation and long-term sustainability: the training needs and the e-Health system.

**Recommendations**

**Recommendation 01:** Continue to move towards the adoption of the Family Health Team approach in all health centres.

**Recommendation 02:** The health department should consider improving indicators, in particular a new measure “cost of a consultation that lasts for a minimum amount of time and leads to quality outcomes” to prepare for the efficiency and effectiveness discussions.

**Recommendation 03:** The health department should be strategic about data collection and only collect data that will be used for decision making or advocacy.

**Recommendation 04:** Process challenges need to be better anticipated and integrated in planning. In particular, the speed of the rollout should be adjusted to the support available. To better manage the rollout, key staff should be involved in planning and implementation of the Family Health Team approach.

**Recommendation 05:** For the roll-out of the Family Health Team approach to the remaining health centres, the implementation processes should be modified to include solutions to issues identified.

**Temporary staff:** When using temporary staff the health department should factor in that these staff might take some time to be fully effective in the position. Use of rosters can partially mitigate this as staff will be already familiar with processes.

**Area-level support:** Make better use of area medical officers to support the roll-out, as well as be more proactive in advising and ensuring the quality of the processes in the Family Health Team approach.

**The e-Health system:** While continuing to make the e-Health system more stable, there is a need to also urgently develop protocols on how to operate in health centres if the e-Health system is down.

**Capacity-building:** To complete the transition, capacity-building needs to continue and be

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2 In the previous system some of the health centres were run very well, but this was almost entirely dependent on the initiative and approach of the senior medical officer. The FHT approach providing guidance to processes has the potential to enable all health centres to operate better. It also has made a positive contribution to the contact time.

3 Some of the indicators used to assess service quality and population health are unsuitable, some good indicators have been ignored and some have little benefit to analysis.

4 For the patients the different elements of the health reform are not necessarily distinguishable therefore problems in the e-Health system will also negatively affect the reputation of the FHT approach.

5 Other important indicators to collect might be: (a) agreed upon and quantified quality standards for consultations; (b) metrics of quality in antenatal care, including how many alert/at-risk pregnancies end up in caesarean sections and (d) more sensitive indicators of impact such as the maternal mortality rate and the infant mortality rate, which may be useful in highlighting UNRWA accomplishments, although those seem to be monitored and reported by HD every five years.

6 Key staff such as SMOs, SNOs, experienced midwives know what does and doesn’t work, involving them in the planning process will help to identify limitations and avoid underestimation of the complexity of processes.

7 As is already done in Gaza.
more focused on generalist skills for clinicians. 

**Recommendation 06:** The health department should approach the human resources department to jointly analyse more strategically the whole system of health delivery and its staffing requirements to reflect the changes necessary for the Family Health Team approach. This should then result in updated job descriptions for key staff.

**Recommendation 07:** Rethink the remodelling of health centres. Rather than a prerequisite to implement the Family Health Team approach it should be decided on a case by case basis.

**Recommendation 08:** The health department should communicate clearly to staff the rationale why certain protocols are implemented.

**Recommendation 09:** The health department should systematically engage with stakeholders (Palestine refugees, host governments, community organizations, etc.) by communicating the goals of the Family Health Team approach and the reform process.

### introduction

The United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), was established under General Assembly resolution 302 (IV) of 8 December 1949 and became operational on 1 May 1950. Its mandate is to respond to the needs of Palestine refugees until a durable and just solution is found to the refugee issue. It is now one of the largest United Nations agencies serving over five million Palestine refugees with more than 30,000 regular staff.

The mission of UNRWA is to “help Palestine refugees achieve their full potential in human development under the difficult circumstances in which they live”. UNRWA fulfils this mission by providing a variety of essential services within the framework of international standards, to Palestine refugees in the Gaza Strip, Jordan, Lebanon, the Syrian Arab Republic (Syria) and the West Bank. Among United Nations agencies it is unique in delivering services directly to refugees, and as such is similar in character to a public service organisation. UNRWA mandate – which derives from the General Assembly and has evolved over time in response to developments in the overall situation in the region – extends at present to providing: education, health, relief and social services, microfinance and emergency assistance to refugees, infrastructure and camp improvement within refugee camps, and refugee protection. The Agency is not responsible for administering camps, or for the rule of law or security within refugee camps or communities.

Between 2006 and 2010 UNRWA went through an Organizational Development process that allowed the agency to shift the responsibilities of individual departments giving them the ability to undertake reforms. The two key reforms undertaken in UNRWA after the organizational development initiative began are the health and education reforms, complemented by a number of smaller reforms primarily in the areas of support services.

### Health in UNRWA

UNRWA is the main comprehensive primary health care provider for Palestine refugees in the Near East and has implemented the largest humanitarian operation in the region for over 60 years. The Agency’s mandate on health is to protect and promote the health of Palestine refugees registered in the Agency’s five fields of operation. It aims for them to achieve the highest attainable level of health as indicated in the first Human Development Goal, “A Long and Healthy Life”, of the UNRWA Medium Term Strategy 2010-2015. Under this goal, UNRWA has three strategic objectives: to ensure universal access to quality comprehensive primary health care; to protect and promote family health; and to prevent and control diseases.

UNRWA has delivered comprehensive primary health care services to Palestine refugees in the Gaza Strip, Jordan, Lebanon, Syria and the West...
Bank for over 60 years using the traditional model of health services delivery. The service delivery system has achieved some remarkable gains, particularly in maternal and child health and communicable-disease control.

The UNRWA health department provides a range of primary health care services in its health centres that includes: general medical care; maternal and childcare; and preventive services that include chronic diseases prevention and treatment. These direct health care services are supported by ancillary services such as provision of medication, laboratory services, physiotherapy and some specialist services – the last two service categories are not available in all health centres. UNRWA arranges for secondary and tertiary health care services through referrals to hospitals and the UNRWA run Qalqila hospital.

The non-FHT approach to health service provision in UNRWA

Traditionally health centres were organized around the type of disease and programmes (vertical and disease-oriented), such as the non-communicable disease (NCD) clinic, the growth monitoring and immunization clinic, the family planning clinic, the general clinic, and the pre- and post-natal care clinics. These clinics operated fairly independently from each other. As a result, different family members from the same family visited different clinics and sections inside the health centre. All the systems and support functions were built to serve this concept, focusing on the priority diseases.

The family health team approach

The context in which the UNRWA health programme operates is changing, bringing with it new challenges that require rethinking of service delivery systems. The population and its needs are continuing to grow while the resource environment is shrinking. In the context of the former, the epidemiology of disease is shifting to NCDs such as diabetes, hypertension, cardiovascular diseases and cancer as the main causes of mortality and morbidity among Palestine refugees. Behavioural risk factors such as unhealthy diets, physical inactivity and

Figure 1: Non-FHT approach
smoking, prevalent among Palestine refugees, adds to the burden of disease. These changes are compounded by the demographic pressure of the refugee population growing by approximately three per cent annually. Funding is not expected to increase at a pace that would cover both the population growth as well as inflationary pressures.

New approaches to health services provision had to be found to meet the needs of Palestine refugees in the 21st century. The UNRWA health department started developing a comprehensive reform programme in 2009. UNRWA instituted health services reforms in 2010, including e-Health and health centre budget initiative, followed by the Family Health Team (FHT) approach to service delivery. The health reform is a multiyear and multifaceted undertaking that aims to comprehensively change the way services are delivered in health centres. The FHT approach is the key component of the health reform package.

The FHT approach represents a system of delivering primary health care (PHC) through a multidisciplinary team of health professionals that work together to serve the comprehensive health needs of a defined population across the life cycle and in a community setting that is close to them. The FHT approach has its foundations in the modern values of primary health care indicated by the World Health Organization in 2008. These are person-centeredness, comprehensiveness and integration, and continuity of care, with a regular point of entry into the health system, to build an enduring relationship of trust between the people and their health care providers. It is a switch from specialized to generalist care, with the responsibility for a defined population and the ability to coordinate support from hospitals, specialized services and civil society organizations.

The focus of the approach is a continuity of care for each person and for the entire family through a multidisciplinary team of service providers. All the family members should visit the same doctor or team, which allows for an understanding of their historical roots, history of diseases and socio-economic situation. The continuous interaction and sharing of information builds trust and improves the quality of clinical care. People are partners and active participants in all matters related to their own health and the health of their families and communities.

UNRWA understood that implementing this model in UNRWA health centres required changes in the organizational structure of health centres. Along with these needs the health department took into account their resource constraints and identified the FHT approach as a key element of the reform of the health system.

The UNRWA health department designed four components of the reform: (a) capacity development, (b) e-Health system development, (c) adaptation, and (d) advocacy. 

Component (a): Capacity development packages for the targeted health centres include the rehabilitation of health centres in terms of buildings, equipment, computers, telephones and access to the internet as well as staff capacity-building.

Component (b): In-house development, testing and deployment of a computerized system. This is supposed to improve registration, documentation
and the appointment system and should document and follow up on the health status of patients and families and to monitor the use of resources such as workload, drug use, laboratory tests and other services.

Component (c): Building UNRWA experience through piloting the FHT approach and developing new procedures, forms, policies, tools, as well as the formation of new teams.

Component (d): Engagement of staff in the process, developing an advocacy campaign with the local community by conducting group sessions, meeting with partners in the committees, visiting schools, non-government organizations (NGOs) and other institutions such as hospitals, preparing posters and wall paintings, talking about the FHT approach at public events and using clear messages such as: “one doctor for each family” or “The FHT approach does not represent a reduction of services, but an improvement of services”, “The Family Health Team approach is a modern approach used globally to improve health services”, etc.

By October 2013 the FHT approach had been implemented in 45 of 139 UNRWA health centres, and the health department plans to institute it in all health centres by 2015. Before doing so, UNRWA wishes to review and learn from the experience and to evaluate the impact of FHT approach on the service delivery system.

Evaluation of the health reform

UNRWA aims to ensure that all initiatives, especially those of a strategic nature are evaluated independently and transparently. The health reform being of strategic nature therefore requires evaluation. The department of internal oversight services (DIOS) engaged with the health department to discuss how this could be best facilitated. The health department preferred to have key reform components evaluated at strategic points in time, so that they can adjust the future roll out of the components accordingly, and build a body of evidence that will enable DIOS to finalize the evaluation of the health reform process in 2016. The evaluation is guided by the norms and standards developed by the United Nations Evaluation Group, but also taking
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into account the advice of the Organization of Economic Cooperation and Development – Development Assistance Committee – as well as good practices used by other United Nations agencies and other organizations.

The scope and the evaluation questions have been extensively discussed with the health department, and can be found in the background paper for the FHT approach evaluation. This report assesses and evaluates a model of delivering health care services, the FHT approach12, adopted by the UNRWA health department in selected primary health care centres since 2011.

This evaluation report supports the health department in moving forward in the reform process providing evidence through a systematic assessment of qualitative and quantitative data. This will give senior managers the opportunity to change strategy or implementation sequence if needed, and to look for better alternatives to a particular strategy, especially in the context of available resources.

Assumptions

The review and conclusions are based on the assumptions that: (a) the larger constraints and challenges such as a steady population growth rate (2.7 per cent) will continue, current inflation rates will continue to constrain available funding and that general funding levels will not increase over time; (b) UNRWA will continue to struggle filling the funding gap each year, but will continue to receive enough funding to implement health services.

Scope

The evaluation covers all five domains of evaluation: relevance, efficiency, effectiveness, impact and sustainability. It should have covered the Agency’s entire operational area, all five fields, headquarters, and area level support to the FHT approach, but due to security constraints in Syria, it was kept to four accessible fields. This evaluation is not designed to provide information and analysis to each field office independently. This evaluation also includes all topics of UNRWA operations that impact the outcome and functioning of the FHT approach. While the e-Health system, per se, is not evaluated as part of this exercise since it is closely linked with the FHT service system, it will be reviewed to the extent that it affects the FHT approach. Note that the e-Health has been taken as one unit, regardless of version type and the number of modules that have been adopted. The evaluation is focused on UNRWA service delivery, but briefly examined the host governments’ primary health care services delivery systems in Gaza, Jordan and Lebanon, to understand the broader context of UNRWA services.

Sample

Fifteen health centres were selected from those four remaining geographic areas: Gaza, Jordan, Lebanon and the West Bank. The selection was based on the application of the FHT approach versus health centres that did not apply the FHT approach, and was cognizant of the different stages of the e-Health rollout to enable the evaluation to capture the effects of the e-Health system on the FHT approach. Health centres were chosen according to the following criteria: (a) their experience of instituting the health reform changes over at least one year; and (b) of providing service to at least 3,000 families registered at the health centre. The selected centres are listed in Table 1.

12 Modern and efficient UNRWA Health Services July 2011.
Evaluation of the Family Health Team Approach | UNRWA

Table 1: Health Centres sampled (JFO – Jordan Field Office; GFO – Gaza Field Office; WBFO – West Bank Field Office; LFO – Lebanon Field Office)

<table>
<thead>
<tr>
<th>FHT approach</th>
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<td>e-Health</td>
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<tr>
<td>Altybih (JFO)</td>
<td>Alnozha (JFO)</td>
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<tr>
<td>Saftawi (GFO)</td>
<td>Ein El Hilweh (LFO)</td>
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<td>Burj Barajneh (LFO)</td>
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<td>Beirut Pool Clinic (LFO)</td>
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<tr>
<td>Rashidieh (LFO)</td>
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<tr>
<td>No e-Health</td>
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<tr>
<td>Alzarqa Town (JFO)</td>
<td>Awajan (JFO)</td>
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<tr>
<td>Beit Hanon (GFO)</td>
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<td>Askar (WBFO)</td>
<td>Balata (WBFO)</td>
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Methodology

The evaluation draws primarily from three sources of information: documentation available within UNRWA and other outside documentation about the FHT approach reform; direct observations and interaction with stakeholders through field visits and key informant interviews, and an exit survey of visitors to health centres using both the traditional approach as well as the FHT approach. The methodology also includes informal discussions with Palestine refugees. This informal interaction allowed the evaluation team to elicit personal responses from Palestine refugees and other members of stakeholder groups about their impressions concerning change to the FHT approach; their response to changes in services such as increased wait time and rationalization of medications; if they had any anxiety related to the change; and how they see the FHT approach contributing to their wellbeing.

The health records for the period 2008 to 2012, were analysed in more detail, in particular with a view to establish the effects on the operational and proxy indicators such as, antenatal care, number of consultations and the antimicrobial prescription rate.

For information gathering from staff, structured and semi-structured questionnaires were used informally to determine the attitude and practices of staff and the effect of change on these parameters. By using this method it was also possible to understand the staffs’ assessment and satisfaction with the implementation strategy, the contribution and utility of the e-Health system and the contribution of training provided to the teams. Staff expectations for the future were also revealed by this method.

The information collected from different sources was then triangulated to ensure consistency of findings through different elements. In cases where this consistency was not given the evaluation team sought additional data to ensure that the findings and recommendations were evidence based.

Survey

The satisfaction survey of the visitors to the health centres was conducted by the team in Gaza, Jordan, Lebanon and the West Bank. In Gaza, where travel was restricted, a local interviewer was oriented and trained for this task to conduct the Gaza satisfaction survey. Participation in the satisfaction survey was voluntary and respondents taken from visitors to the health centre the day the evaluation team visited. The evaluation team conducted 378 interviews for the users of UNRWA health centres that were part of the evaluation study among the four fields: Gaza, Jordan, Lebanon and the West Bank.

To assess the effects that the FHT approach had on staff a staff survey was conducted in all selected health centres. This survey had close to 100 per cent response, capturing the opinions of all staff in the 15 health centres that were part of the sample, in total 353 questionnaires from staff.

relevance

Relevance refers to the extent to which the FHT approach and its intended impact are consistent with beneficiary priorities and needs and with national and local policies. Relevance also considers the extent to which it is aligned with UNRWA strategic plans. It includes the level of responsiveness to changing and emerging health priorities and needs.

The millennium development goals (MDGs) lay down the goals for human development before 2015 and have been agreed to by all countries including the five host governments: Jordan,
Luban, Syria, and the West Bank and Gaza. MDGs four, five and six pertain to health and endorse primary health care and system strengthening as vital to achieving the development targets. The four host governments13 are signatories to the MDGs and thus endorse the recommended strategies including the primary health care service delivery system. To meet the MDG targets, primary health care has been identified as the key component of the health service system. Consequently, within the United Nations system, strategic health sector documents give the highest priority within country systems to primary health. This is relevant to UNRWA as it provides health care to Palestine refugees in the absence of a Palestinian government.

UNRWA Medium Term Strategy includes its Health Sector Strategy that confirms its commitment to primary health care to protect the health of Palestine refugees and promote improved human development.14

The current environment for Palestine refugees with respect to health is uncertain because of

(a) demographic pressure, (b) increased caseload of NCD patients, and (c) increasing frequency of emergency and crisis situations in the region. This type of environment is not unique to the Palestinian situation. In similar situations, people require more services to be delivered with constrained resources including emergency services provided on short notice.

The FHT approach is better suited to address a changing environment as compared to the traditional model since it has internal flexibility to accommodate and respond to these changes. The FHT approach responds by supplying health service providers who have wider medical skill set better management skills and have greater flexibility substituting for each other. FHT approach staff members also have responsibility for various specific tasks within the system. Team members gain comprehensive knowledge of patients and are thus able to provide more consistent follow-up over time. Given these characteristics, the FHT approach is more able to proactively address critical health provisions such as prevention, advocacy, health screenings and health education as opposed to non- FHT approaches. Implementing these critical area activities successfully has proven to be the most effective pathway in ultimately improving health outcomes and giving value for money.

The non-FHT approach is passively focused on curative health services on a demand-driven basis. These services are offered at fixed times, in fixed locations, and are reactive rather than proactive. Staff skills under this model are compartmented, thus limiting their ability to cover different categories of primary health care services when confronted with complex patient issues. Within primary health care service delivery, the FHT approach is more responsive to client needs within a rapidly changing environment.

As a model of service delivery, the FHT approach is conceptually different from the non-FHT model in that it is person-centred primary health care provision, as opposed to both vertical15 and disease-oriented care. The FHT approach changes the service delivery model from a ‘vertical’ system of disease care to a ‘horizontal’ one of patient care, where the whole family is assigned to a provider team consisting of doctor(s), nurse(s), midwife(s) and others, such that each patient is followed up by the same team over time. As a result doctors are part of and deeply involved in a continued relationship with a service provider team that have a wider, historical knowledge of the patient. This approach has been tested in many state health systems in other countries including the United States, and it has been demonstrated that this model helps to improve the quality of care for patients, improves overall population health, and increases the cost effectiveness for the health care system.16

The FHT model is advocated by the primary health care community and the World Health Organization as a model of primary health care services delivery system that uses available

13 The Palestinian Authority for GFO and WBFO, Syria for SFO, Jordan for JFO and Lebanon for LFO
15 By vertical care the authors mean those health care interventions having a top-down approach, such as immunization campaigns, TB control programmes, etc.
16 Benefits of Implementing the Primary Care Patient-Centred Medical Home: A Review of Cost & Quality Results. September 2012. Patient Centred Care Collaborative; Washington DC, USA
resources efficiently and effectively. Particularly, when managing chronic, lifestyle-related conditions such as diabetes and hypertension. The concept is endorsed by professional organizations internationally like the College of Family Physicians of Canada\textsuperscript{17}, the American Academy of Family Physicians\textsuperscript{18}, and by the American Academy of Paediatrics\textsuperscript{19} in their National Agenda Healthy People 2020. Accrediting organizations such as the US National Center for Quality Assurance and the Accrediting Association for Ambulatory Health Care and Utilization are also supporters.

Recognizing these advantages of the FHT approach in primary health care, the UNRWA health department developed a strategy to implement the FHT model in UNRWA health care centres. Others are also moving in this direction, although at a much slower pace. The Ministry of Health in Gaza is actively moving to enhance its capabilities by taking steps to adopt the UNRWA FHT approach. The Jordan Ministry of Health is internally discussing moving towards a family health-based approach, although not necessarily that of UNRWA. The details have not been worked out between the Jordan Ministry of Health and the other stakeholders. All host governments have, in some of their localities, a version of the FHT approach that has been received positively by service providers and their clients. Therefore, UNRWA primary health care is not only in-line with that of the host government’s policies but it is spearheading those policies to achieve a more comprehensive primary health care delivery package.

There seems to be a common understanding amongst host governments that post-2015 MDG plans, which recommend developing effective partnerships for health service delivery systems in countries that face social challenges, are a good idea. Partnerships for health services would be easier to implement within a FHT approach where teams react proactively, as opposed to a traditional system, where a single provider waits to provide a one-on-one service on demand.

In Lebanon, Palestine refugees are largely dependent on UNRWA health services because of a lack of other options. In Jordan, most Palestine refugees have the choice to access host government services – except for 150,000 ex-Gaza refugees who depend mainly on UNRWA. Jordan’s health service delivery system has been able to develop a mutually trusting relationship with Palestine refugees over time. Additionally, in the West Bank and Jordan, UNRWA is the only provider of free medication to Palestine refugees and this benefit is valued highly by the community. In Gaza, UNRWA relevance is undisputed; it is the largest provider of health services, and as such, is exploring ways to enhance FHT activities and its outcomes jointly with the Ministry of Health in Gaza.

A literature review of similar approaches in other countries\textsuperscript{20,21} shows that this model is recommended for, and can be implemented systematically in, resource-constrained environments. The review of results\textsuperscript{22} after implementation showed positive outcomes for many areas of health care.

The Patient-Centred Primary Health Care Collaborative 2012 review of 46 medical home initiatives in United States (which are based on the same principles as the family health team model\textsuperscript{23}) highlighted these outcomes from peer-reviewed research and industry-reported outcomes. The report documents that this model of primary care service delivery improves the health outcomes for patients and provides better service. Additionally it lowers costs by reducing resource utilisation. There seems to be a clear understanding amongst host governments that post-2015 MDG plans, which recommend developing effective partnerships for health service delivery systems in countries that face social challenges, are a good idea. Partnerships for health services would be easier to implement within a FHT approach where teams react proactively, as opposed to a traditional system, where a single provider waits to provide a one-on-one service on demand.

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18 Primary Care for 21st Century: Ensuring a Quality Physician-led Team for Every Patient, September 2012.
23 “Benefits of Implementing the Primary Care Patient-Centred Medical Home: A Review of Cost & Quality Results”.

inpatient visits, emergency department use and hospital readmissions.

The FHT approach is well designed to meet refugee needs. The design identifies all critical elements and prerequisites to move towards implementing a FHT approach. However, it seems that the FHT work plan did not fully take into consideration UNRWA inherent implementation constraints and was not flexible enough to deal with unanticipated needs that occur during implementation. Inevitably, these flaws in planning reduced the effectiveness of the rollout.

An internal UNRWA assessment provides evidence that the FHT approach appeals to refugees. More than half (57.7 per cent) of respondents interviewed during this evaluation’s Satisfaction Survey (November 2013) agreed that the FHT approach is a “good arrangement”.

efficiency

Efficiency measures how resources or inputs (budget, staff time, medications, supplies, infrastructure, etc.) are converted into results or outputs. The FHT approach can be considered efficient if it uses resources appropriately (cost efficient) and produces the desired outputs.

Reflection on some of the indicators used in the UNRWA context

At the lower level of operations UNRWA has been using yet another set of proxy indicators. The ones most commonly used are the antimicrobial prescription rates, the average number of visits per-day per-doctor, and the cost per-patient per-year.

Average number of consultations per day / contact time, cost per-patient / per-year

The number of patients seen per day is used to estimate the time doctors spend with each patient, thus assuming that the contact time is directly correlated with the quality of the doctor-patient encounter leading to improved patient health. If the number of patient visits per doctor is minimized, each patient visit could be of a longer duration giving more time with the doctor. This measure is primarily a health quality measure. However, it is not useful as a straight measure of efficiency. If doctors or other staff have more than a certain number of patients per day, they start to be overworked and cannot provide the quality of service required. The number of 80 patients seen per doctor per day is still the target for the operation of the health centres and is somewhat useful for operational purposes.

The reverse side of this assumption is that more patient visits per day, while reducing the presumed cost per visit, will at some point overwhelm the system and make it inefficient, as the encounters are too short to be meaningful. In summary while these indicators provide some useful information about organizational processes, they are not helpful in measuring the quality of the services delivered.

To ensure that visits to health centres are effective, it is necessary that each patient’s contact with health centre staff have some benefit to the patient. This requires both a minimum time spent with the patient, as well as transferring some information from the patient to the health centre staff and vice versa.

Intuitively and improved satisfaction of the patient indicates that UNRWA gets a much better value for money under the FHT model than in the non-FHT approach.

To ensure that visits to health centres are efficient, it is necessary that each patient’s contact to a health centre staff bear a benefit for the patient. This requires both a minimum time spent with the patient, as well as transferring some information from the patient to the health centre staff and vice versa.

The minimum contact time depends on the type of consultation: first-visit common ailments, appointed and first visit NCD patients control check-ups, alert pregnant women examination, children referred by the nurse in charge of growth

24 This is too much to assume, unless a specific quality indicator is set up to actually show it.
monitoring, adults referred by the nurse in charge of screening. Each one of them needing very different contact times. Hypertension patients, for example, will need more time initially, and afterwards require much less time per visit. Initial consultations will take longer, as will consultations for high-risk pregnant women, people with complications, and for people with multiple diseases. Therefore, guidance on the timing of the most common types of consultations should be provided by the health department.

Likewise, more work will need to be done to define the quality aspect of consultations. These would include aspects such as if the patient understands the diagnosis, accepts the advice from the medical staff, and is able to use the advice appropriately.

In the medium term and to assure that the health system is not only efficient but effective in delivering quality outcomes, the evaluation recommends introducing the concept of a meaningful consultation as a unit of service at the health centre. As nurses and pharmacists now independently engage with patients, these meaningful types of consultations should cover not only engagements by doctors, but also by nurses and pharmacists. This in turn will have operational implications for the health centres, so the health department should engage with the human resources department to define workload measures for operational purposes for nurses and pharmacists in particular.

The UNRWA health department also uses cost per-patient per-year to evaluate the efficiency of service delivery. However, the needs of each patient requiring health service are different based on age, gender and underlying disease. Since the indicator does not include these distinctions in its calculation, it is not useful for determining the cost of quality service. To demonstrate the weakness of this indicator, if more men and less women and children were served, the indicator would show an efficiency improvement, i.e., a lower cost per year as these latter groups require more services.

The UNRWA health department did not systematically establish a baseline prior to rolling out the FHT approach. The lack of a data baseline for processes as well as for outcomes makes it more challenging to attribute positive results to a specific course of action. This evaluation benefitted from the incomplete status of the FHT roll-out which enabled a comparison between health centres adopting the approach and those that did not. However, since the adoption of the FHT approach is also correlated with the dedication of staff, this does introduce a slight bias to the findings. To ensure that attribution of results is clear establishing baselines improves the processes of learning.

The statistical analysis of the health center users in Lebanon showed that 15.3% of health center users were displaced Palestine refugees of the crisis in Syria. The UNRWA field office in Lebanon provides health care services to Palestine refugees from Syria wherever they have settled in Lebanon, care they can access just by showing their Syrian documents. However, this has caused problems in the health centers daily work since their names were not registered in the appointment system and the staff could not plan for a steady daily flow of the Palestine refugee patients from Syria. Some health centers assigned one medical officer for them or served them in between the scheduled patient appointment queue, depending on the number of available medical officers and the number of Palestine refugees from Syria that came seeking health care.

**Antimicrobial prescription rate**

The antimicrobial prescription rate is used as a proxy for organizational improvement as well as the quality of the encounter with the doctor. However, as this indicator moves towards international standards, it becomes less clear if it is a measure of the quality of the encounter or a...
measure of how closely organizational instructions are followed in the health delivery system.

Antimicrobial prescription rates seem to have continued falling through 2012 and 2013, according to the evaluation findings. Overall UNRWA antimicrobial prescription rates appeared to experience an impressive plunge from 2007 (37 per cent) to 2008 (29.3 per cent). The highest decline was shown by West Bank Field, which fell from 37% in 2007 to 26% in 2012. Gaza Field experienced a unique plunge from 2007 (55.4%) to 2008 (29%)25, and then underwent less dramatic changes up to 2012 – from 29% in 2008 to 26% in 2012. In the Lebanon Field, those rates were already low when compared with the other fields – 22.1% in 2008 to 20% in 2012.

Guidelines seeking to control drug expenditure by focusing on antimicrobial prescriptions were introduced well before the FHT approach became operational, and therefore are not caused by the FHT approach. Efficiency may have been gained by the stable reduction in antimicrobial prescriptions, although this cannot be attributed to the launching of the FHT approach as more rational rates were reached prior to it.

**Improvements in pharmacy functions**

The improvement in processing prescriptions has been achieved because the team, including the pharmacists, has comprehensive knowledge about the patients. Knowledge of the patient’s history enables the team to consistently and systematically engage with patients and explain to them what they need, which does not always relate to medication but could be a change of lifestyle or behaviour. This engagement along with other organizational improvements helps reduce the antimicrobial prescription rate. Patients are better directed at the pharmacy and do not come to the pharmacy with vague requests.

Impact on pharmaceutical drug use has been very positive as the FHT approach discourages patients from obtaining drugs (a common practice amongst UNRWA clients) and encourages the rational use of medications. The impact specifically on the antimicrobial prescription rate has been quite marked having decreased from an overall rate of 37 per cent in 2007 to 26 per cent in 2012. Although guidelines to control antimicrobial prescriptions were in place before FHT approach was launched, many health staff interviewed stated that the FHT approach has made it easier to implement the guidelines and positively impact rational drug use. However, the key reduction in the antimicrobial prescription rate occurred prior to the implementation of the FHT approach.

**Number of continuing family planning acceptors**

This parameter is limited by several factors and it does not assess the quality of care concerning family planning services. As these are absolute numbers, it is unclear if they represent either basic population growth or else a consistent increase in family planning service utilization, as figures for women of childbearing age during those years were not weighed. Remarkably, in the database presented in UNRWA annual report 2011 a more telling quality indicator was used: “Prevalence of modern contraceptives among women of reproductive age utilizing UNRWA MCH services”, which appeared to be 61.7 per cent. This far more precise efficiency indicator should continue being used but seems to have become part of a periodic survey every five years.26

**Operational indicators**

Where high-level indicators were not designed for this programme within a logical framework, health system programmes often use mid-level operational indicators to obtain required information. However, in developed countries which use mid-level operational indicators (such as: reduced obesity rates in a defined population; at least two dental check-ups for children under the age of five and decreased smoking under the age of 30) they require a known quantified population denominator which is very difficult to

25 Ibid

26 According to the health department within “Current contraceptive practices”
obtain in the UNRWA context. Given this constraint, the most relevant UNRWA indicators are the ones it already tracks among those who access services. These indicators are: a minimum of four antenatal check-ups for pregnant women, the number of women who are new acceptors of contraceptives or use contraception, and a full immunization protocol for children under five.

A minimum of four antenatal check-ups for pregnant women: Is only marginally consistent at reflecting the quality and efficiency of antenatal care. Because antenatal visits’ high rates do not necessarily correspond to the quality of professional care. However, when matching these outcomes with other parameters such as the rate by which women labelled as ‘alert’ or ‘high risk’ pregnancy in their first ante-natal care visit, ended up with the same or lower risk\textsuperscript{27}, the picture becomes clearer:

<table>
<thead>
<tr>
<th></th>
<th>Normal (per cent)</th>
<th>Alert (per cent)</th>
<th>High risk (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Initial</strong></td>
<td>60.5</td>
<td>24.9</td>
<td>14.6</td>
</tr>
<tr>
<td><strong>Last visit</strong></td>
<td>55.7</td>
<td>26.5</td>
<td>17.8</td>
</tr>
</tbody>
</table>

*Table 2: Prevalence of risk status on last visit compared to initial visit*

More than five per cent of all women who were declared healthy at the first antenatal care assessment were subsequently diagnosed as an alert or at-risk pregnancy in the latest ante-natal care visits.

**Pharmacy services**

The system of processing prescriptions in general is much more efficient in the FHT health centres. Prescriptions are better targeted as a result of meaningful consultations, a deeper knowledge of patients and greater trust and better communication between patient and provider team.

Prescriptions are filled in the pharmacy system that has efficient and effective controls to prevent the possibility of system abuse. As pharmacists have more information on the patient, there is an additional check supporting the team effort which improves performance of the overall prescription processing system.

Economies of scale, working with bundled resources and having the ability to procure categorical goods lead to efficiency. The health department procures goods such as pharmaceuticals, health centre equipment and other supplies, in bulk, giving UNRWA the benefit of economies of scale, decreased transaction costs and lower negotiated rates. This ability makes UNRWA one of the more efficient health providers, and is applicable to the traditional as well as FHT approach.

**e-Health**

The e-Health system is clearly an asset and a useful tool for the service delivery system as a whole. If it worked well, it would contribute to efficiency by improving record keeping, data generation and aggregation, decreasing administrative burden (e.g. for appointments), streamlining pharmacy functions, rationalising prescriptions for antimicrobials, increasing data analysis capabilities (such as cohort analysis for chronic diseases) and monitoring for hospital referrals.

Jordan Field Office (JFO) has installed queue systems in addition to the appointment system that is part of the e-Health system in several health centres. While queue systems improve client satisfaction, as client treatment is more equal, this is not an efficient use of money in the current situation. It would be better if the health department would fully dedicate its effort to the e-Health system, making the queue system redundant.

Currently, because of its limitations, e-health is not yet contributing to efficiency. For example, almost all health centres having the e-health system are constrained to maintain double records\textsuperscript{28} because the system is unstable and not entirely reliable, so duplication ensures data validity when it comes to monthly performance reporting\textsuperscript{29}. Conversely, this duplication is prone

\textsuperscript{27}Ibid

\textsuperscript{28}Staff of health centers that adopted the e-Health considered using registry books and the e-Health system as duplication

\textsuperscript{29}The forthcoming e-Health evaluation will analyse the causes of failure in more detail.
to affecting data quality and placing unnecessary overload to staff. This aspect of data collection and analysis has potential for more efficiency and effectiveness.

In cases where the e-Health system is disrupted and there are no readily available backup procedures or alternative operation protocols, there can be a severe disruption of services when such interruptions occur. The health department and the information technology division have so far concentrated on minimizing downtime.

Communications

Communication to different stakeholders about the FHT approach is challenging at times. The initial reaction of stakeholders is to sometimes associate reform process with a declining level of service. Therefore, high level communication is important to have a consistent message. The problem may be that there is no standard definition of what is meant by communication in the context of this change. Some stakeholders expect to participate in policy decisions, others ask for more information. Some expect detailed implementation plans to be shared, while others just want the big picture. Miscommunication regarding efficiency leads employees to think that a more efficient system translates into fewer jobs. They perceive the FHT approach to be an efficient system of service delivery, but that also comes with demands limiting incentives because market efficiency is not always equated with consumer benefit.

Communication challenges exist between headquarters – the department of human resources – and field departments. More consistent communication between headquarters and field offices regarding reform and changes in health services is required for maximum efficiency. For example, human resource departments in the field feel left out, and are forced to make personnel decisions based on their own assumptions of how the FHT approach translates into staff numbers. Some feel that the target of 80 patient consultations per-day per-doctor means a reduction in staff.

Clearly, the challenge of communication was underestimated and the FHT concept needs to be communicated to target communities to help build trust between clients and FHTs. This communication should be systematic and ongoing.

Pre-planning meetings were conducted with staff of all of the sampled health centres where the FHT approach was implemented. Engagement with the community in preparation for implementation and communication about aspects of change was not as complete. This activity was conducted in a cursory fashion in some locations.

Space redesign

In eight out of ten health centres, physical space was redesigned prior to the implementation of the FHT approach. The remodelling encouraged staff to support the FHT approach. While helpful, remodelling is not required for change to the FHT approach. In the two health centres where physical space redesign was behind schedule, one of them had overcome this challenge by colour coding, painting different ends of the waiting space in different colours, thus matching the team rooms, as well as the filing system for the two different teams. Though colour coding did not add more space, it facilitated team identification and organized patient flow. In the other health centre there were limits to what could be remodelled because it was in a rented building. Given the success of the colour coding, remodelling of the space does not seem to be as much a priority as initially thought, especially in a resource constrained environment.

Improved data gathering

As a result of change to the FHT approach and e-Health, there is progress in documenting
pharmacy services. And in activities of the NCD programme facilitating follow-up, outreach and cohort analyses. Patient file transfer to e-Health is moving forward, but the usefulness is limited due to the instability of the e-Health system. At the moment the FHT centres maintain both systems in parallel.

**Implementation of the family health team approach**

**Logical framework and timeframe**

A complete FHT project description was contained in a July 2011 document, where a standard intervention logical framework was found for the FHT approach implementation. However, no implementation schedule was included at the time. The implementation timeframe is implicitly stated in the headquarters implementation plan and field implementation plan but no detailed project plan schedule was prepared for the FHT approach.30

**Budget allocation**

Budget allocation was partially decentralized, with fields being responsible for some of the FHT approach activities; the headquarters’ health department had project money31 available to support some of the infrastructure demands and to help with the implementation of the e-Health system. It seems, however, that not all the time required from health and in particular IT staff was budgeted or adequately anticipated.

**Staff orientation and training**

Training and preparation for the FHT model was done efficiently. The venues and training materials make good use of resources, and the remodelling of the health centres was not overly expensive.

Staff orientation and basic training was achieved successfully in pilot health centres. Training was more intensive and consistent in FHT approach health centres with e-Health where 1.35 training opportunities per staff member per year were provided in the past two years whereas only 0.62 training opportunities were available to staff in health centres with a traditional approach.

A one-week training course including training of trainers was arranged. The content of training included FHT approach principles and the new roles of team members. While the training was useful and appreciated, it did not define specific competencies for staff, especially for doctors who were expected to function as general practitioners where previously they worked as just clinicians. They should have extended support time so as to reach a steady state of standardized practice. Filling this gap between acquiring different skills and their steady state practice will require more training than originally planned, as current needs including time needed for consolidating change appears to have been underestimated. This concern was expressed by FHT health centre staff some of whom who felt undertrained and at times unsupported.

**Staff capacity**

Staff redeployment instituted under the FHT approach uses the range of available skills more efficiently than in non-FHT approach health centres. The FHT model uses the skill sets of a team rather than individuals, assuming teams have broader skill sets than individuals with the flexibility that makes it easier to match skills with specific needs of the population. There have been varying levels of challenges in the systematic application of this redeployment, mainly due to the shortage of permanent and trained staff.

Long-term efficiency is ensured when the trained staff takes on additional tasks and responsibilities under the FHT approach that normally would have required more staff. For example, medical officers in the health centres working under the non-FHT model function as clinicians providing one-on-one clinical service, whereas medical officers in the FHT are functioning as clinicians, administrators, team managers and trainers. We saw this in most of the (80 per cent) FHT health centres visited in all fields, with exceptional results. The senior staff nurses also perform additional functions, including the critical triage functions under senior medical officers’ supervision in some centres.

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30 However each field developed and presented their FHT implementation plan during the second FHT retreat in the dead sea focussing on the timing of rollout of different elements.

31 Money allocated by donors to a specific project.
Staff redeployment and task shifting

In seven out of the ten centres it has been mostly a smooth process and achieved what was planned. In the three remaining ones the process has not been so smooth. Staff deployment under the FHT approach takes advantage of all available staff in a health centre. Larger health centres have more staff, so there can be more skills available to the team and task shifting is relatively smooth. For example, some teams have two medical officers per team, while smaller health centres struggle with two teams having a single medical officer. Alternate or replacement staff are usually provided in such health centres, but these added staff are either part-time – e.g., a midwife sharing her time between two or three different health centres, or belonging to ‘daily paid’ / job creation programme cadre.32 Job creation programme staff have limited time they can be employed (six months) and to bring them up to standard takes about three of the six months.33

This practice of using job creation programme staff is limiting the effectiveness of the programme. Temporary staff are usually untrained, creating additional training demands on senior medical officers, and requiring extra support from their team members.

Although under the FHT approach multi-tasked teams will require redistribution of skilled staff – more doctors and less nurses – no such clear progress was witnessed among those health centres that had adopted the FHT model so far. It will likely take a long time until FHTs can test reduction of nursing staff without compromising effectiveness.34

The FHT approach requires all medical officers to engage in being trainers and leaders. Many are up to the task. Some staff nurses say “they would have left or retired had it not been because of the one-on-one training provided to me by the senior medical officer”. However, not all senior medical officers were equipped to combine the tasks of administering the clinic, training and leading one of the teams, and not all of them were inclined to do so. The FHT approach provides a more elaborate framework to guide senior medical officer running the health centres. Where the senior medical officers were not so inclined to administer, some of these tasks were taken over by the senior nurse.

effectiveness

Effectiveness is a measure of the extent to which the FHT approach delivered planned results. It shows the value of changes and the attributes that helped in achieving this change. Efficiency discussed how inputs are utilized to produce outputs. This section will look at the relationship between inputs and results / outputs to determine the effectiveness of the FHT approach. It will also evaluate to what extent the FHT approach was successfully implemented. This section will build on the discussion under efficiency.

The planned activities and subsequent results identified under the FHT approach were largely achieved in the health centres adopting the approach. Analysis showed that UNRWA services and staff were, at least, at the same quality level as host government services and staff; as already mentioned above. Other assessments also support this analysis.35 The evaluation team confirms that most UNRWA staff and the services they provide are very good. Some staff members are outstanding, with a few that are better as clinicians than as administrators or team leaders.

External stakeholders

Intuitively, a higher number of visits, combined with a higher quality visit and improved patient satisfaction indicates that UNRWA gets a much better value for money than in the traditional approach.

32 Under the Job Creation Programme many health professionals found a working place in UNRWA health centres on a temporary basis.
33 In Gaza however, health professionals in the Job Creation Programme are generally employed for one year.
34 Gaza field reports some progress in relocating nursing staff.
35 DFID support to Palestine refugees through UNRWA.
It has already been stated in the efficiency section that clients who were served in those centres with the FHT approach were satisfied with the length of a consultation. In table 3 below, satisfaction with waiting times in those centres were almost 15 per cent higher than for those in health centres using the non-FHT model. There is a continuity of service within the whole team and the clients value this relationship. Clients and staff are building a joint history, are more comfortable exchanging information thereby reinforcing the continuity of service. Based on that continuous relationship about 75 per cent of clients who frequented health centres using the FHT approach and e-Health systems indicated that they had received health education about their condition from health centre staff, and 77 per cent said they were satisfied with the service.

Clients confirmed that they have more understanding of their own medical history regarding chronic diseases such as diabetes and high blood pressure. Their level of knowledge increased by almost 11 per cent. For growth monitoring and immunization, users’ knowledge increased by around 18 per cent.

People in the community as well as camp committees perceive the FHT approach as a positive development, improving services that UNRWA provides in the health centres. For example, in one of the Lebanese camps, the camp committee confirmed that due to the FHT approach there are fewer complaints about the health service than before. Similarly, some visitors leaving one of the UNRWA health centres using the FHT approach stated, “things are better” and a visiting mother said “this information [about growth monitoring, child nutrition] was not given to me before”.

The FHT approach impact on contraceptive acceptance shows an interesting trend. While the actual number of contraceptive acceptors in both FHT and non-FHT centres is almost the same, it seems from very rudimentary data that the number of acceptors in the 25-35 years age group increased in FHT health centres. Health centres also kept detailed sex-disaggregated records on male contraception, which enhances expectations of the health centres achieving comprehensive contraceptive acceptance. If consolidated, this outcome would be very positive since increased contraceptive use in this age group improves the health of mothers and infants by increasing the birth interval between pregnancies. In the long run, this practice has a positive impact on maternal and infant morbidity and mortality rates.

One of the many goals for the implementation of the FHT approach was to draw more men into attending health centres, by stressing in the message to the community that the health centre is serving families as a whole. However, health centres continue to be used primarily by women and children, as in most developed country public health centre settings, where at least two-thirds of daily users are women and children.

### Focused supervision

The supervision chain in UNRWA is complex with the health centres’ senior medical officers reporting to area health officers and both reporting to the chief area officers and to the field health programme chief. The chief area officer reports to the director of UNRWA operations while the field health programme chief reports to the deputy director of UNRWA operations.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Family health team</th>
<th>Traditional health centre</th>
<th>FHT and e-Health</th>
<th>Traditional health centre with e-Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied with service (per cent)</td>
<td>n.a</td>
<td>70</td>
<td>77</td>
<td>n.a</td>
</tr>
<tr>
<td>Satisfied with wait time (per cent)</td>
<td>64.5</td>
<td>50</td>
<td>67.5</td>
<td>n.a</td>
</tr>
<tr>
<td>Number of visits to health centres per client surveyed</td>
<td>1.84</td>
<td>1.82</td>
<td>2</td>
<td>1.3</td>
</tr>
<tr>
<td>Clients received education/health information (per cent)</td>
<td>n.a</td>
<td>n.a</td>
<td>75</td>
<td>77</td>
</tr>
</tbody>
</table>

*Table 3: Impact of FHT approach on services*
At health centre level the senior medical officer and the senior staff nurse are managing their respective areas in the health centres part time, while in larger health centres they are fully committed to doing so.

Area health officers are meant to provide direct supervisory support. Systemic monitoring / supervision and support from the area or field office is possibly the most efficient way to supervise and monitor but hardly effective at present. Area health officers are visiting the health centres regularly and there are good tools and protocols available to make these visits effective. However, many of the area health officers and FHT centres do not use these tools consistently in all fields. We found an exception in Gaza where there is consistent supervision of health centres both by the area health officer and field health officer.

Health centres produce periodic reports of mainly quantitative data with a comparatively weak analysis. These reports are rarely analysed by those health centres or by the area level and seldom used for policy or management decisions regarding service delivery.

Area officers are supposed to do the first-level analysis of metadata and monthly reports of the FHT centres. However, most of the area medical officers just send the data on to the field health department without monitoring or doing analysis, thereby losing opportunities for feedback, problem solving and support to health centre staff. Gaza was an exception where maternal and child health data used to be analysed at the field level. This issue is especially problematic in Lebanon where the decision making chain is slower than in the other fields. Effective monitoring and supervision at the area and field levels as a way “to improve the services” and as “a very useful reward for those who are working hard to improve their indicators” would add to the FHT’s capacity.

The area health officer was expected to help address the challenges of staff redeployment and task shifting, depending critically on higher-level support. With the exception of Gaza, area health officers are not yet utilized appropriately to provide this type of support.

Taking UNRWA health staff functions as a united category, staff in area offices and in health centres seem to be the central pillar of UNRWA service delivery system, as well as for reforms carried out. Clear definition of their roles, focused training, supported deployment and other incentives would improve their functioning and morale and thus improve effectiveness of the overall service delivery system.

**Staff perceptions**

Staff appeared to be most satisfied with their work environment in FHT health centres without e-Health.

When talking to the health centre staff, the
evaluation team discovered that there is a perception that the FHT model introduced a new state-of-the-art ‘technology’ that has made the work environment professionally more fulfilling.

The staff confirmed the improvement voiced by clients in the survey. 79 per cent of the staff surveyed declared that the FHT model creates a “better work environment” as opposed to about 61 per cent in support of the traditional approach. 80 per cent declared that the FHT model is a “better arrangement for service delivery” as opposed to 70 per cent in favour in health centres with the traditional approach.

**Client flow**

Patients in all health centres are allocated evenly to nurses, midwives and clerks in different programmes, such as in the NCD or maternal and child health programmes. In seven out of ten FHT centres, medical officers were allocated patients in a rational way depending on the number registered that day. In the three remaining centres the allocation of patients was similar to the allocation in those centres with the traditional approach, which was not as even and more based on the reputation and availability of experienced doctors.

Client flow improved in FHT approach health centres compared to those with the traditional approach, although it was far from optimal. When looking at a client-flow analysis conducted in Gaza, Jordan, Lebanon and the West Bank the overall patient load was uneven over the day in two of the fields and more equally distributed in the other two. In Jordan 88 per cent and in Gaza 78 per cent of patients visited during the 08:00 through 11:00 time period. While in the West Bank and Lebanon the patient flow was far more evenly distributed at 53 per cent into the 08:00-11:00 time group in the West Bank and at 61 per cent into the Lebanon. It is unfortunate that other client-flow surveys conducted by UNRWA do not use the same methodology to assess more details on consultation patterns. Some health centres with the non-FHT approach, with the help of innovative staff, devised internal methods to manage patient flow that distributed patients equitably during clinic hours. However, this was not a standard practice and was dependent on staff initiative. In three out of five of those centres, client flow was still a problem, while we found improvements in the remaining two.

A triage system was in place in only a few of all visited FHT centres. Triage contributes to decreased waiting time and to meaningful consultations with an appropriate team member. This activity is still challenging in all four UNRWA fields, where government regulations do not allow nurses to run the triage system. It needs to be recognized that in Lebanon the triage system might have to be part of the tasks of the senior

<table>
<thead>
<tr>
<th>FHT and e-Health (%)</th>
<th>82.3</th>
<th>79.6</th>
<th>81</th>
<th>94.2</th>
<th>89.7</th>
<th>85.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>FHT (%)</td>
<td>86.6</td>
<td>79.8</td>
<td>80.1</td>
<td>93.3</td>
<td>87.9</td>
<td>84.9</td>
</tr>
<tr>
<td>e-Health (%)</td>
<td>77.9</td>
<td>61</td>
<td>71</td>
<td>89.7</td>
<td>84.1</td>
<td>85.7</td>
</tr>
<tr>
<td>No FHT no e-Health (%)</td>
<td>82.8</td>
<td>61.1</td>
<td>70.7</td>
<td>90.3</td>
<td>84.2</td>
<td>77.2</td>
</tr>
</tbody>
</table>

Table 5: Staff satisfaction


38 The periods of analysis used for the client flow analysis in different fields are not consistent.
medical officer, and the roles, responsibilities and training should be designed accordingly.

**Management of the change process**

Many of the key elements of what was supposed to be achieved during the FHT approach roll-out were indeed achieved. Table 6 below provides examples on the level of achievement for selected outputs.

The schedule for roll-out of the FHT approach was very ambitious, leading to insufficient support when problems arose. Therefore, when some of the FHT health centres started facing challenges such as unstable e-Health programmes and running two parallel filing systems, the health department realized that there was not sufficient support to address all these in a timely manner.

Since management resources are limited, it seems the health department chose speed over consolidating the changes made. In hindsight, maybe it should have gone slower, thus conserving resources to address anticipated and unanticipated challenges in a timely manner. The challenge for the medical officers in clinics was to function as generalists, as it required them to change the way they operate and requires an attitude shift as well as the technical skills.

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-planning meetings and orientation of health centre staff on time</td>
<td>100</td>
</tr>
<tr>
<td>Staff training (technical) in time</td>
<td>100</td>
</tr>
<tr>
<td>Redesign of physical space</td>
<td>80</td>
</tr>
<tr>
<td>Staff deployment / allocation, task shifting</td>
<td>70</td>
</tr>
</tbody>
</table>

*Table 6: Implementation of the FHT approach in UNRWA health centres*

The process challenges to attaining these end-of-project results will need to be taken into full account and be included in the overall design of any future follow-on programme. In any subsequent roll-out of the FHT approach, the identified challenges should be avoided for the next phase by improving on the initial design, since all activities have implications for utilizing scarce resources. For example: staff should understand that the need for a certain number of patient visits, for antenatal care or for monitoring patients of chronic diseases, should be based on best practices and not based on their desire to meet targets.

The development of the logical framework was not very comprehensive at the start of the FHT approach project. Over time knowledge has improved but only some of this has been documented and was available to guide the process. In particular the assumptions and risks associated with the plan were not stated clearly enough, and mitigation measures for realized risks were designed ad hoc rather than preemptively and systematically.

The challenges of constantly training temporary staff could not be addressed as immediately as would have been desirable. This did not significantly delay roll-out, as the health centres continued with the implementation as well as they could while at the same time showing positive results.

**Medical**

The FHT approach had an impact on the credibility of, and confidence in, the team as a whole. As opposed to the traditional approach where the presence or skill of the medical officer carries most of that credibility. The strengthened team minimizes the dependence on any particular staff member by allowing different team members to fill in and treat patients with greater independence. Since all team members are familiar with the patient’s history and the patient in turn is familiar with all members of the team.

The evaluation took into consideration the effects of the FHT approach on the following services provided by health centres: outpatient care, inpatient care, oral health, physical rehabilitation, family planning, preconception care, antenatal care, delivery care, care of children under five, school health, non-communicable diseases and communicable diseases. The improvements in some of these areas seem to be primarily attributed to the focus of the health department on these areas.

The FHT health centres showed improvement on
many mid-level operational indicators used, such as reduced obesity rates in a defined population, at least two dental check-ups for children under the age of five, and decreased smoking under the age of 30 in a before and after analysis. Health centre data showed that they exceeded the targets for these indicators after implementation of the FHT approach. The FHT approach actually surpassed the targets for some mid-level operational indicators, such as pregnant women receiving ante-natal visits. However, since the ante-natal visits are not correlated with pregnancy outcomes in data analysis, some very useful outcome information concerning effectiveness was lost.

Nursing

Nurses’ roles within the new system are probably one of the major upturns brought about by the FHT approach. According to information drawn from every HC visited, nurses have been the most proactive in adopting many different tasks in order to optimize their effectiveness. Family Health teams have strongly benefitted of nurses’ multiple roles and of how quickly they have taken new tasks into their responsibilities.

In almost every HC visited, senior nursing officers showed an impressive coordinating role beyond what it might be their job description, competently adopting responsibility tasks in database recording, regular reporting, staff training, staff supervisors, managers and being, all in all, a fundamental wager in the family health teams.

According to all records accessible to the consultants, UNRWA achieved breakthrough targets on ante-natal and postnatal care, family planning, nutritional care, infant and child health care, community mental health, and school health care. Here with some of the topics worth highlighting:

Antenatal visits: the FHT approach per se did not substantially change achievements in ante-natal care – very high ante-natal care rates were already reached in previous years – but it likely increased quality ante-natal health care by strengthening protocols and follow-up. The percentage reached a peak in 2007 and 2008 with a 90 per cent and then entered a slow decline down to 86.5 per cent in 2012. However, this does not seem to be related to the FHT approach but rather to the limited availability of ultrasound scans in UNRWA health centres, and the availability thereof outside of UNRWA health centres.

Outreach activities in the majority of the sample FHT health centres were consistent and methodical, having structured communication to the patients / households. Nurses and midwives followed up with home visits to pregnant women and to non-communicable disease cases that had missed their appointments. Conversely, in most traditional health centres visited, non-communicable disease programme follow-up and other outreach activities were sporadic – depending on the personal motivation of a particular senior medical officer or other experienced staff.

Lack of at least one ultrasound scanning along normal pregnancies: information on stillbirth malformations or deformities was shown in standard registration of hospital deliveries. A better knowledge of foetal serious growth disorders might prompt gynaecologists / obstetricians to recommend early hospital care for some pregnancies.

Health promotion and education: countless health promotion and education activities were reported by almost every health centre visited, both under the shape of individual counselling within health service delivery and in community campaigns. Although there is ample documentation on health promotion campaigns jointly conducted by UNRWA and host ministry of health, very scant information is available on regular programming and planning of information, education and communication activities within the health centre.

The early detection of breast cancer programme stopped in 2010. By the time the evaluation team conducted its visits it seems it was not implemented in any of the fields and did not appear as part of either maternal health care or non-communicable diseases’ programmes, either. Nevertheless, health centres still were training patients in the use of the breast self-examination.

39 "Data collection sheet_13_final_version_26 June 2013 [1]."
Evaluation of the Family Health Team Approach | UNRWA

The programme for early detection of cervical cancer was discontinued when systematic screening showed its irrelevance in the Palestinian population.\(^{40}\)

UNRWA made an important effort to meet psychosocial disorders and, particularly so, gender-based violence, in both Gaza and West Bank through community mental health programmes. A Family Protection Programme started in West Bank with promising expectations. Most of the community mental health activities started very shortly before the evaluation team visit – just a few months – and therefore progress assessment was not easy.

An extraordinary effort was placed on communicable disease control during the last years, to the extent that communicable disease reporting was almost left only to serious life-threatening conditions such as TB and viral hepatitis, with a rebound of some HIV / AIDS cases in Lebanon in 2012. Two indicators are set up to measure effectiveness in communicable diseases’ control: one is the “Number of EPI vaccine preventable diseases outbreaks”, which has been nil for a long time; the other was the “Percentage of under 18 month-old children receiving all EPI vaccinations according to host country requirements”. Even though rates are extremely high – in Gaza Field they reach 100 per cent – it is assumed that in this case the denominator is the overall refugee population and not just that served by UNRWA.

The Non-Communicable diseases programme was, most likely, the programme receiving the strongest boost over the last two years coinciding with FHT start-up, to the extent that it was a strategic objective whose reporting details – and performance parameters associated with it – seemed to increase. Achievements such as decreasing diabetes prevalence of ≥40 years which was 11 per cent in 2012, not much higher than many developed countries (Europe 10 per cent), and hypertension prevalence of ≥40 years – 16.5 per cent while in Europe it was around 35 per cent\(^{41}\) – are praiseworthy. This comparison with some of the most advanced countries in the world to tackle NCD gives a clue on how far UNRWA has gone in terms of NCD control.

An age and gender disaggregated indicator used to assess NCD screening rates was introduced in 2012, “Percentage of targeted pop over 40 years screened for DM”. Another indicator was already in place: “Percentage of patients with DM under control according to defined criteria”. These are the only indicators sensitive enough to allow comparison, as the remaining indicators only translate numbers and are thus statistically invalid for assessing effectiveness. Those two age and gender related indicators were well above the established targets both in 2012 and 2013 but those found in the latter – “Percentage of patients with DM under control according to defined criteria” – were more than three times the size of the percentages in the former (5.7 per cent male / 12.5 per cent female in 2012 – 24.8 per cent male / 39.3 per cent female in 2013). A boost in NCD detection brought about by the FHT approach may reasonably be assumed to be directly responsible for this increase.

Expansion of and improvements in NCD – diabetes mellitus and hypertension programmes – are correlated with implementation of the FHT approach. The number of patients screened for one or both diseases increased by 52 per cent from 2011 to early 2013 in the West Bank\(^{42}\). In the served population aged 40 and above, the prevalence rate of diabetes mellitus was registered as just a little over 15 per cent; for diabetes and hypertension combined it was 25 per cent. For all operational fields the prevalence rate was 11.4 per cent in 2012.\(^{43,44}\) These prevalence rates are roughly in line with what is expected from a self-selected population, indicating that the screening process is operating according to good practice.\(^{45}\)

The FHT approach seems to have been directly

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40 According to health department explanations
41 WHO Europe 2010.
43 Ibid
44 In UNRWA prevalence rates are calculated based on the population served (defined as the group in which at least one member of the family from a family registration card visits a health centre during the year).
45 This rate is comparable with European rates for the population of 40 years and above ranging from 5.7 per cent in Sweden to 12.6 per cent in Poland with an averaged 10.8 per cent for the whole of Europe.
accountable for the extraordinary swell in diabetes mellitus screening rates. However, as specific indicators started being measured in 2012 no substantive comparison with previous achievements is possible.

Part of the success of the NCD programme is due to the effective follow-up and tracking made possible by more systematic record keeping, availability of data and a comprehensive approach to treatment. This process started even before the FHT approach was launched but it seems that the FHT approach is supporting this. Diabetes patient-control is shown in UNRWA database by sheer increase in recruitment numbers. However, this evaluation team believes it is better measured by the defaulting rates, which show positive results even in the short time of FHT approach implementation:

5.3 per cent in 2011 (the first year this parameter was recorded) and 4.8 per cent in 2012. The decrease of half a percentage point seems to be a result of improvements in health education and follow-up provided by FHTs.

The overall effect of the FHT approach on referrals in general is not clear at this stage. It is possible that because of the expansion of and the improved NCD services the number of people diagnosed with diabetes mellitus or hypertension will increase, thus increasing the number of specialist referrals. It is possible that some people with these underlying diseases may have complications as result of chronicity of these diseases and may need more sophisticated care through referrals.

Quality of contact

According to data collected, a consultation averaging three minutes was evident in almost all of the FHT health centres. This evaluation team found senior medical officers’ remarkably determined to stick to the rule of 12 to 15 medical consultations per hour on average, leading to an averaged contact time of three to five minutes per patient. However, direct observation showed the following.

The contact time is sometimes unevenly allocated to patients. In some cases where an appointment system was installed the evaluation team could witness medical officers finishing their hourly workload in just half that time, which gave an indication of pervasive poor practice. As a recent study outlined, it is far from sure doctors are using the extra contact time to advocating lifestyle changes.

General curative health care delivered to patients did not seem to translate into an improvement of medical records – as shown by a systematic lack of anamnesis, exploration and previous medical and surgical history notes – both in those health centres where e-Health was installed and those where it was not. An attempt to streamline medical records seemed to have started at HQ but has not led to a result yet.

Daily medical consultation (rough) figures have to be taken with scepticism, as it is UNRWA policy not to discard anyone coming to a health centre without an appointment under an ‘open door’ approach, which means that the actual number of daily consultations might range from 67 to 148 in many health centres that adopted a 15-patient-per-hour workload. Only in one of the health centres visited an energetic senior medical officer set up an active strategy of discouraging newcomers with mild complaints to bypass the appointment system, by forcing them to endure much longer waiting times than those patients keeping their appointments.

A Department for International Development (DFID) study using cost per consultation as the measure demonstrated that UNRWA in 2008 was currently more efficient than the government in the West Bank. However, the study did not go

49 “PRM Report West Bank 20 October 2013”.
50 Ibid (p 9) “… FHT has significantly improved the daily life at the clinic, streamlining organization and reducing wait times. Less clear, is whether or not doctors are advocating for lifestyle changes during consultations… It may be that it will take years for any cost effectiveness to become apparent, or for the decrease in the NCD burden to be statistically significant”.
51 DFID Support to Palestine refugees through UNRWA, 2013
52 The Palestinian authority has an appalling shortage of funding to conduct the majority of its social services, health not being an exception.
into detail about effectiveness.

In most FHT health centres, we found that the total daily number of patients visited decreased. The satisfaction survey also showed that, a client attending an FHT health centre made two visits per month on average, but 1.8 visits when he/she attended a health centre with the non-FHT approach in the same time-period. Almost twice as many visits – 40.6 per cent – were for general medical services, which cannot be turned away, while 20.5 per cent were for maternal and child health.

When it comes to a meaningful encounter, the FHT approach is better than the non-FHT model. Most of the patient encounters now are meaningful with an average minimum contact time of three to five minutes. Not all encounters are with the doctors – some patients only need to meet with a nurse or with the pharmacist. These focused encounters avoid the need for patients to see several persons during a health centre visit and this is a great gain in efficiency. The client satisfaction survey agrees with this engagements quality overall.

**impact**

Impact measures changes in people’s health that are brought about by adopting the FHT approach, directly or indirectly, intended or unintended. The different levels of results and especially some of the indicators for higher level results were already discussed in the efficiency section.

The ultimate result (and impact) expected from introducing the FHT approach should be a positive change in the health status of the Palestine refugee population as a whole. This change could be proven by measuring specific population-based health indicators. The only health indicators assessing impact which were systematically recorded over the years are maternal mortality rate and infant mortality rate.

Both of which showed a dramatic decrease to the extent that UNRWA annual health reports ceased giving maternal mortality rate from 2011, and only raw numbers of maternal deaths were registered. Furthermore, infant mortality rates were duly registered and reported during 2009 and 2010 but were opted out to fill in a five-year period current trends and practices. Years 2009 and 2010 showed an infant mortality rate of 22.0‰ (lowest 19.0‰ Lebanon / highest 28.2‰ Syria). Although these figures are promising, there still is a long way to go until reaching equivalence with the developed countries.

However, directly attributing impact to the FHT approach is difficult for the following reasons:

(a) both the FHT and traditional approaches to service delivery systems have been functioning simultaneously; (b) there are multiple service providers serving Palestine refugees; (c) the FHT approach has not been in operation long enough for population-based impacts to be quantified and (d) a dedicated baseline for comparison between the two systems was not set up before initiating the FHT approach pilot.

There are challenges to accurately calculating the total number in the denominator population. The number of family files of registered refugees within the overall refugee population does not match with the number of refugees using services in most locations because of the way in which the Palestine refugee population is counted and served.

2010 was the last year when the Millennium Development Goals were reported, giving an Agency averaged maternal mortality ratio of 34.5
per 100,000 live births, ranging from 44.7 in Syria to 15.8 in West Bank. What is far more interesting is the comparison the report makes between infant mortality rate and maternal mortality rate among UNRWA fields and host countries (see table 7).

Table 7: Comparison of infant mortality rate and maternal mortality rate between UNRWA and host countries

The use of some proxy indicators for assessing health programme impact is prone to fault. Neither the percentage of deaths averted nor the rates of diabetes controlled are exempted from miscalculations unless UNRWA was fully responsible for the health of the totality of Palestine refugees, which it is not. Probably the most reliable parameter to assess FHT approach performance in tackling NCD might be the defaulting rates: 5.3 per cent in 2011 (the first year this parameter was recorded) and 4.8 per cent in 2012, which may be inferred is the result of the improvements in health education and follow-up.

The impact of the FHT approach on the non-communicable disease programme is quite remarkable. Screening, diagnosis and registration of patients with these two diseases – diabetes mellitus and hypertension – showed measurable improvements over the last two years, coinciding with the start of the FHT approach. The increased quality and quantity of services can be attributed largely to the comprehensive team approach to programme activities. The FHT approach is more proactive and therefore better suited to multidimensional, population-based services such as outreach, screening, tracking of patients and health education – practices which are the cornerstone of chronic-disease control and treatment programs. In every health centre using the FHT approach in the sample, the evaluators observed staff systematically handling non-communicable disease screening activities. Appropriate team members follow up every patient diagnosed with health education protocols (corroborated with satisfaction survey). Furthermore it is expected that over the long run, the FHT approach will decrease the need for sophisticated or hospital services for chronic diseases and related complications such as heart attacks and strokes, due to timely and improved detection and treatment.

Unintended impact

The only unintended impact that the evaluation team found was that the increase in FHT referrals might lead to an extra financial burden on Palestine refugee families. However, this corresponds with improved detection of illnesses.

UNRWA JFO is negotiating with the Jordanian Ministry of Health to maintain preference fares for Palestine refugees being referred to the second health care level to contain expenditure. If this fails, it might mean substantial increases in hospitalization costs for the refugees.

Palestine refugees seek health care where it is most affordable. However, the withdrawal of some services – breast and cervical cancer screening – and the reduction of others – gynaecology and obstetrics – are pushing women refugees to seek assistance in the private sector. Some host countries’ PHC networks – namely Jordan and Syria, and the occupied East Jerusalem – receive a steady inflow of Palestine refugees.

A lack of a fruitful interaction between UNRWA and host countries’ ministries of health has resulted in the absence of reliable information on the extent of this impact. With the exception of JFO – and maybe Syria Field Office (SFO) (which has started participating in inter-ministry debates on refugees’ assistance), neither the West Bank Field Office (WBFO), nor the Gaza Field Office (GFO), nor the Lebanon Field Office (LFO), have got a consistent and rewarding working relationship with the ministries of health on matters besides immunization and health education campaigns. However, this is not specifically related to the FHT approach. Communication needs to be very careful to
ensure that refugees do not link it to the FHT model, as this would negatively influence the FHTs sustainability.

**External stakeholders**

Overall, UNRWA is not very closely cooperating with regional host ministry of health services. This is partially because UNRWA is still perceived as it was historically, as the primary provider of services to Palestine refugees. However, this situation has changed and given the multi service provision nature of health systems a closer cooperation would pay dividends such as: (a) establishing the share of Palestinian refugees regularly using host ministry of health services, might give a better oversight on UNRWA actual health programme coverage; (b) drugs and tests prescribed at host health facilities will give UNRWA an account of actual ‘served’ / active population besides those refugees attending UNRWA health centres just for drugs or tests but not for assistance and follow-up; (c) NCD patients being followed both by host health authorities and UNRWA; (d) pregnant women receiving antenatal care both at host health and UNRWA facilities and therefore being eligible to be included in UNRWA antenatal care coverage statistics; (e) Boost FHT knowledge of the patient condition by sharing information on patient’s clinical tests and screening results; and (f) achieving more reliable Palestine refugee population health statistics.

Furthermore, other service providers perceive the FHT approach positively and are exploring partnering with UNRWA to benefit from the knowledge UNRWA gained from its use of the FHT approach. Specifically providers in the West Bank and Gaza are interested in developing collaborative partnerships with the UNRWA field offices. Examples include West Bank organizations, such as the Jazoor Foundation, which would like to develop joint training programmes in the use of indicators and training for family health clinical skills. And the Palestine Red Crescent Society, an active partner in Lebanon for hospital-based services, is open to exploring other options for collaboration under the FHT approach.

**sustainability**

Sustainability measures the extent to which the benefits of adopting the FHT approach will continue in the longer term. Assessing sustainability involves evaluating the extent to which relevant social, economic, political, institutional and other conditions are present and, based on that assessment, making projections about the UNRWA capacity to maintain, manage and ensure results in the future.

This evaluation team found no indication that using the FHT approach would eventually reduce costs, either in personnel, drugs, lab tests, or hospitalization. What it did find was a much-improved operational health care structure with far better perspectives for resource optimization and much improved value for money.

The expected savings in nursing staff under the FHT approach will eventually be outmatched by the increased cost of hiring new doctors to keep FHTs operational. Reductions in antimicrobial prescriptions will be neutralized by an increase in very expensive NCD drugs. Savings in unnecessary repeated lab tests will be counterbalanced by substantial increases in NCD tests due to an improved detection and follow-up.

What UNRWA may expect by furthering this approach is, and this is already a breakthrough achievement, being in the position to show donors that every penny allocated to the health care of Palestine refugees is optimally spent and brings value in terms of lives saved and longevity achieved.

**Budgetary**

The UNRWA budget has been growing in the past years at about five per cent due to the extraordinary effort put into fundraising. However, the Palestine refugee population is growing at three per cent and, with added inflation, the annual excess cost to UNRWA is

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54 UNRWA annual reports.
about four per cent above its budget. Since overall service delivery costs grow faster than UNRWA income, the Agency has to absorb these costs within the various programme budgets.

Budget distribution within UNRWA sectors remains constant, as does (largely) the distribution of different elements of the health budget – salaries, pharmaceutical supplies and rent. The opportunities for any redistribution between different fields are extremely limited. This budget structure does not provide much flexibility to the health department to use the allocated funding according to its internally determined needs, but rather dictates to the health department to deliver planned elements of the health programme within a constrained budget.

Although the health department had access to some additional funding for the implementation of the FHT approach, primarily for training and health facility improvements, its funding constraints are very real, and new initiatives need to be accommodated in the existing budget without incurring additional recurrent costs. This in turn implies that after the full implementation of the FHT approach there should not be any additional recurrent cost over and above the previous situation.

**Human resources**

The implementation of the FHT approach has created several opportunities to use existing resources more efficiently. One is to reorganize and rationalize the existing, and very significant, human resources. To fully ensure sustainability the planned reorganization should take into account the roles of all UNRWA health personnel. This review of roles and responsibilities of health staff is made easier as critical departments at headquarters, such as the front office, human resources department, planning department, and all field offices including the programme support offices are keen to help sustain the effort. Field directors have shown commitment to making the resources available to ensure sustainability in the three field offices. The headquarters human resources department and the field offices have to help rationalize the human resources and the particular skill set needed for the future. Given the commitment, it will only require the health department to reach out and increase their understanding of what is required to sustain the FHT approach in a steady state.

The staff have both a professional and operational interest in maintaining the FHT approach. The majority of staff working in the FHT centres assessed, thought that their work environment was better, the organization of health centres had improved, and that they had more knowledge of their patients. The difference between staff assessment of their work environment in the FHT approach and in the traditional model was 19 percentage points (Table 8). Given this level of staff interest there should not be any challenges to sustainability from the staff.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Family health team (per cent)</th>
<th>Traditional health centre (per cent)</th>
<th>Family health team and e-Health (per cent)</th>
<th>Traditional health centre with e-Health (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better work environment</td>
<td>79</td>
<td>60.6</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Better arrangements for service delivery</td>
<td>80</td>
<td>70</td>
<td>n.a</td>
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<tr>
<td>More knowledge about their patients</td>
<td>48</td>
<td>33</td>
<td>56.5</td>
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<td>More knowledge of patients’ medical history</td>
<td>61.5</td>
<td>53.5</td>
<td>61.5</td>
<td>n.a</td>
</tr>
</tbody>
</table>

*Table 8: Staff response to FHT approach*

While staff morale in the health sector remains better than in other sectors of UNRWA service delivery, it is lower than it was in the past. This is partly due to the working conditions but, also because some of the staff feel undervalued. They feel that the professional opportunities and financial incentives are not attractive enough to encourage staff to stay with UNRWA.

Of the surveyed FHT staff 60 per cent indicated that they had participated in the change to FHT model and 45.5 per cent had been consulted.
when the change was planned. However, the staff had hoped to have more involvement in the planning process. And, given the financial constraints at UNRWA and its inability to offer higher salaries, it should look into offering non-monetary incentives such as increased involvement in planning and decision making opportunities to its qualified staff. More participation in programme planning, structured training and real time supervisory support would improve staff satisfaction and morale, and make them feel like they are being invested in for the long-term.

After the training needs critical for change have been addressed, it is estimated that the training requirements for the FHT approach will be similar to the ones for the traditional approach. However, there is a challenge as currently UNRWA is the leading Agency in the region with regards to the FHT model and this will in turn mean that other agencies would like to hire staff previously trained at UNRWA.

External environment

Camp committees and Palestine refugees are positive about the FHT approach. At the moment there is no evidence that they would reject it, or pose a threat to the sustainability of the model. Where it is already implemented, the client satisfaction survey shows high levels of satisfaction so no challenges to sustainability are anticipated from clients after universal implementation.

The FHT approach has created additional opportunities for partnering with other organizations, such as NGOs or host government ministries of health on specific elements. Currently these opportunities are not followed up systematically, due to resource constraints at the management level and the interpretations of the mandate within UNRWA. However, partnering will further ensure the sustainability of the approach.

As the FHT approach emphasises the value of generalist medical doctors, a long-term option is to expand the partnership with various medical schools so as to emphasize the role of generalist training. UNRWA could then use and recruit recent graduates with some generalist training background to staff FHT posts. Since most medical doctors are job mobile, a new supply of doctors recently graduated holding a positive view on general practice would become available. UNRWA can then fulfil these new generalist doctors’ desires for experience, while profiting from the improvements in medical service provision, a win-win situation.

Support systems

The e-Health system is the major support system for, and integral component of, the FHT approach. It improves record keeping, thus decreasing administrative burdens for appointments; streamlining pharmacy functions; rationalizing antimicrobial prescriptions; increasing analytical capabilities such as cohort analysis for chronic diseases; and helping to monitor hospital referrals.

The existing e-Health system is extremely fragile and unstable. The problems seem to be due to its unclear ownership and other internal implementation challenges – it is under-resourced and is implemented in a piecemeal fashion. Some of the assumptions for the e-Health system did not hold true. Interconnectivity is more expensive than anticipated and electricity in some locations is unreliable. Key staff with institutional knowledge did not remain with the project leading to a situation where the software being used is not standardized. Finally, the need for trained and back-up IT support was underestimated. The e-Health system’s current governance and operational problems can be a significant stumbling block to the sustainability of the FHT approach and can jeopardize the whole success of the FHT approach if not addressed appropriately.

55 Satisfaction survey 2013.
**annex 1 - list of persons met**

<table>
<thead>
<tr>
<th>Name, Title, Affiliation, Field, Organization</th>
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</thead>
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<tr>
<td>Abeer El Nador, Growth Monitoring / Expanded Programme of Immunization Nurse, Beit Haneen Health Centre, GFO, UNRWA</td>
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<td>Ahlam Yousef Sehwail, Practical Nurse Child Care / Midwife, Beit Haneen Health Centre, GFO, UNRWA</td>
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<td>Nadira Khalil Qunbar</td>
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<td>Randa Rantissi</td>
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<td>Sameh Jarallah</td>
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<td>Yahi Yousef Hassan</td>
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annex 2 - findings derived from the statistical analysis of staff and client surveys

Introduction

The quantitative analysis of the survey data was done using the Statistical Package for the Social Sciences (SPSS 17); the following statistical tools were used: (a) frequencies and percentiles, (b) comparison of means and (c) multiple linear regressions (Cause Effect Analysis). The main purpose of the quantitative data analysis is to understand the impact of the Family Health Team Approach on the staff and users of UNRWA health centers. Data can be disaggregated by gender and age. A variety of influencing factors were controlled for in the analysis, such as e-Health, education level, and age, health service required and living place.

One issue that should be mentioned is that the selection of the health centers was biased towards the health centers which were easiest to study, in terms of the medical officers’ willingness, the community and other factors that related to the facility and space.

Sample Health Centers

The evaluation team surveyed health centers in which the FHT approach was adopted and compared them to health centers using the traditional approach. The two types of health center samples were divided into two groups in which e-Health was used or not used (table 1. shows the distribution).

Questionnaire

The data will be collected with the help of two short questionnaires; the user’s satisfaction questionnaire and staff’s satisfaction questionnaire these contain sections related to (a) demographic data regarding the respondents and (b) questions directly relating to the objectives of the surveys. The demographic data will be used to understand the characteristics of the respondents. The questionnaires are available in Annex 3 and Annex 4.

Data Collection

The two surveys were conducted by using two different methods; exit interviews and self- administrated questionnaires. The exit interview method was used to collect data from the users of the health centers who received at least one service. The survey was conducted by the evaluation team and study participants were selected randomly. The same sampling methodology was applied to all the fields; to ensure consistency of approach. The self-administrated questionnaire was used to collect data from the health center’s staff. The study participants were all the staff who reported for work during the period of the evaluation.

Statistical Data Description

The evaluation team has conducted 378 questionnaires for the users of UNRWA health centers in four fields: Lebanon, Jordan, West Bank and Gaza Strip. The team retrieved 353 questionnaires from the staff of the same health centers. Giving both surveys an approximate 95% confidence level +/- 5%.

Client Satisfaction Survey
The statistical analysis of the health center users showed that 57.7% of health center users were females. Furthermore, 29.6% of the users were less than 15 years old, 12.2% were between 15 and 24 years old, 51.3% of the users were between 25 and 65 years old and 6.9% of the users were older than 65. Of the users, 54.8% had a primary education or less, 28.3% of users obtained a secondary education and 16.9% of users obtained a post-secondary degree. Additionally, 25.9% of the health center users sampled were residents of the Palestine refugee camps. 40.6% of the sample users visited the general clinic, 24.3% of the sample users visited the NCD clinic, 8.7% of the sample users visited the growth monitoring and immunization clinic, 7.7% of the sample users visited the dentist, 7.4% visited the midwife, 2.6% visited more than one clinic and 8.7% of sample users visited the clinic for different reasons; collecting medicine, taking a referral to hospital, visiting specialised clinic etc. 34.9% of the sample users visited the health centers with a companion and 5.6% of the sample visited the health centers with one or members of their households.

Staff Satisfaction Survey

The statistical analysis showed that 28.9% of staff were nurses 17.6% were doctors, 8.8% were clerks, 8.5% were lab technicians, 8.2% were doorkkeepers, 7.6% were pharmacists, 5.4% were midwives, 8.5% of the sample were X-Ray technicians, physiotherapists or clerk assistants and 6.5% of the sample didn’t declare their role. Males constituted 38% of the sample. 80.7% of the sample were fixed staff who on average had worked with UNRWA for around 12 years while 19.3% of the sample were working under temporary contracts with average working time of 4.4 years.

The analysis of health centers that adopted the family health team approach showed that 45.4% of the staff had been consulted about the prioritization of needs in their health center. Around 60% of them participated in activities related to the planning of the family health team approach in their health center. Of the staff who did not participate in the planning activities 13.2% were not aware of them, while 18.9% were not invited, but would have been interested. 2.5% were not invited, but they would not have been interested, and 5.4% were invited, but were busy.

Effectiveness

To what extent has the new approach achieved the planned results?

The health centers which did not adopt the Family Health Team Approach nor e-Health were used as a baseline reference for comparison. The statistical analysis showed that the users’ satisfaction with the health centers which adopted the family health team approach and e-health (together or separately), with the health service that they got was approximately 77%; thus they were more satisfied by 7%. Furthermore, the satisfaction level with the waiting time in the health centers which adopted the family health team approach and e-health was almost 67.5%, which was higher by 17.5% than the satisfaction with the centres which adopted neither approach and while the health centers that adopted the family health team approach alone was 64.4%; therefore about 14.4% higher than non- adoptive centres.

The analysis showed that the average number of users’ visits to health centers was about 2 for the health centers that adopted the family health team approach and e-Health, 1.3 for the health centers that adopted just the e-Health, 1.84 for the centers that adopted just the family health team approach and 1.82 for the health centers which neither have a family health team approach nor e-Health.

Staff satisfaction with the work environment in the health centers that adopted the family health team approach was around 79%, which was higher by 18.4% than the health centers which not adopt the family health team approach. As well as this, the staff recorded an 80% satisfaction rating with the arrangements related to health service delivery, higher than the traditional centres by around 10%.
What is the effect of the new approach on the quality of services provided?

The data analysis showed that the level of medical officers’ knowledge about their patient was 56.53% in the health centers that adopted both the family health team approach and e-health; which is 21.65% higher than the health centers that are still using the traditional approach with no e-Health. The level of knowledge was around 48% in the centers that adopted either e-Health or the family health team approach, higher by 13.3% than the health centers with no e-Health or family health team approach.

Additionally, the level of knowledge of the users’ medical history was approximately 61.5% at the health centers that adopted the family health team approach and e-Health together or separately; higher by around 8.3% than the centres which did not adopt either approach. Furthermore, the users’ level of agreement that they received guidelines or advice related to their health from the medical officer, or other staff, in health centers that adopted the e-Health was around 77.2% while it was about 74.8% in the health centers that adopted the family health team approach and the e-Health together. There was no difference between the health centers that adopted just the family health team approach and the health centers that adopted the traditional approach with no e-Health.

The cause-effect analysis showed the family health team approach improved the level of users’ satisfaction by around 7%. Furthermore, it increased the users’ level of satisfaction with the waiting time by around 11%. It improved the level of medical officers’ knowledge about their patients by 12.4% and improved the level of medical officers’ knowledge about their patients’ medical history by around 6%. It increased the level of users’ satisfaction with the behavior of the health center’s staff by 3.8%. However, it didn’t affect the level of advice and guidelines that the staff gave to the health center’s users.

The cause-effect analysis demonstrated that there were other factors which effected the results such as the age of patients, the ratio of temporary staff to fixed staff in the health center, the average years working in UNRWA, the location of the health center (inside the camp or outside) and the station type.

The users’ satisfaction with the service that they got it in the health center

Being male decreased the satisfaction with health centre service by 4.9%. Every additional year the health centres staff (as an average) had spent working in UNRWA decreased the satisfaction of users by around 1.6%. The health center being in the camp increased the level of user satisfaction by 10.5%.

The users’ satisfaction with the waiting time

Being a youth between 15-24 years old decreased the level of satisfaction with waiting times by 9.6%. An increase in the ratio of temporary staff to fixed staff of 1% decreased the satisfaction level with waiting time by 0.37%.

The level of the user agreement with the medical officers’ knowledge about them

Every additional year the health centres staff (as an average) had spent working in UNRWA decreased the level of knowledge of patients by around 2%. An increase in the ratio of temporary staff to fixed staff of 1% increased the level of knowledge by 0.58%. Each monthly additional visit of users of the health center increased the level of knowledge by 1.14%. Also, the health center being inside the camp increased the level of knowledge by 11.9%.

The level of the user agreement with the medical officers’ knowledge about their medical history

An increase in the ratio of temporary staff to fixed staff by 1% increased the level of the users’ medical history knowledge by 0.36%. Being a child (0-14 years old) decreased the level of the users’ medical history knowledge by 11.3%. Being one of the NCD patients increased the users’ medical history knowledge by 10.9% while being one of the growth monitoring and immunization patients increased
the users’ medical history knowledge by 18%. Being treated at one of the specialized clinics inside the health centers increased the users’ medical history knowledge by around 12%.

**The users’ satisfaction with the staff’s behavior with them**

Being a male decreased the level of satisfaction with the behavior of the staff by 3.7%. Being a youth (15-24 years old) decreased the level of satisfaction with the behavior of the staff by 7.7%. Users that had obtained a degree above secondary school had on average a 5% decrease in satisfaction. Treatment at one of the specialized clinics inside the health center, decreased the level of satisfaction by 6%. Lastly, the health center being in the camp increased the user satisfaction with the staff behavior by 13.8%.

**What is the role of the capacity development packages in improving services?**

The statistical analysis of data showed that the average number of training courses (related to their role in the health centre) that the staff had attended in the last two years was higher in the health centers that adopted the e-Health than those which had not adopted it; the average number of training courses was 1.96 for the health centers that adopted just the e-Health 1.35 for the health centers that adopted the family health team approach and e-Health, 0.80 for the centers that adopted just the family health team approach and 0.62 for the health centers that still use the traditional approach.

Moreover, the cause-effect analysis showed that increasing the average number of training courses per-health center would increase the level of users’ satisfaction with the service they received by approximately 9.5%. Furthermore, it increased the level of users’ satisfaction with the waiting time by around 8.9%. As well as, increasing the level of medical officers’ knowledge about their patients by 14.4%. Also, it increased the level of medical officers’ knowledge about the patient medical history by 11.4%. Also it increased the level of users’ satisfaction with the behavior of health center’s staff by 8.2%. On the other hand, it didn’t improve the level of advice and guideline that the staff gave to the health center’s users.

**To what extent did the e-Health system help in the implementation of the Family Health Team approach?**

The cause-effect analysis showed that e-Health didn’t have any effect on the level of users’ satisfaction with waiting time or the level of knowledge of the medical officers had about their patients and the patients medical history. Moreover, it has a negative effect on the level of users’ satisfaction with the service in the health center, adopting e-Health will decrease the satisfaction around 7.7%.

**Relevance**

71.4% of the users of the health centers that have adopted the family health team approach were not aware of the family health team approach. 66.2% of respondents declared that they and their households were assigned to one medical officer. 57.7% of respondents agree that the new arrangement was good, while 17.1% disagreed and 25.2% didn’t know.
annex 3 - client satisfaction survey

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<tr>
<td>2. Companion</td>
<td></td>
</tr>
<tr>
<td>3. Family</td>
<td></td>
</tr>
<tr>
<td>p2. Your age is between</td>
<td></td>
</tr>
<tr>
<td>1. Less than 15</td>
<td></td>
</tr>
<tr>
<td>2. 15-24</td>
<td></td>
</tr>
<tr>
<td>3. 25-65</td>
<td></td>
</tr>
<tr>
<td>4. Above 65</td>
<td></td>
</tr>
<tr>
<td>p3. Sex</td>
<td></td>
</tr>
<tr>
<td>1. Male</td>
<td></td>
</tr>
<tr>
<td>2. Female</td>
<td></td>
</tr>
<tr>
<td>p4. Do you live inside the camp</td>
<td></td>
</tr>
<tr>
<td>1. Yes</td>
<td></td>
</tr>
<tr>
<td>2. No</td>
<td></td>
</tr>
<tr>
<td>p5. Patient age</td>
<td></td>
</tr>
<tr>
<td>1. Less than 15</td>
<td></td>
</tr>
<tr>
<td>2. 15-24</td>
<td></td>
</tr>
<tr>
<td>3. 25-65</td>
<td></td>
</tr>
<tr>
<td>4. Above 65</td>
<td></td>
</tr>
<tr>
<td>p6. Patient sex</td>
<td></td>
</tr>
<tr>
<td>1. Male</td>
<td></td>
</tr>
<tr>
<td>2. Female</td>
<td></td>
</tr>
<tr>
<td>p7. Do you have a ration card?</td>
<td></td>
</tr>
<tr>
<td>1. Yes</td>
<td></td>
</tr>
<tr>
<td>2. No</td>
<td></td>
</tr>
<tr>
<td>p8. Education level</td>
<td></td>
</tr>
<tr>
<td>1. Primary</td>
<td></td>
</tr>
<tr>
<td>2. Secondary</td>
<td></td>
</tr>
<tr>
<td>3. Higher the secondary</td>
<td></td>
</tr>
<tr>
<td>p9. Purpose to visit the health center</td>
<td></td>
</tr>
<tr>
<td>1. General disease</td>
<td></td>
</tr>
<tr>
<td>2. NCD</td>
<td></td>
</tr>
<tr>
<td>3. Growth monitoring and immunization</td>
<td></td>
</tr>
<tr>
<td>4. Dentist</td>
<td></td>
</tr>
<tr>
<td>5. Midwife</td>
<td></td>
</tr>
<tr>
<td>6. More than one clinic</td>
<td></td>
</tr>
<tr>
<td>7. Other</td>
<td></td>
</tr>
<tr>
<td>p10. How many times have you visited the health center last month?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### UNRWA health clinic services

Please indicate to what degree you agree to the following statements. Available options are (i) "strongly disagree", (ii) "disagree", (iii) "neutral", (iv) "agree", (v) "strongly agree" and (vi) if there is no answer please keep it empty.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>q1. I am satisfied with the service that I got it in the health center.</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
</tr>
<tr>
<td>q2. I prefer going to UNRWA health centers rather than going to any other clinics</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
</tr>
<tr>
<td>q3. I am satisfied with the waiting time that I spent in the waiting room.</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
</tr>
<tr>
<td>q4. The medical officer knows me and my family very well.</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
</tr>
<tr>
<td>q5. The medical officer knows my medical history very well.</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
</tr>
<tr>
<td>q6. I received a guideline or advice related to my health by the medical officer or any other staff.</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
</tr>
<tr>
<td>q7. The staff treated me nicely</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
<td>![Rating Icon]</td>
</tr>
</tbody>
</table>

### Health centers that adopt the family health team approach

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>I don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>q8. Are you aware of the family health team/new arrangement in the health center?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q9. Currently, your family and you assigned to one doctor.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q10. From your point of view, is the new arrangement good?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Staff Questionnaire – Family Health Team Approach Evaluation

### Questionnaire Identification

<table>
<thead>
<tr>
<th>g1. Questionnaire serial number</th>
<th>g2. Date (dd/mm/yyyy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>g3. The clinic is inside camp/outside the camp</td>
<td></td>
</tr>
<tr>
<td>g4. Clinic name</td>
<td>g5. Field office</td>
</tr>
</tbody>
</table>

### General Info

| p1. My role in the health center is (optional) | 1. Doctor  
2. Nurse  
3. Pharmacist  
4. Midwife  
5. Clerk  
6. Doorkeeper  
7. Laboratory technician  
8. Other |
|-----------------------------------------------|--------------------------------------------------|
| p2. Sex | 1. Male  
2. Female |
| p3. I am currently working at a job in the same position for… | Month |
| p5. My contract with UNRWA is | 1. Fixed-term  
2. Temporary |
| p6. Did you get a training course related to your role in the health center last 2 years? | 1. Yes  
2. No |
| p7. What is the number of training courses that you attend related to your role in the health center last 2 years | ………………… |

### UNRWA Health Clinic Services

Please indicate to what degree you agree to the following statements. Available options are (i) “strongly disagree”, (ii) “disagree”, (iii) “neutral”, (iv) “agree”, (v) “strongly agree” and (vi) if there is no answer please keep it empty.

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>disagree</th>
<th>neutral</th>
<th>agree</th>
<th>strongly agree</th>
<th>don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>q1. I am satisfied with the service that we deliver in the health center.</td>
<td>😞</td>
<td>😞</td>
<td>😞</td>
<td>😞</td>
<td>😞</td>
</tr>
<tr>
<td>q2. I am satisfied about the work environment in the health center.</td>
<td>😞</td>
<td>😞</td>
<td>😞</td>
<td>😞</td>
<td>😞</td>
</tr>
</tbody>
</table>
### Evaluation of the Family Health Team Approach

<table>
<thead>
<tr>
<th>Question</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>q3. I am satisfied with the arrangement related to health service delivery inside the health center.</td>
<td><img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /></td>
</tr>
<tr>
<td>q4. I understand my role in the health center.</td>
<td><img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /></td>
</tr>
<tr>
<td>q5. I am satisfied with my role in the health center.</td>
<td><img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /></td>
</tr>
<tr>
<td>q6. I am able to positively influence the work in the health center.</td>
<td><img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /> <img src="Rating" alt="Rating" /></td>
</tr>
</tbody>
</table>

**Comments:**

**Clinics that adopt the family health team approach**

<table>
<thead>
<tr>
<th>Question</th>
<th>Option 1</th>
<th>Option 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>q7. Have you been consulted in the prioritization of needs in the health center?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>q8. Did you participate in any activities related to the planning of family health team approach activities in the health center?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>q9. Why didn’t you participate in any activities related to the planning of family health team approach activities in the health center?</td>
<td>I was not aware</td>
<td>I was not invited but I would have been interested</td>
</tr>
</tbody>
</table>
annex 5 - bibliography

Priority Documents

A. Khader et al. 2012. Cohort Monitoring of Persons with Diabetes Mellitus in a Primary Health care Clinic for Palestine Refugees in Jordan. Tropical Medicine and International Health. DOI:10.1111/j.1365-3156.2012.03097.x


Additional Documents


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and Family Planning Acceptors Remaining. Amman.


Amman.


UNRWA. 2012. FHT Total Cost Final Estimate. Amman.


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UNRWA. 2013. Cumulative Cohort Outcomes of Patients with Diabetes Mellitus (Patients Ever Registered up to 31 December 2012). Amman.

UNRWA. 2013. Cumulative Cohort Outcomes of Patients with Hypertension Patients Ever Registered Up to December 2012 (since October 2012). Amman.

UNRWA. 2013. Cumulative Cohort Registration Cohort of Patients with Diabetes Mellitus (Patients Ever Registered up to 31 December 2012). Amman.


UNRWA. 2013. Family Health Approach. Infrastructure and Camp Improvement Programme – Outlines
UNRWA. 2013. Quarterly Cohort Registration of Patients with Diabetes Mellitus (October to December 2012). Amman.


