Report on Secondary and Tertiary Health Care

January – June 2013

Executive Summary

Overview

UNHCR's public health strategy for refugees in Lebanon is to encourage and prioritise primary health care, so as to decrease the reliance on secondary and tertiary health care services.

UNHCR works to promote and support refugee access to a network of primary health care centres, which serve as the entry point to the national health care system at primary level.

UNHCR supports secondary and tertiary health care on a needs-only basis.

In order to inform programme design and adjustments in relation to secondary *and* tertiary health care referrals, UNHCR undertook a review of data provided by its implementing partners, the International Medical Corp (IMC), the Makhzoumi Foundation (MF) and Caritas Lebanese Migrant Centre (CLMC) for the period January – June 2013.

Summary of Selected Findings

- A total of 18,365 cases have been referred for secondary and tertiary health care for the period January – June 2013 (i.e. 3.7% of the registered refugee population as of end of June 2013)
- UNHCR partners referred refugees to 62 hospitals between January and June; however, 92% of these referrals were in 15 hospitals only
- Approximately 70% of all refugees referred were female – with obstetric care being the primary reason
- Close to 40% of all referrals were for obstetric and gynaecological care
- Among obstetric and gynaecologic referrals, 56% were for vaginal deliveries and 31% for caesarean sections
- Obstetric, gastrointestinal, trauma and respiratory cases represent together 57% of the cases and 51% of hospital costs – by comparison, surgery, neonatal/congenital condition and cardiovascular diseases only represent 13% of all cases but 23.3% of the total hospital costs
- The average hospital cost of a referral was USD 529.

Recommendations for UNHCR

1. For reasons of efficiency, UNHCR and partners shall endeavour to review and limit the number of referral hospitals in each region
2. UNHCR should continue prioritising primary health care and, for secondary/tertiary health care, referrals for emergency lifesaving interventions (including emergency obstetrical care).
3. UNHCR needs to develop a fully functional database for partners to record information related to patient care and referrals.
4. Given the high cost of neo-natal care, a further enquiry on the quality and costs of services in the leading hospitals in each region needs to be undertaken.
5. Follow-up needed to fully investigate the reasons for the high rate of caesarean sections.

Lebanese Republic
Ministry of Public Health

Caritas Lebanon
Migrants Center

International Medical Corps

مؤسسة مخزومي
Makhzoumi Foundation

UNHCR
The UN Refugee Agency

Report on Secondary and Tertiary Health Care

Background

UNHCR's public health strategy for refugees in Lebanon is to encourage and prioritise primary health care, so as to decrease the reliance on secondary and tertiary health care services.

UNHCR is facilitating, monitoring and advocating for refugee access to existing services and structures. These include Ministry of Public Health (MoPH) accredited health units and Ministry of Social Affairs (MoSA)-supported dispensaries.

The vast majority of primary health centres (PHCs) are supported by MoPH, MoSA as well as local and international NGOs, charities and religious groups, and politically-affiliated foundations.

Due to the highly privatised nature of the Lebanese health care system, health care is very expensive and UNHCR is unable to meet the full coverage needs. Referral (i.e. secondary and tertiary) care is particularly expensive in Lebanon.

For primary health care, UNHCR aims to provide a standard package of services to refugees, at a level similar to what is received by Lebanese citizens in the public health care system. The rate covered by UNHCR varies based upon the profile of the refugees, taking account vulnerability and specific needs (see inset below). Registration with UNHCR is a general requirement for refugees to access UNHCR health care assistance. Expedited registration is provided for unregistered refugees or refugees pending registration who are in need of urgent health care services.

Primary Health Care (PHC)

Access to public health care in Lebanon is based upon co-sharing. Lebanese pay LP 10,000 - 15,000 per consultation. Refugees with the help of UNHCR contribute a nominal fee of between LP 3,000 to 5,000 (USD 2 to 3.3) per consultation.

For children <5 years, seniors ≥60 years, and pregnant women, UNHCR covers 85% of diagnostic costs and 100% of the cost of medicine. For refugees between 5 and 59 years of age, UNHCR only covers the cost of medicine (not the diagnostic costs).

Implementing partners provide mobile health services to populations in informal settlements, especially in the Bekaa Valley.

Secondary and Tertiary Health Care (Referral Care)

Estimated cost <USD 1,500: UNHCR does not have to pre-approve this service. UNHCR covers 75% of costs and the refugees cover the remaining 25%. For the extremely vulnerable, UNHCR will cover 90% of costs. For survivors of gender-based violence and torture, UNHCR covers 100% of the costs. All emergency obstetrical care, including caesarean sections, is also covered at 100% by UNHCR.

Estimated cost ≥USD 1,500: These require review by UNHCR or referral to an exceptional care committee (ECC). Other cases below the financial limit may be referred to UNHCR if deemed exceptional, for example cases that have presented outside the pre-approved hospital network. Emergency UNHCR approval is strictly for immediate life or limb-saving cases. ECC approval is needed for non-emergency cases in need of life-prolonging expensive tertiary health care. If approved, UNHCR covers 75% of the costs. For the extremely vulnerable refugees, UNHCR covers 90% of the costs. For survivors of gender-based violence and torture, 100% of costs are covered.

Findings

- There were 18,478 referrals to secondary and tertiary health care during the period 1 January 2013 to 30 June 2013
- Peak referrals were observed between March and April 2013 **(Figure 1)**
  - o 69.7% of all referrals were female
  - o 58.8% were between the ages of 18 to 59 years
  - o 23.5% children younger than 5 years **(Figure 2)**
  - o Median age (overall) is 23 years (range 0 to 101 years) **(Figure 3)**
  - o Median age among females is 24 years (range 0 to 98) (correlates with high proportion of referrals related to pregnancy; median age for males, 8 years (range 0 to 101) **(Figure 3)**
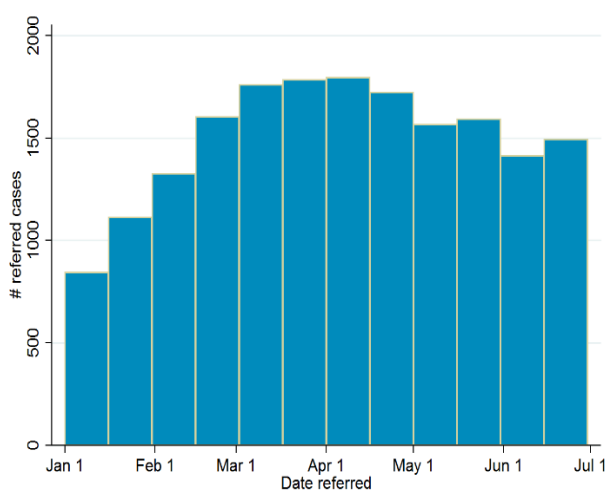

Figure 1 – Referrals for secondary and tertiary Health care, Lebanon, January – June 2013
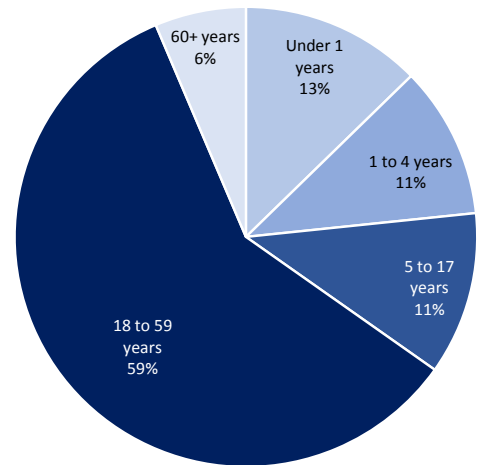

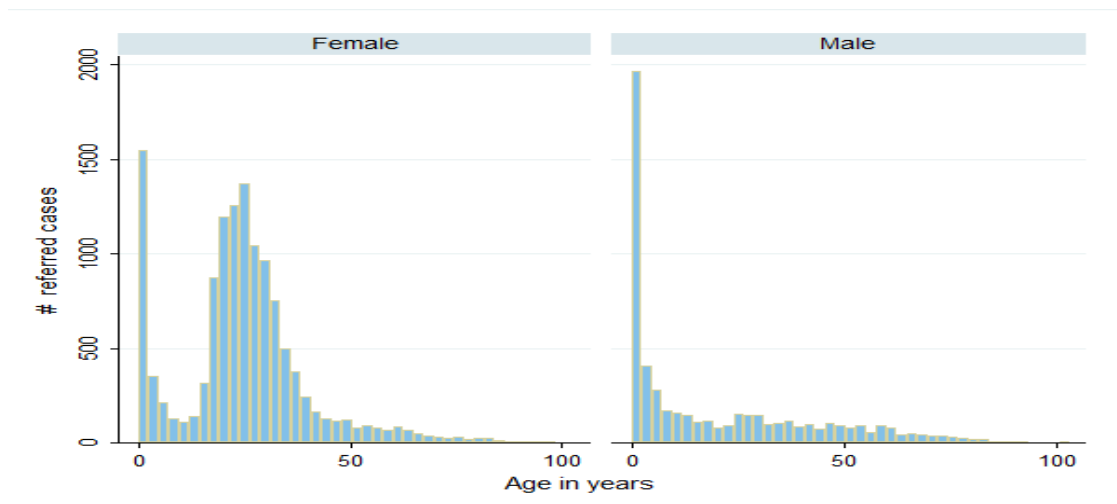**Figure 2 –** Distribution of cases by age category

Figure 3 – Age distribution of referral cases by gender, Lebanon, January – June 2013

Report on Secondary and Tertiary Health Care

- Referrals by organization: IMC 72.9%, MF 23.5% and CLMC 3.6% **(Figure 4)**
- Referrals by region: Bekaa (40.5%), North (25.4%), Beirut and Mt Lebanon (23.5%) and South (10.3%) **(Figure 4)**
- Referrals in Beirut and Mt Lebanon declining since May, however numbers are stable elsewhere **(Figure 5)**
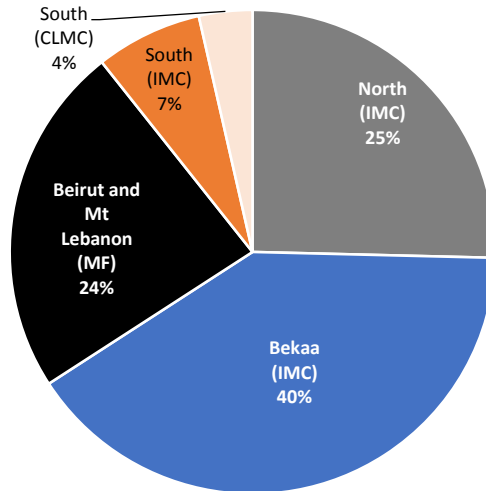

Figure 4 – Referrals by region of country and partner organization, Lebanon, January – June 2013
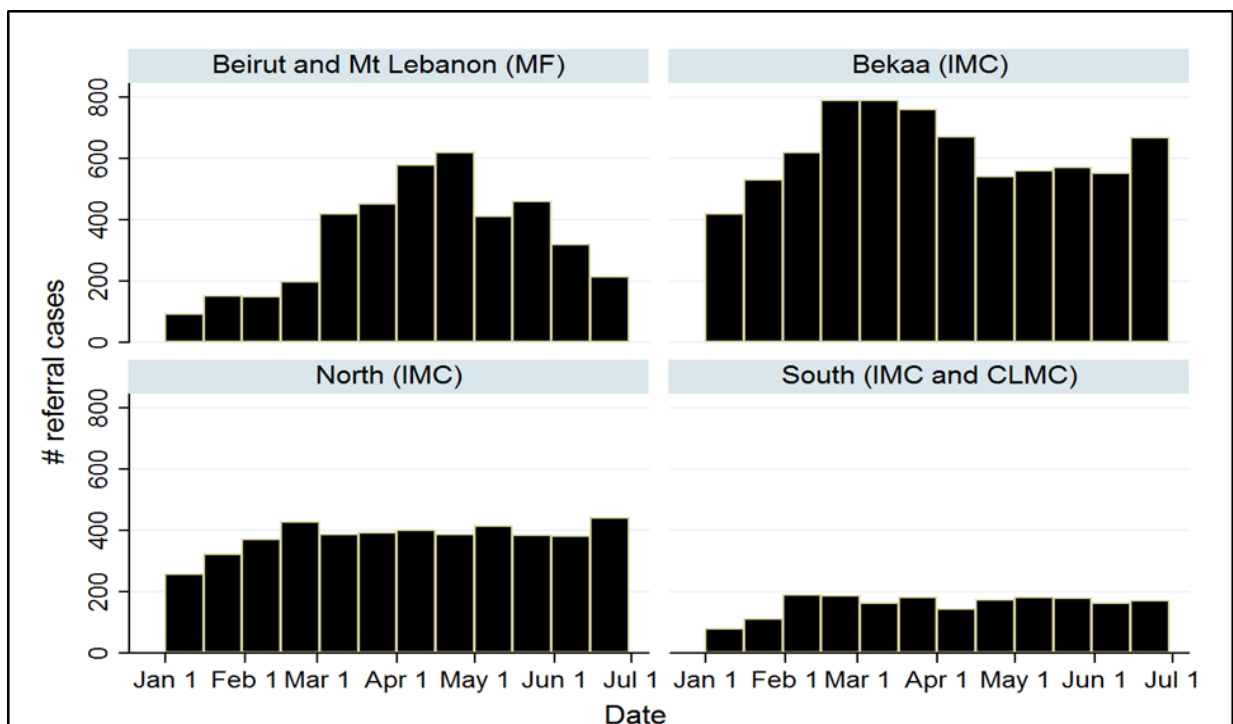

Figure 5 – Trends of referrals for secondary and tertiary care by region and agency, Lebanon, Jan-Jun 2013. A decline in cases in recent months is observed in Beirut and Mt Lebanon.

Report on Secondary and Tertiary Health Care

- While most disease diagnostic information was available for 18,365 (99.4%) of referrals, information for 2,945 (15.9%) non-obstetric referrals was entered using non-specific terminology such as "consultation", "emergency" "inpatient" and therefore further classification could not be performed.
- Top 3 reasons for referrals were: obstetric conditions 6,707 (36.5%), gastrointestinal conditions 1,556 (8.5%), and trauma and other injuries 1,294 (7.1%) **(Figure 6)**

Number of referred cases

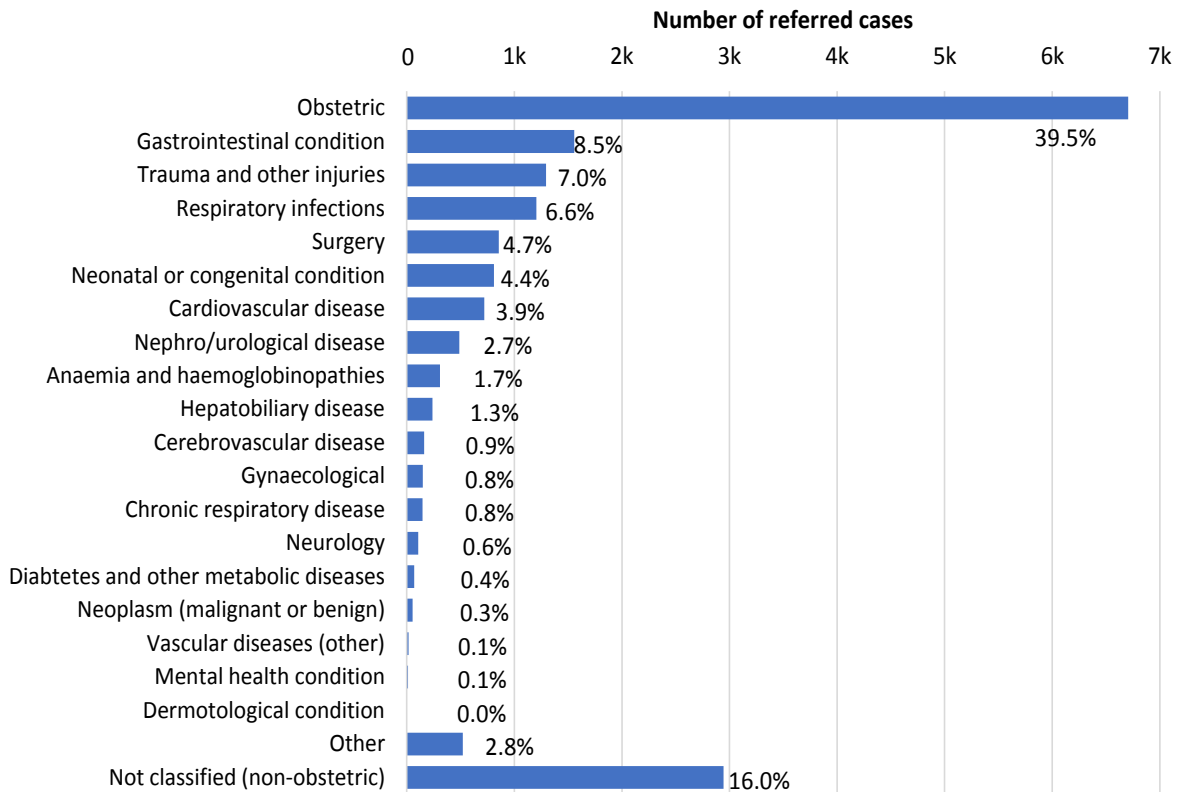| Category	Value
Obstetric	39.5%
Gastrointestinal condition	8.5%
Trauma and other injuries	7.0%
Respiratory infections	6.6%
Surgery	4.7%
Neonatal or congenital condition	4.4%
Cardiovascular disease	3.9%
Nephro/urological disease	2.7%
Anaemia and haemoglobinopathies	1.7%
Hepatobiliary disease	1.3%
Cerebrovascular disease	0.9%
Gynaecological	0.8%
Chronic respiratory disease	0.8%
Neurology	0.6%
Diabtetes and other metabolic diseases	0.4%
Neoplasm (malignant or benign)	0.3%
Vascular diseases (other)	0.1%
Mental health condition	0.1%
Dermotological condition	0.0%
Other	2.8%
Not classified (non-obstetric)	16.0%

Figure 6 – Distribution of referral cases by diagnosis category, Lebanon, January – July 2013. More than a third were for pregnancy and pregnancy-related care (n=18365).

- Among obstetric-related cases, 3,771 (56.2%) were referred for normal delivery, 2,048 (30.5%) caesarean section, 418 (6.2%) miscarriages and other early pregnancy complications, 103 (1.5%) antepartum and postpartum haemorrhage, and 366 (5.5%) for other pregnancy related conditions **(Figure 7)**
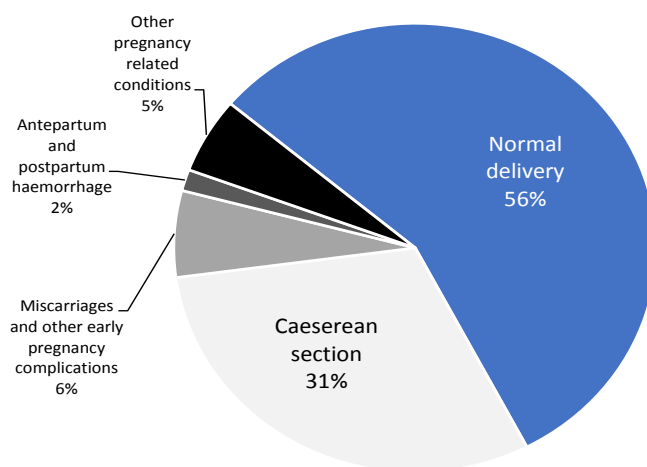
Figure 7 – Obstetric referral, January –July 2013

Report on Secondary and Tertiary Health Care

- Between January and June, at least 62 hospitals received referral patients. The top 22 hospitals are listed in **Appendix Table 2**. The top 5 hospitals were Taanayel General Hospital 3226 (17.5%), Rafic Hariri Govermental Hospital 3082 (16.7%), Tripoli Governmental Hospital 1833 (10.0%), Notre Dame de la Paix 1582 (8.6%) and Chtoura Hospital 960 (5.2%) **(Figure 8)**
- The proportion of referrals by diagnosis category for these hospitals is indicated in **Appendix Table 3**.
- The estimated mean hospital cost for each referral was USD 529 (range 0 to 36,679) **(Figure 9)**
- Among the 15 most utilised hospitals, the estimated mean cost was highest in Lebanese Italian Hospital (USD 753) followed by Dar Al Chifaa (747) and Rafic Hariri (710) **(Table 1)**
- The highest proportion of hospital costs were for obstetric conditions (34.4%) and neonatal or congenital conditions (10.0%).**(Figure 10)**
- The median length of stay (LOS) for the hospitalised was 1 day (range 0 to 92 days). The median and range of LOS for the 15 most utilised hospitals is shown in Table 1 below.
- The mean and standard deviation (SD) of LOS in days by region was: Beirut and Mt Lebanon, 3.8 days (SD 7.3); Bekaa, 1.5 days (SD 2.5); North Lebanon, 2.0 days (2.9); and South Lebanon 2.1 days (SD 3.3 days). Mean LOS by diagnosis is shown in **Appendix Table 1**.
- Overall the estimated total costs of referrals for all cases from January to June 2013 was USD 9,764,847. Estimated cost covered by UNHCR was USD 7,847,460 (80.4%) of the total **(Appendix Figure 1)**. (NB. the total costs listed here are only the hospital bills paid for the 18,478 referrals reported. It does not include all other direct and indirect costs related to the referral process. It also does not include the costs of care for all those who do not meet the criteria listed above.)
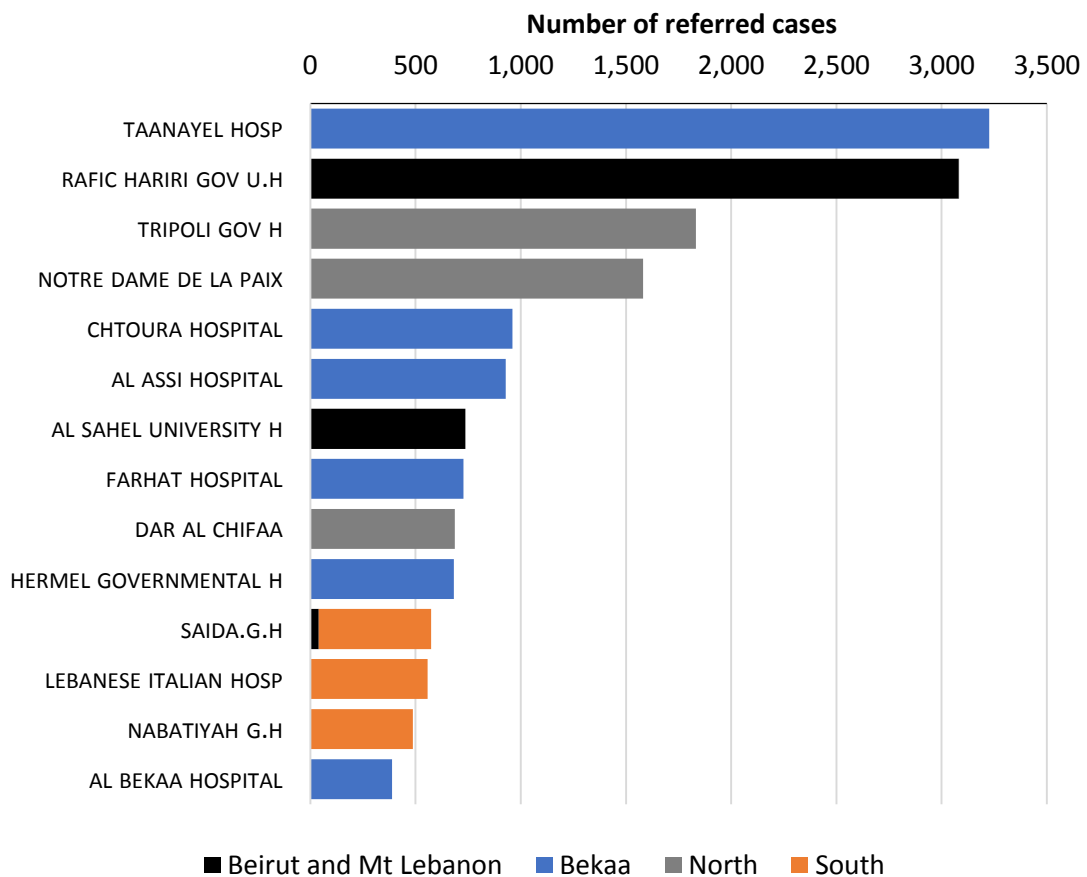

Figure 8 – Top 15 hospitals receiving Syrian refugee referrals, January – June 2013

Report on Secondary and Tertiary Health Care

Table 1 – Average cost and median length of hospitalisation per referral for top 15 hospitals, Lebanon, January – June 2013

Hospital	Total	Mean cost per referral in USD	Median length of stay (range)
Al Asisi Hospital	929	478	0 (0 – 15)
Al Bekaa Hospital	388	643	2 (0 – 24)
Al Rayan Hospital	285	414	1 (0 – 5)
Al Sahel University Hospital	737	536	1 (0 – 35)
Chtoura Hospital	960	445	1 (0 – 40)
Dar Al Chifaa	687	747	1 (0 – 36)
Farhat Hospital	727	469	1 (0 – 31)
Hermel Governmental Hospital	682	385	1 (0 – 29)
Lebanese Italian Hospital	557	753	2 (0 – 32)
Nabatiyah G.H	487	670	1 (0 – 44)
Notre Dame De La Paix – Qbayat	1,582	545	1 (0 – 41)
Rafic Hariri G.U.H	3,082	467	2 (0 – 73)
Saida G.H	574	710	-
Taanayel General Hospital	3,226	383	1 (0 – 28)
Tripoli G.H	1,833	419	1 (0 – 49)

Figure 9 – Estimated mean cost by disease category, Lebanon, January – Jun 2013

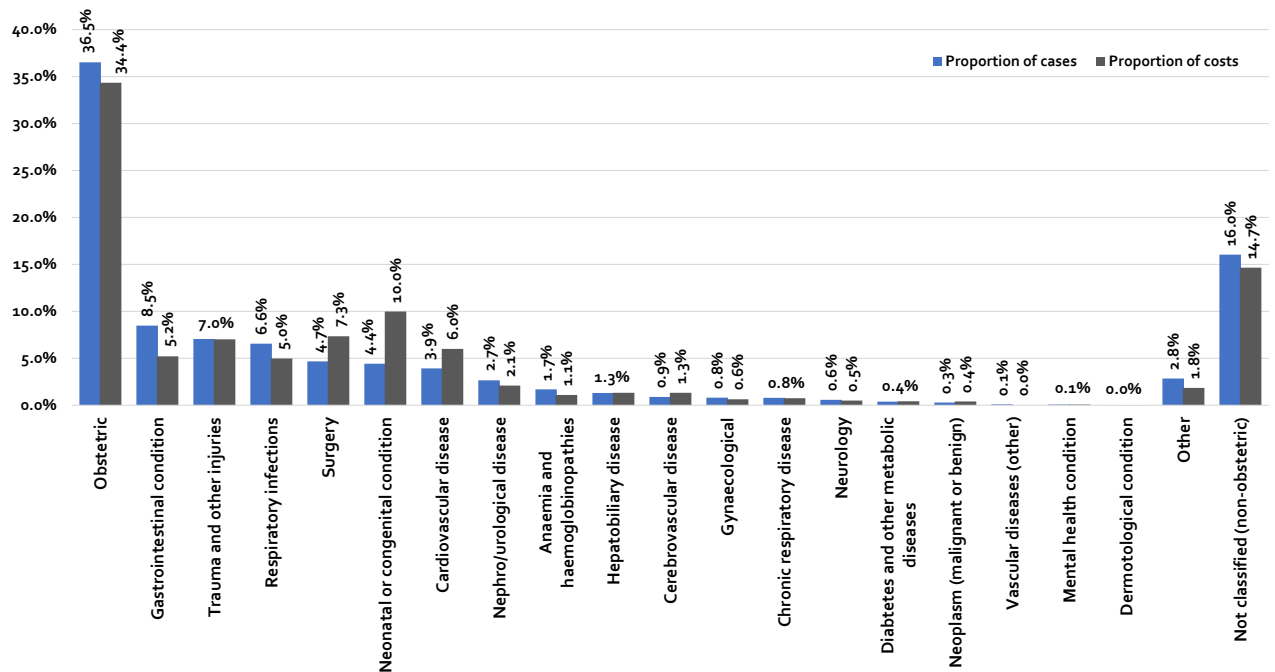Estimated mean cost of referral, US dollars
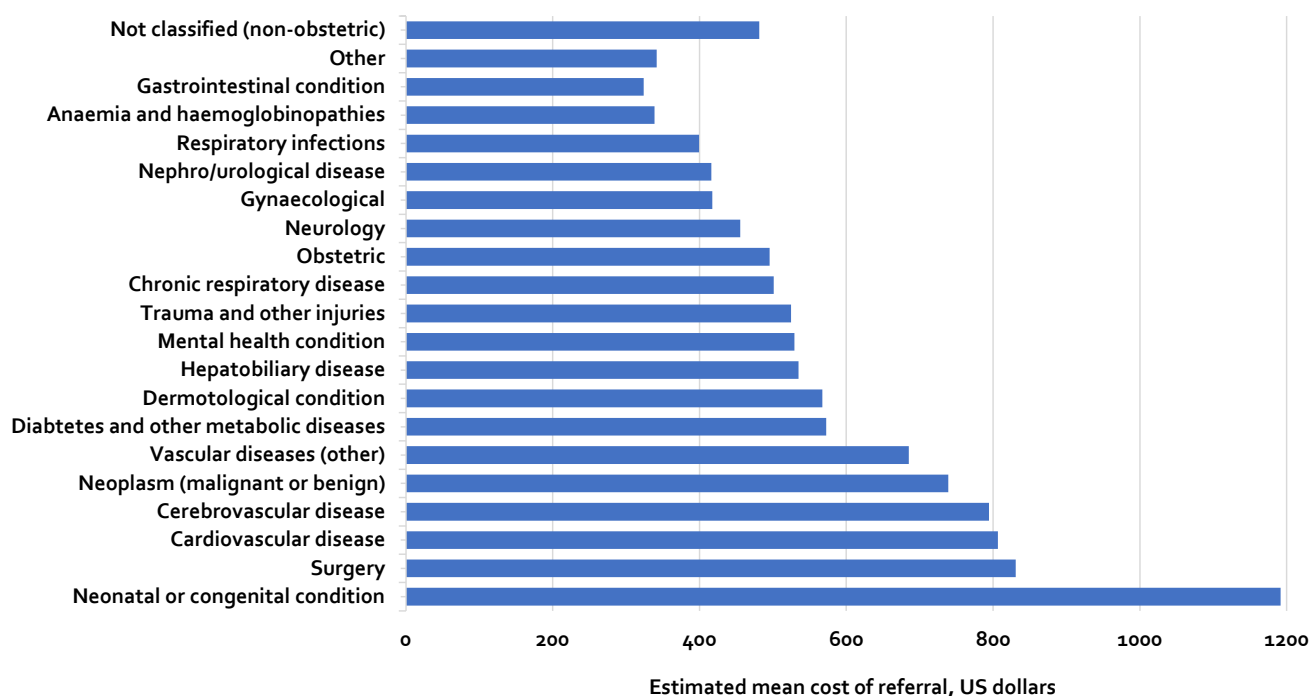
Figure 10 – Proportion of referral cases and proportion of total costs by disease category, Lebanon, January – Jun 2013

Recommendations:

1. **UNHCR and partners should limit the number of referral hospitals in each region, and negotiate preferred rates.** Refugees utilised at least 62 hospitals across Lebanon. However, 92% of all referrals are in 15 hospitals. If there are no compelling reasons to continue to treat refugees in such a wide range of hospitals, follow-up and monitoring could be improved by using fewer facilities.

2. **Investigate the reason for a decline in the number of referrals to Rafic Hariri hospital in Beirut as there was no increase in referrals to other hospitals in the region observed.**

3. **UNHCR should continue to emphasize PHC and referrals to emergency lifesaving care (including emergency obstetrical care).** This follows a public health approach that allows limited funds to help the largest amount of people. Difficult decisions need to be made regarding cost-efficiency and number of individuals served (e.g. children with neonatal conditions are relatively small but very expensive; some conditions require long-term continuous funding compared with one time funding). Figure 10 is particularly useful as it compares proportion of referral cases and proportion of total costs by disease category.

4. **Improve monitoring and evaluation on access to referral to secondary and tertiary health care and quality of health care received.** Examine the impact of referral standard operating procedures on refugees to determine if the 20% required fees for secondary and tertiary health care prevent access to lifesaving treatment. This could be done by enlisting Syrian medical personnel and have them report from key hospitals. Hospital exit-surveys or community-based surveys (such as prospective surveillance) could also be instituted. An effective monitoring system needs to be developed and implemented.

5. **UNHCR needs to develop a fully functional database for partners to record information related to patient care and referrals.** Ideally, the database should be uniform and centralised so that duplicate entries be minimised; should ensure patient confidentiality by ensuring data is accessible to a limited number of appropriate personnel working for the partners and UNHCR; and be easily updatable by users on subsequent sessions. There is a significant amount of missing data,

especially on costs of referral. The agencies receive invoices from the hospitals, but that data is not always entered in a timely manner. Each agency needs to systematically capture and enter this data.

6. **Given the very high cost of neonatal care, an investigation needs to occur as to the quality and costs of services in at least the leading hospitals in each region.**

7. **Follow-up needed to fully investigate the reasons for such a high rate of caesarean sections.** Plausible explanations include: i) a high proportion of deliveries occur at home, therefore pregnant women seeking referral care are more likely to have delivery complications; ii) hospitals are motivated by profit margins, not medical necessity to conduct more caesarean sections than vaginal deliveries; and iii) obstetricians are wary of possible negative outcomes of delivery, and frequently err on the side of caution.

Appendix Table 1 – The frequency and proportion of referrals by diagnosis category. Note: in Beirut and Mt Lebanon, until June, the referral monitoring system did not capture diagnosis for non-obstetric referrals.

Diagnosis category	Beirut and Mt Leb, n (%)	Bekaa, n (%)	North, N (%)	South, N (%)	Total, N (%)	Mean length of stay in days (standard deviation)
Anaemia and haemoglobin	0 (0%)	228 (3.1%)	65 (1.4%)	16 (0.9%)	309 (1.7%)	1.7 (1.3)
Cardiovascular diseases	7 (0.2%)	389 (5.2%)	286 (6.1%)	38 (2%)	720 (3.9%)	2.3 (2.6)
Cerebrovascular diseases	0 (0%)	91 (1.2%)	62 (1.3%)	8 (0.4%)	161 (0.9%)	3.6 (6.4)
Chronic respiratory diseases	0 (0%)	72 (1.0%)	53 (1.1%)	20 (1.1%)	145 (0.8%)	1.9 (3.6)
Dermotological condition	0 (0%)	0 (0%)	0 (0%)	2 (0.1%)	2 (0%)	-
Diabtetes and other metabolic diseases	0 (0%)	25 (0.3%)	39 (0.8%)	6 (0.3%)	70 (0.4%)	2.9 (5.4)
Gastrointestinal conditions	0 (0%)	924 (12.4%)	480 (10.3%)	152 (8.1%)	1556 (8.5%)	1.8 (1.8)
Gynaecological	0 (0%)	68 (0.9%)	29 (0.6%)	51 (2.7%)	148 (0.8%)	0.9 (0.8)
Hepatobiliary disease	0 (0%)	136 (1.8%)	85 (1.8%)	18 (1.0%)	239 (1.3%)	2.5 (2.9)
Mental health	0 (0%)	2 (0%)	5 (0.1%)	5 (0.3%)	12 (0.1%)	8 (9.9)
Neonatal or congenital illness	0 (0%)	446 (6.0%)	209 (4.5%)	156 (8.3%)	811 (4.4%)	6.6 (7.7)
Neoplasm	0 (0%)	27 (0.4%)	7 (0.2%)	19 (1.0%)	53 (0.3%)	1.6 (1.3)
Nephro/urological disease	0 (0%)	269 (3.6%)	136 (2.9%)	83 (4.4%)	488 (2.7%)	1.4 (2.4)
Neurology	0 (0%)	56 (0.8%)	31 (0.7%)	19 (1.0%)	106 (0.6%)	1.8 (2.2)
Obstetric	1285 (29.6%)	2576 (34.5%)	2023 (43.2%)	823 (43.9%)	6707 (36.5%)	1.5 (2.6)
Respiratory infection	0 (0%)	723 (9.7%)	340 (7.3%)	142 (7.6%)	1205 (6.6%)	2.4 (2.3)
Surgery	99 (2.3%)	354 (4.7%)	241 (5.1%)	162 (8.6%)	856 (4.7%)	1.8 (3.4)
Trauma and other injuries	0 (0%)	751 (10.1%)	437 (9.3%)	106 (5.7%)	1294 (7.1%)	0.8 (2.3)
Vascular diseases (other)	0 (0%)	0 (0%)	9 (0.2%)	8 (0.4%)	17 (0.1%)	2.1 (1.7)
Other	0 (0%)	331 (4.4%)	148 (3.2%)	42 (2.2%)	521 (2.8%)	1.6 (1.9)
Not classified (non-obstetric)	2945 (67.9%)	0 (0%)	0 (0%)	0 (0%)	2945 (16%)	3.8 (7.0)
Total	4336	7468	4685	1876	18365	2.0 (3.7)

Appendix Table 2 – Distribution of referrals by hospital, January – June 2013

Hospital	Beirut and Mt Lebanon	Bekaa	North	South	Total	Proportion
Taanayel General Hosp	0	3226	0	0	3226	17.5%
Rafic Hariri G.U.H	3081	0	1	0	3082	16.7%
Tripoli G.H	2	0	1831	0	1833	10.0%
Notre Dame De La Paix	0	0	1582	0	1582	8.6%
Chtoura Hospital	0	960	0	0	960	5.2%
Al Assi Hospital	0	929	0	0	929	5.0%
Al Sahel University H	737	0	0	0	737	4.0%
Farhat Hospital	0	727	0	0	727	3.9%
Dar Al Chifaa	0	0	687	0	687	3.7%
Hermel Gov Hospital	0	682	0	0	682	3.7%
Saida.G.H	40	0	0	534	574	3.1%
Lebanese Italian Hosp	2	0	0	555	557	3.0%
Nabatiyah G.H	1	0	0	486	487	2.6%
Al Bekaa Hospital	0	388	0	0	388	2.1%
Al Rayan Hospital	0	285	0	0	285	1.5%
Islamic Hospital	0	0	273	0	273	1.5%
New Mazloum	0	0	268	0	268	1.5%
Pres Elias Haroui Gov H	0	264	0	0	264	1.4%
Sibline Gov Hospital	164	0	0	8	172	0.9%
Notre Dame Du Liban,	157	0	0	2	159	0.9%
Bent Jbeil Government	0	0	0	131	131	0.7%
Tebnin Governmental H	0	0	0	60	60	0.3%
Other	159	14	46	127	346	1.9%

Appendix Table 3 – Frequency and proportion of referrals by diagnosis category and hospital, Lebanon, January – June 2013

Disease Category	Assi	Al Bekaa	Al Rayan	Al Sahel	Chtoura	Dar Al Chifaa	Farhat	Hermel	Leb Ital	Nabati	Notre Dam - Q	Rafic Hariri	Saida GH	Taanayel	Tripoli G
Anaemia and haemoglobinopathies	0.2%	0.8%	1.8%	0%	2.7%	2.3%	0.4%	1.2%	0.4%	0.2%	0.9%	0%	1.3%	5.6%	1.7%
Cardiovascular diseases	4.5%	19.6%	7.7%	0%	10.9%	11.2%	6.1%	7.5%	0.7%	0.4%	4.2%	0.3%	1.3%	0.2%	3.9%
Cerebrovascular diseases	1.2%	3.9%	0.7%	0%	3.5%	2%	1.8%	0.2%	0%	0.4%	1.5%	0%	0.6%	0.1%	1.2%
Chronic respiratory disease	0.9%	2.6%	1.8%	0%	1.4%	1.6%	1.1%	1.6%	1.6%	0.2%	1.3%	0%	1.3%	0.4%	0.9%
Dermotological conditions	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.4%	0%	0%
Diabtetes and other metabolic	0%	1.6%	0.4%	0%	0.9%	1.2%	0.3%	0.4%	0.4%	0.4%	1.1%	0%	0.2%	0.1%	0.6%
Gastrointestinal conditions	17.3%	16.2%	15.8%	0%	11.4%	12.4%	11.6%	16.7%	9.3%	4.8%	11.7%	0%	9.5%	10.3%	10.3%
Gynaecological	1.5%	0.3%	2.5%	0%	0.6%	1.2%	0.6%	2.1%	4.9%	2.7%	0.8%	0%	0.9%	0.7%	0.4%
Hepatobiliary disease	0.9%	1.6%	0.4%	0%	0.8%	1.2%	1%	0.7%	0.9%	1.2%	1.6%	0%	0.4%	3%	2.2%
Mental health	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%	0.2%	0%	0.7%	0%	0.1%
Neonatal or congenital illness	3%	7%	4.6%	0%	2.1%	0%	3.6%	0.3%	12.6%	7%	6.3%	0%	5.1%	10%	4.2%
Neoplasm	0.4%	0.3%	0.7%	0%	0.9%	0.2%	0.1%	0.7%	0.9%	1.7%	0.1%	0%	0.4%	0.1%	0.2%
Nephro/urological diseases	5%	3.6%	3.2%	0%	7.9%	6.7%	6.1%	6.3%	1.1%	11.8%	2.1%	0%	1.3%	0.4%	2.7%
Neurology	0.5%	1.3%	1.1%	0%	1.9%	0.3%	1.2%	0.3%	2.2%	1%	1%	0%	0%	0.3%	0.7%
Obstetric	18.5%	17.3%	30.2%	37.1%	12.4%	40.3%	30.6%	21.7%	42.9%	47.8%	37.7%	25.5%	48.3%	51.5%	45%
Respiratory infection	25.2%	8.3%	2.5%	0%	6.8%	6.8%	9.4%	6.9%	7.4%	5.2%	11.4%	0%	7.1%	8.1%	5.1%
Surgery	4.4%	5.9%	5.3%	3.1%	8.2%	3.8%	4.6%	8.5%	7%	4.1%	4.2%	2%	15%	3%	5.9%
Trauma and other injuries	13.4%	5.4%	15.1%	0%	22.6%	4.8%	16.3%	21.9%	5.4%	7.3%	10.8%	0%	2.7%	1.7%	11.3%
Vascular diseases (other)	0%	0%	0%	0%	0%	0.2%	0%	0%	0.2%	0.8%	0.1%	0%	0.4%	0%	0.2%
Other	3.1%	4.6%	6.7%	0%	4.9%	3.9%	5.4%	3.1%	2.3%	2.5%	3.2%	0%	1.3%	4.5%	3.5%
Not classified (non-obstetric)	0%	0%	0%	59.8%	0%	0%	0%	0%	0%	0.2%	0%	72.3%	2%	0%	0%

Appendix Figure 1 – Total costs and UNHCR covered costs by month, Lebanon, January – June 2013