

HeRAMS Summary Report

2nd Quarter 2018 (April – June)

Public Hospitals
in the Syrian Arab Republic

HeRAMS Summary Report

2nd Quarter 2018 (April – June)

Public Hospitals
in the Syrian Arab Republic

World Health Organization
Health Resources and Services Availability Monitoring System
Syrian Arab Republic

This is to acknowledge that the data provided in this report is a product of joint collaboration between the World Health Organization, Ministry of Health, and Ministry of Higher Education in the Syrian Arab Republic. The report covers the months of April to June 2018.

HeRAMS published reports are available at: <http://www.emro.who.int/syr/information-resources/herams-reports.html>

© World Health Organization 2018

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization.

Suggested citation. [Title]. Cairo: WHO Regional Office for the Eastern Mediterranean; 2018. Licence: CC BYNC-SA 3.0 IGO.

Sales, rights and licensing. To purchase WHO publications, see <http://apps.who.int/bookorders>. To submit requests for commercial use and queries on rights and licensing, see <http://www.who.int/about/licensing>.

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

General disclaimers. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

Contents

HeRAMS background	1
1. Completeness of hospitals' reporting	1
2. Functionality status	2
3. Density of public hospitals	4
4. Accessibility to public hospitals	5
5. Level of damage to hospitals' buildings	7
6. Infrastructure patterns of the functional public hospitals	9
6.1 Inpatient capacity	9
6.2 Water	10
6.3 Electricity	11
7. Availability of human resources for health	12
8. Availability of health services	17
9. Utilization of health services	18
9.1 General clinical services	19
9.1.1 Outpatient and inpatient	19
9.1.2 Laboratories, blood bank, and imaging services	20
9.2 Surgical and trauma care	21
9.2.1 Emergency cases reported in emergency departments	21
9.2.2 Emergency and elective surgeries	22
9.2.3 ICU services (Intensive Care Unit)	23
9.2.4 Trauma services	23
9.2.5 Burn patient management	24
9.3 Maternal health services	25
9.3.1 Caesarean sections and normal deliveries	25
9.4 Child health	26
9.5 Nutrition	27
9.6 Communicable diseases services	28
9.7 Noncommunicable diseases (NCDs)	28
9.8 Rehabilitation services	30
9.9 Mental health	31
10. Availability of medical equipment	32
11. Availability of medicines & medical supplies	33

Key indicators

111

of public hospitals

100%

Completeness rate

51%

Fully functioning

23%

Partially functioning

26%

Non-functioning

15%

Fully damaged

30%

Partially damaged

55%

Intact

11,855

of available beds

10,305

of medical
doctors

17,549

of nurses &
midwives

547,695

Estimated caseload
(June 2018)

HeRAMS background

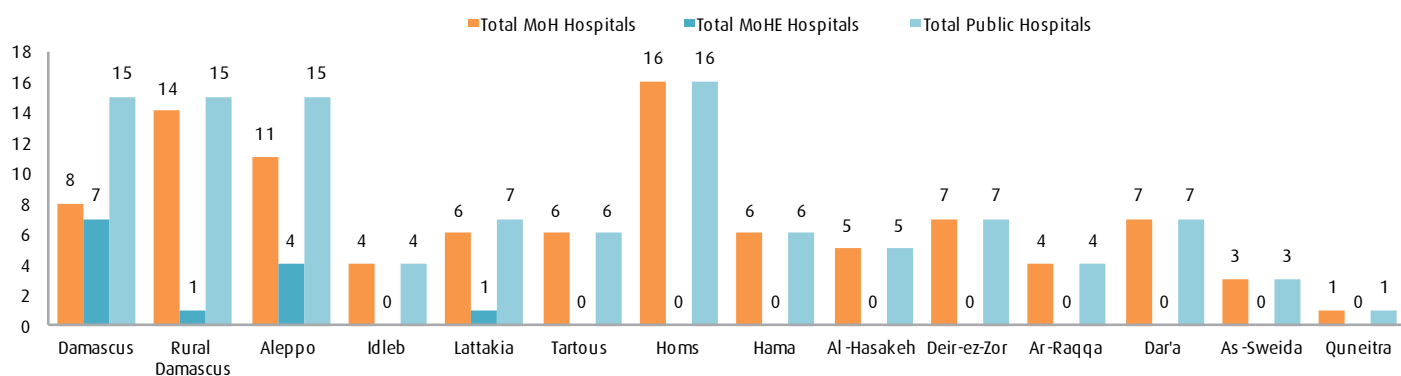
HeRAMS (Health Resources and Services Availability Monitoring System)¹ is a global health information management tool (for monitoring, collection, collation and analysis of information on health resources and services) that aims to provide timely, relevant and reliable information for decision-making. It is used to guide interventions at the primary and secondary care levels, measure gaps and improve resource planning, ensure that actions are evidence-based, and enhance the coordination and accountability of WHO and other health sector partners.

HeRAMS in Syria is a World Health Organization (WHO) project that aims at strengthening the collection and analysis of information on the availability of health resources and services in Syria at health facility level. A team of national health staff from all governorates was formulated for HeRAMS reporting, and different data collection mechanisms were introduced to address the shortage of timely and relevant information. The main HeRAMS tool for collecting data is a questionnaire that assesses the functionality status, accessibility, health infrastructure, human resources, availability of health services, equipment and medicines at primary and secondary care level.

1. Completeness of hospitals' reporting

1. Completeness rate: 100%
2. Ministry of Health (MoH) hospitals: 98
3. Ministry of Higher Education (MoHE) hospitals: 13
4. Total hospitals: 111

Figure 1: Distribution of public hospitals by affiliation, per governorate



¹ The HeRAMS name has been updated globally to be "Health Resources and Services Availability Monitoring System" instead of Health Resources and Services Availability Mapping System"

2. Functionality status

- **Fully functioning:** a hospital is open, accessible, and provides healthcare services with full capacity (i.e., staffing, equipment, and infrastructure).
- **Partially functioning:** a hospital is open and provides healthcare services, but with partial capacity (i.e., either shortage of staffing, equipment, or damage in infrastructure).
- **Non-functioning:** a hospital is out of service, because it is either fully damaged, inaccessible, no available staff, or no equipment.

Figure 2: Functionality status - June 2018

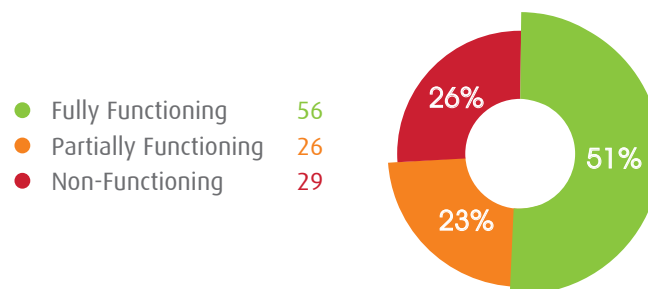
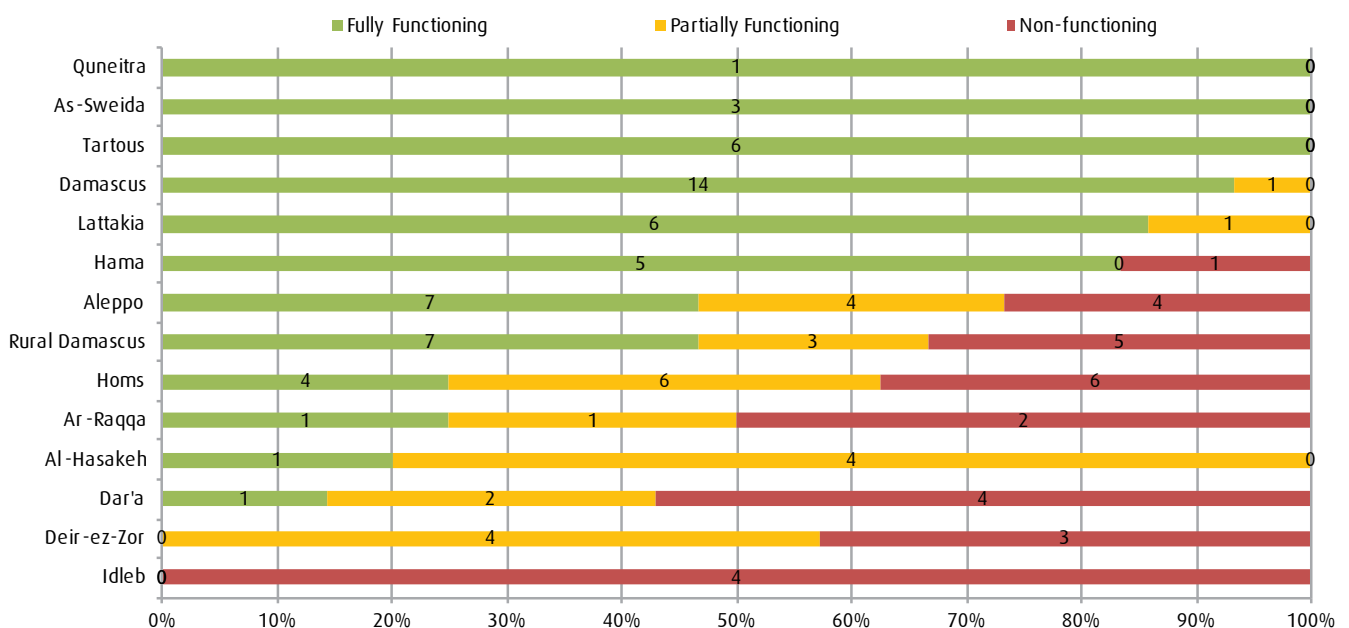


Figure 3: Functionality status, per governorate, June 2018



Map 1: Functionality status, per governorate, June 2018

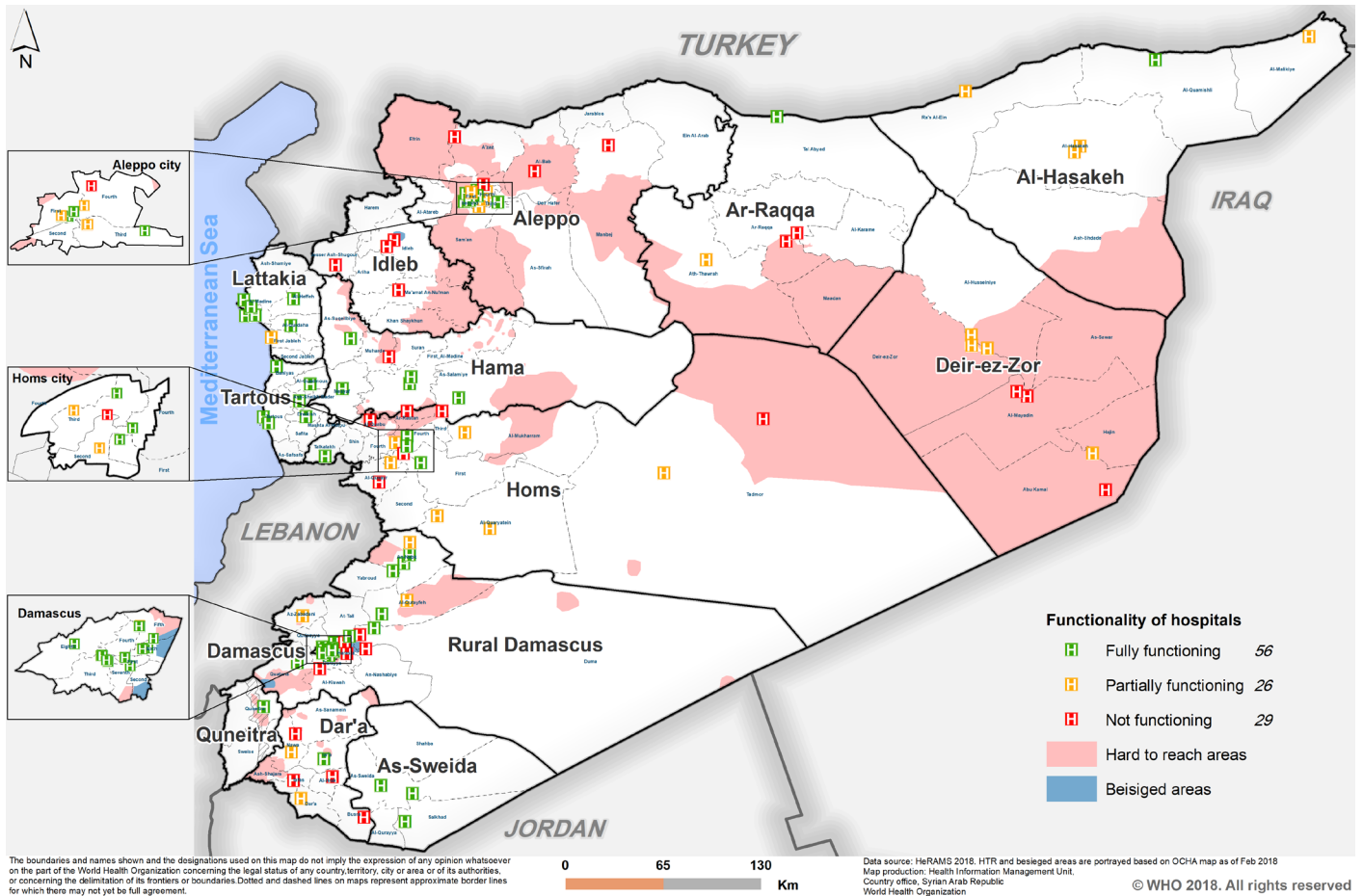
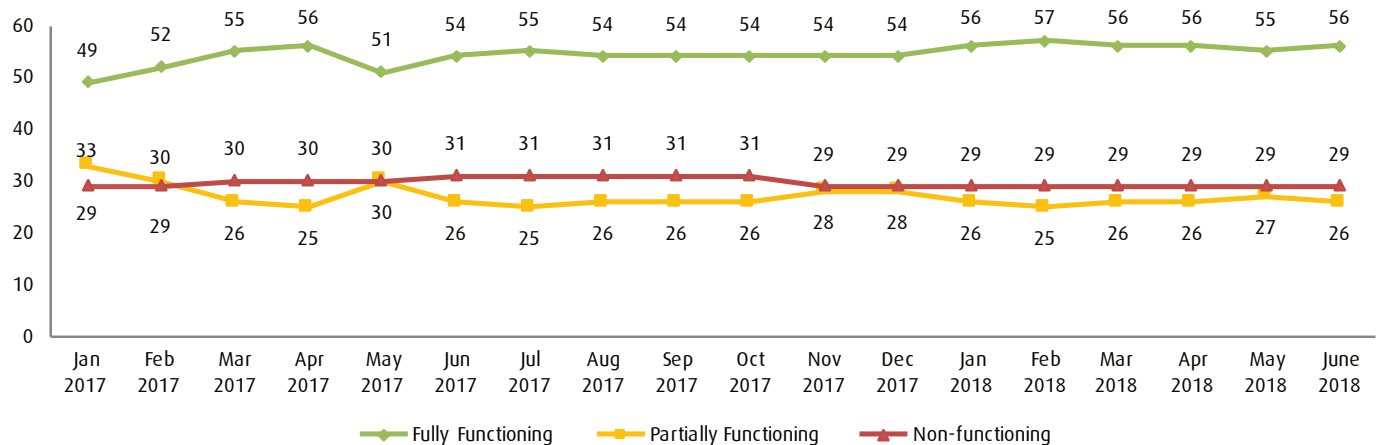


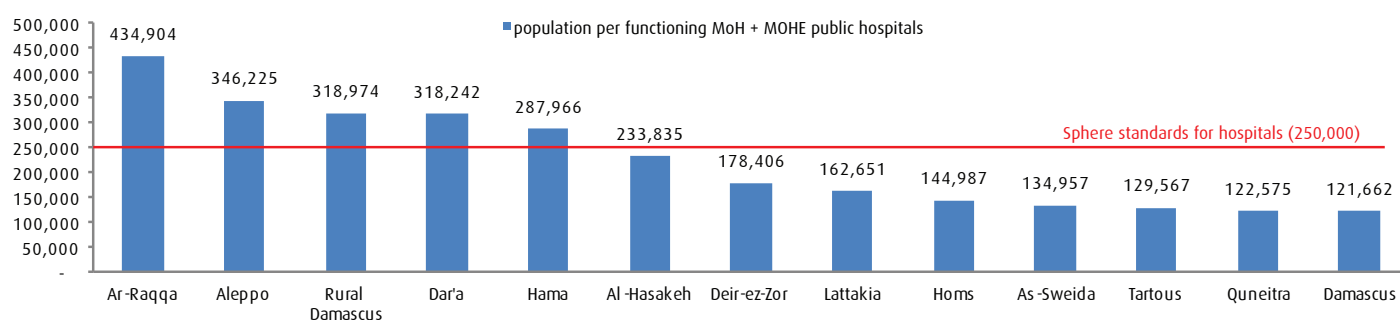
Figure 4: Trend analysis of functionality status, January 2017 to June 2018



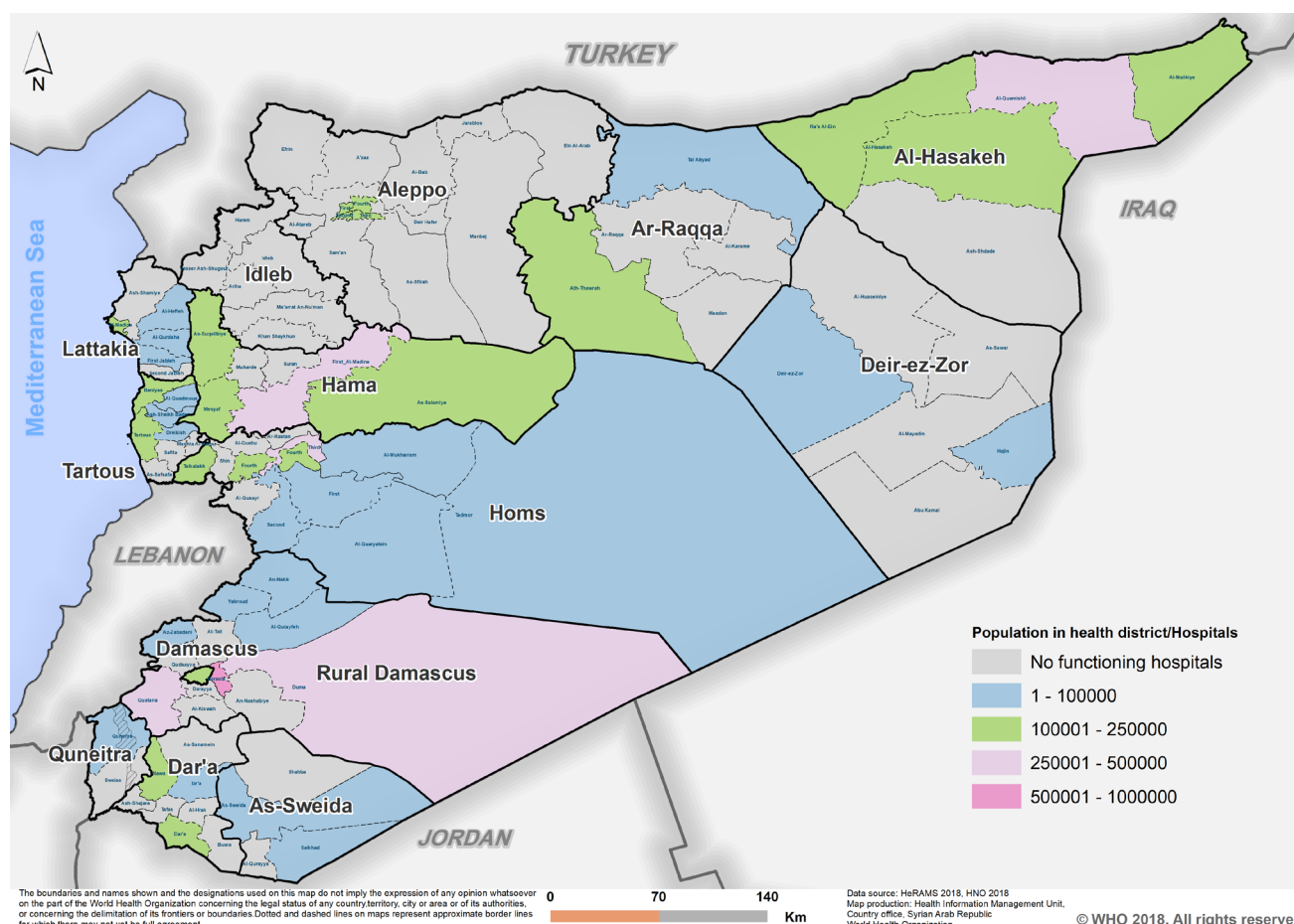
3. Density of public hospitals

Hospitals density reflects the total number of hospitals relative to population size (based on OCHA HRP 2018), which helps measure physical access to outpatient health care services.

Figure 5: Density of the public hospitals per governorate, June 2018



Map 2: Density of the public hospitals per governorate, June 2018



4. Accessibility to public hospitals

- **Accessible:** a hospital is easily accessible for patients and health staff.
- **Hard-to-reach:** a hospital is hardly reached, due to security situation or long distance.
- **Inaccessible:** a hospital is not accessible because of the security situation, or a hospital is accessible only to a small fraction of the population, or military people (inaccessible to civilians).

Figure 6: Accessibility status - June 2018

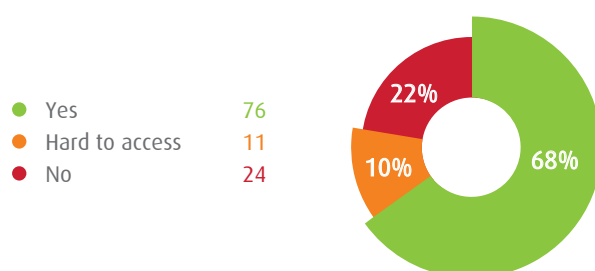


Figure 7: Accessibility status per governorate, June 2018



Map 3: Accessibility status per governorate, June 2018

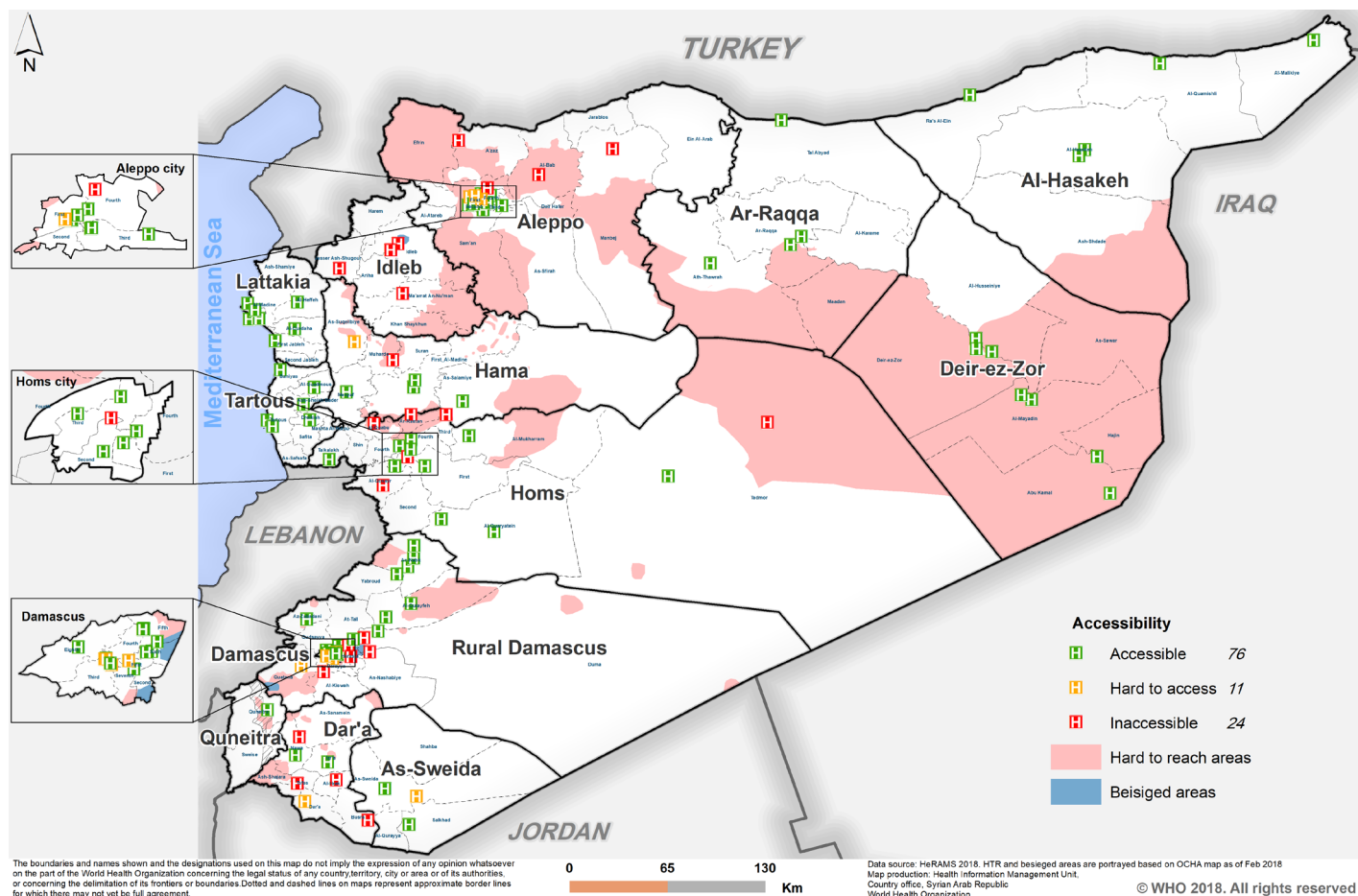
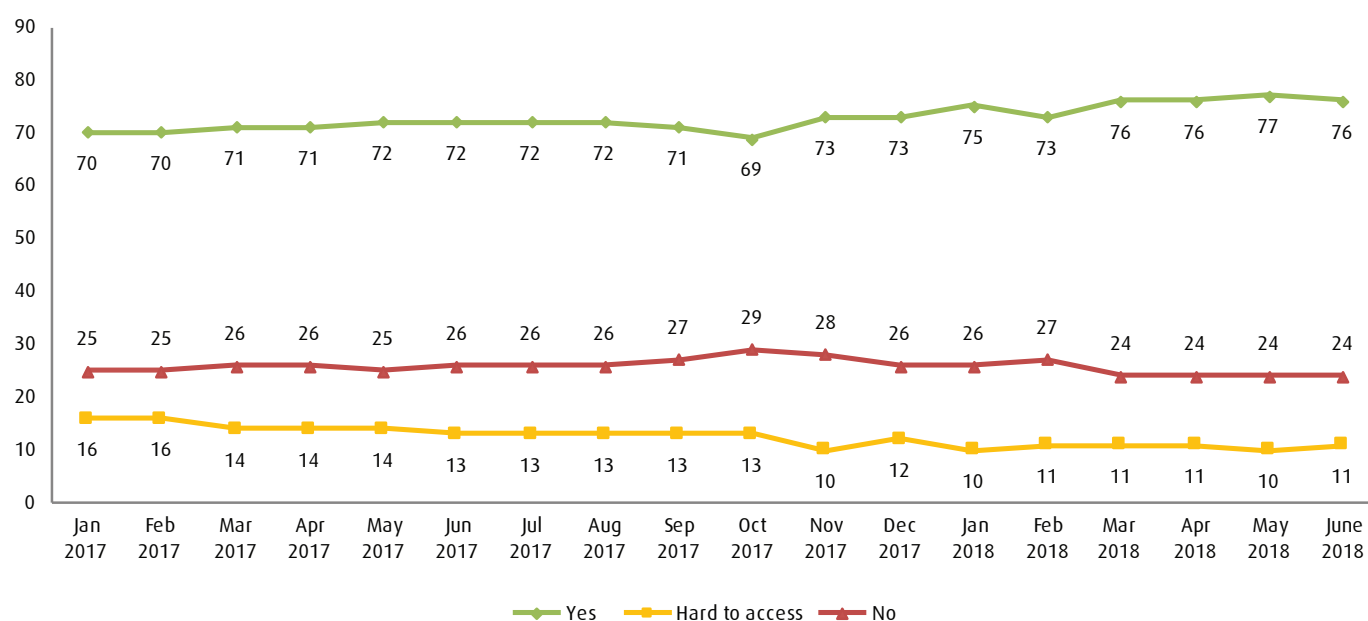


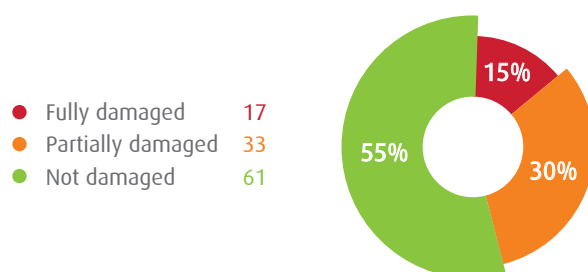
Figure 8: Trend analysis of accessibility to public hospitals, January 2017 to June 2018



5. Level of damage to hospitals' buildings

- **Fully damaged:** either, all the building is destroyed, about 75% or more of the building is destroyed, or damage of the essential services' buildings.
- **Partially damaged:** where part of the building is damaged.
- **Intact:** where there is no damage in the building.

Figure 9: level of damage - June 2018



Map 4: Level of damage of the hospitals' buildings by governorate, June 2018

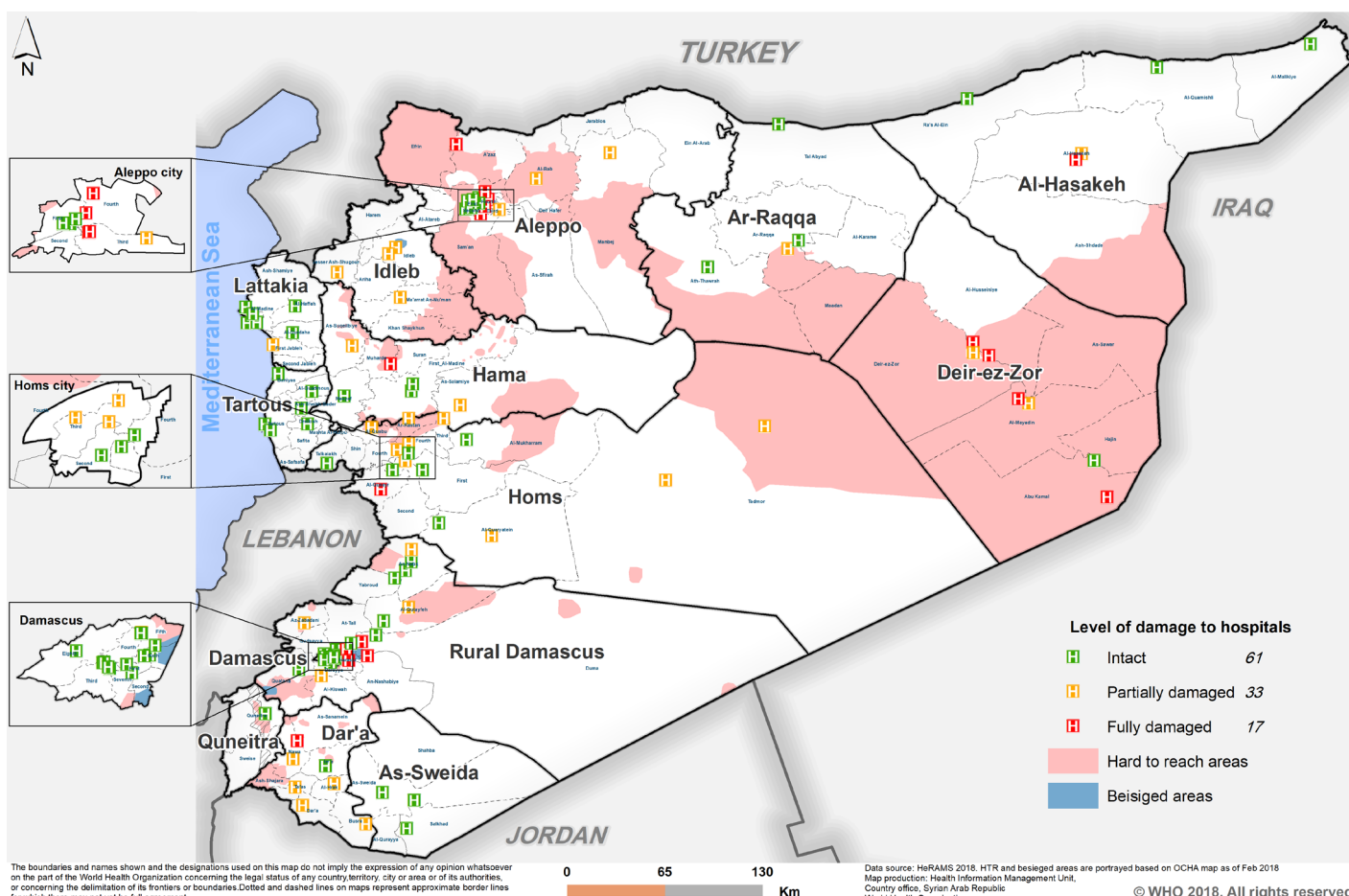


Figure 10: Level of damage of the hospitals' buildings per governorate, June 2018

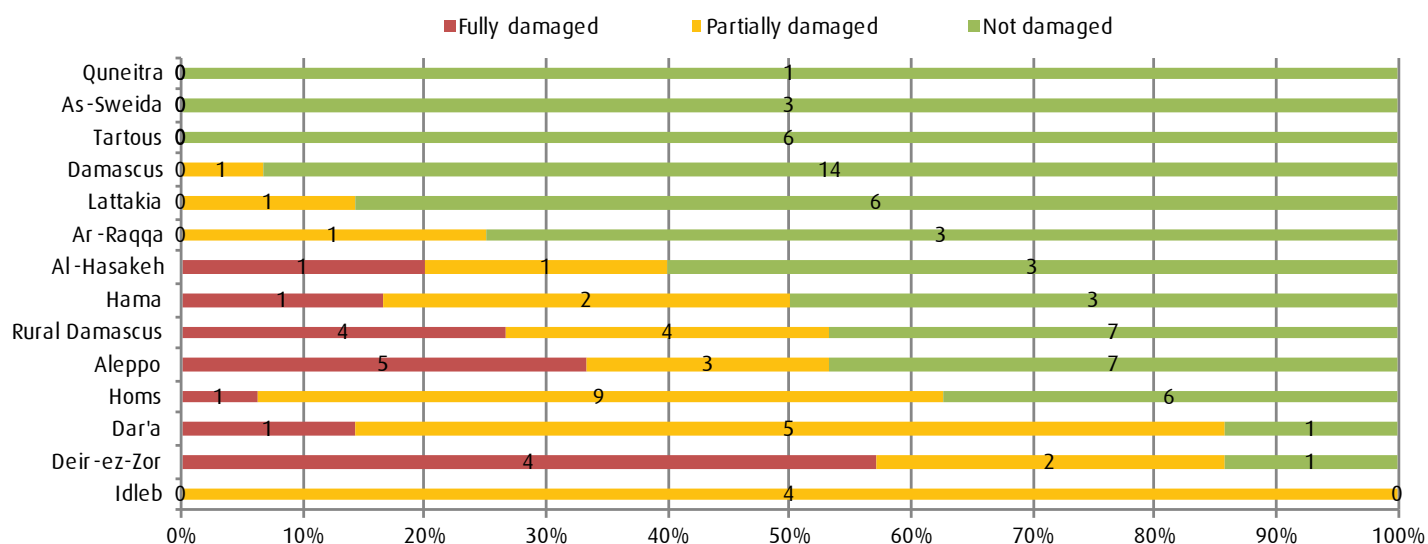
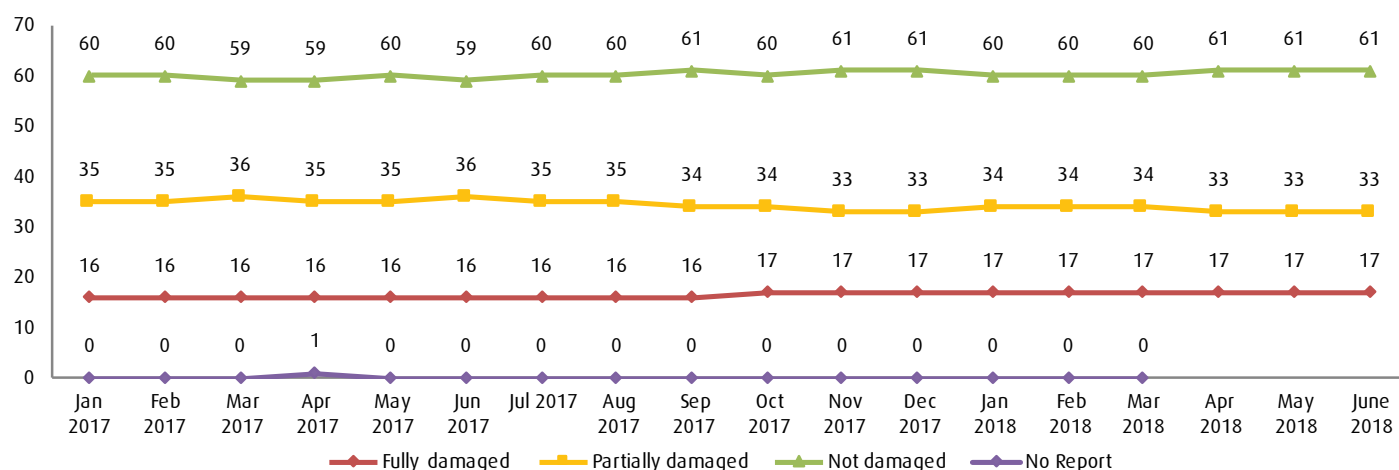


Figure 11: Trend analysis of public hospitals' level of damage, January 2017 to June 2018



6. Infrastructure patterns of the functional public hospitals

6.1. Inpatient capacity

Figure 12: Comparison of inpatient capacity (original vs. available) in functional hospitals per governorate, June 2018

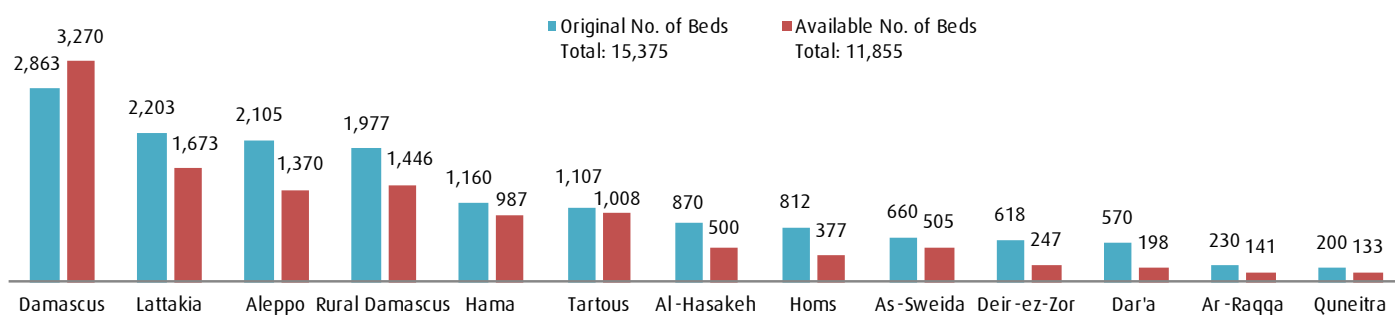
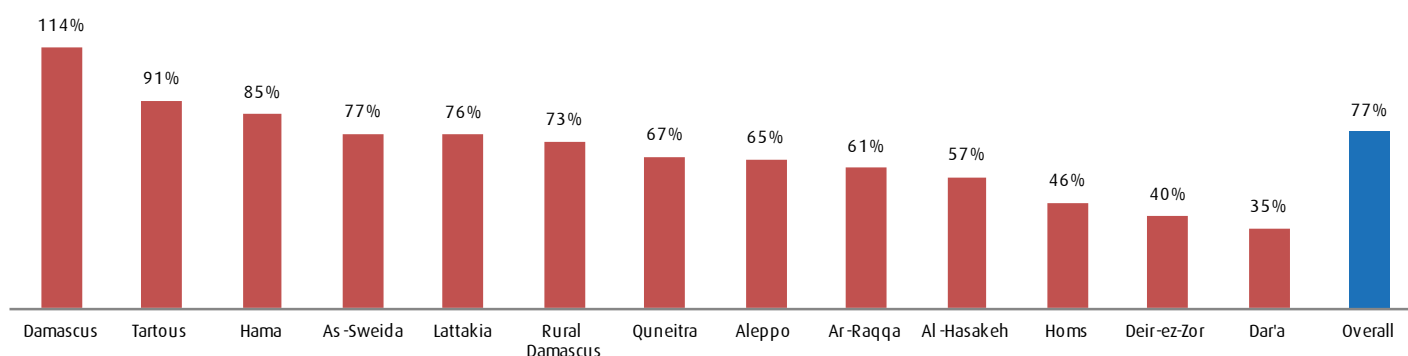


Figure 13: Percentage of available number of beds in functional hospital versus the original inpatient capacity, June 2018



6.2. Water

Figure 14: Main sources of water, June 2018

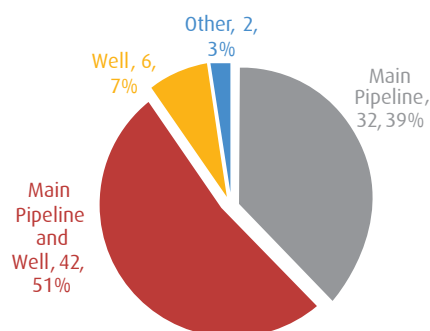


Figure 15: Distribution of water sources/ types at functional public hospitals, per governorate, June 2018

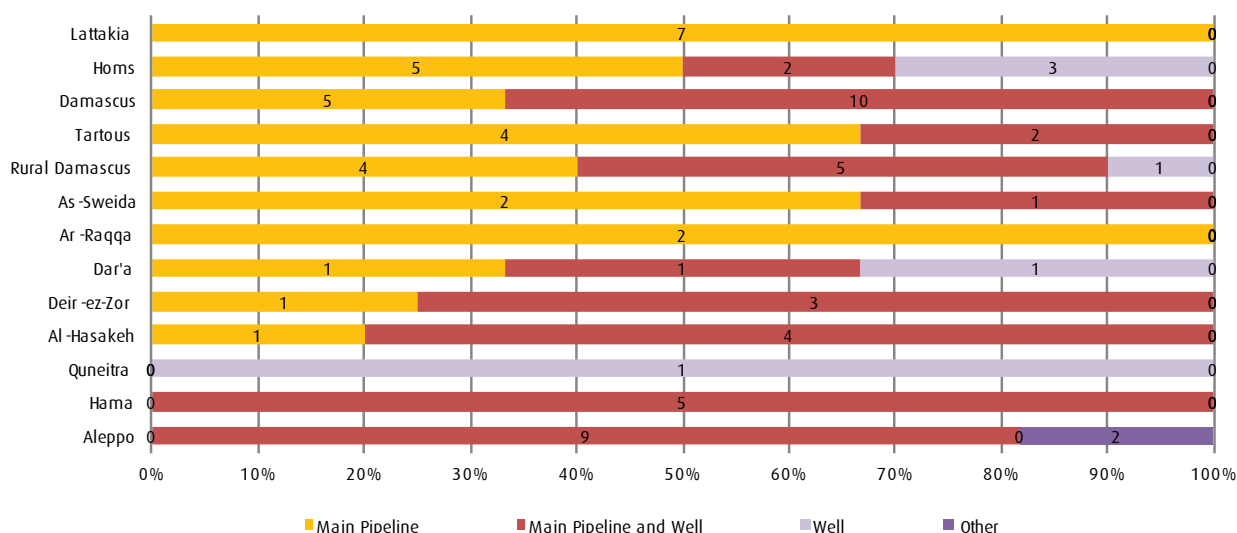
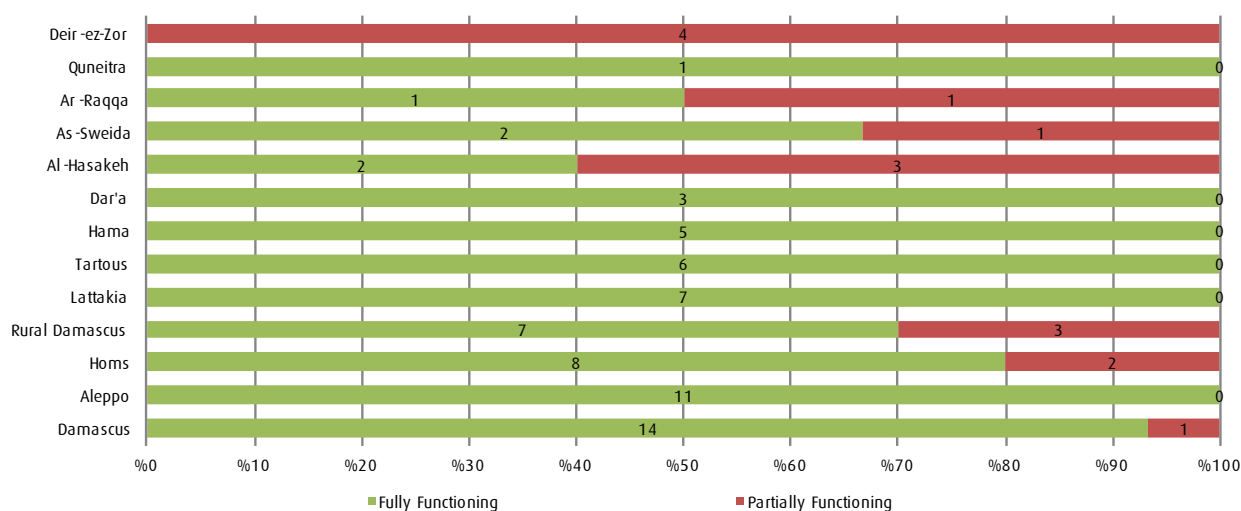


Figure 16: Functionality status of the water sources at functional public hospitals, June 2018



6.3. Electricity

Figure 17: Hours of availability of electricity (from all sources) on average during the day in functional hospitals, June 2018

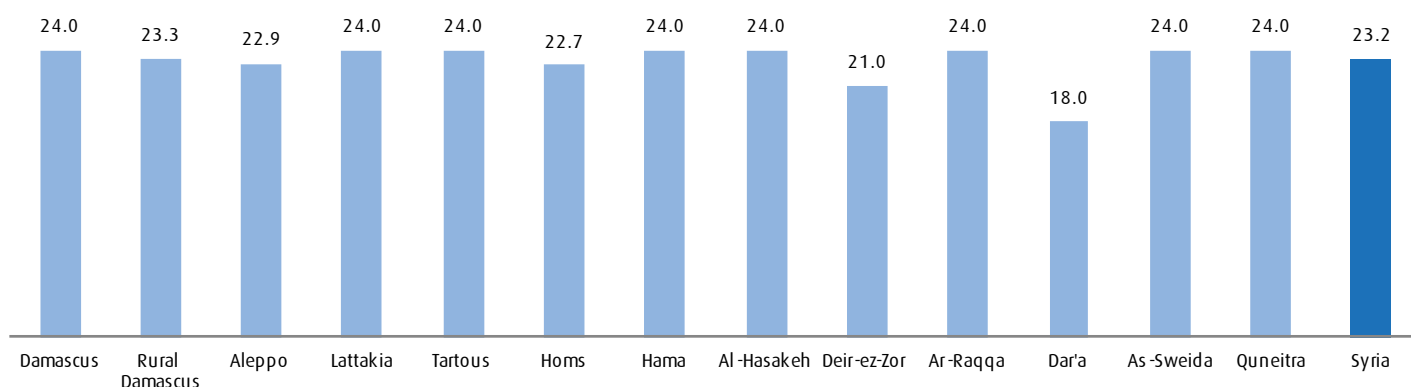
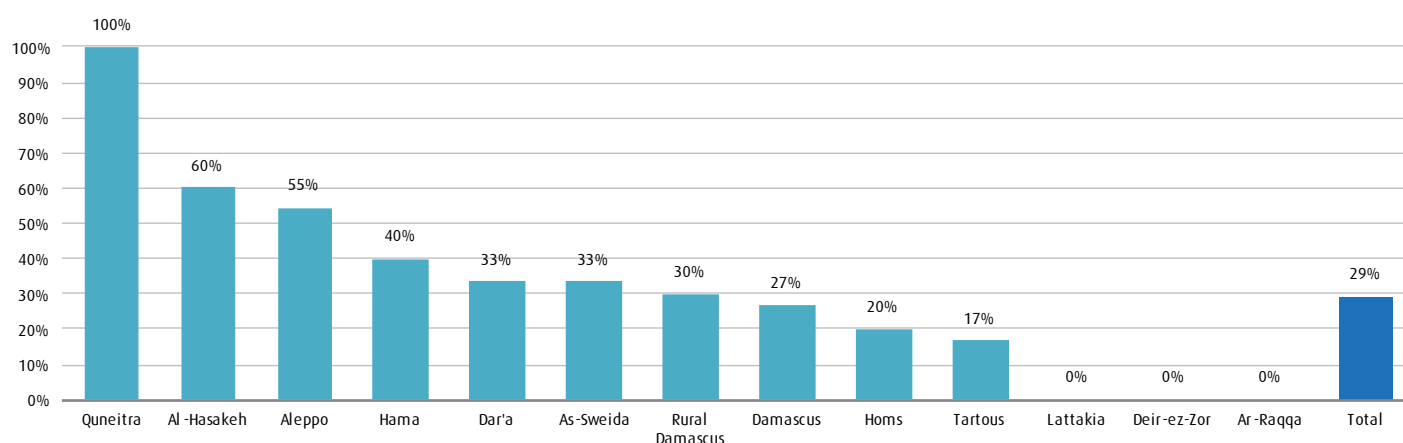


Figure 18: Percent of hospitals in need for generators out of total functional hospitals, June 2018



7. Availability of human resources for health

Figure 19: Proportion of health staff in hospitals, June 2017

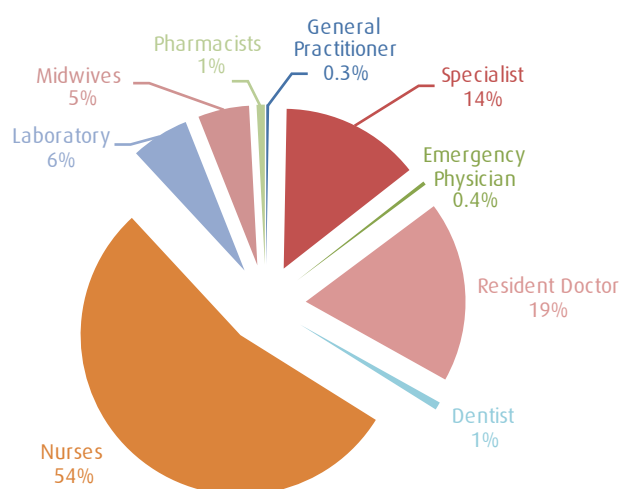


Table 1: Availability of human resources of functioning public hospitals, per governorate, June 2018

Governorate	General Practitioner	Orthopedic surgery	General surgery	Neurological surgery	Other Specialists	Emergency physician	Resident Doctor	Dentist	Nurses	Laboratory	Midwives	Pharmacists	University	Technicians	Others
Damascus	0	45	65	20	843	17	2466	36	3701	422	148	83	536	1245	3003
Rural Damascus	10	21	29	4	229	5	276	9	1217	126	93	24	122	415	934
Aleppo	6	26	37	4	383	7	940	51	971	208	112	14	178	314	1032
Idleb															
Lattakia	14	40	50	9	522	23	883	48	2485	153	232	28	212	503	1109
Tartous	15	43	68	4	467	18	523	38	2388	246	117	28	239	1088	1484
Homs	15	32	42	5	232	14	123	21	1291	145	184	17	71	646	436
Hama	4	27	44	8	348	14	352	38	1448	162	237	15	131	660	842
Al-Hasakeh	2	6	6	1	79	2	55	2	361	58	53	5	31	161	169
Deir-ez-Zor	2	2	1	0	39	0	10	4	593	91	152	1	59	250	374
Ar-Raqqa	12	5	6	0	19	3	0	0	214	9	26	3	11	18	4
Dar'a	3	2	3	1	39	0	13	0	276	22	41	4	19	119	183
As-Sweida	1	8	16	3	108	4	100	1	999	61	85	4	70	316	475
Quneitra	0	3	3	3	47	3	71	4	112	8	13	3	12	79	225
Grand Total	84	260	370	62	3355	110	5812	252	16056	1711	1493	229	1691	5814	10270

Map 5: Availability of medical doctors in functional public hospitals, by end of June 2018, per governorate

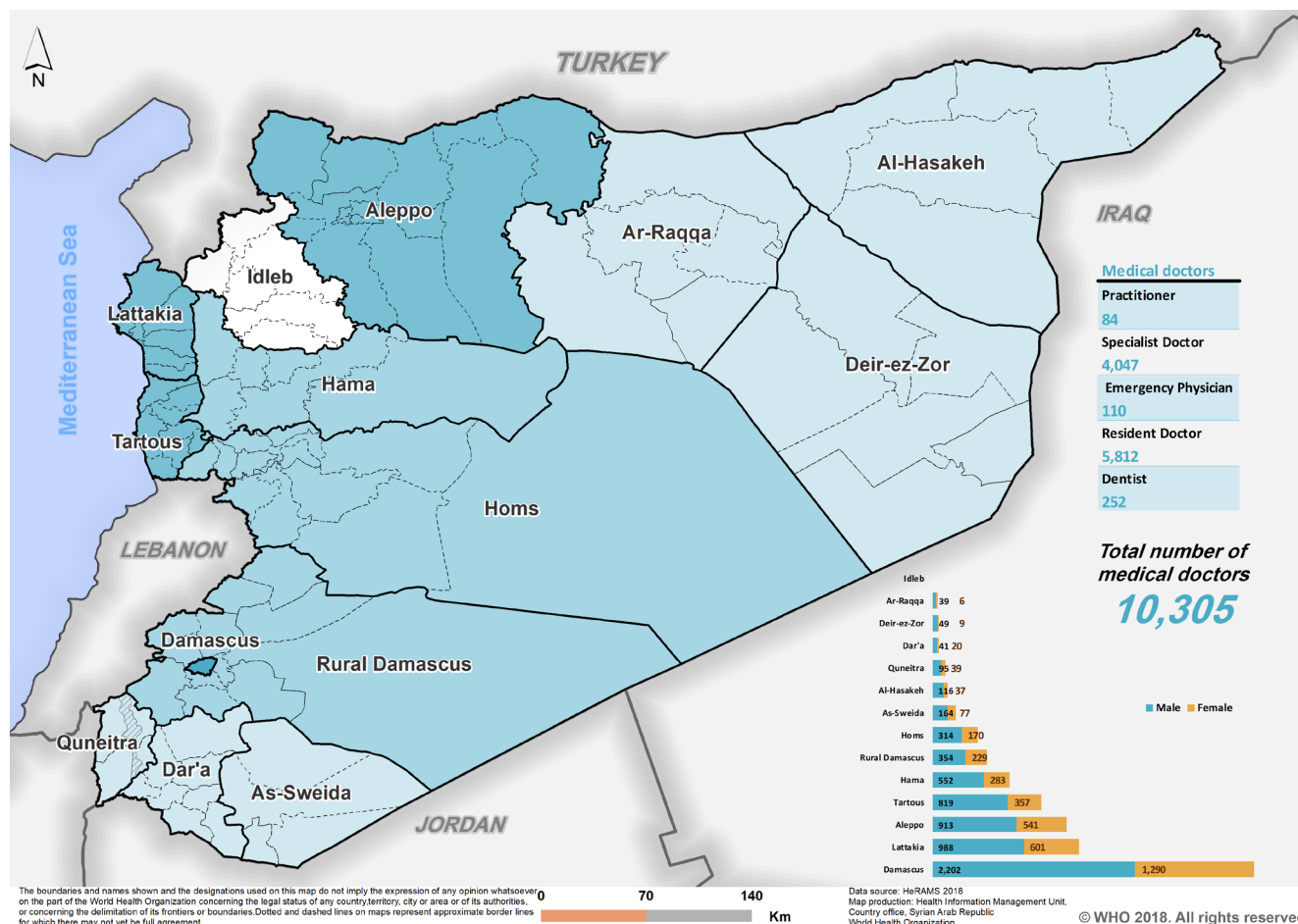


Figure 20: trend analysis of number of doctors (a total of general practitioner, specialists, emergency physicians, resident doctors, and dentists) in public hospitals during 2017 and 2018

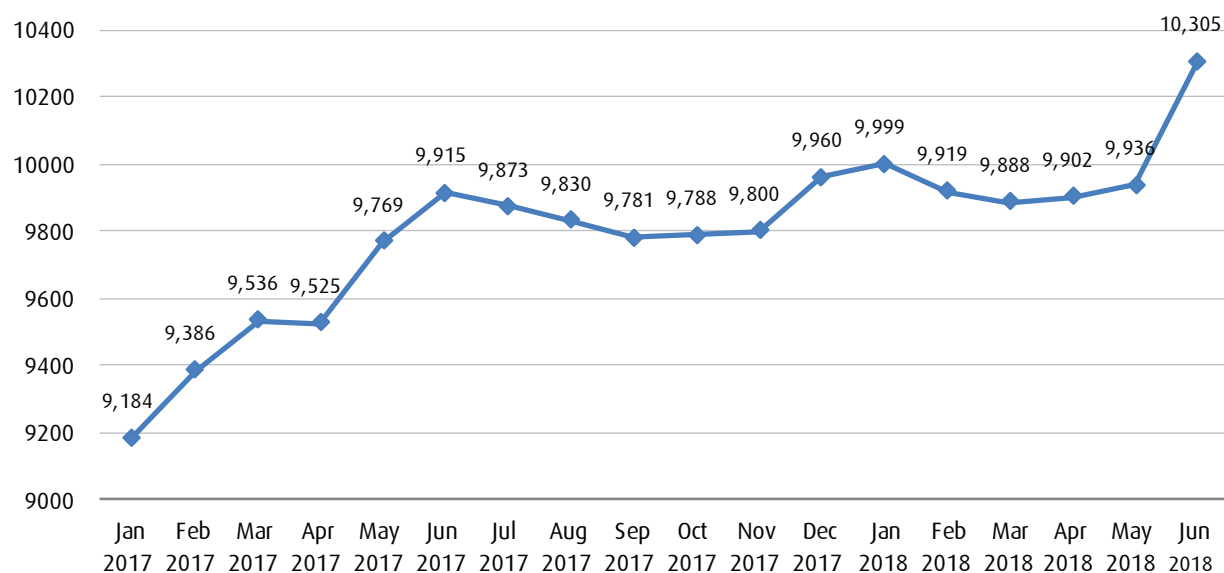


Figure 21: Trend analysis of number of nurses in public hospitals during 2017 and 2018

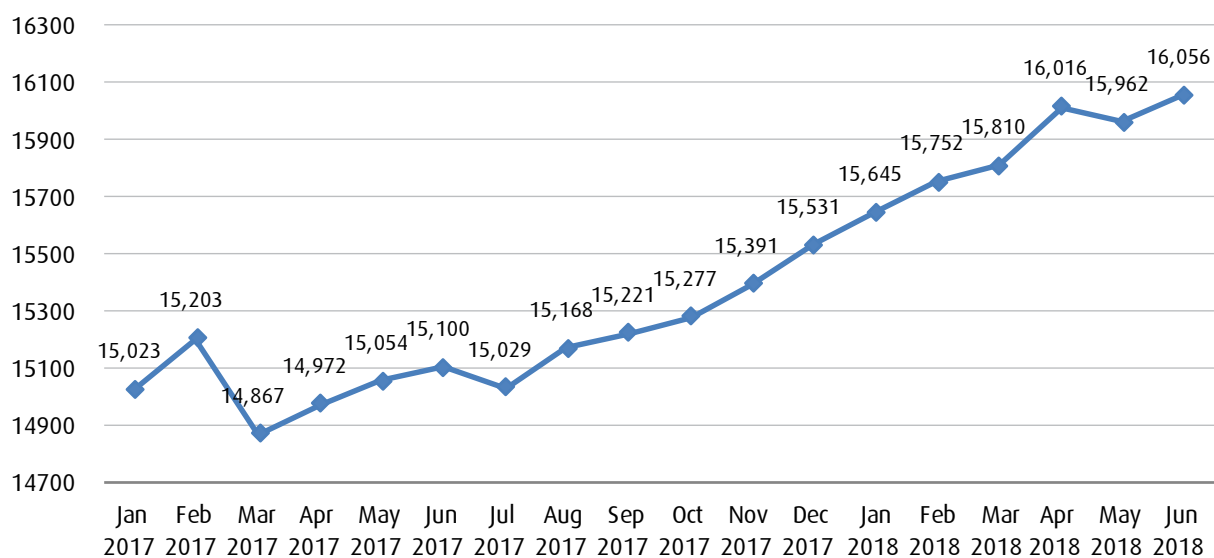


Figure 22: Trend analysis of number of midwives in public hospitals during 2017 and 2018

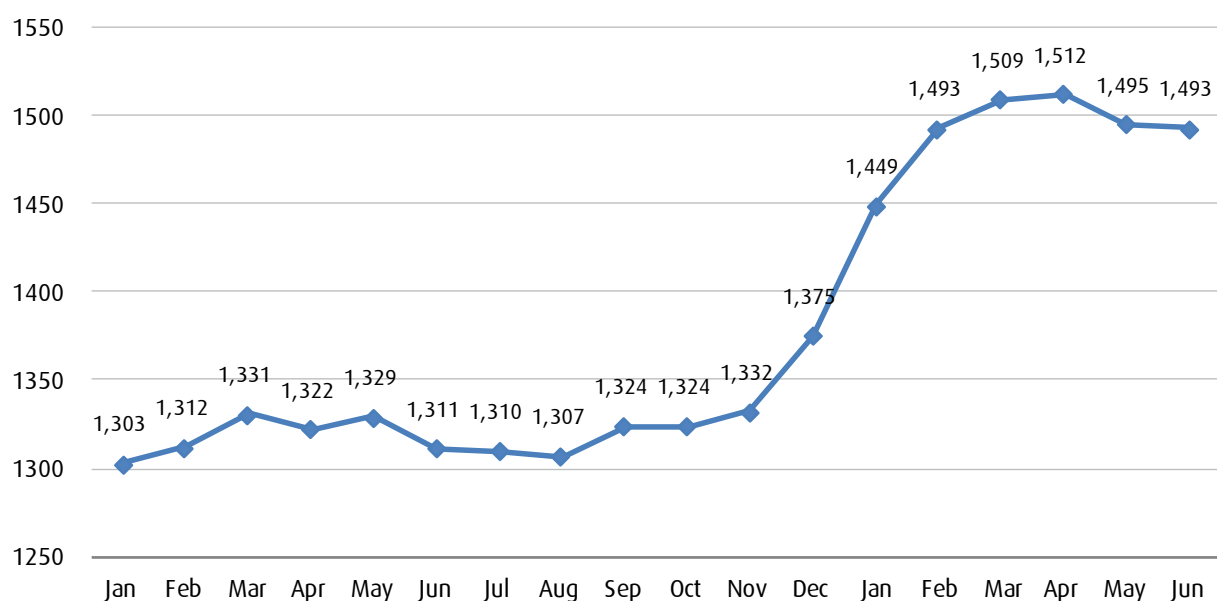


Figure 23: Proportions and numbers of key staff work in MoH vs. MoHE hospitals, June 2018

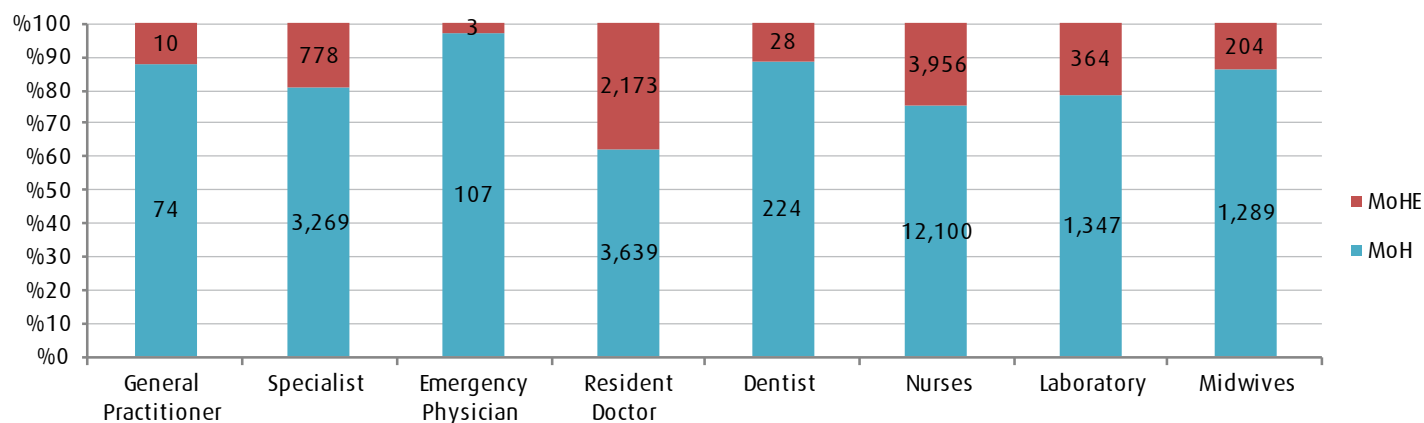


Figure 24: Comparison of the medical staff of MoH vs. MoHE hospitals, June 2018

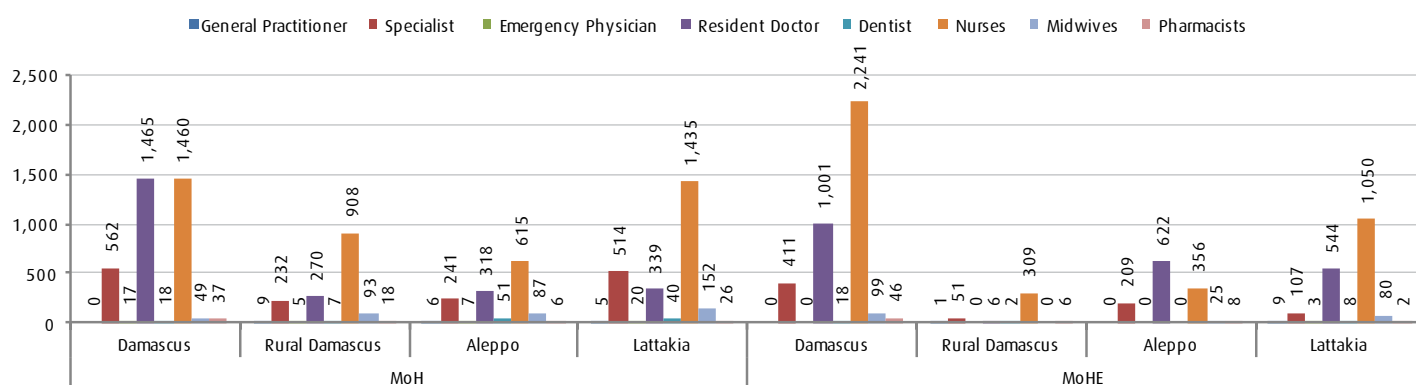


Figure 25: Number of nurses and midwives per doctor in public hospitals, June 2018

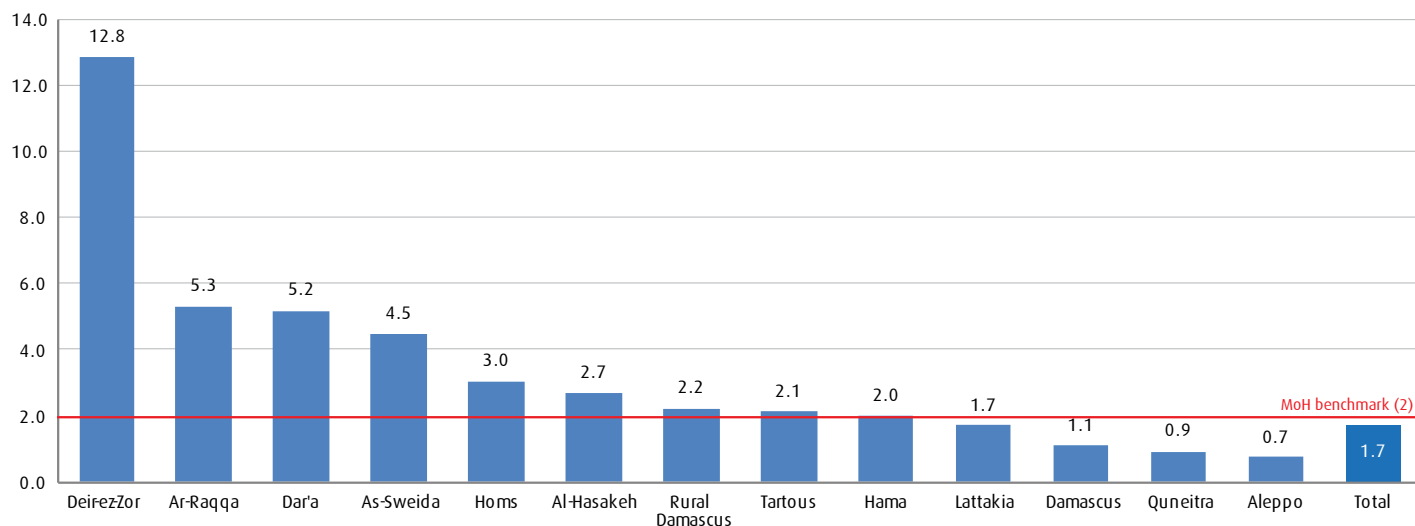


Figure 26: Proportion of doctors (a total of specialists, emergency physicians, resident doctors, dentists), by gender, per governorate, June 2018

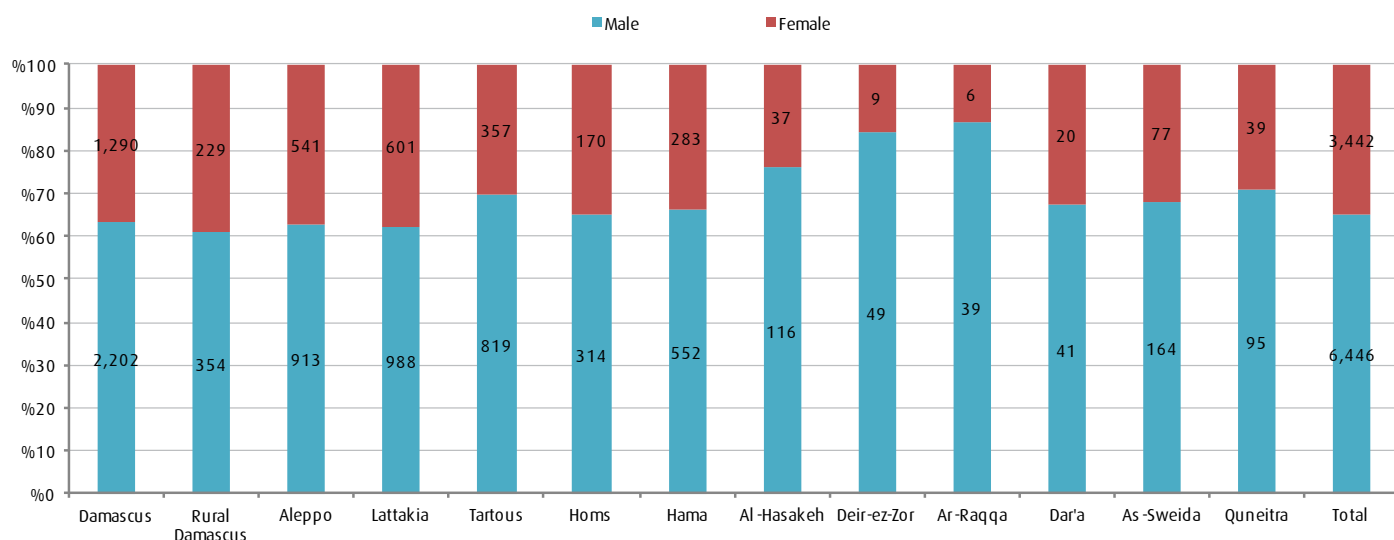
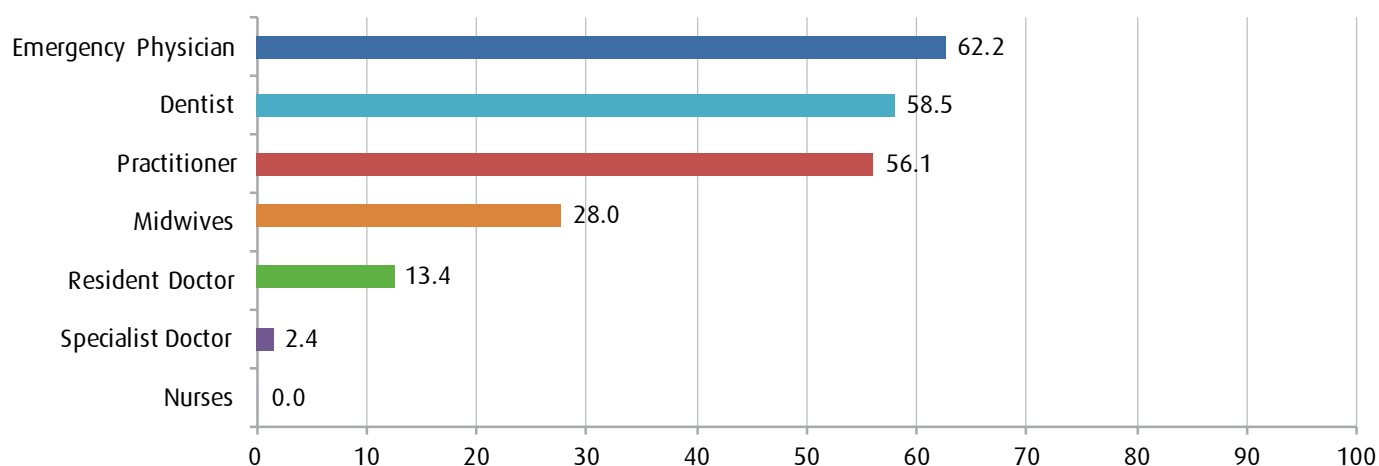


Figure 27: Percentage of functioning public hospitals without medical staff (gaps), June 2018

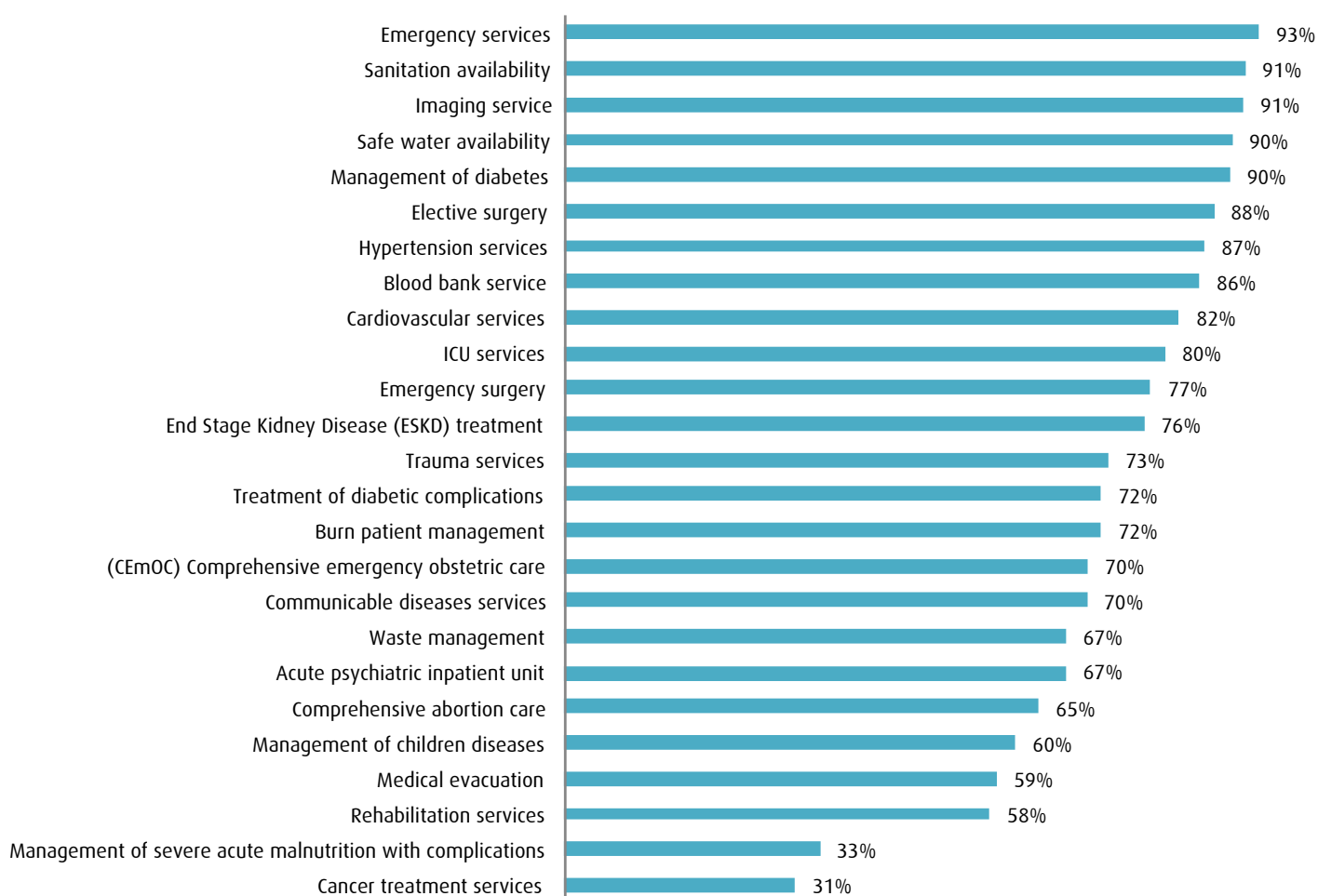


8. Availability of health services

The availability of core healthcare services is monitored through HeRAMS at hospital's level, considering a standard list of health services including:

1. General Clinical Services (Outpatient, Inpatient, Laboratory, Blood bank services, Imaging services)
2. Surgical and Trauma care
3. Maternal health services [normal deliveries, caesarean sections, and CEmOC]
4. Nutrition
5. Child Health
6. Communicable diseases
7. Non-communicable diseases
8. Mental Health

Figure 28: Availability of health services in the functional public hospitals, June 2018



9. Utilization of health services

Figure 29: Estimated caseload of functional public hospitals (outpatient consultations and emergency cases), June 2018

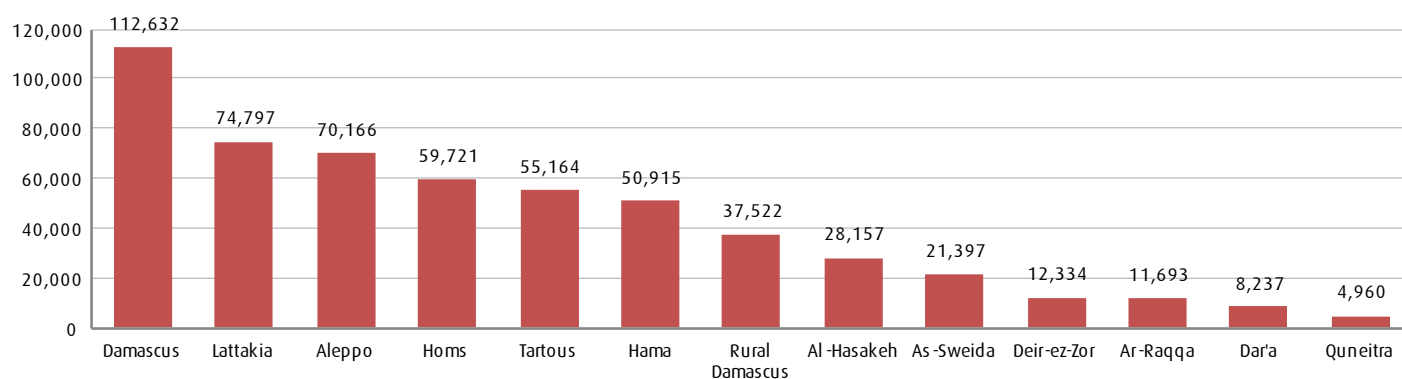


Figure 30: Trend analysis of estimated caseload in public hospitals, January 2017 to June 2018

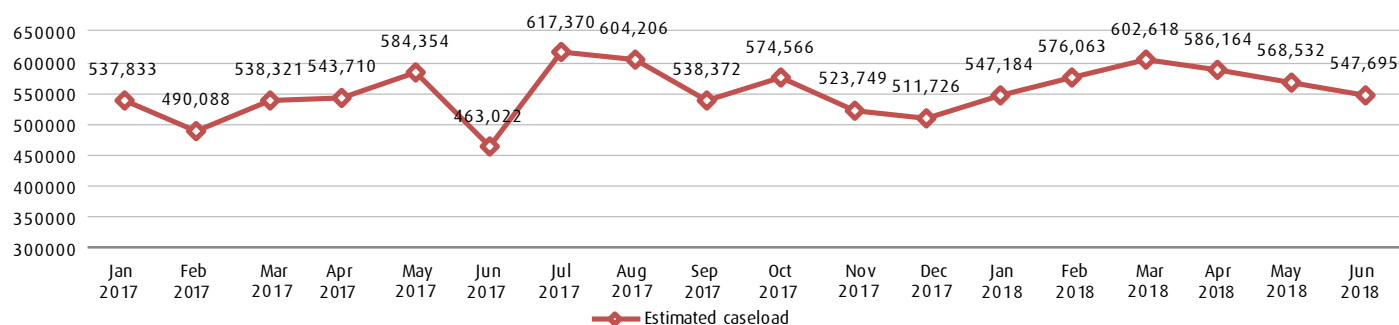
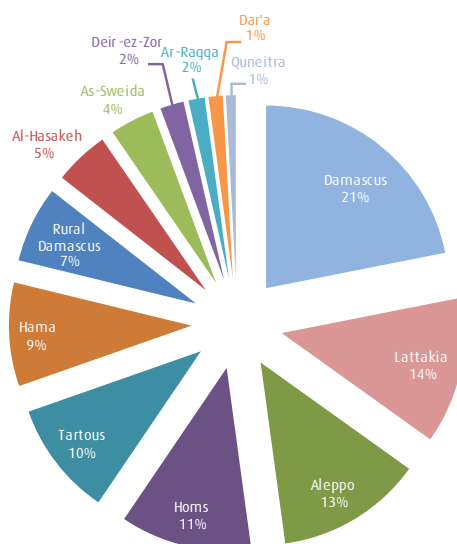


Figure 31: Proportions of workload during June 2018, per governorate



9.1. General clinical services

9.1.1. Outpatient and inpatient:

- **Outpatient department (OPD)** with at least one doctor
- **Inpatients services:** At least 20 inpatient bed capacity with availability of medical doctors (MD), nurses and midwives, and 4–5 beds for short observation before admission, or 24/48 hour hospitalization

Figure 32: The number of outpatient and inpatient in public hospitals, June 2018

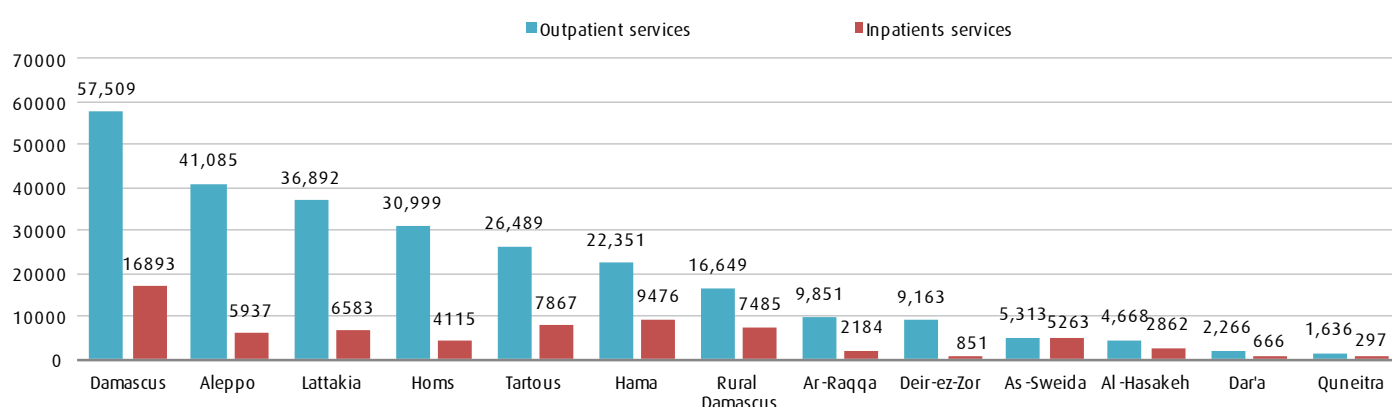
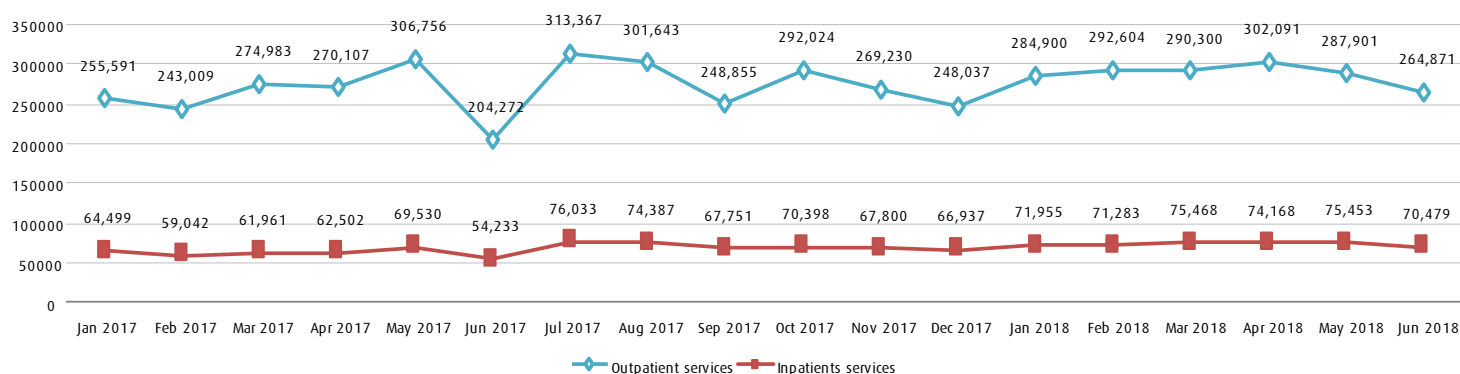


Figure 33: Trend analysis of outpatient and Inpatient in public hospitals, January 2017 to June 2018



9.1.2. Laboratories, blood bank, and imaging services

- **Laboratory services** including public health laboratory
- **Blood bank service**
- **Imaging service** (X-Ray, ultrasound, CT Scanner, MRI, Mammography...etc.)

Figure 34: The number of patients received services in laboratories, blood bank, and imaging services in public hospitals, June 2018

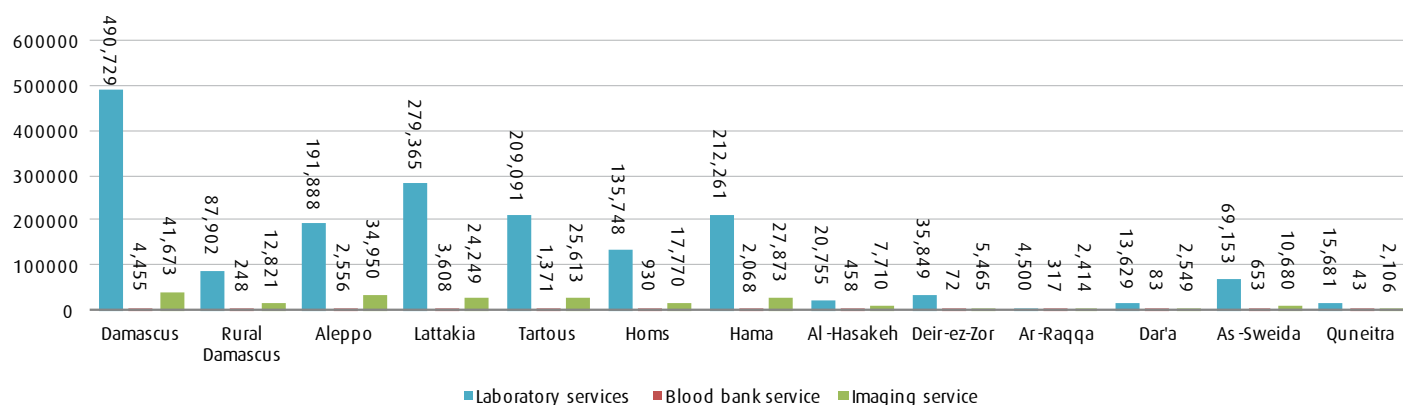
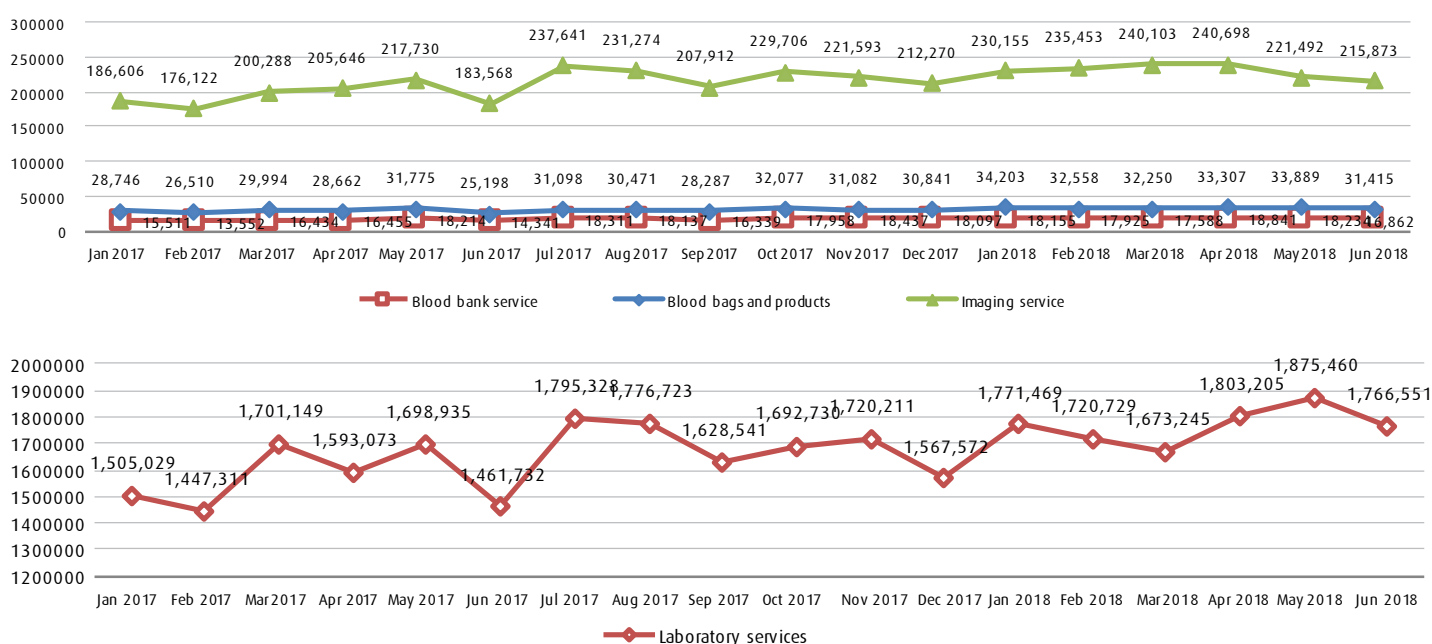


Figure 35: Trend analysis of number of patients received services in blood banks and imaging services in public hospitals, January 2017 to June 2018



9.2. Surgical and Trauma care

9.2.1. Emergency cases reported in emergency departments

Medical and surgical triage, advanced life support (defibrillator) and airway management, acceptance of referral, advance stabilization and referral, availability of second-line emergency and pain management drugs

Figure 36: The number of reported cases in emergency department in public hospitals, June 2018

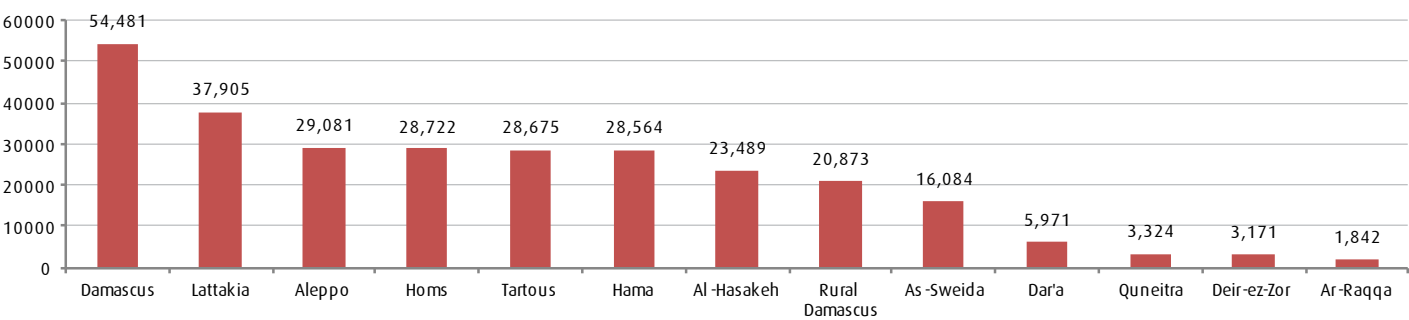
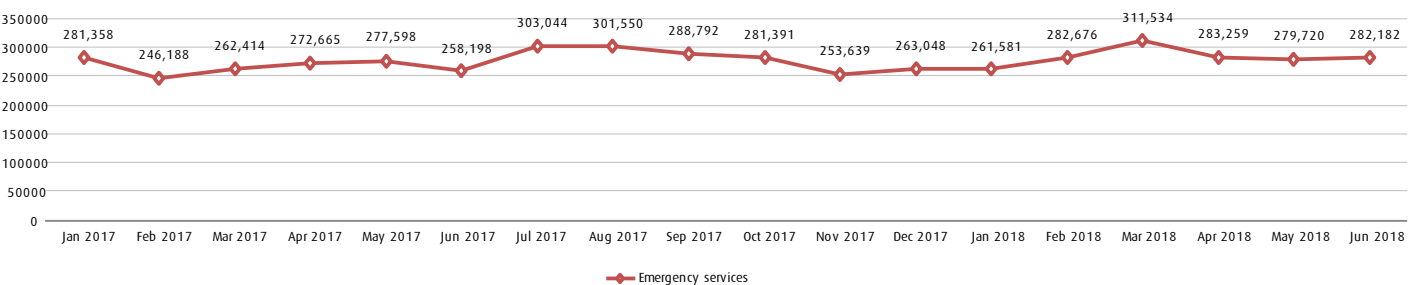


Figure 37: Trend analysis of number of reported cases in emergency department in public hospitals, January 2017 to June 2018



9.2.2. Emergency and elective surgeries:

- **Emergency surgery** (including advanced fracture management through at least one operating theatre with basic general anaesthesia)
- **Elective surgery** (including but not limited to full surgical wound care)

Figure 38: The number of emergency surgeries vs. elective surgeries in public hospitals, June 2018

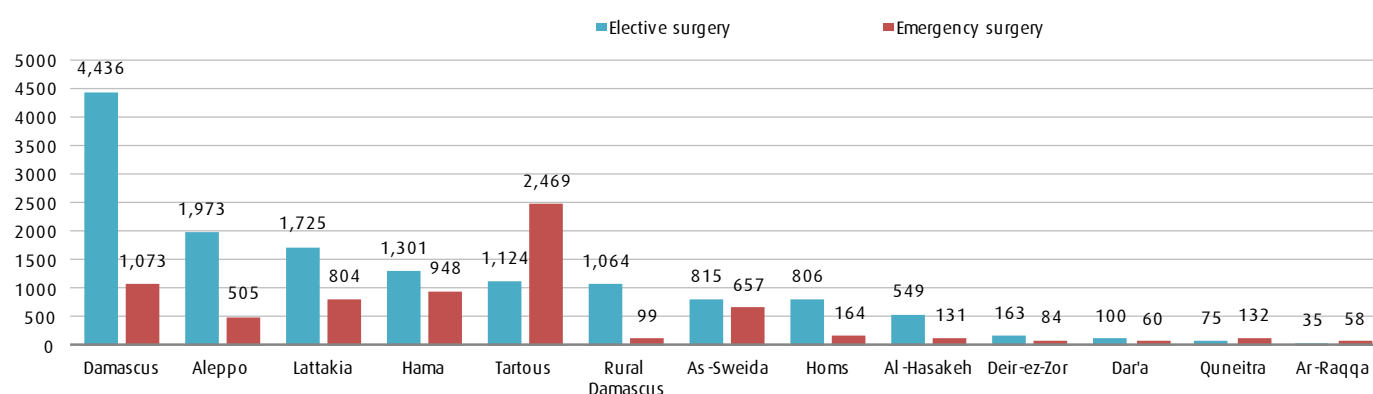


Figure 39: Percentage of total emergency surgeries to elective surgeries in public hospitals per governorate, June 2018

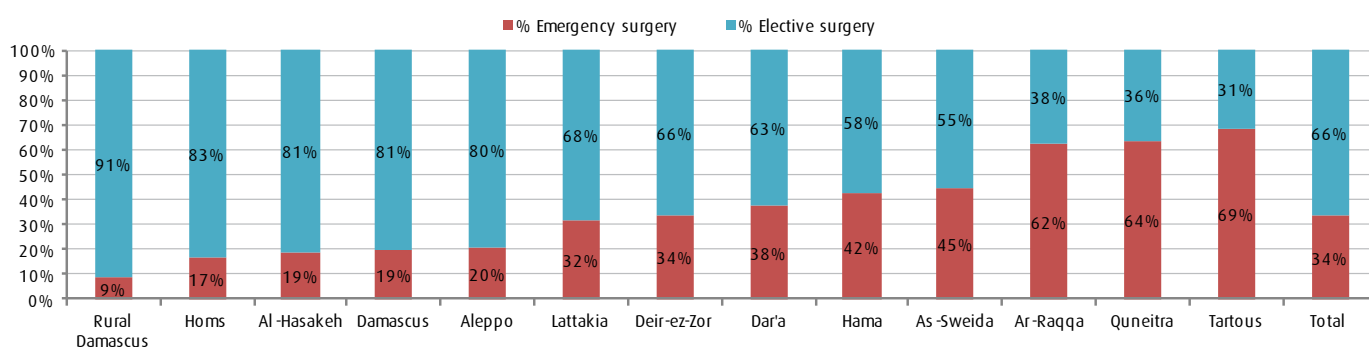
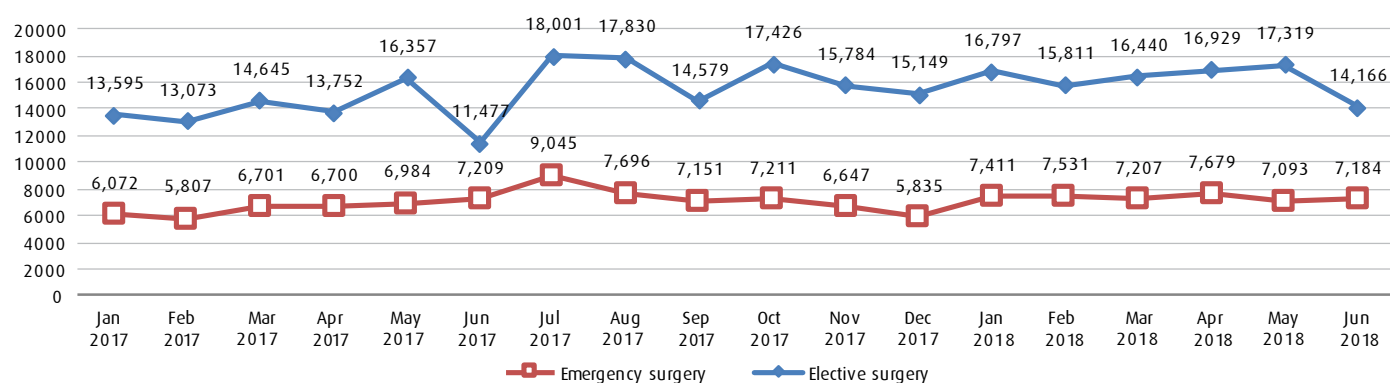


Figure 40: Trend analysis of number of patients received emergency surgeries and elective surgeries in public hospitals, January 2017 to June 2018



9.2.3. ICU services (Intensive Care Unit):

Figure 41: The number of patients received ICU services in public hospitals, June 2018

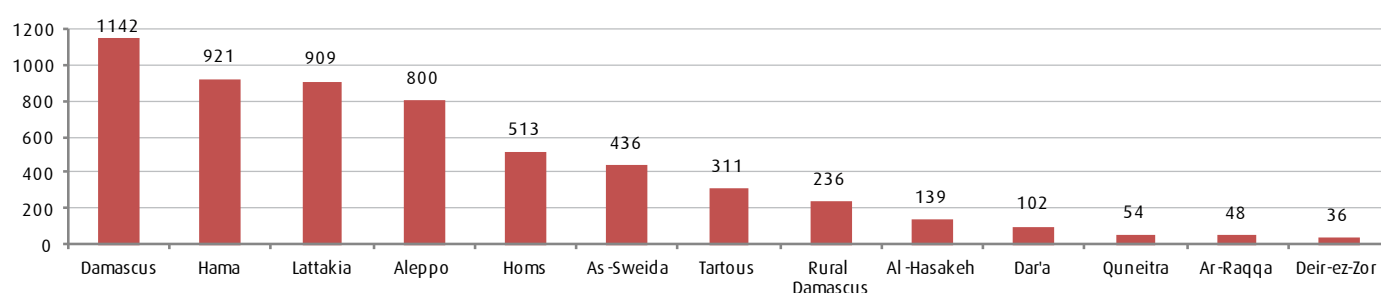
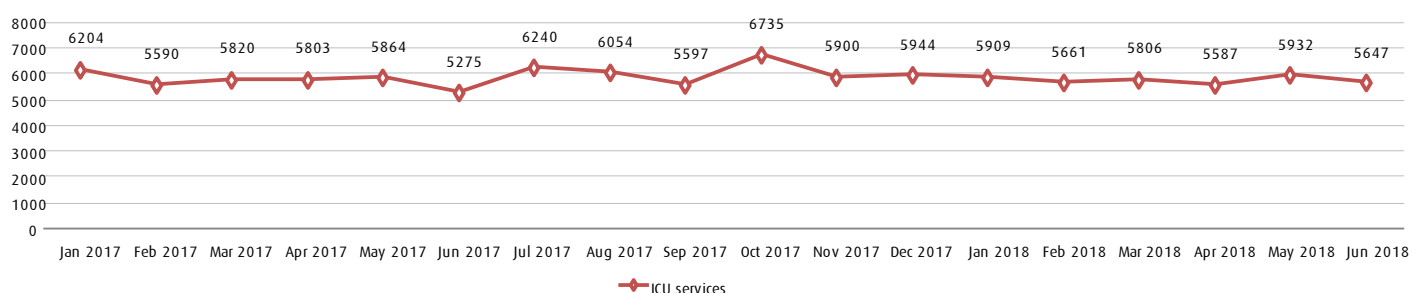


Figure 42: Trend analysis of number of patients received ICU services in public hospitals, January 2017 to June 2018



9.2.4. Trauma services:

- Orthopedic/trauma ward for advanced orthopedic

Figure 43: The number of patients received trauma services in public hospitals, June 2018

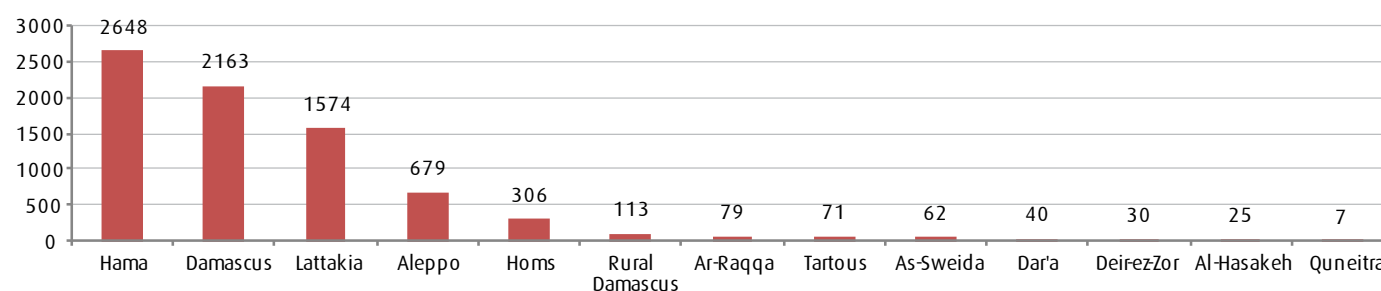
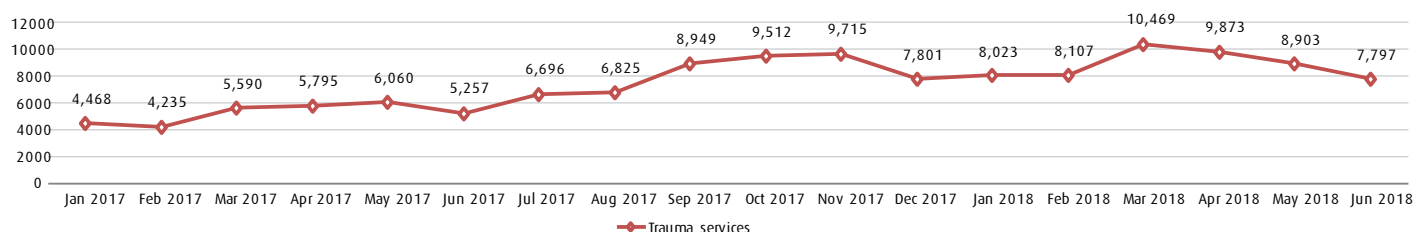


Figure 44: Trend analysis of number of patients received trauma services in public hospitals, January 2017 to June 2018



9.2.5. Burn patient management:

Figure 45: The number of patients received burn patient management in public hospitals, June 2018

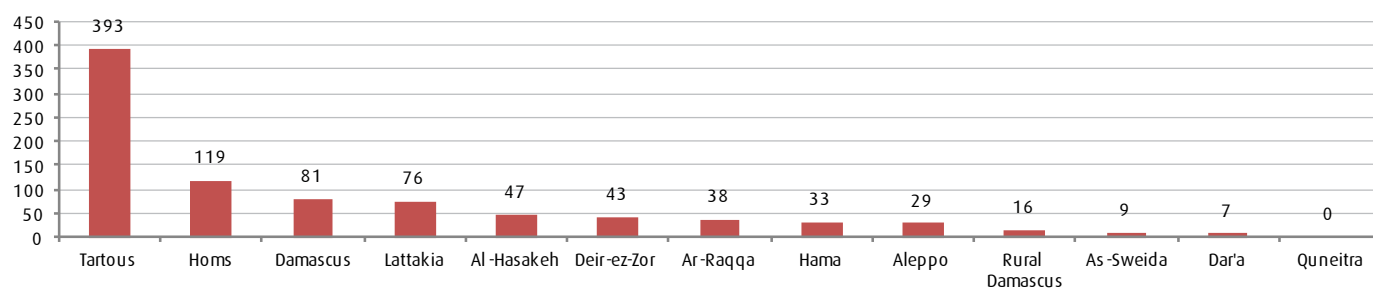
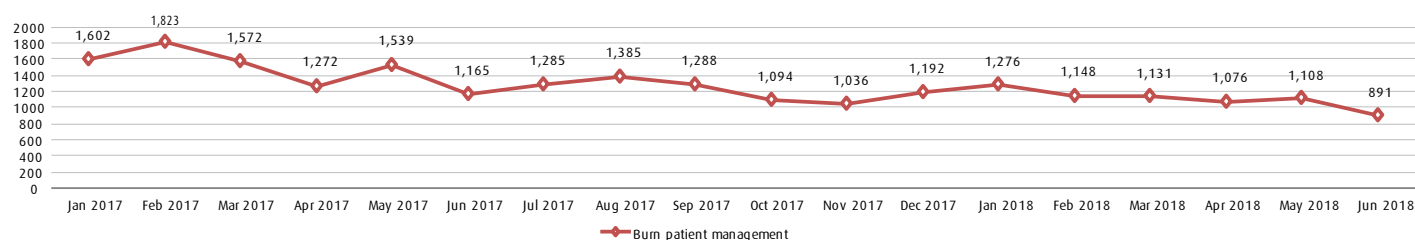


Figure 46: Trend analysis of number of patients received burn patient management in public hospitals, January 2017 to June 2018



9.3. Maternal health services

9.3.1. Caesarean sections and normal deliveries

Figure 47: The No. of normal deliveries and caesarean sections (CSs) performed at public hospitals, June 2018

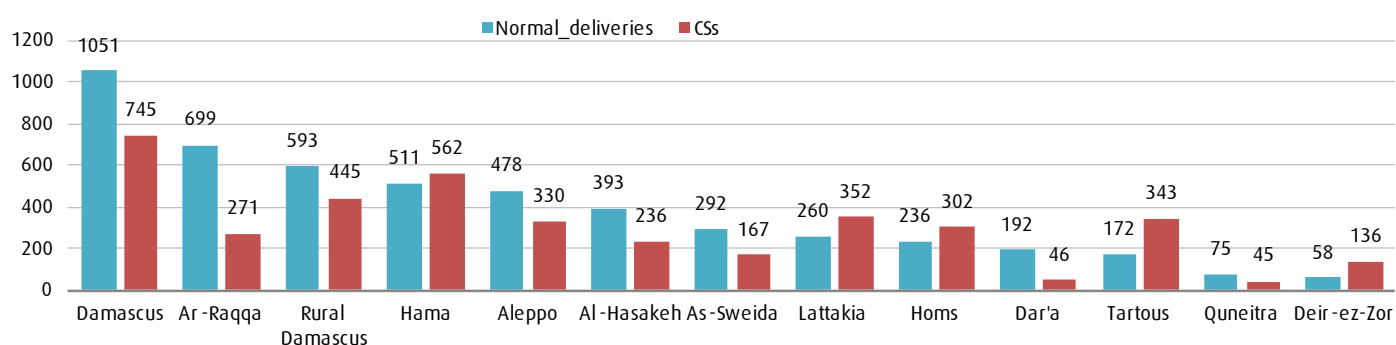


Figure 48: Percentage of caesarean sections to normal deliveries in public hospitals, June 2018

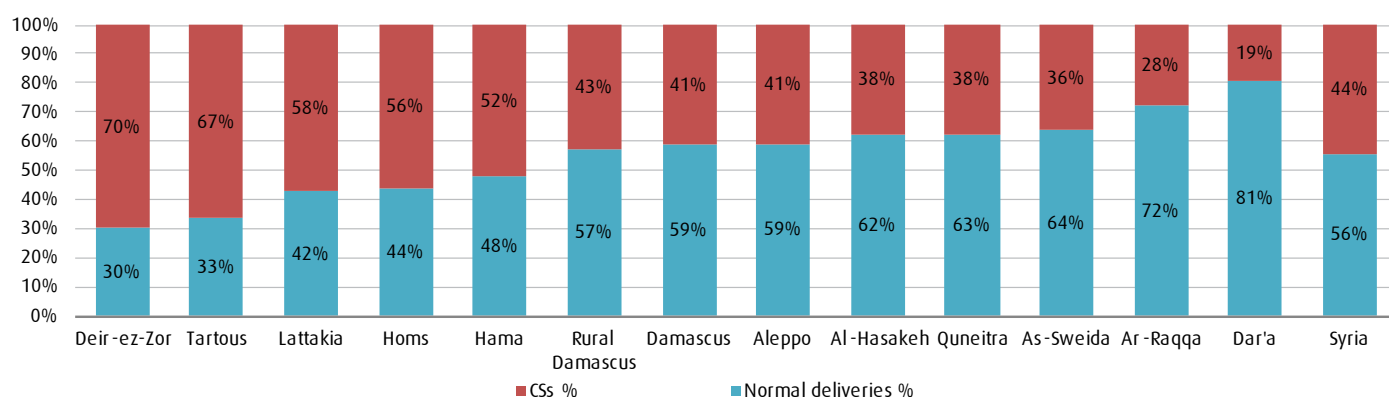


Figure 49: Trend analysis of the monthly numbers of normal deliveries vs. caesarean sections in public hospitals, January 2017 to June 2018

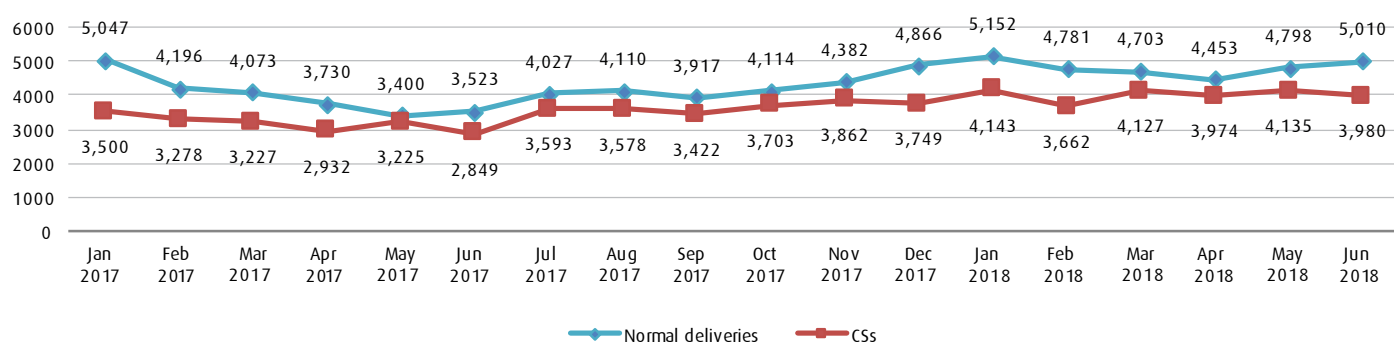
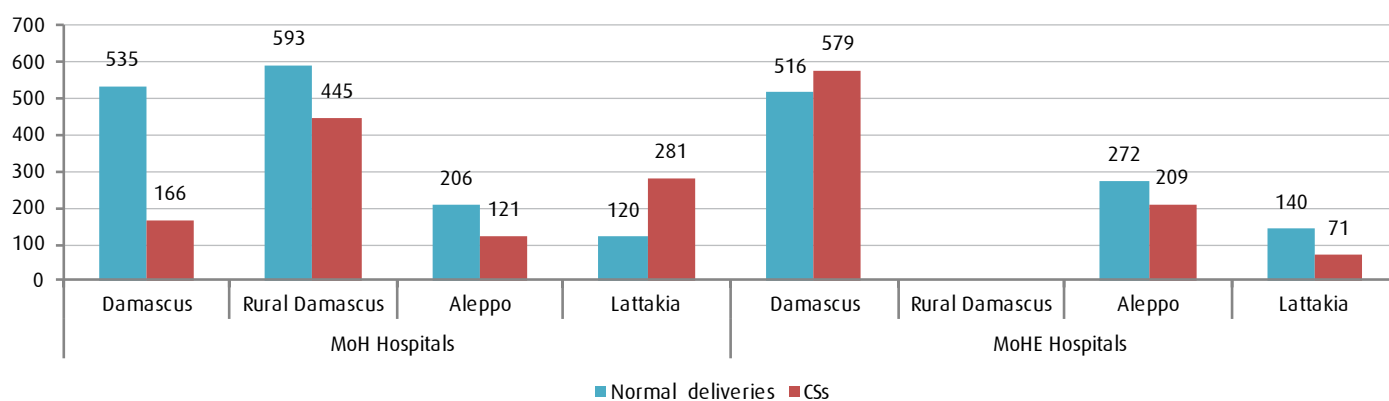


Figure 50: Comparison of MoH & MoHE hospitals workload of normal deliveries vs, CSs, June 2018



9.4. Child health

- Management of children classified with severe or very severe diseases (parenteral fluids and drugs, oxygen)

Figure 51: Number of children with severe diseases in public hospitals, June 2018

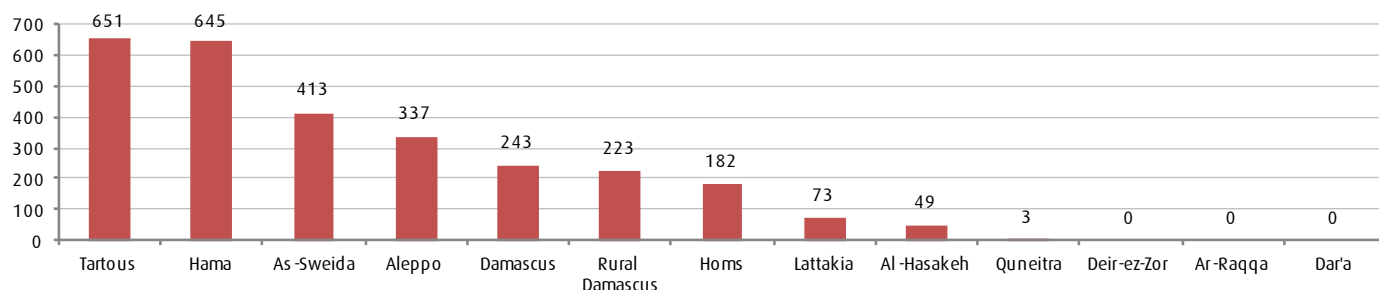
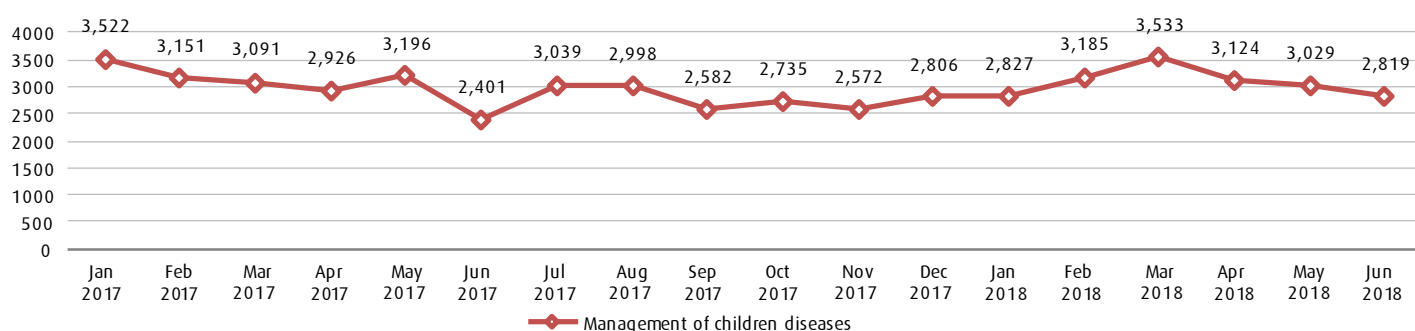


Figure 52: Trend analysis of reported cases of severe children diseases in public hospitals, January 2017 to June 2018



9.5. Nutrition

- Stabilization centre for the management of severe acute malnutrition with medical complications, with availability of F75, F100, ready-to-use therapeutic foods and dedicated trained team of doctors, nurses, and nurse aids, 24/7

Figure 53: The number of children with severe acute malnutrition with complications in public hospitals, June 2018

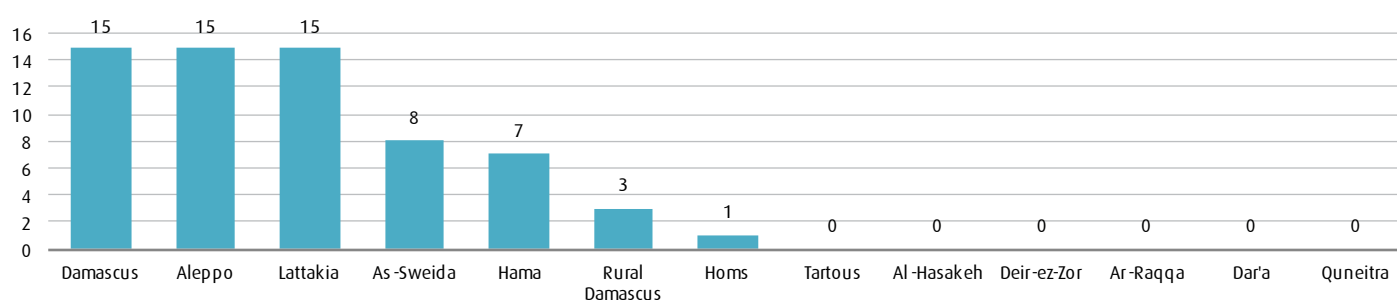
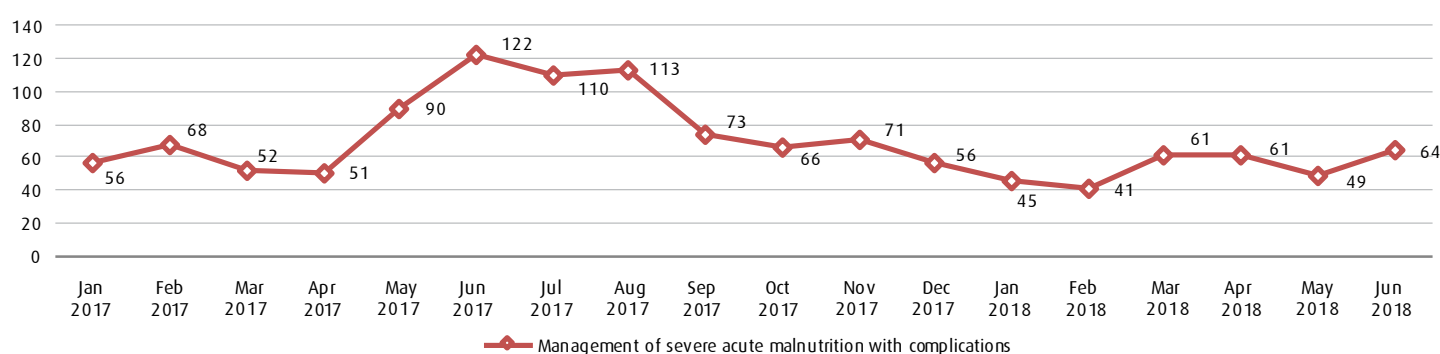


Figure 54: Trend analysis of number of children with severe acute malnutrition with complications in public hospitals, January 2017 to June 2018



9.6. Communicable diseases services

- Management of severe and/or complicated communicable diseases (such as meningitis, measles, SARI, others)

Figure 55: The number of patients received communicable diseases services in public hospitals, June 2018

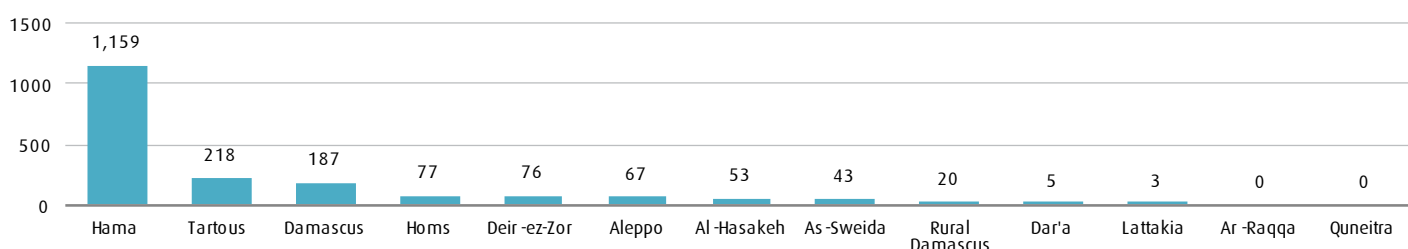
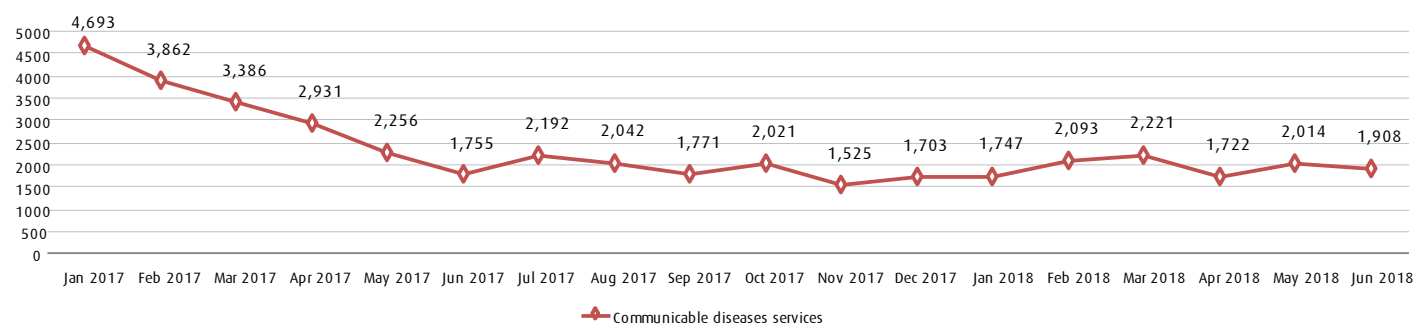


Figure 56: Trend analysis of number of patients received communicable diseases services in public hospitals, January 2017 to June 2018



9.7. Noncommunicable diseases (NCDs)

- Management of diabetes
- Treatment of diabetic complications (Kidney failure, Diabetic retinopathy, Neuropathy Diabetes, Ft Diabetes ... etc.)
- Management of hypertension
- Management of cardiovascular diseases
- Haemodialysis unit
- Management of cancer diseases

Figure 57: The number of NCDs' consultations in public hospitals, June 2018

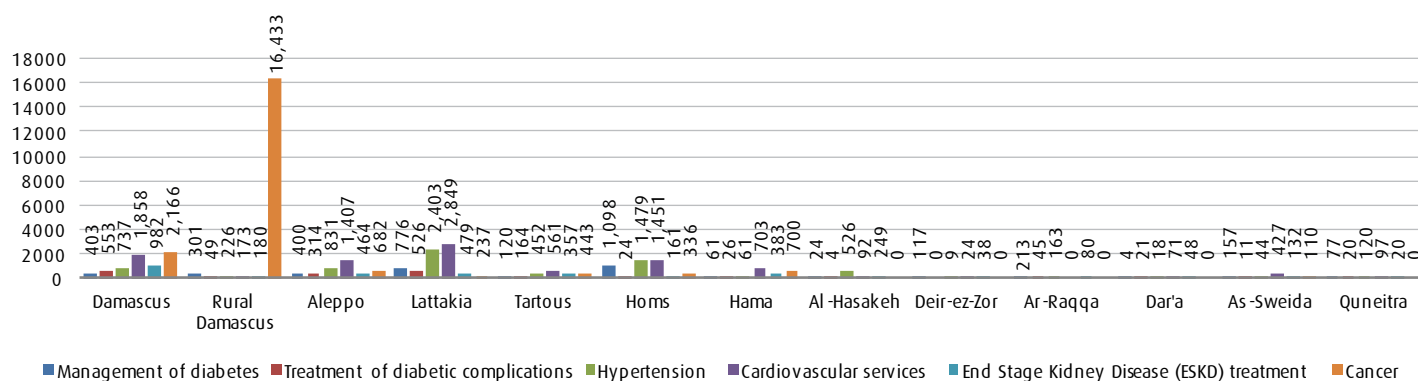
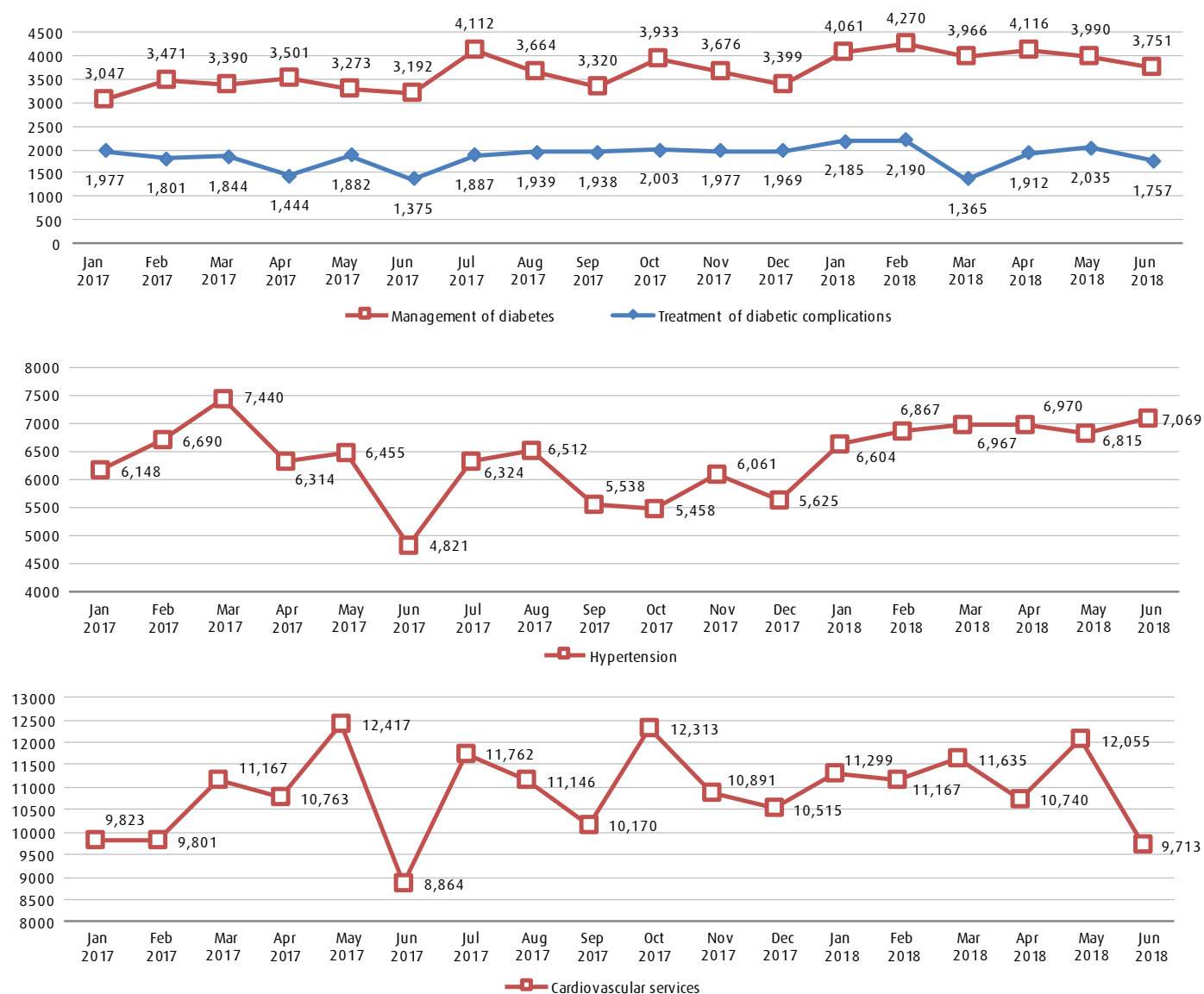
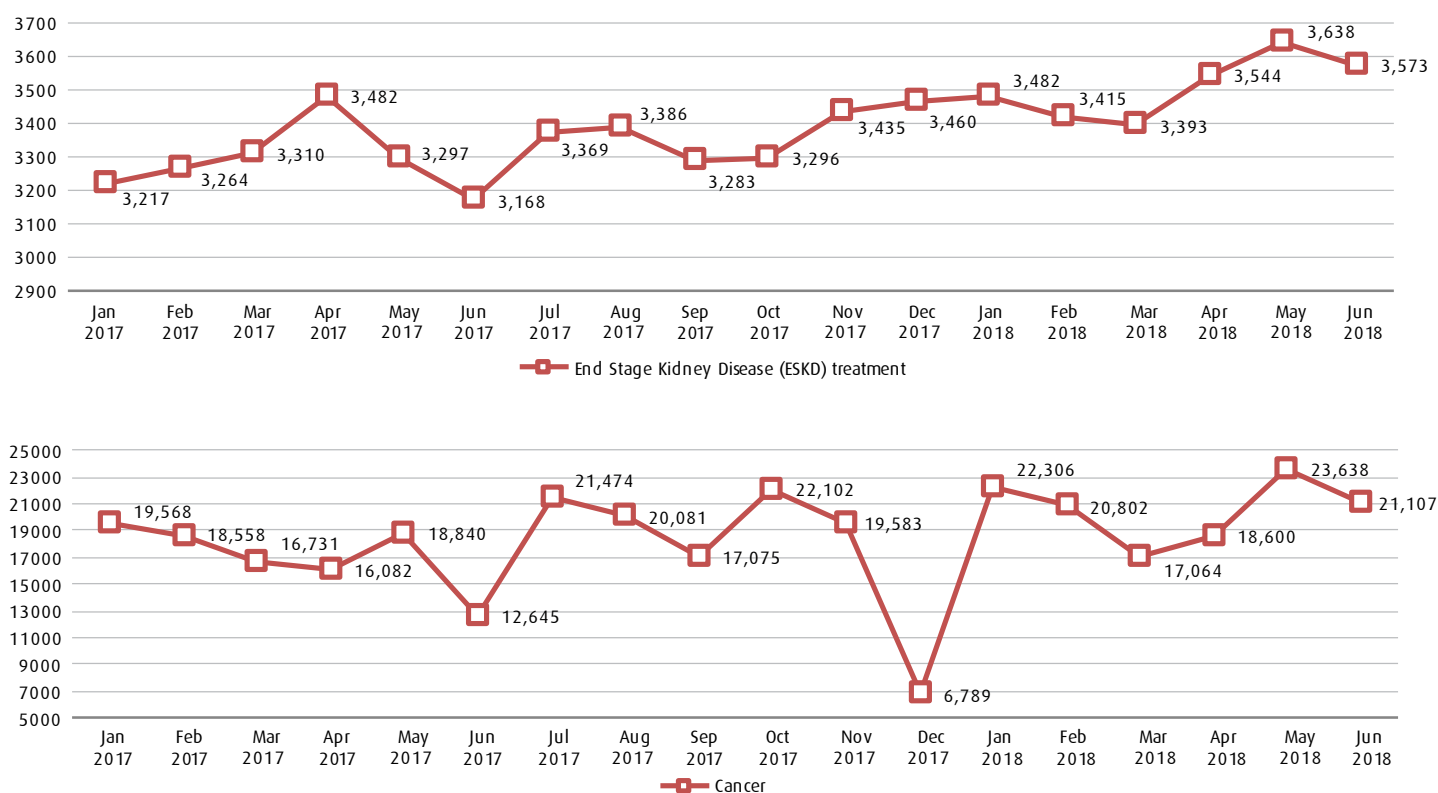


Figure 58: Trend analysis of total monthly number of NCDs' consultations reported in public hospitals, January 2017 to June 2018





9.8. Rehabilitation services

- Rehabilitation services and assistive device provision, including post-operative rehabilitation for trauma-related injuries

Figure 59: The number of rehabilitation services in public hospitals, June 2018

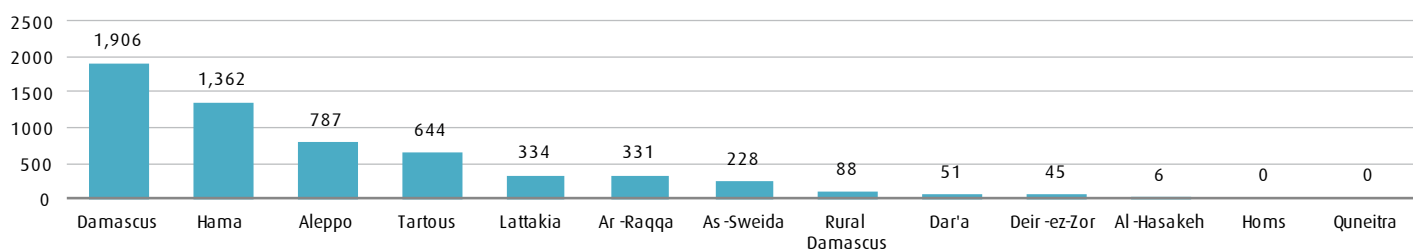
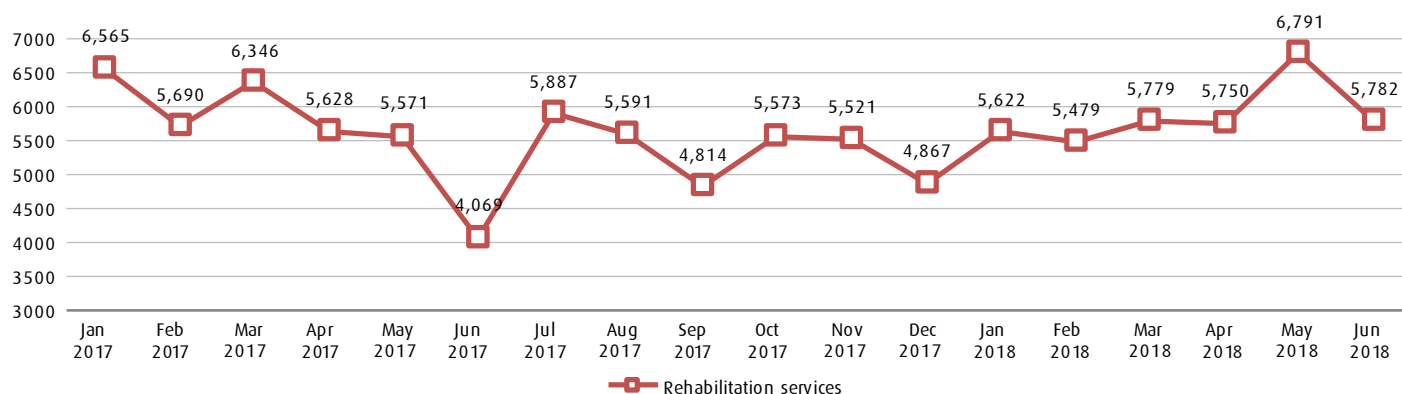


Figure 60: Trend analysis of number of rehabilitation services in public hospitals, January 2017 to June 2018



9.9. Mental health

- Inpatient care for management of mental disorders by specialized health-care providers

Figure 61: The number of psychiatric inpatients in public hospitals, June 2018

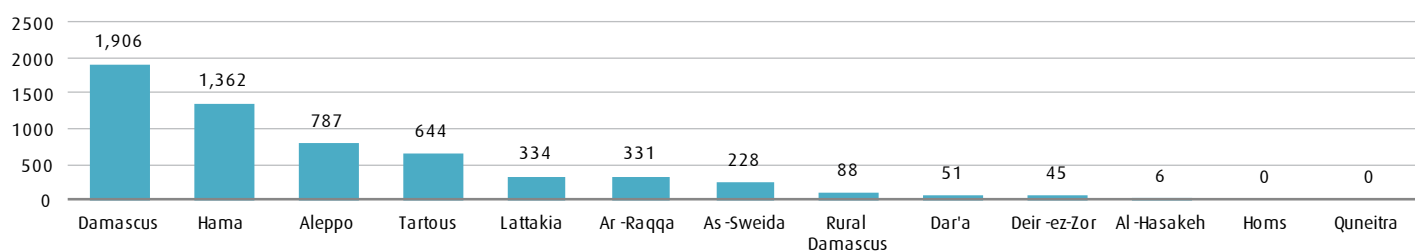
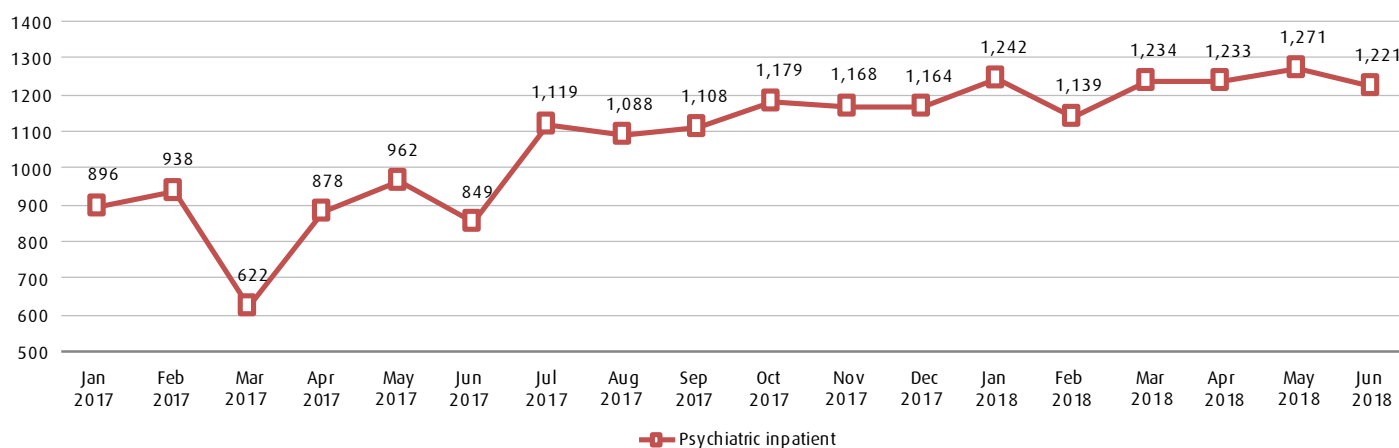


Figure 62: Trend analysis of psychiatric inpatient cases in public hospitals, January 2017 to June 2018



10. Availability of medical equipment

The produced analysis provides good indication of the current readiness of the hospitals to provide the health services, and also to guide focused planning for procurement of equipment and machines, to fill-in identified gaps.

Figure 63: Percentage of functional essential equipment/ total available equipment in functional public hospitals, June 2018

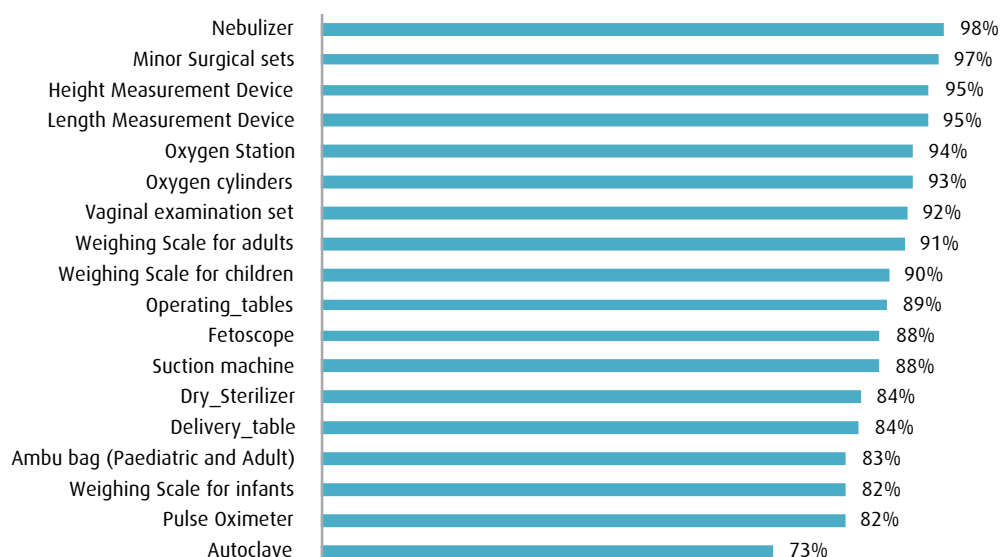
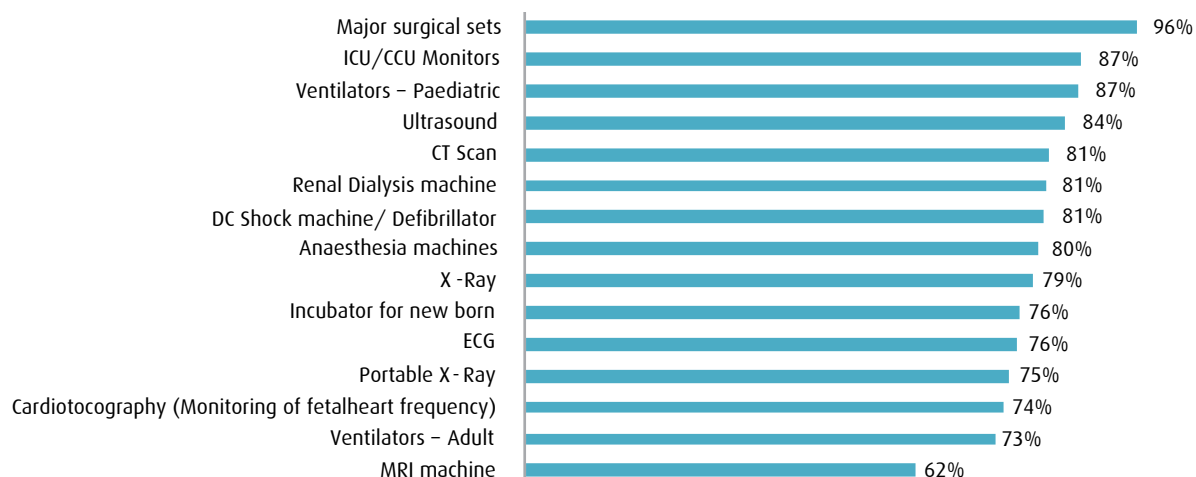


Figure 64: Percentage of functional specialized equipment/ total available equipment in the functional public hospitals, June 2018



11. Availability of medicines & medical supplies

Based on a standard list of identified priority medicines (driven from the national Essential Medicine List), and medical supplies for duration of one month

Figure 65: Availability of medicines and medical supplies for one month in the functional public hospitals, June 2018

