HeRAMS Summary Report

1st Quarter 2018 (January – March)

Public Hospitals in the Syrian Arab Republic

World Health Organization

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World Health Organization
Health resources and services availability mapping system
Syrian Arab Republic

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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 January to March 2018.

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Key indicators

111
# of public hospitals

100%
Completeness rate

51%
Fully functioning

23%
Partially functioning

26%
Non-functioning

15%
Fully damaged

31%
Partially damaged

54%
Intact

11,670
# of available beds

9,888
# of medical doctors

17,319
# of nurses & midwives

602,618
Estimated caseload
(March 2018)

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HeRAMS background

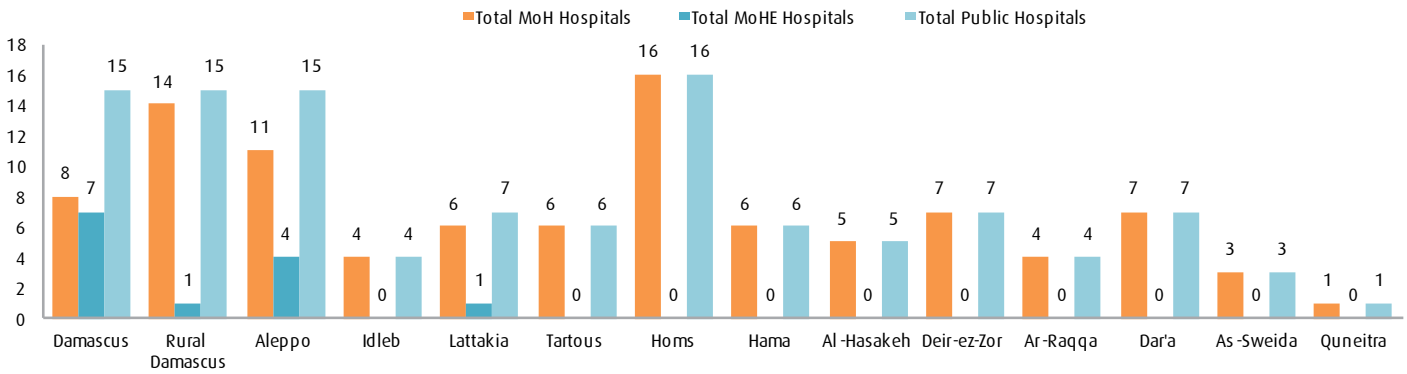
HeRAMS is a global health information management tool (for mapping, collection, collation and analysis of information on health resources and services) that aims to provide timely, relevant and reliable information for decision-making. It is used to guide interventions at the primary and secondary care 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 hospital 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



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 - Mar 2018

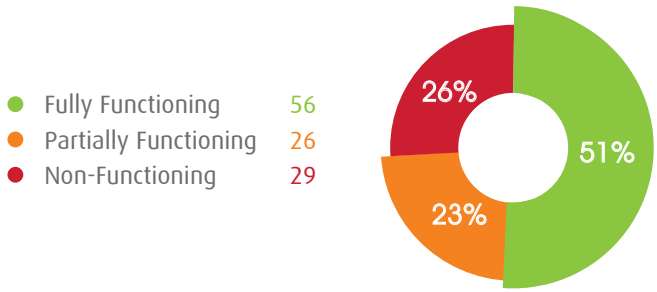
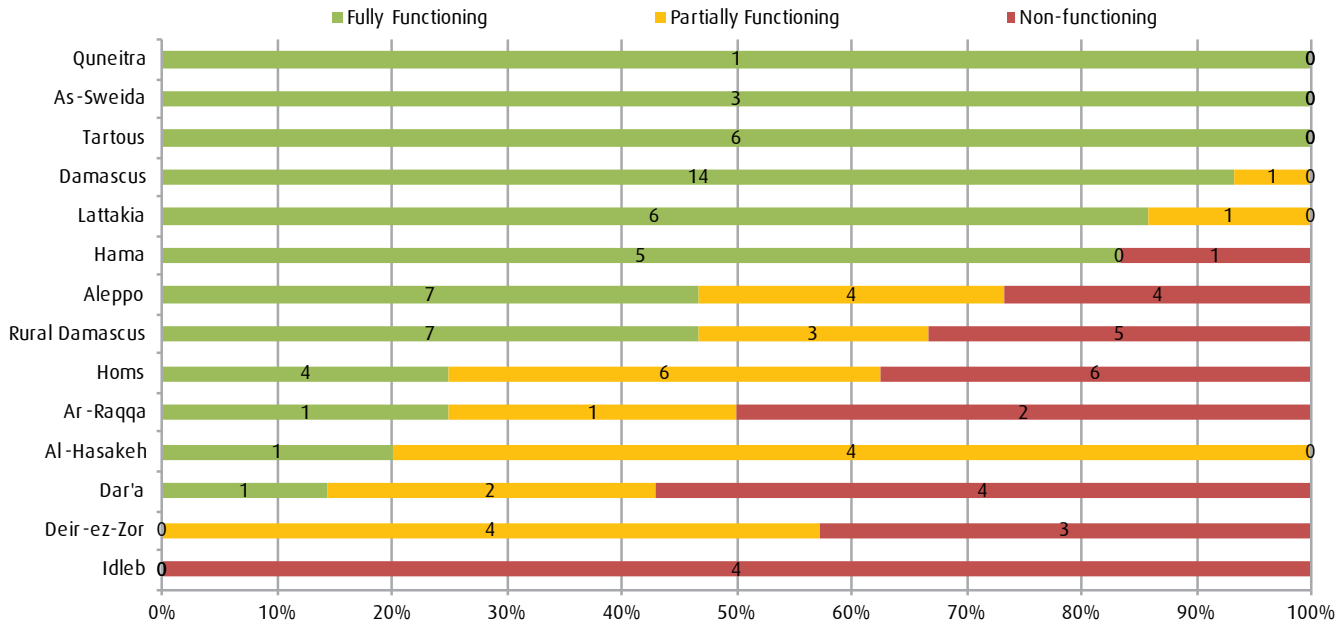


Figure 3: Functionality status, per governorate, March 2018



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Map 1: Functionality status, per governorate, March 2018

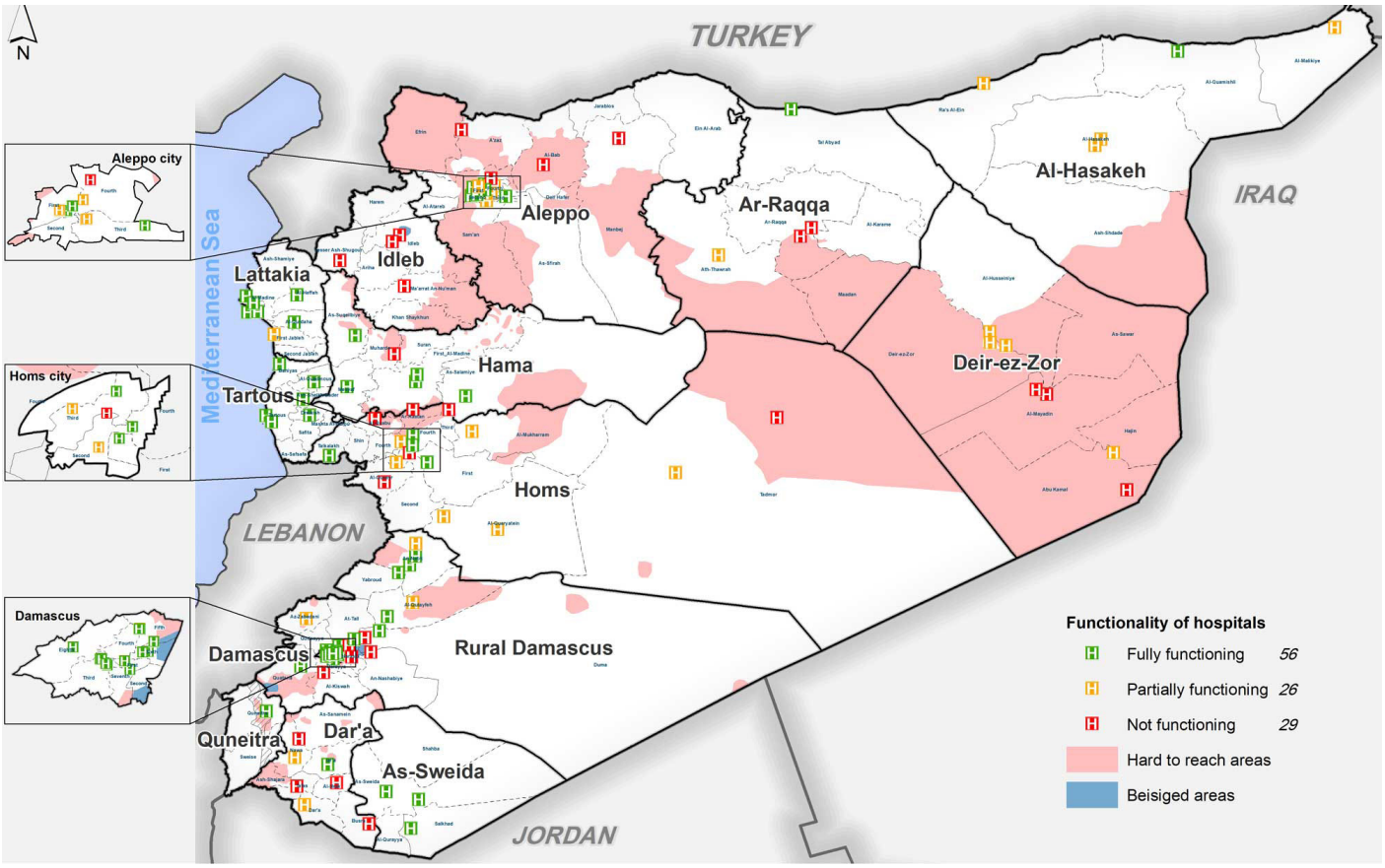
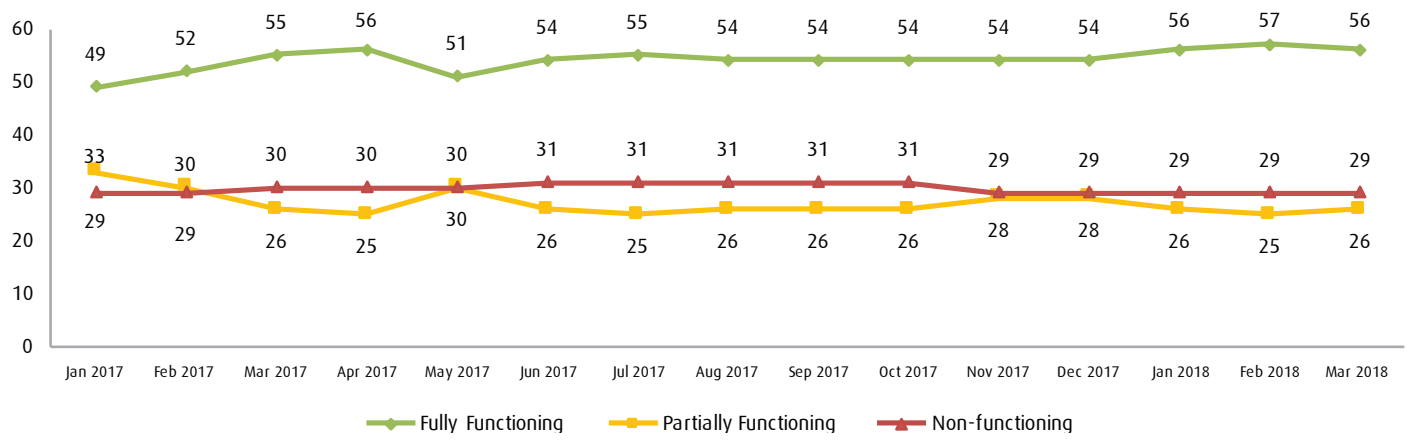


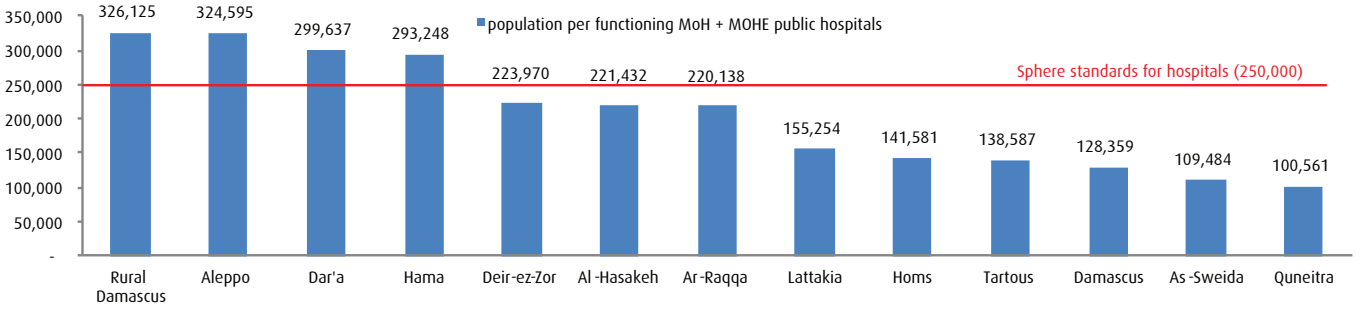
Figure 4: Trend analysis of functionality status, January 2017 to March 2018



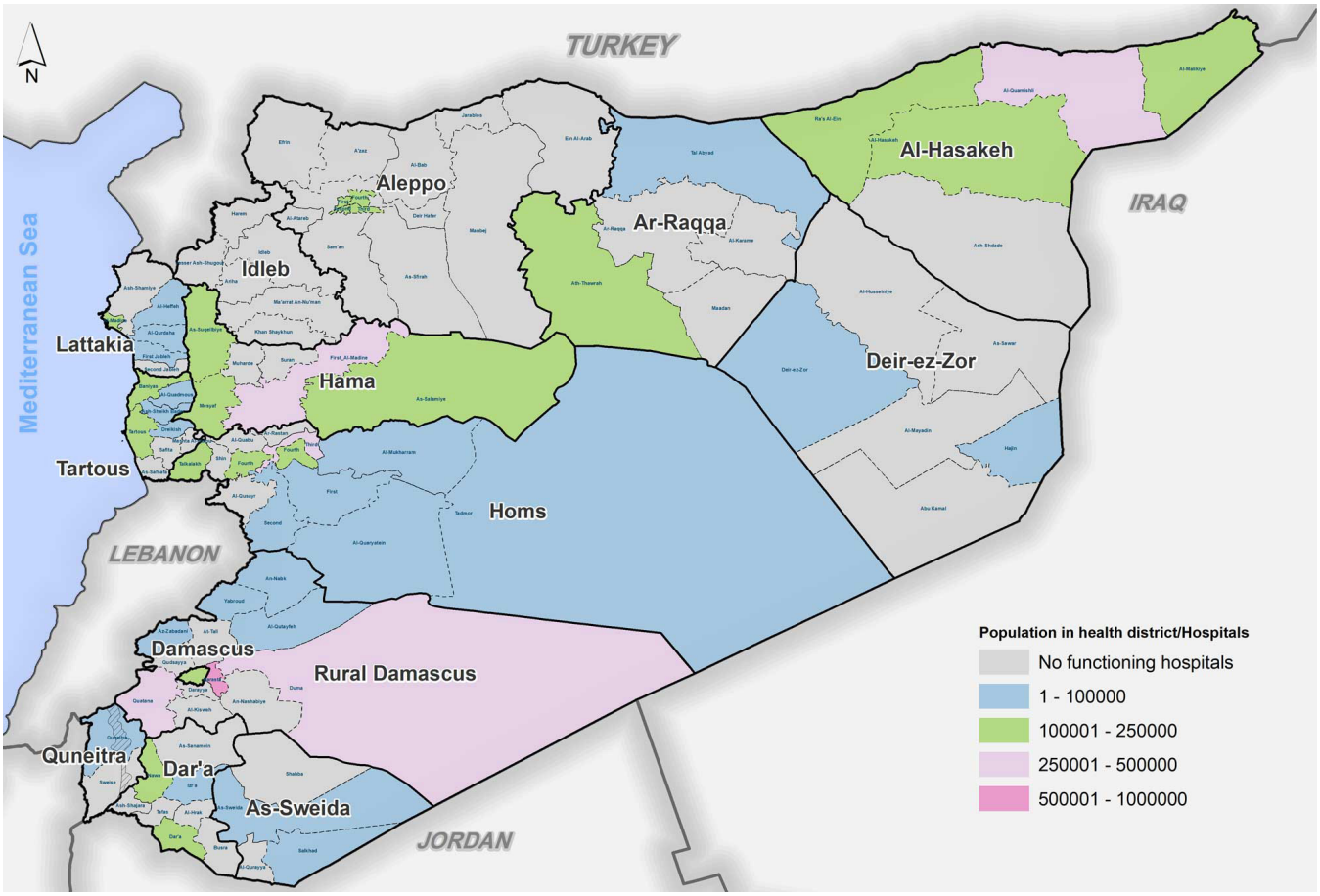
3. Density of public hospitals

Hospitals density reflects the total number of hospitals relative to population size (based on OCHA HRP 2017), which helps measure physical access to outpatient health care services.

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



Map 2: Density of the public hospitals per governorate, March 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 - Mar 2018

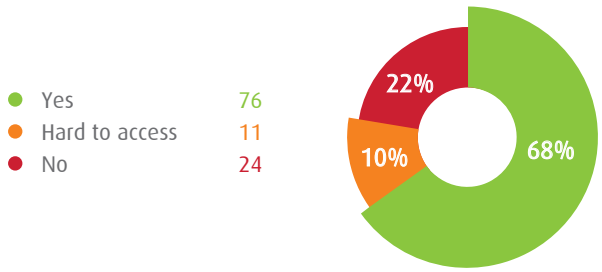
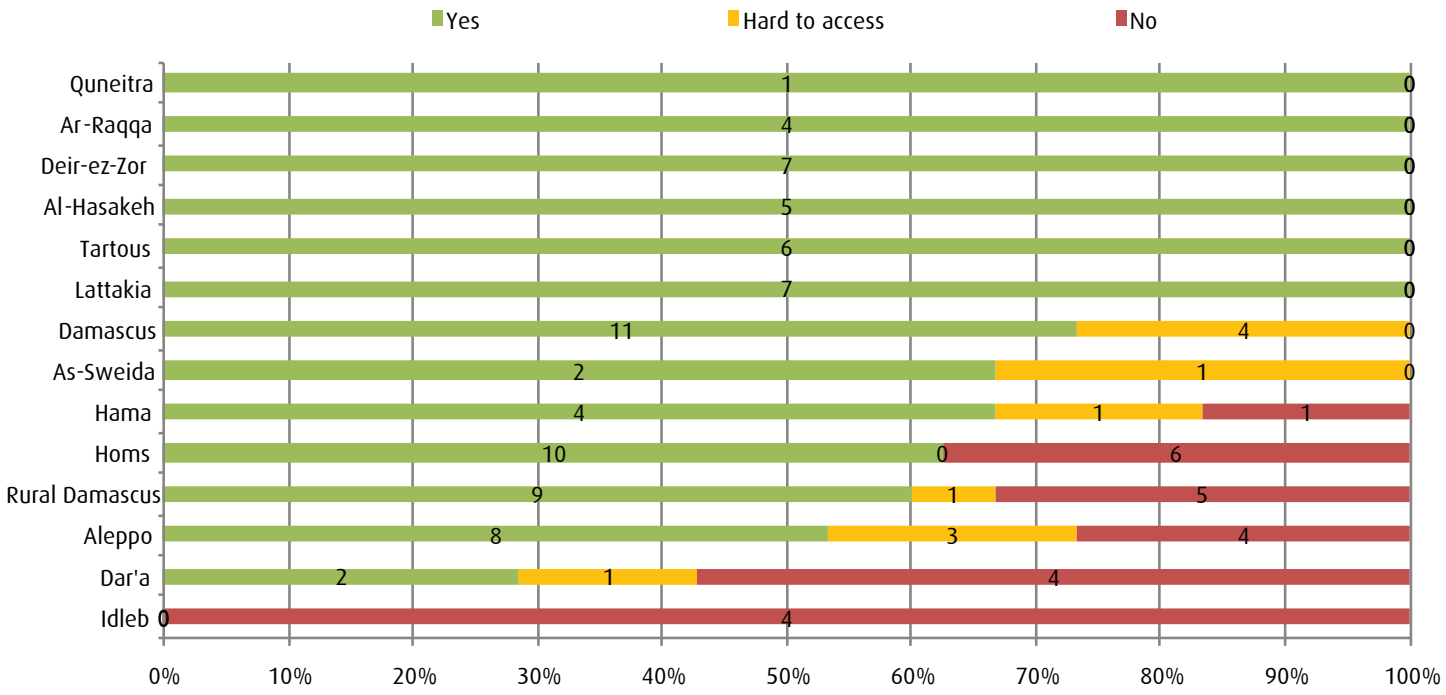


Figure 7: Accessibilty status per governorate, March 2018



Map 3: Accessibilty status per governorate, March 2018

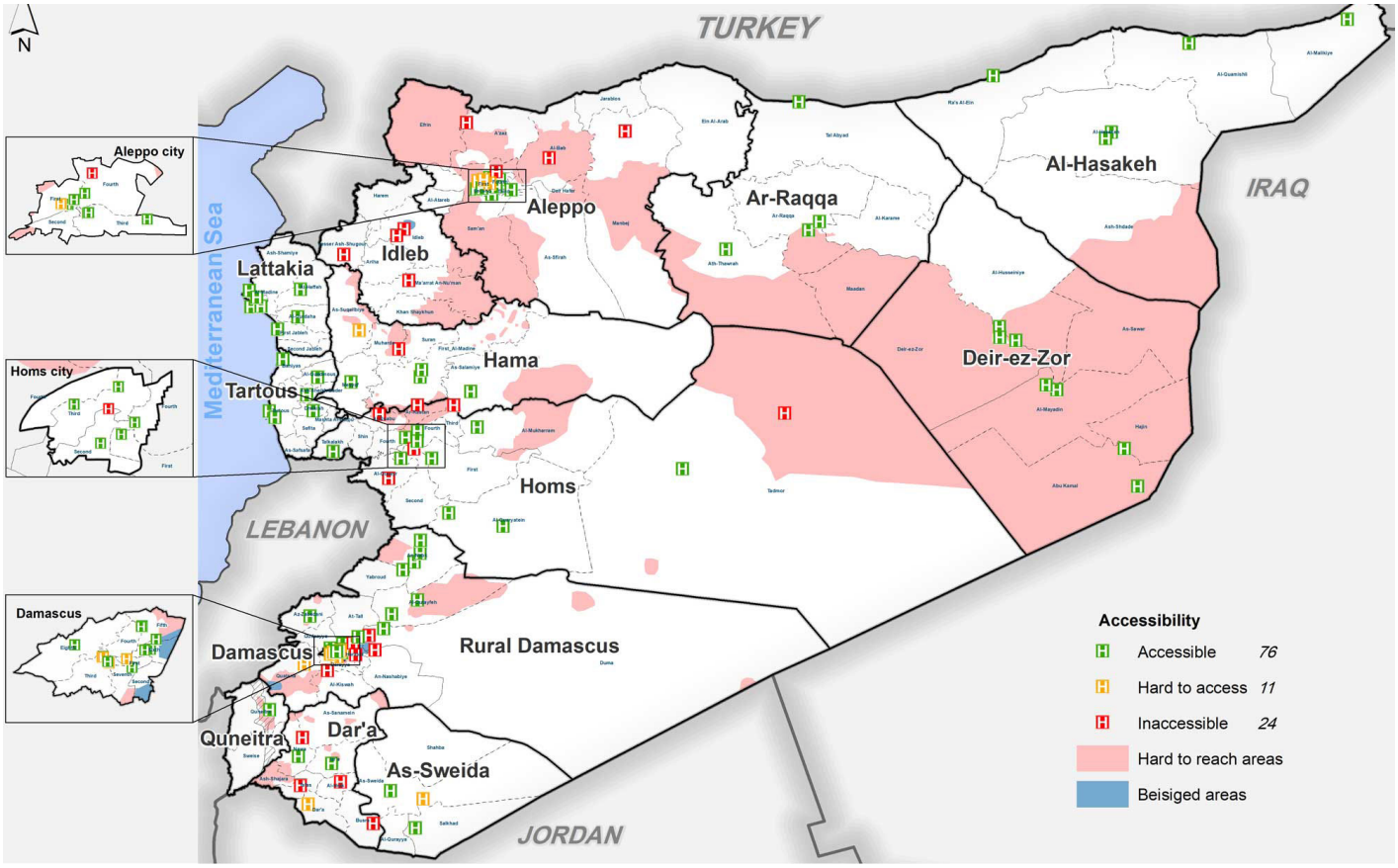
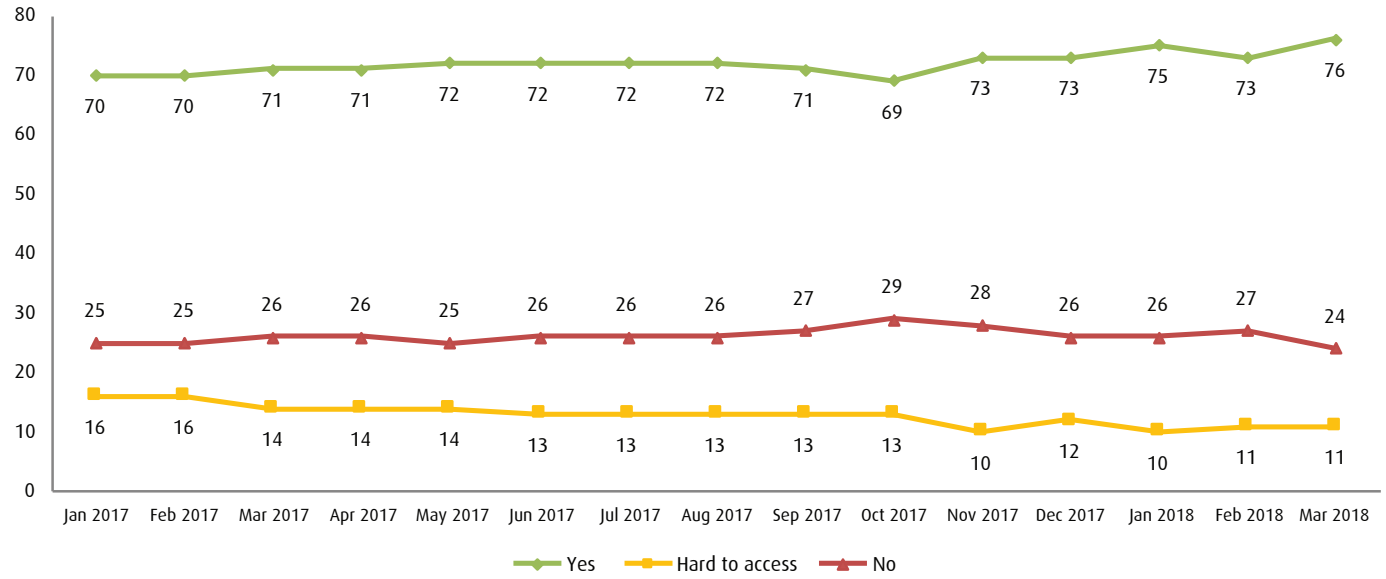


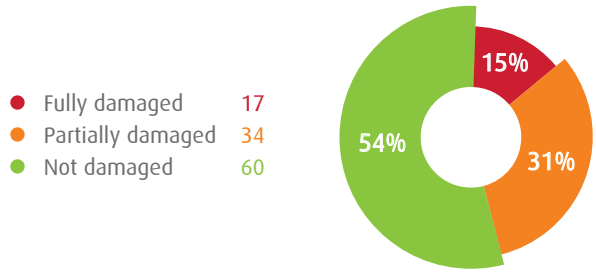
Figure 8: Trend analysis of accessibility to public hospitals, January 2017 to March 2018



5. Level of damage to hospital 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 - Mar 2018



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

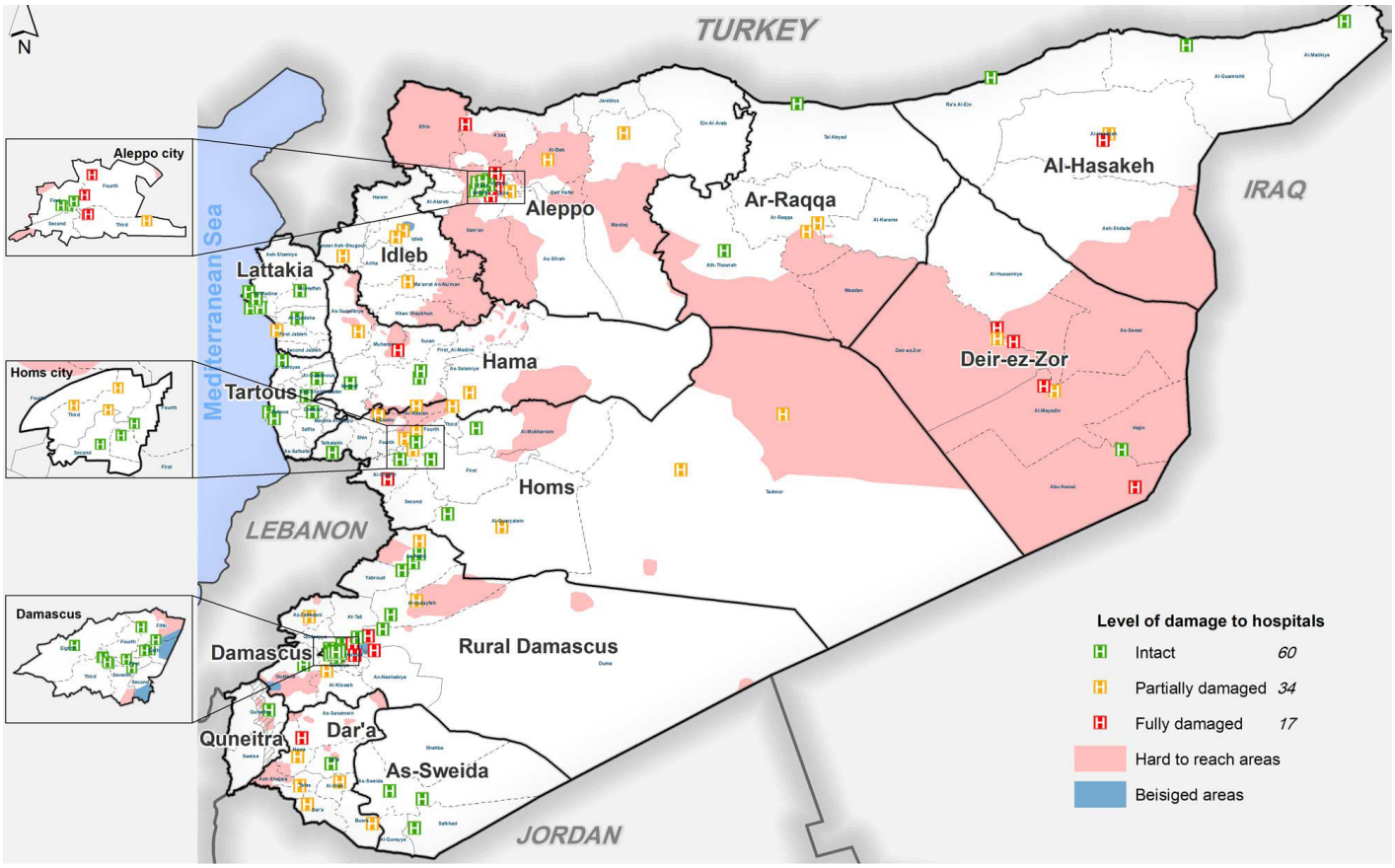


Figure 10: Level of damage of the hospitals' buildings per governorate, March 2018

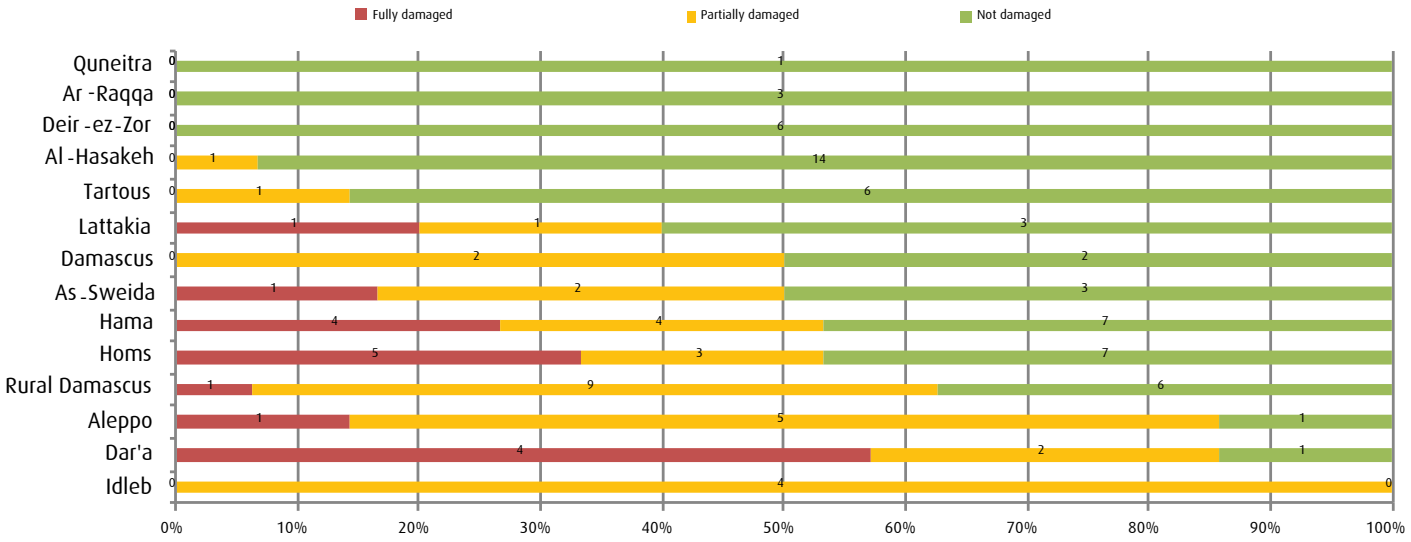
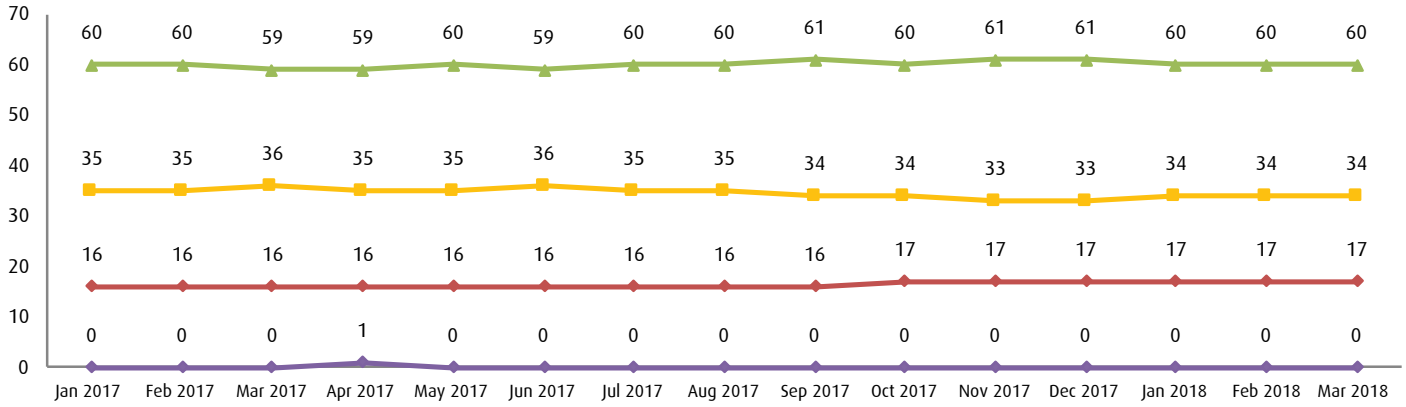


Figure 11: Trend analysis of public hospitals' level of damage, January 2017 to March 2018



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, March 2018

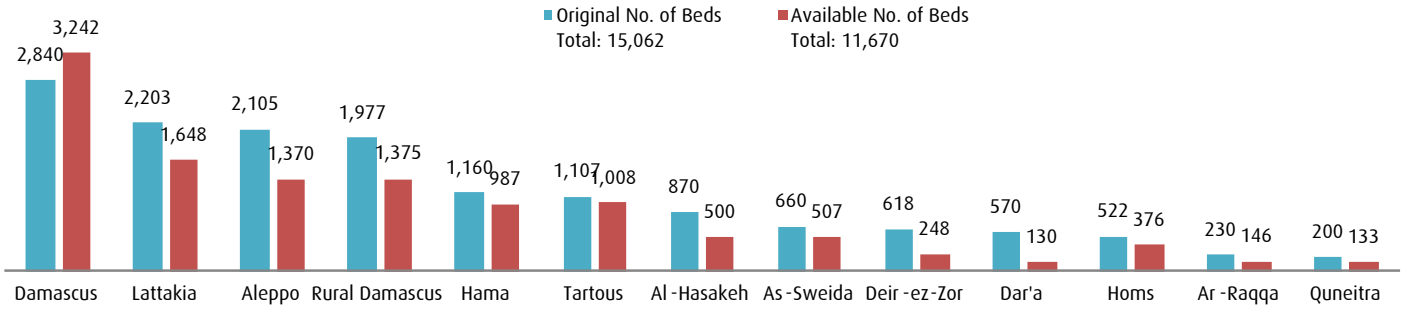
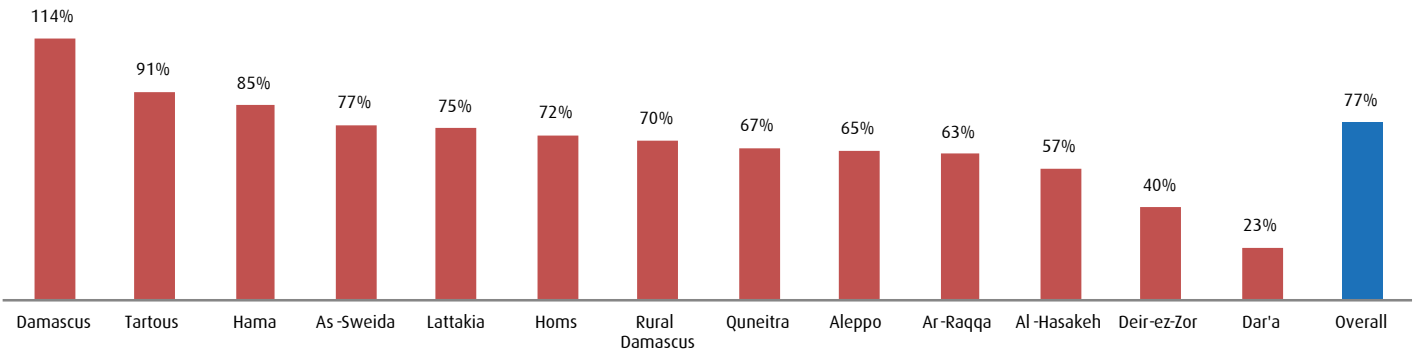


Figure 13: Percentage of available number of beds in functional hospital versus the original inpatient capacity, March 2018



6.2. Water

Figure 14: Main sources of water, Mar 2018

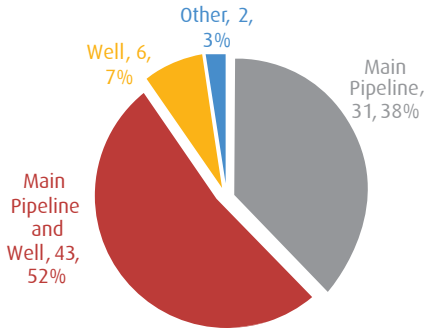


Figure 15: Distribution of water sources/ types at functional public hospitals, per governorate, March 2018

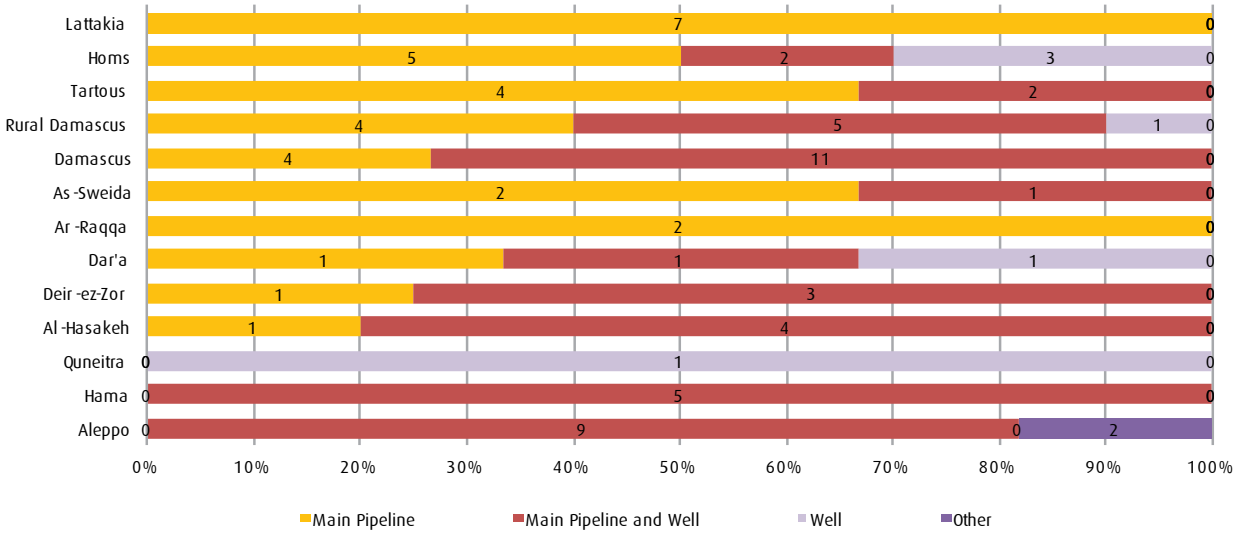


Figure 16: Functionality status of the water sources at functional public hospitals, March 2018

6.3. Electricity

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

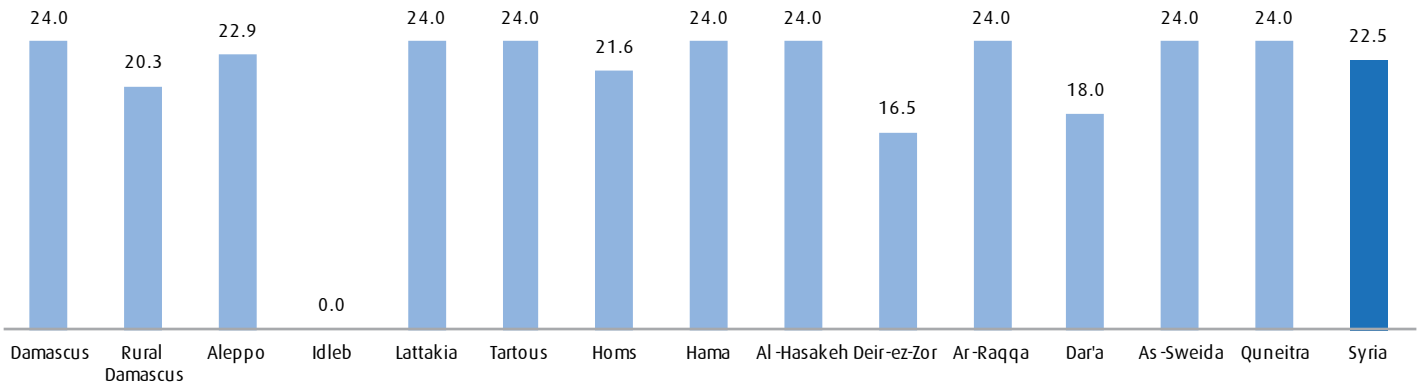
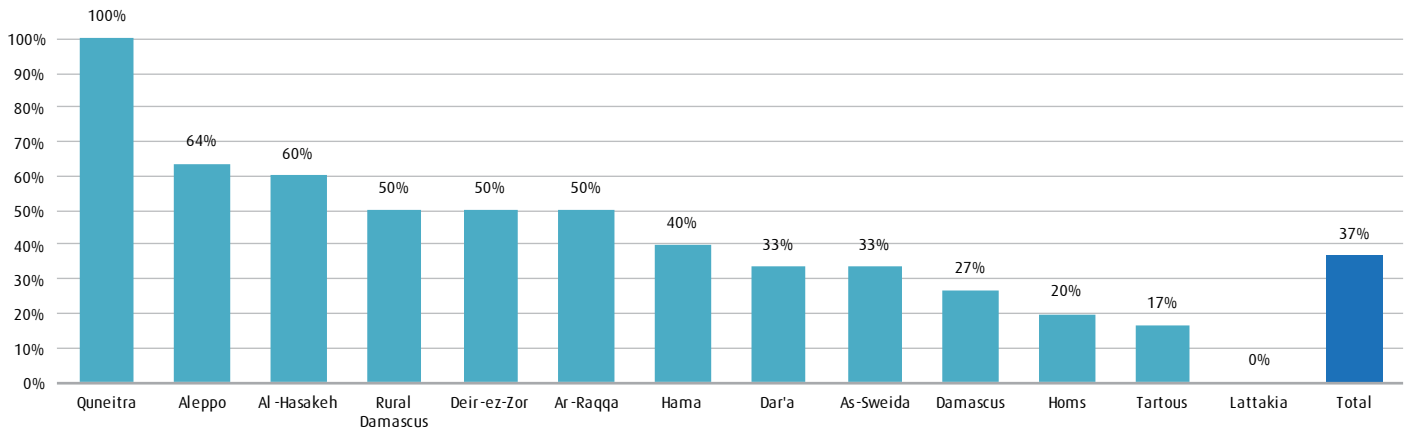


Figure 18: Percent of hospitals in need for generators out of total functional hospitals, March 2018



7. Availability of human resources for health

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

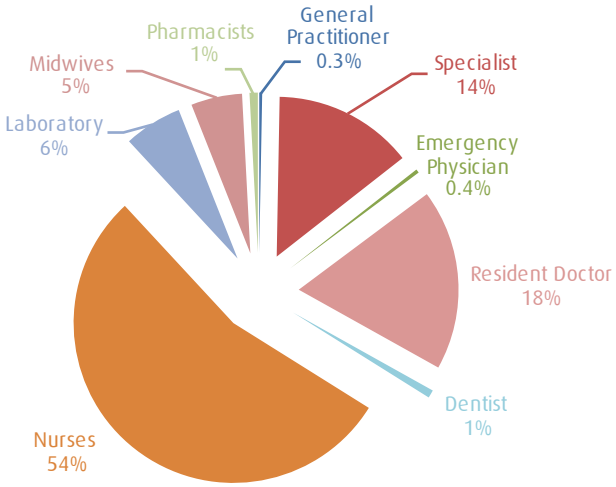


Table 1: Availability of human resources of functioning public hospitals, per governorate, March 2018

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	64	20	836	17	2226	34	3727	425	146	86	529	1243	3017
Rural Damascus	12	21	29	3	232	5	266	9	1196	124	89	25	123	404	907
Aleppo	6	25	38	4	381	7	844	45	924	211	112	13	170	298	982
Idleb															
Lattakia	14	40	51	9	523	22	843	49	2468	151	228	27	216	505	1108
Tartous	15	44	69	4	470	18	504	38	2401	247	123	29	237	1087	1511
Homs	15	32	41	5	231	14	104	20	1164	149	177	17	67	640	417
Hama	4	27	40	8	392	12	328	31	1428	162	237	15	133	736	846
Al-Hasakeh	2	7	6	1	94	2	41	3	426	59	73	6	32	183	183
Deir-ez-Zor	1	0	1	0	50	0	13	0	547	85	157	11	26	274	358
Ar-Raqqa	13	5	9	0	23	5	3	0	210	10	30	3	11	19	4
Dar'a	3	3	3	1	41	0	13	0	265	22	40	4	22	120	186
As-Sweida	1	8	16	3	110	4	82	1	942	63	84	4	68	303	478
Quneitra	0	3	3	3	47	3	71	4	112	8	13	3	12	79	225
Grand Total	**86**	**260**	**370**	**61**	**3430**	**109**	**5338**	**234**	**15810**	**1716**	**1509**	**243**	**1646**	**5891**	**10222**

Map 5: Availability of medical doctors in functional public hospitals, by end of March 2017, per governorate

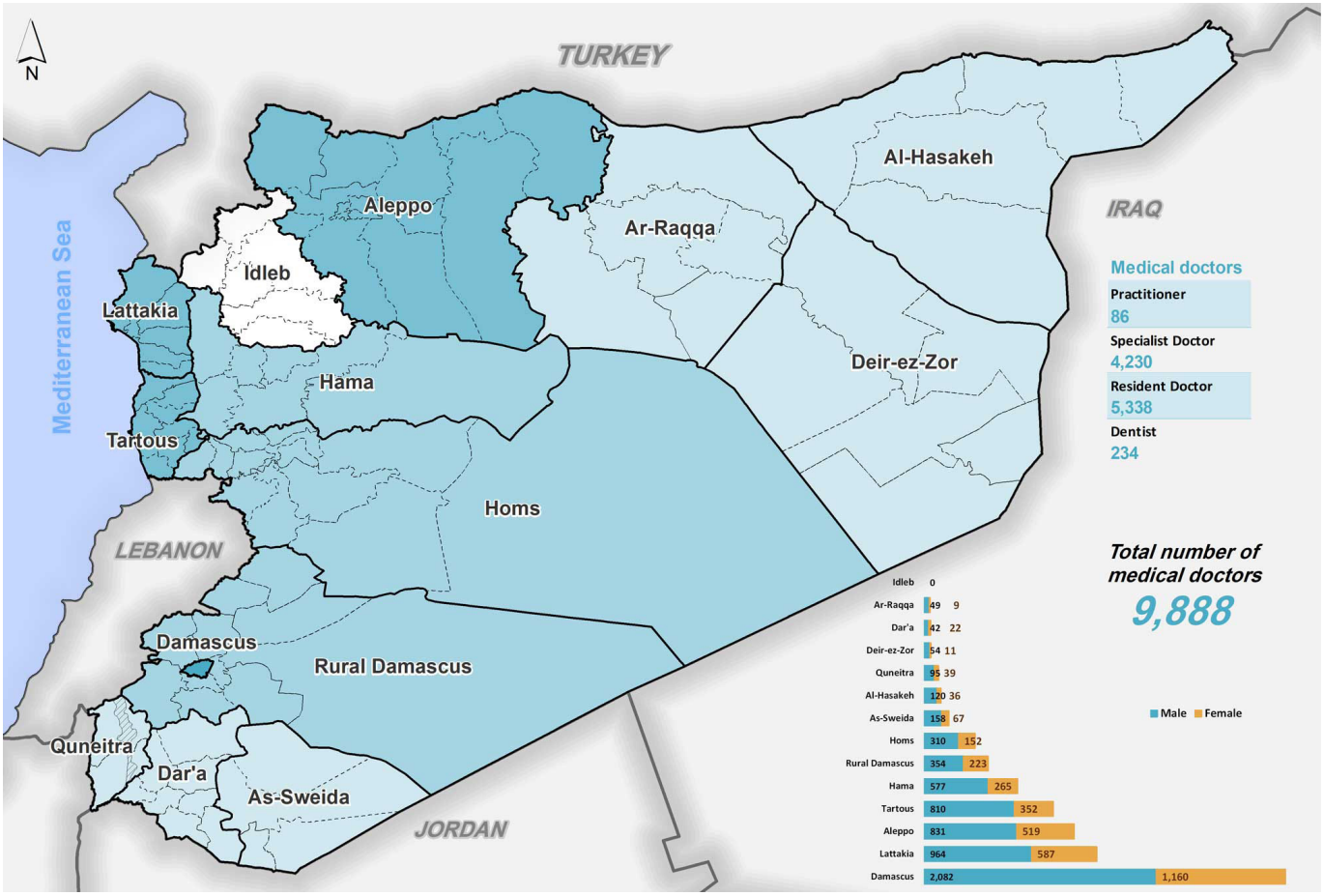


Figure 20: trend analysis of number of doctors (a total of general practitioner, specialists, emergency physicians, resident doctors, and dentists) in public hospitals during 2017

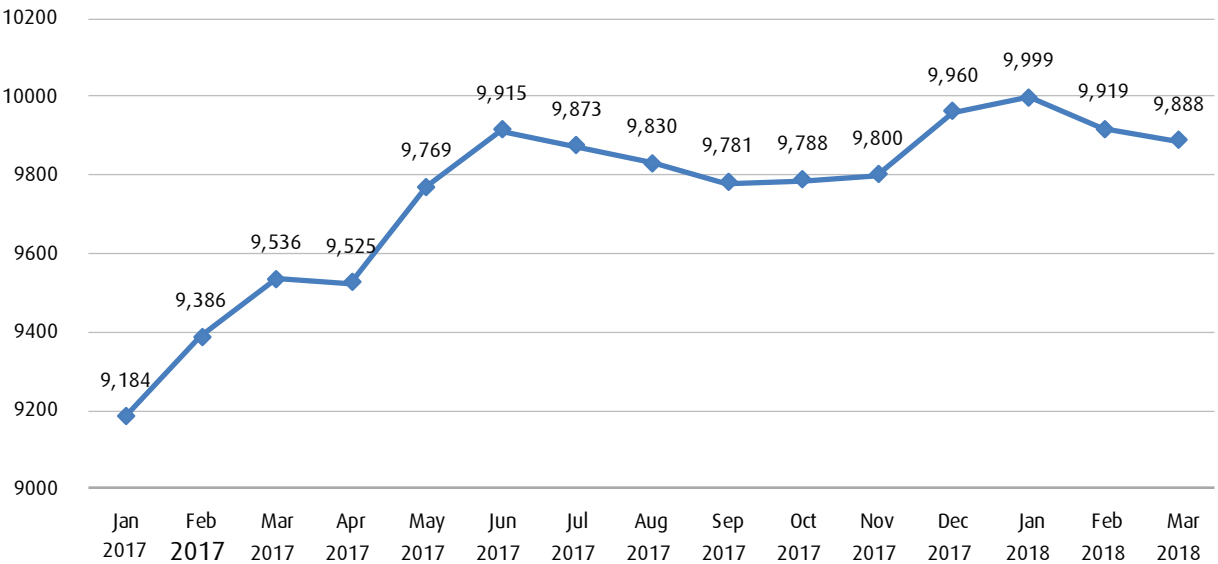


Figure 21: Trend analysis of number of nurses in public hospitals during 2017

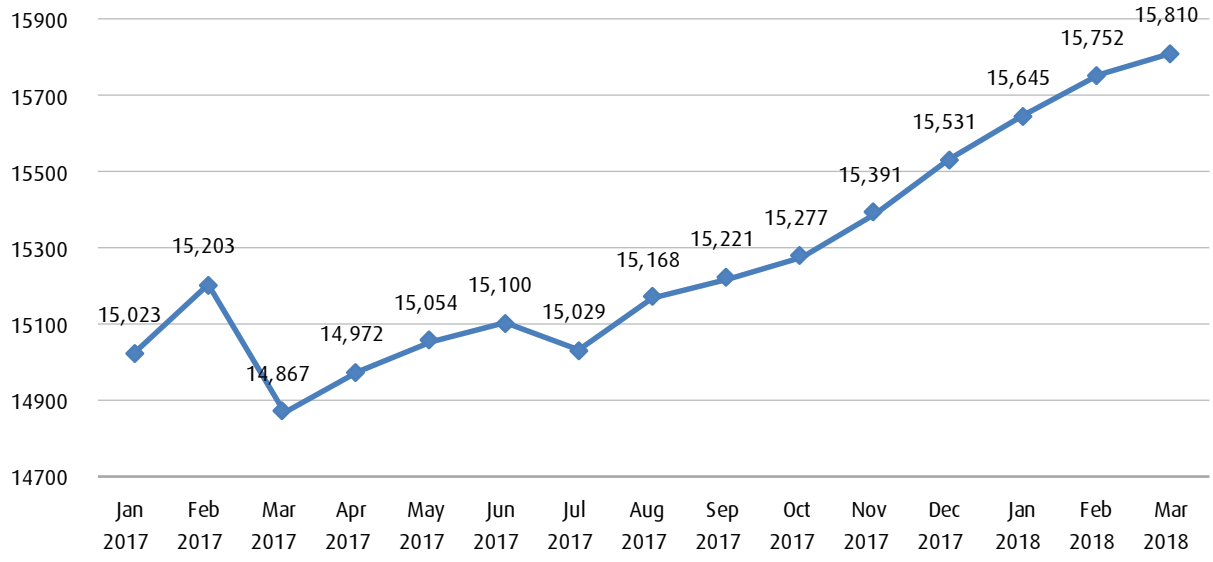


Figure 22: Trend analysis of number of midwives in public hospitals during 2017

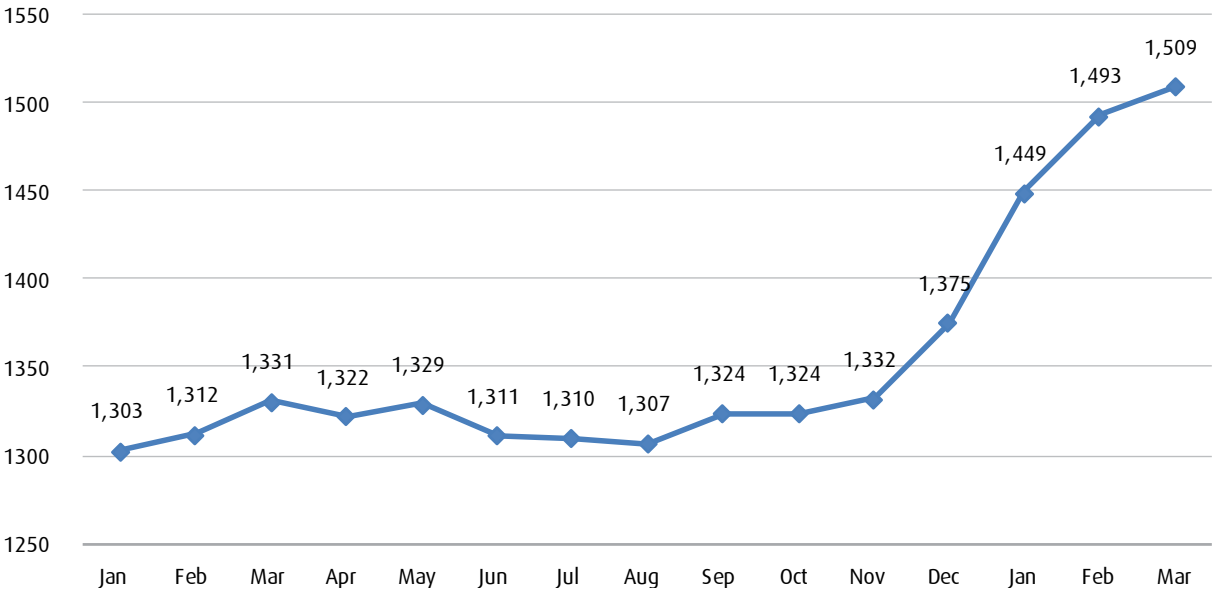


Figure 23: Proportions and numbers of key staff work in MoH vs. MoHE hospitals, March 2018

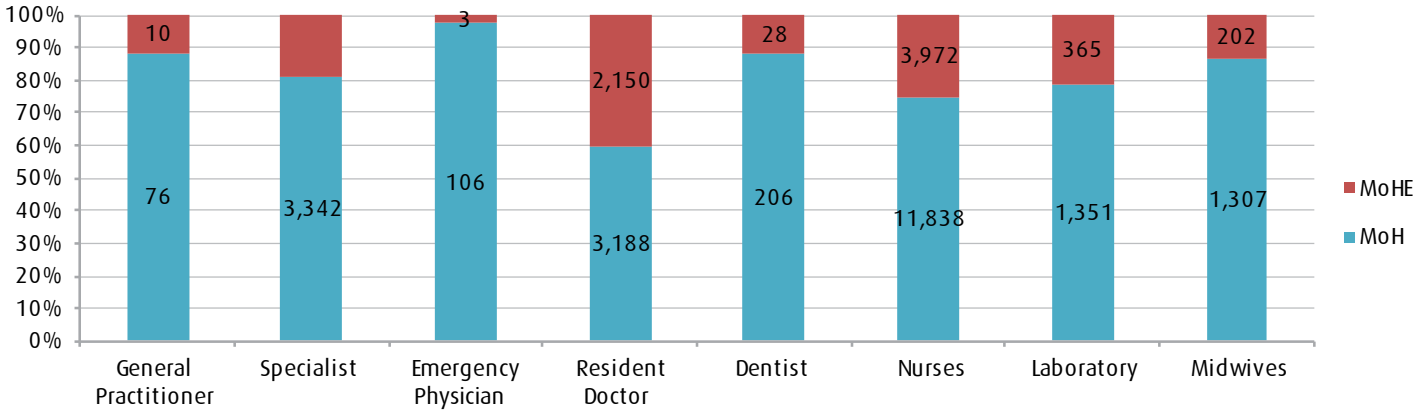


Figure 24: Comparison of the medical staff of MoH vs. MoHE hospitals, March 2018

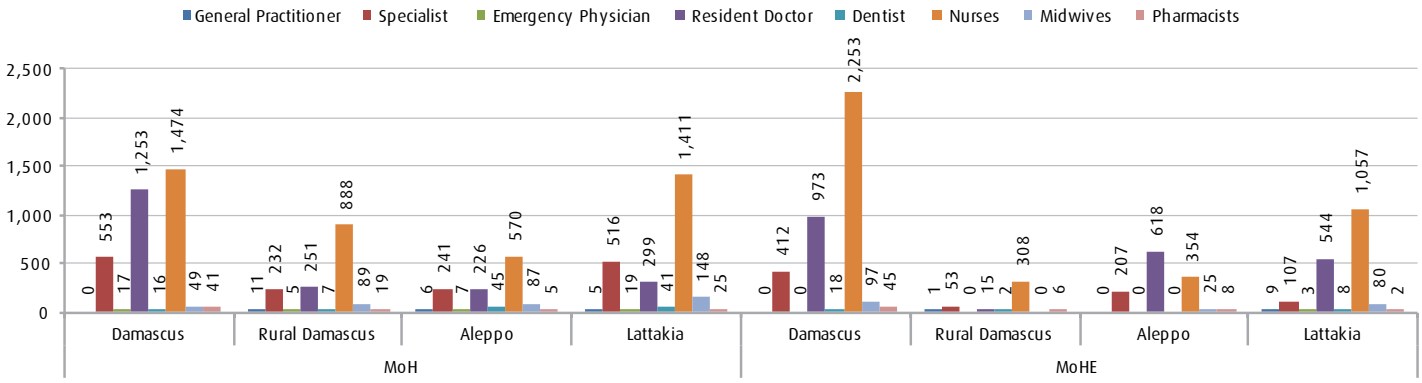


Figure 25: number of nurses and midwives per doctor in public hospitals, March 2018

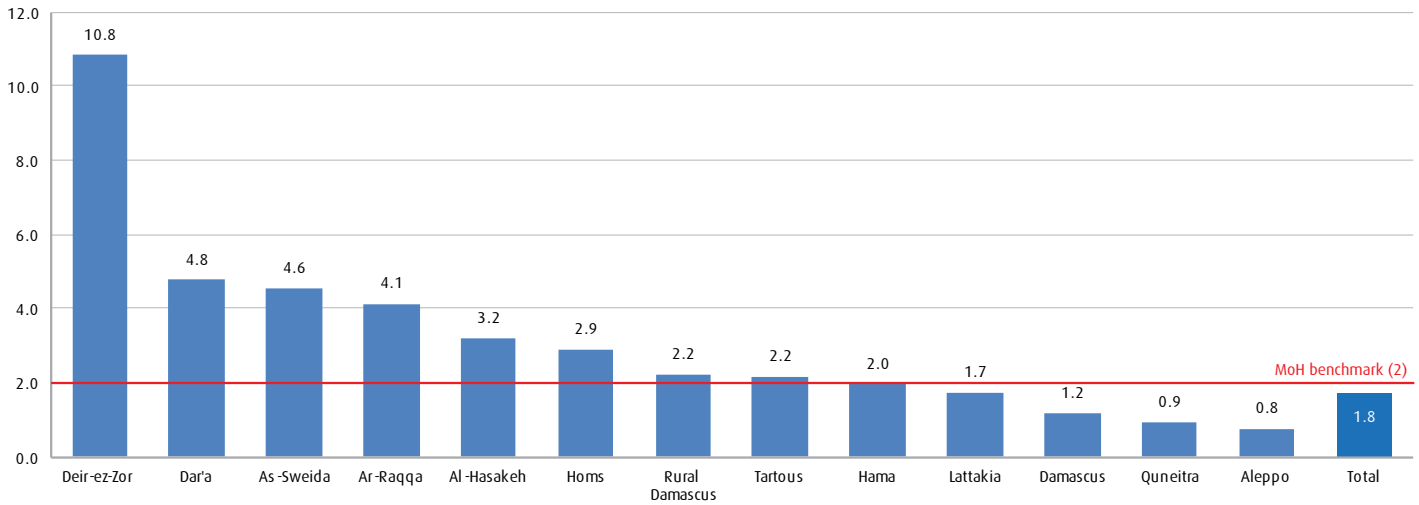


Figure 26: Proportion of doctors (a total of specialists, emergency physicians, resident doctors, dentists), by gender, per governorate, March 2018

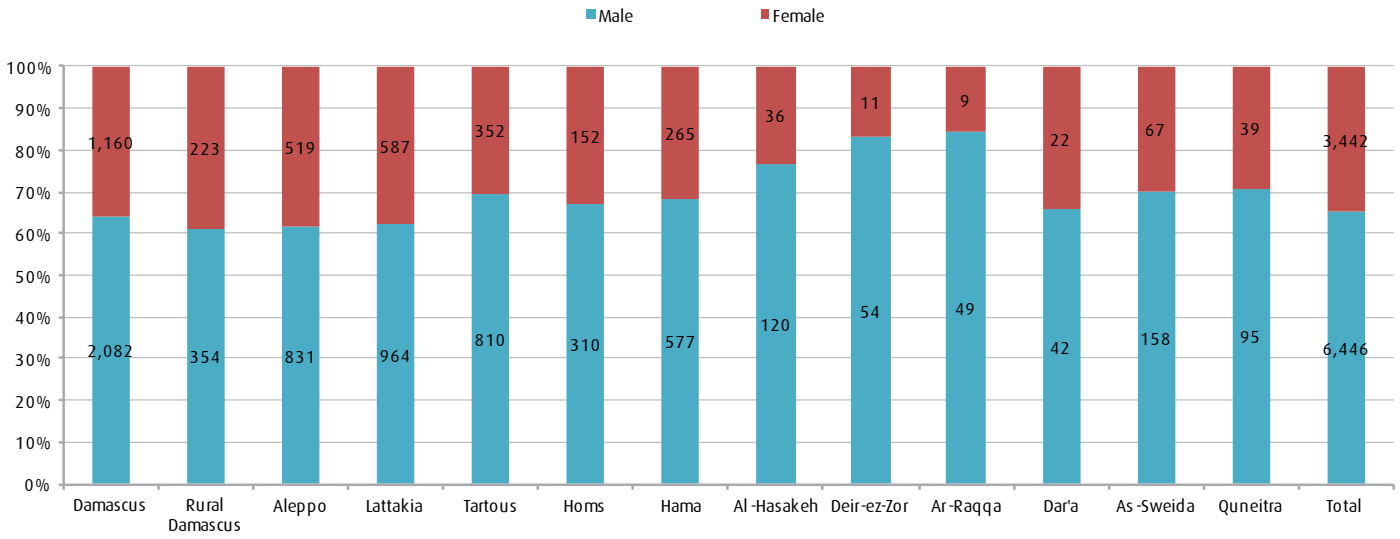
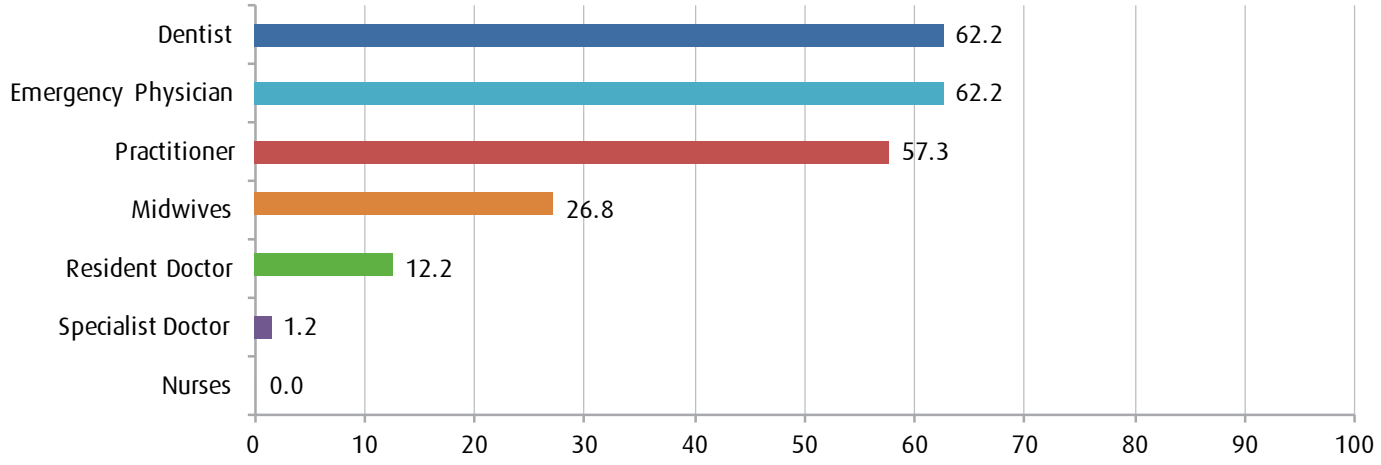


Figure 27: Percentage of functioning public hospitals without medical staff (gaps), Mar 2018

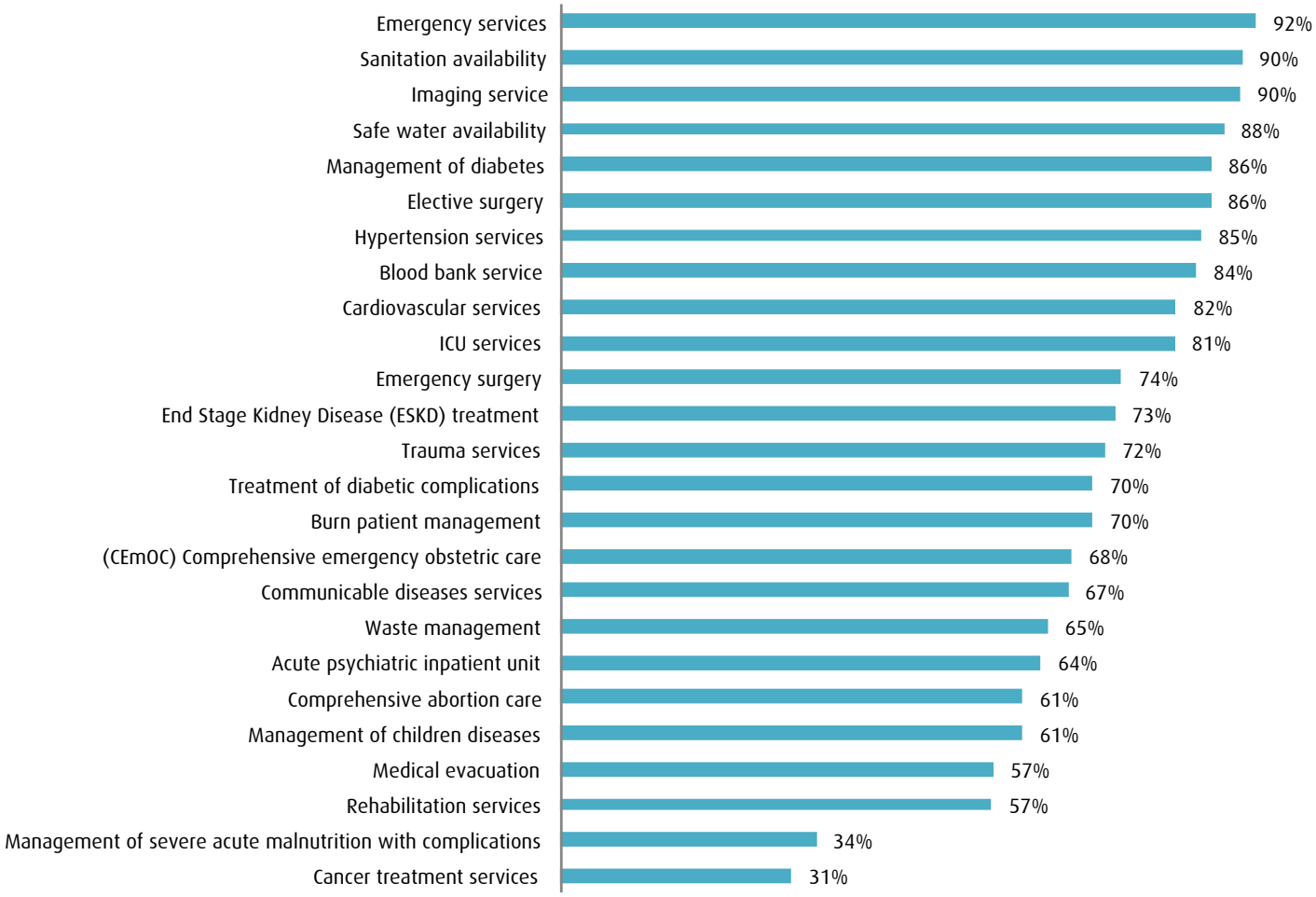


8. Availability of health services

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, March 2018



9. Utilization of health services

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

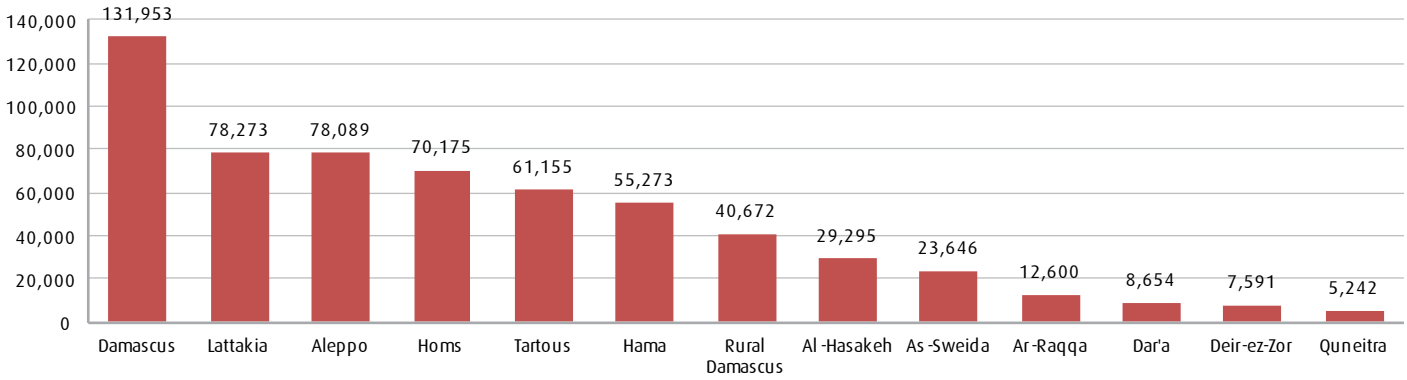


Figure 30: Trend analysis of estimated caseload in public hospitals, January 2017 to March 2018

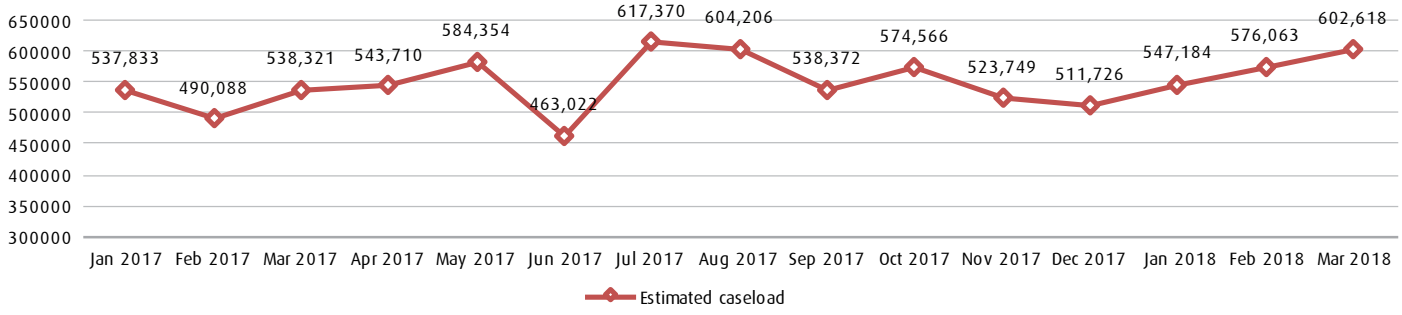
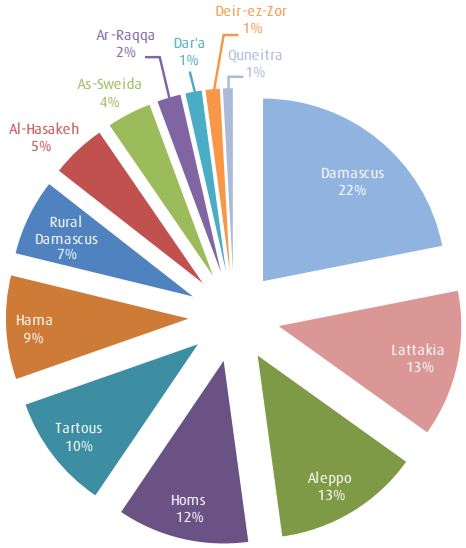


Figure 31: Proportions of workload during Mar 2018, per governorate



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 midwifes, 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, March 2018

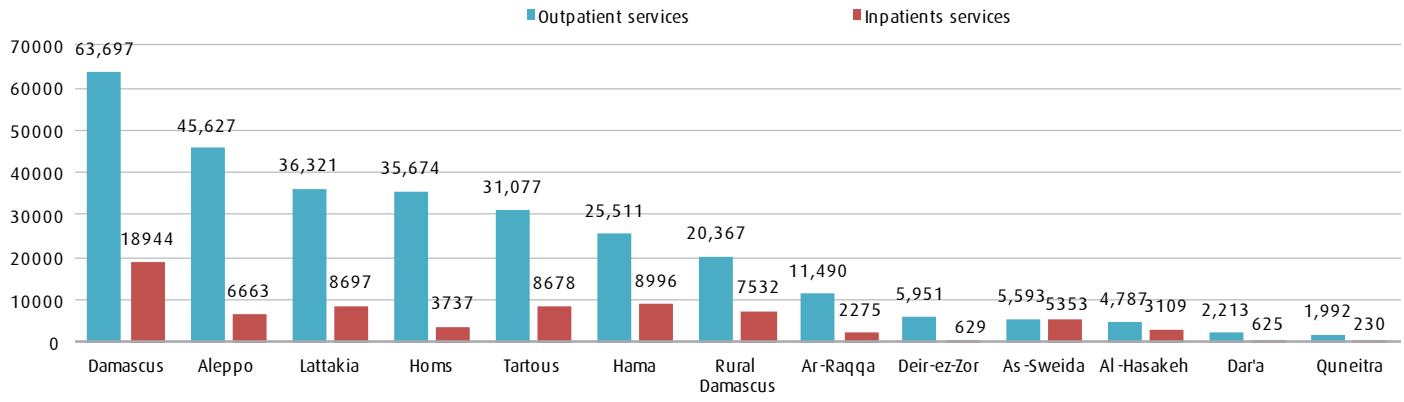
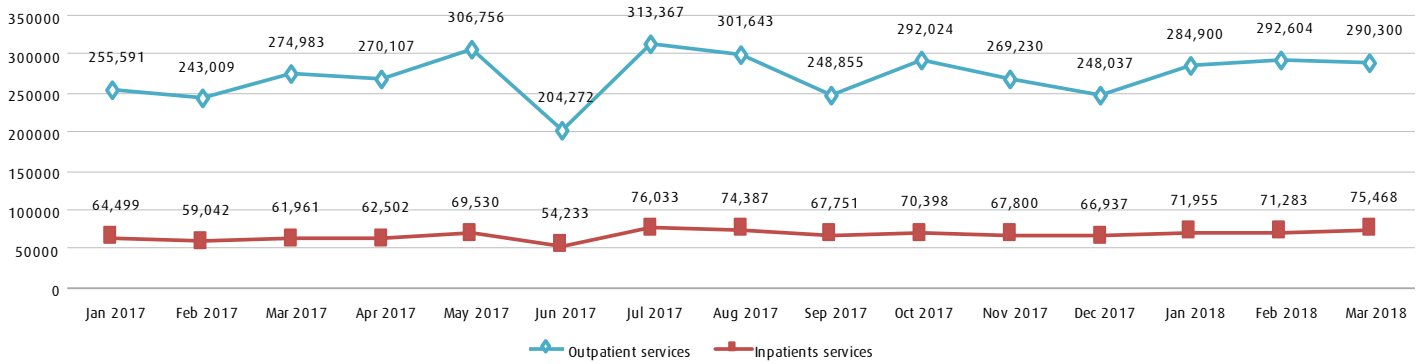


Figure 33: Trend analysis of outpatient and Inpatient in public hospitals, January 2017 to March 2018



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, March 2018

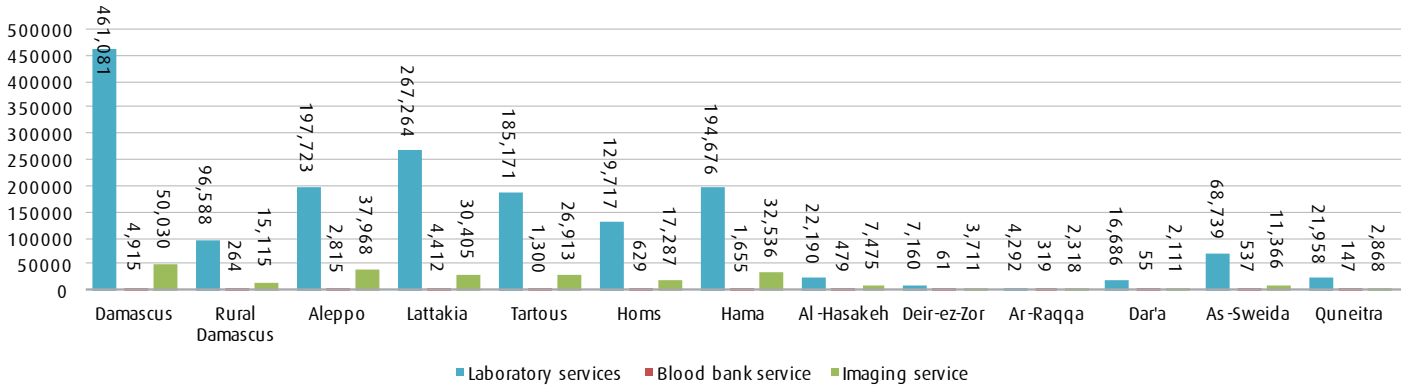
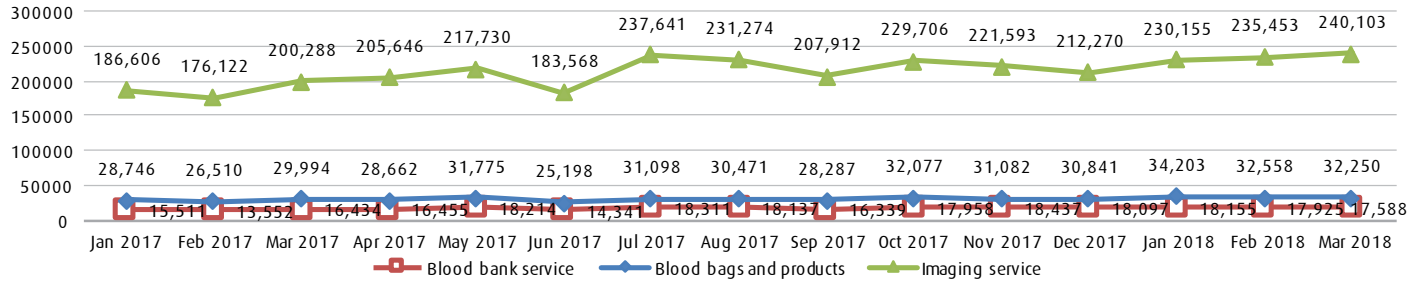
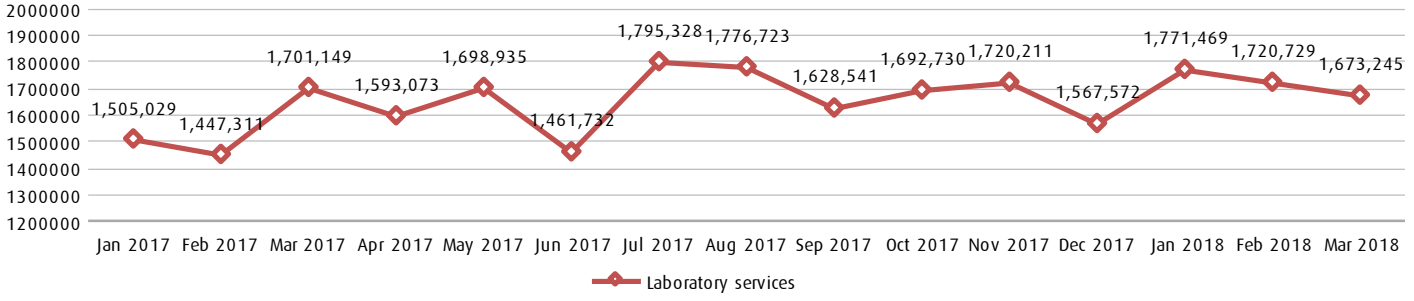


Figure 35: Trend analysis of number of patients received services in blood banks and imaging services in public hospitals, January 2017 to March 2018





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, March 2018

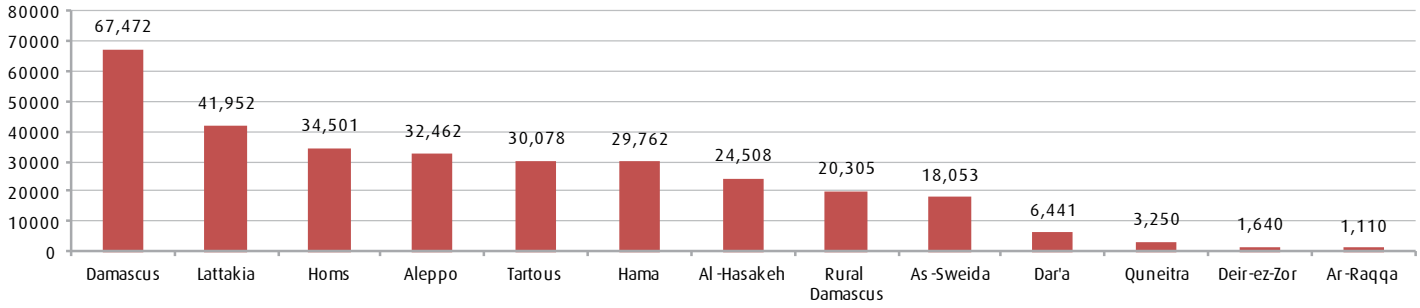
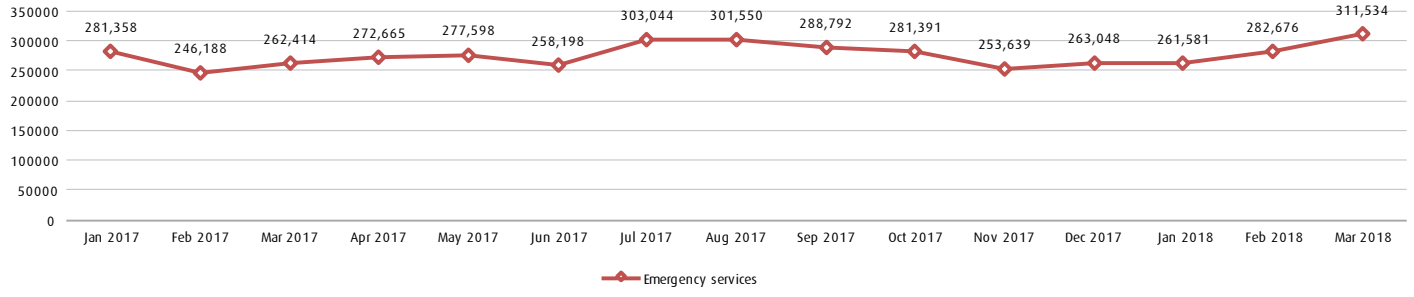


Figure 37: Trend analysis of number of reported cases in emergency department in public hospitals, January 2017 to March 2018



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, March 2018

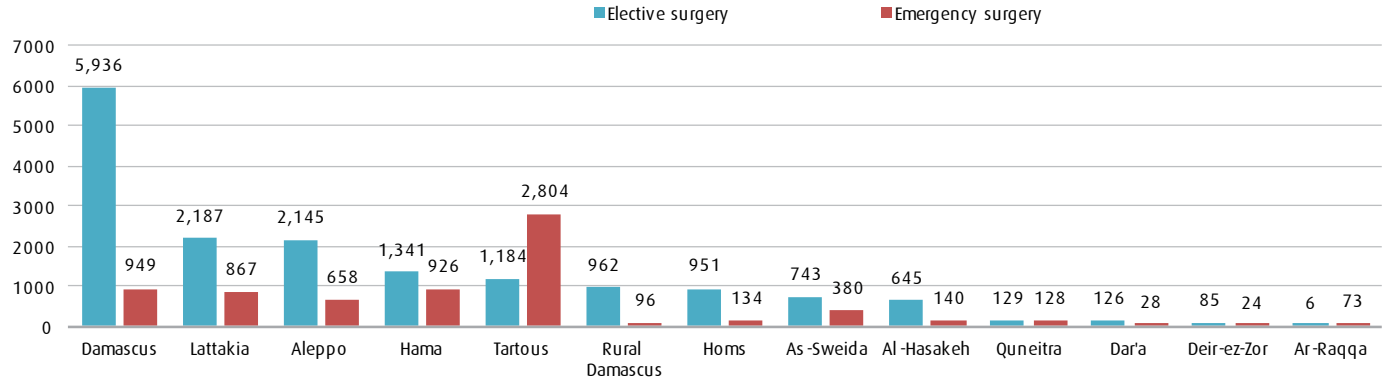


Figure 39: Percentage of total emergency surgeries to elective surgeries in public hospitals per governorate, March 2018

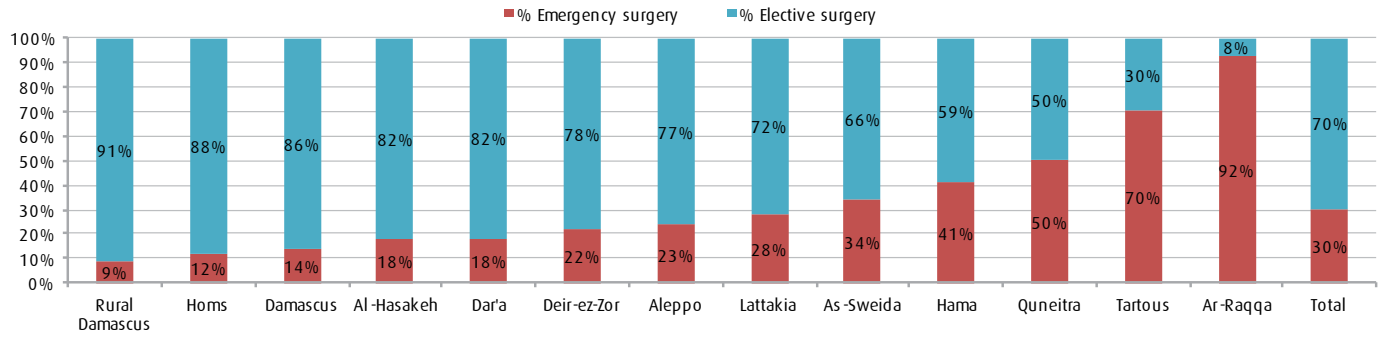
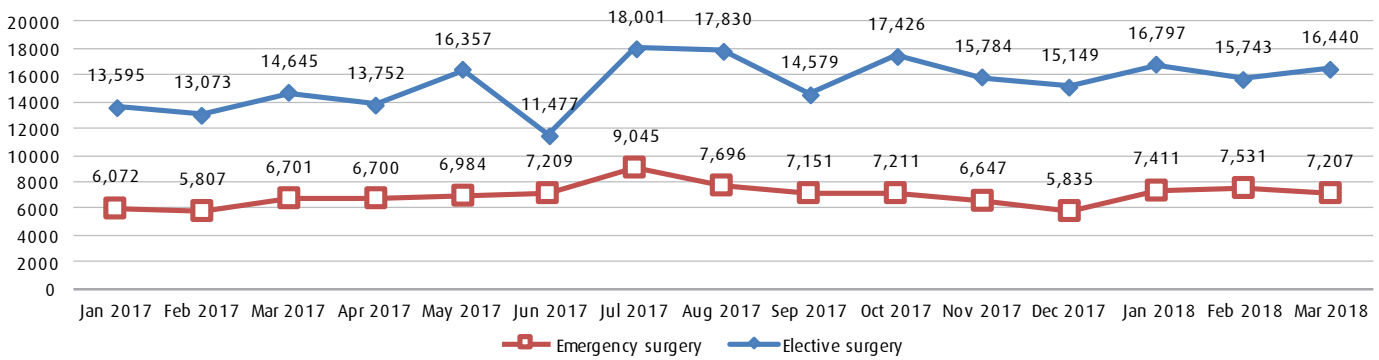


Figure 40: Trend analysis of number of patients received emergency surgeries and elective surgeries in public hospitals, January 2017 to March 2018



9.2.3. ICU services:

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

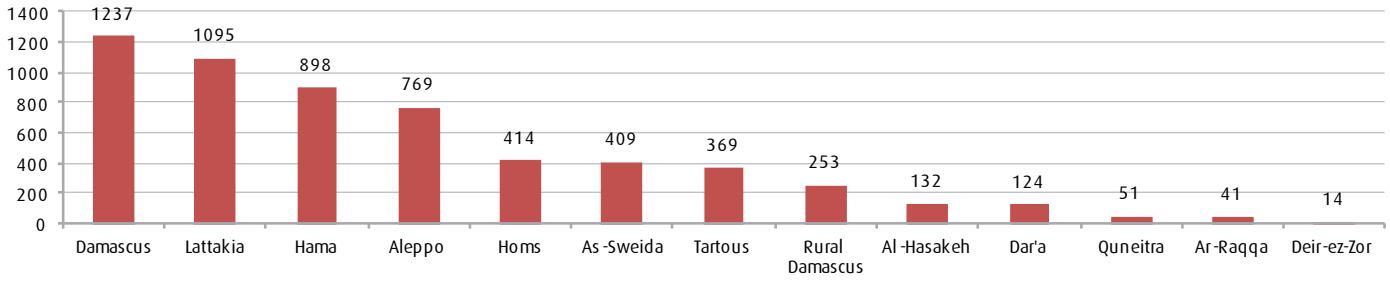
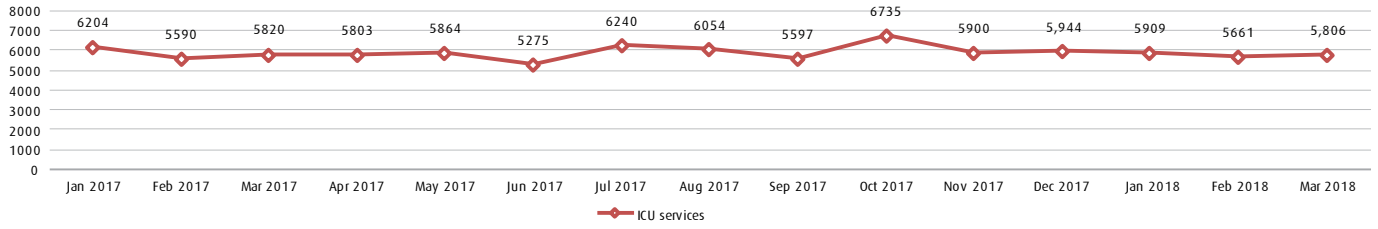


Figure 42: Trend analysis of number of patients received ICU services in public hospitals, January 2017 to March 2018



9.2.4. Trauma services:

- Orthopedic/trauma ward for advanced orthopedic

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

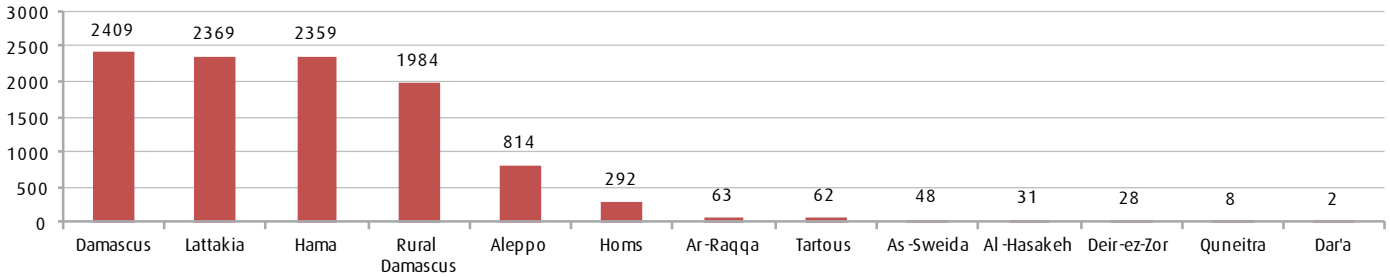
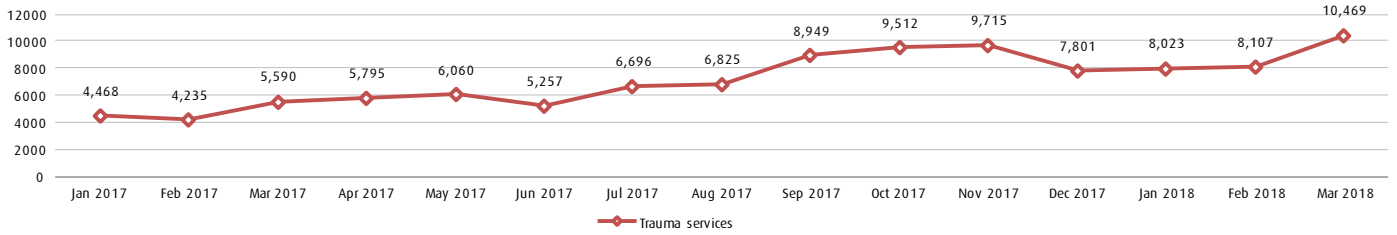


Figure 44: Trend analysis of number of patients received trauma services in public hospitals, January 2017 to March 2018



9.2.5. Burn patient management:

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

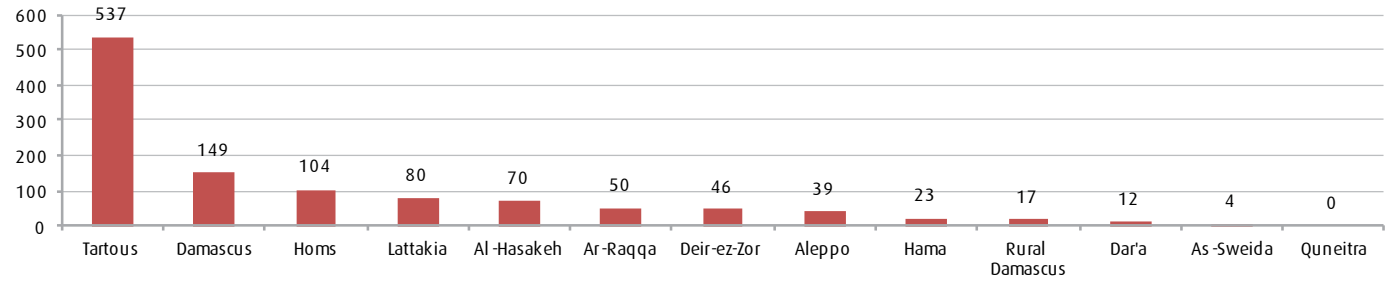
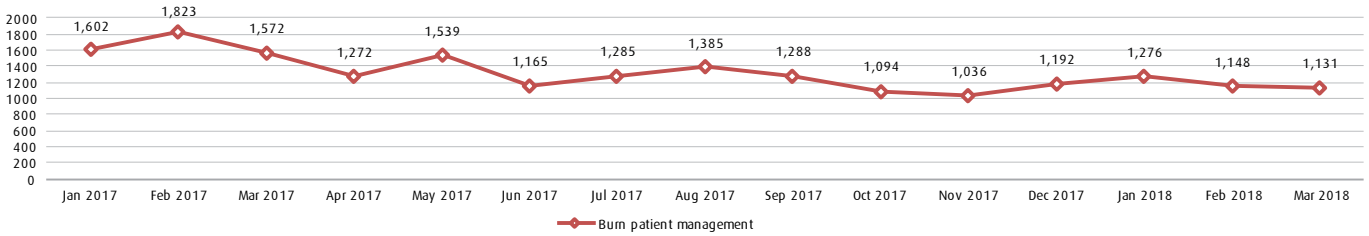


Figure 46: Trend analysis of number of patients received burn patient management in public hospitals, January 2017 to March 2018



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, March 2018

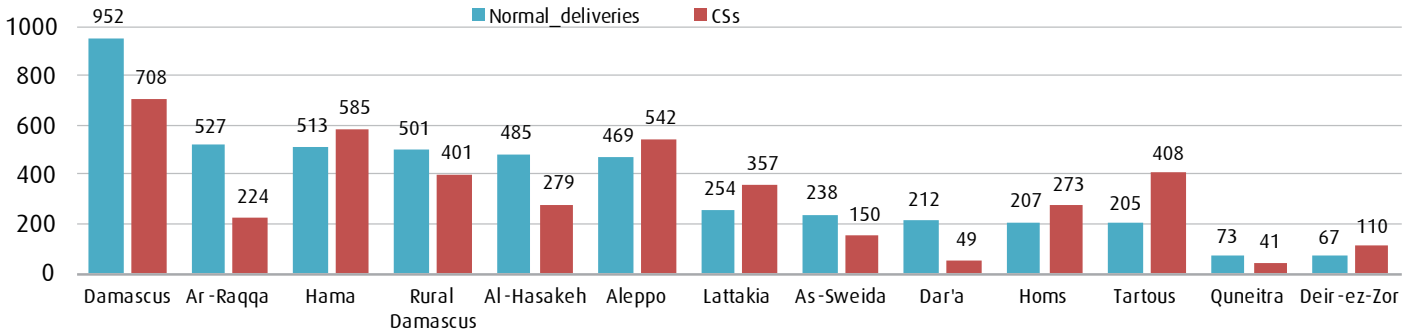


Figure 48: Percentage of caesarean sections to normal deliveries in public hospitals, March 2018

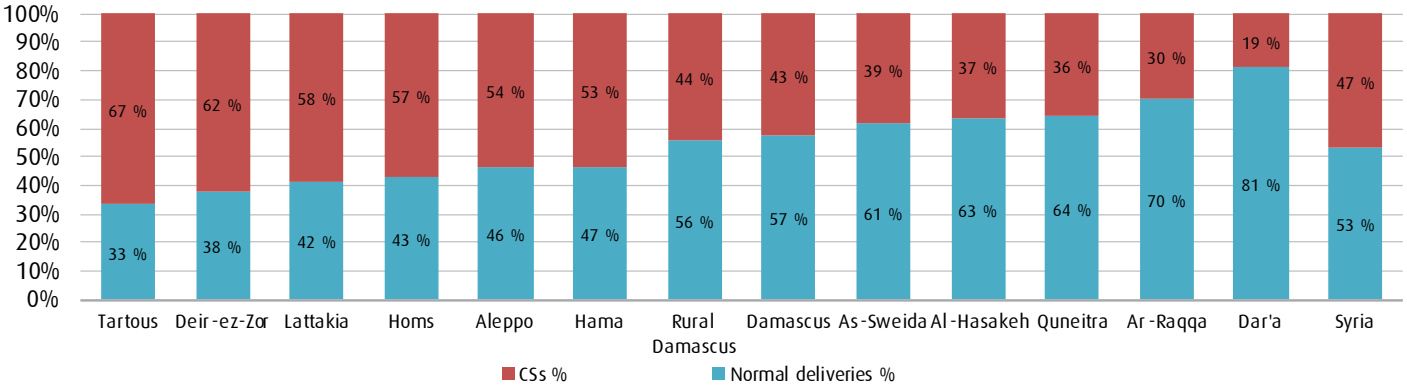


Figure 49: Trend analysis of the monthly numbers of normal deliveries vs. caesarean sections in public hospitals, January 2017 to March 2018

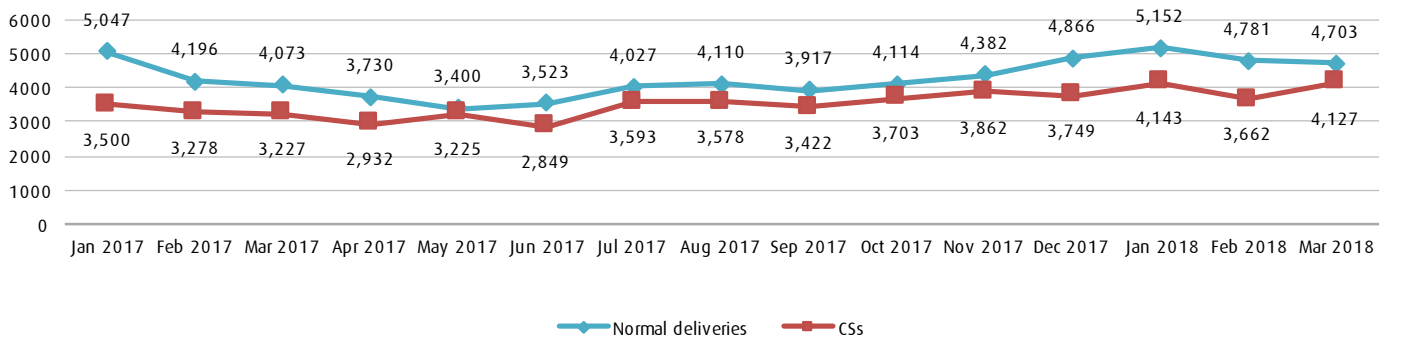
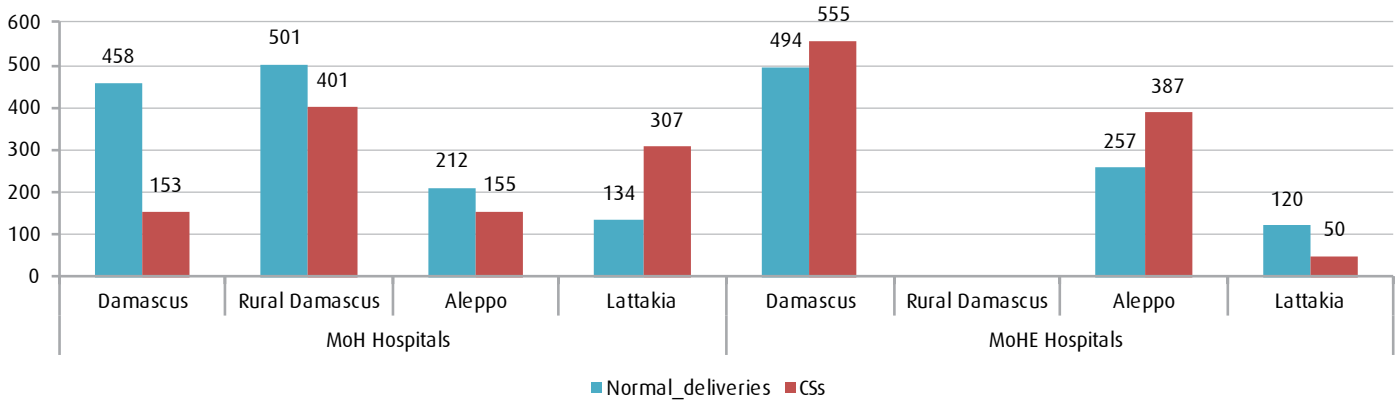


Figure 50: Comparison of MoH & MoHE hospitals workload of normal deliveries vs, CSs, March 2018



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, March 2018

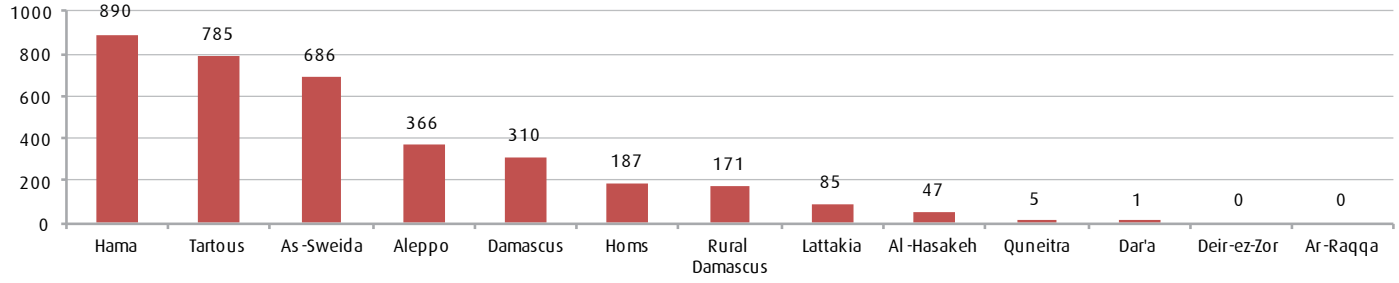
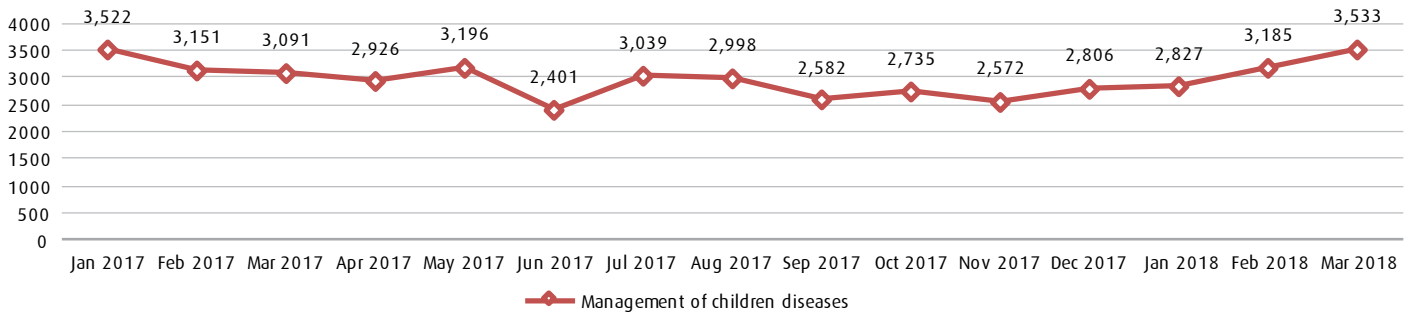


Figure 52: Trend analysis of reported cases of severe children diseases in public hospitals, January 2017 to March 2018



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, March 2018

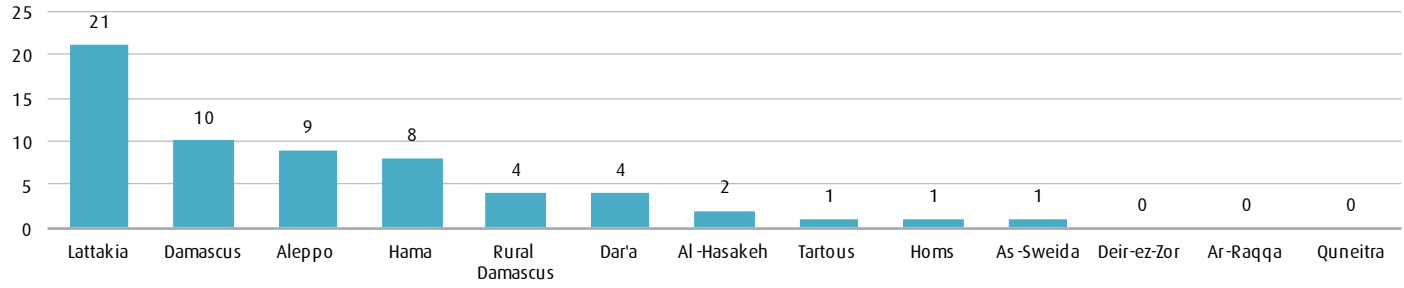
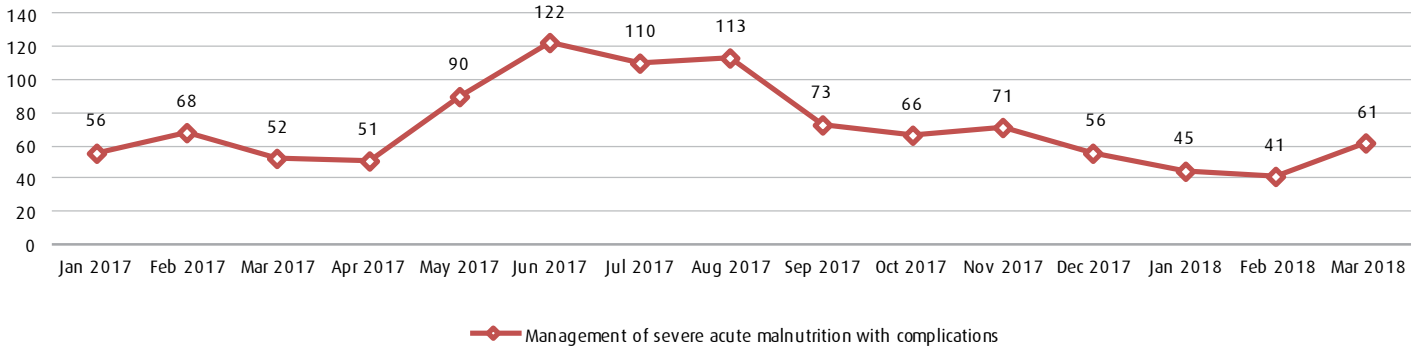


Figure 54: Trend analysis of number of children with severe acute malnutrition with complications in public hospitals, January 2017 to March 2018



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, March 2018

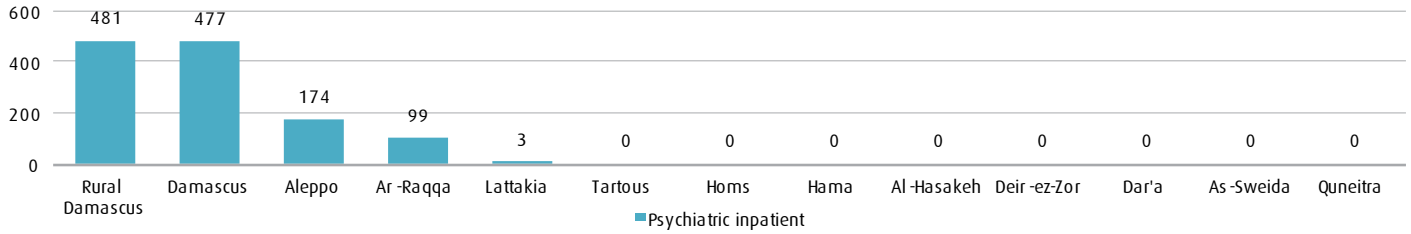
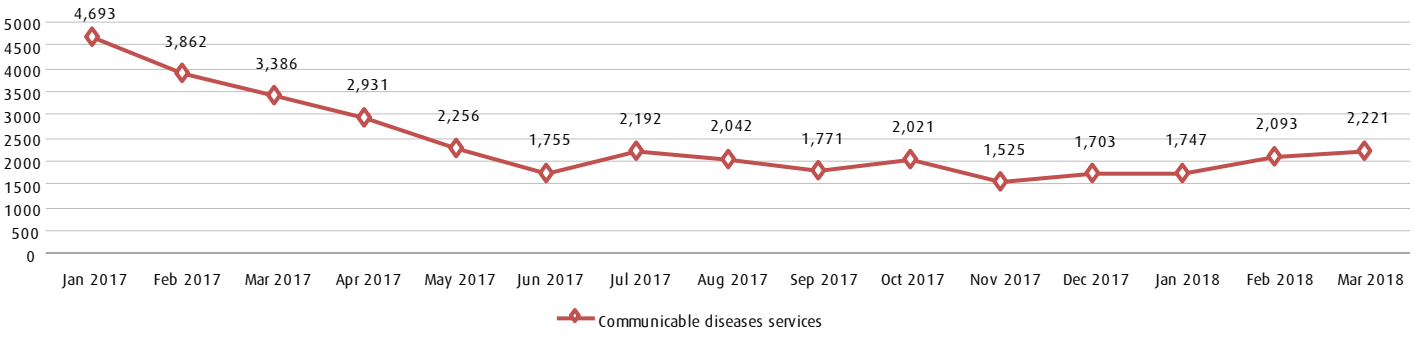


Figure 56: Trend analysis of number of patients received communicable diseases services in public hospitals, January 2017 to March 2018



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, March 2018

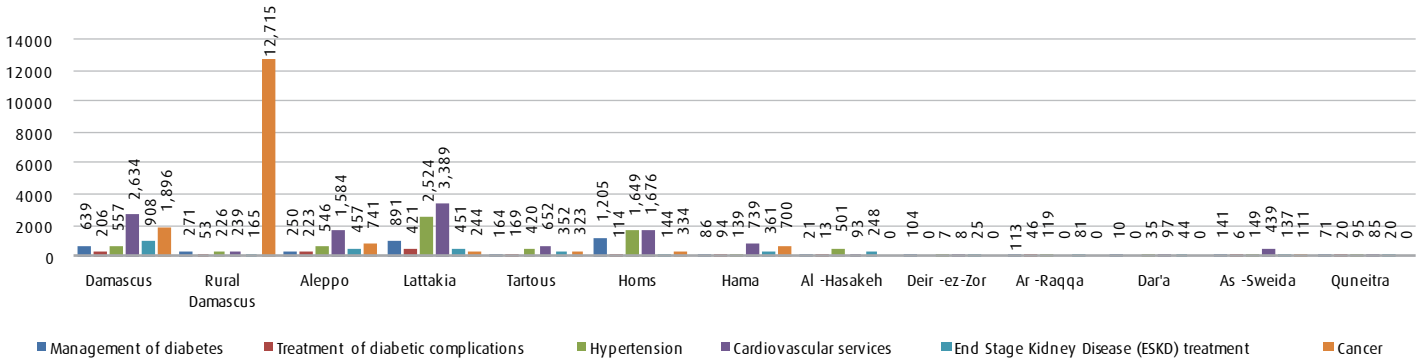
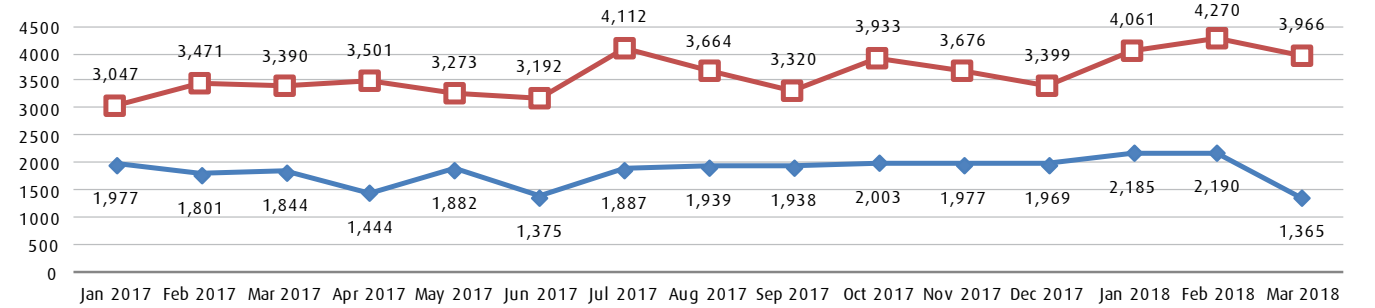
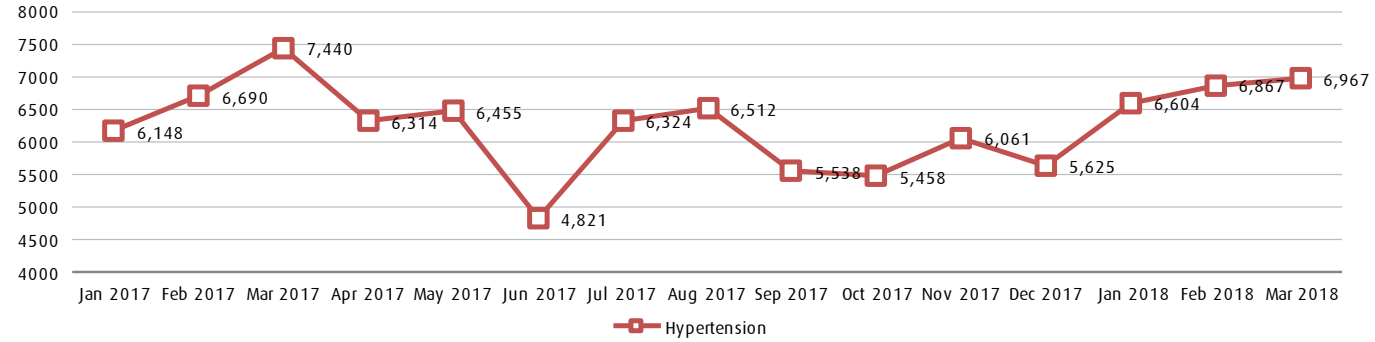
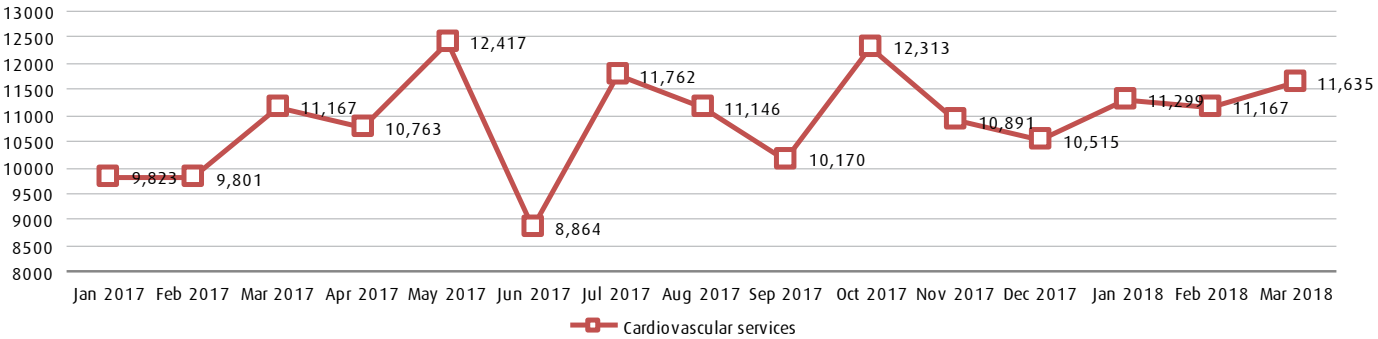
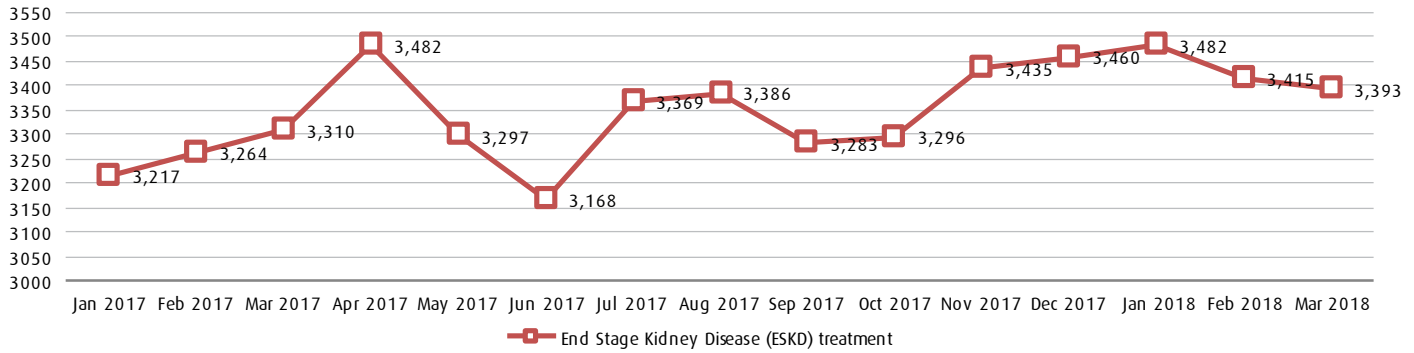


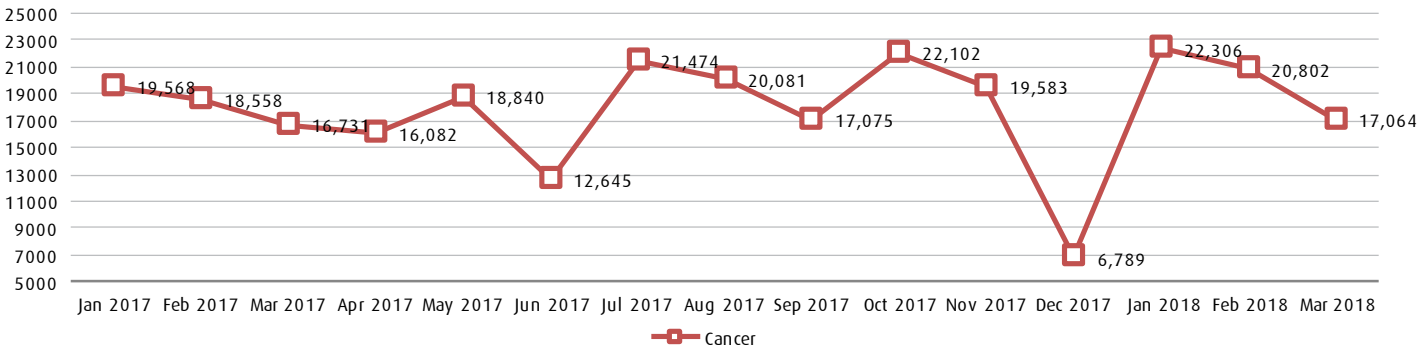
Figure 58: Trend analysis of total monthly number of NCDs' consultations reported in public hospitals, January 2017 to March 2018











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, March 2018

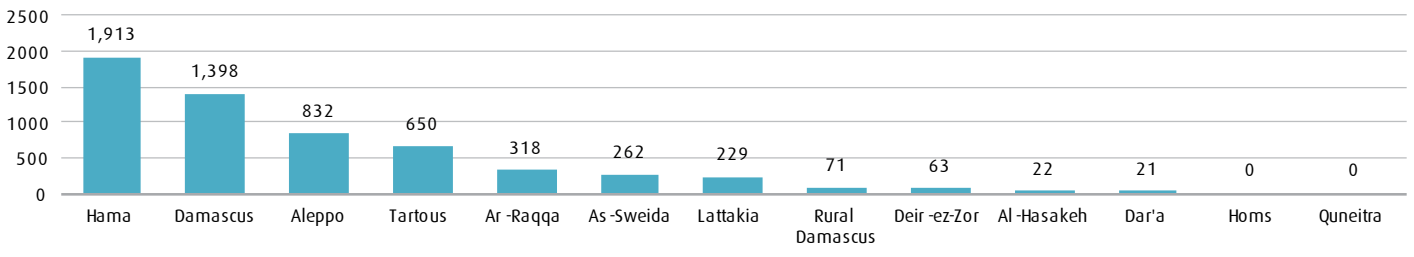
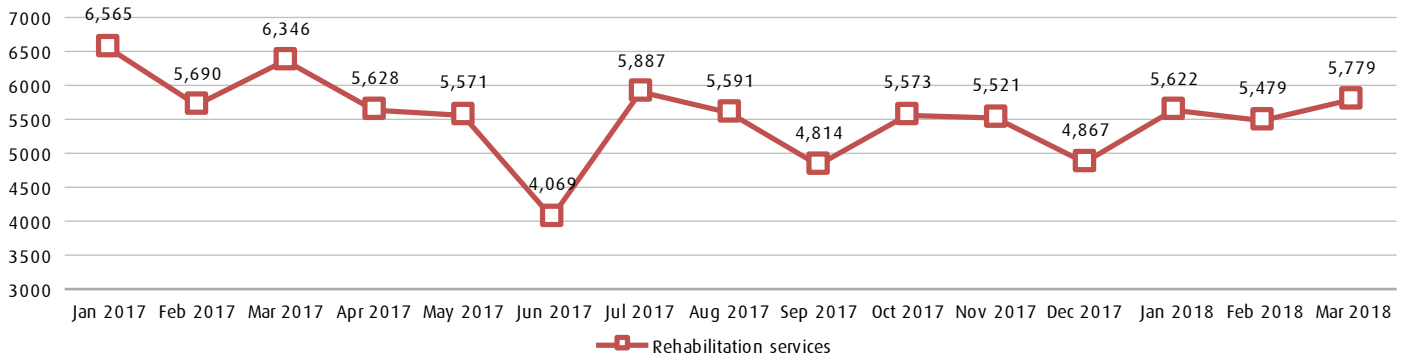


Figure 60: Trend analysis of number of rehabilitation services in public hospitals, January 2017 to March 2018



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, March 2018

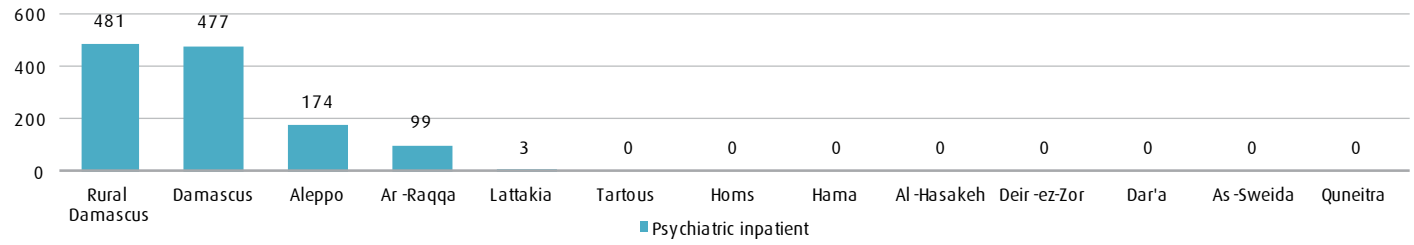
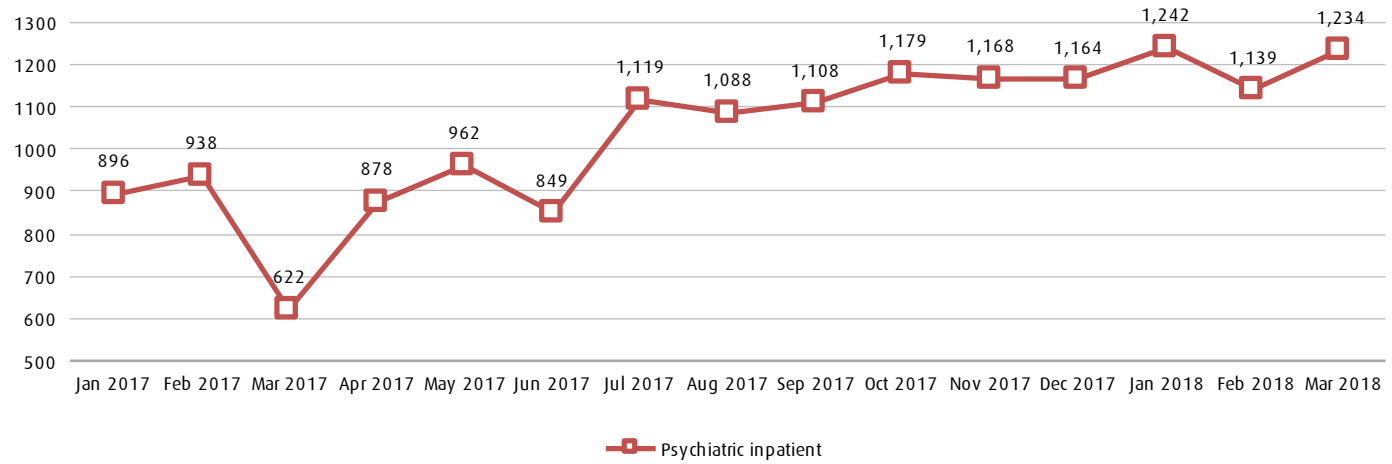


Figure 62: Trend analysis of number of psychiatric inpatient cases in public hospitals, January 2017 to March 2018



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, March 2018

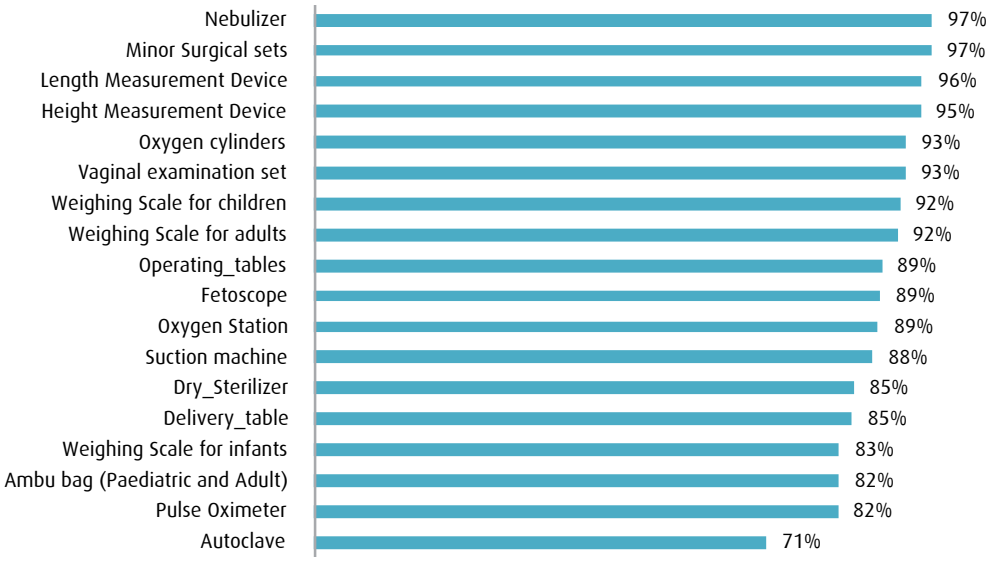
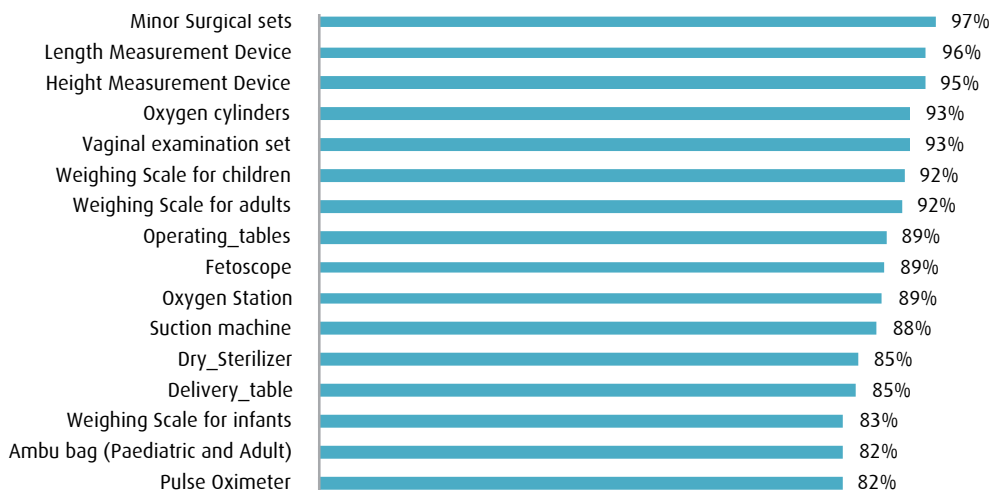


Figure 64: Percentage of functional specialized equipment/ total available equipment in the functional public hospitals, March 2018



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, March 2018