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World Health
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HeRAMS Annual Public Health Centres Report

World Health Organization | Health Resources and Services Availability Mapping System

HeRAMS-Syria



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 December 2017.

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Introduction

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.

Executive summary

Regular assessments to monitor the impact of the crisis on the health facilities functionality, accessibility, condition status, availability of resources and services, are conducted using **HeRAMS** (Health Resources & services Availability Mapping System) tool.

This report provides descriptive and trend analysis of the situation of the public health centres of MoH (Ministry of Health), in terms of functionality status, accessibility, and infrastructure, availability of resources & services, and available equipment and medicines during the 4th Quarter 2017 in comparison to other three quarters of 2017. The total assessed health centres in the 4th Quarter 2017 is **1,804**.

Completeness of Centre's reporting

The completeness of reporting of health centres has increased slightly throughout 2017. In the 4th Quarter 2017, completeness of reporting has reached 99.8% compared to 99.7% at the end of 3rd Quarter, 99.7% at the end of 2nd Quarter, and 99.6% at the end of 1st Quarter 2017.

Functionality status

By end of the 4th Quarter 2017 and out of **1,804** assessed public health centres, 46% (825) were reported fully functioning, 20% (354) partially functioning, 34% (621) non-functioning (completely out of service), while the functionality status of 0.2% (4) of health centres were unknown.

Accessibility status

By end of the 4th Quarter 2017, 76% (1,374) health centres were reported accessible, 1% (22) hard-to-access, and 22% (397) were inaccessible, while the accessibility status of 0.6% (11) health centres were unknown.

Infrastructural patterns

By end of the 4th Quarter 2017, 29% (518) health centres were reported damaged [9% fully damaged and 20% partially damaged], 64% (1,152) were reported intact, while the building's condition of 7% (134) health centres were unknown.

Assessing the availability of **water sources** at functional public centres indicated that 81% (950) are using main pipelines, 2% (23) are mainly using wells, while 8% (100) are using both (main pipeline and well).

Electricity power is widely disrupted nationwide and majority of public health centres are dependent on generators' power.

Human resources

By end of the 4th Quarter 2017, the proportions of different categories of health staff among the total functional (fully and partially) health centres (1,179 /1,804), remained almost the same as 3rd Quarter 2017. The resident doctors represented (1.4%) of total health staff at centres' level, along with pharmacists(1.4%) followed by general practitioners (4.3%); laboratory (6.3%); Specialist (7.8%); dentists (9.5%); midwives (11.5%); and nurses (57.8%).

Trend analysis of available number of medical doctors during 2017 has shown slight decline from 1st quarter to 4th quarter. In functional public health centres the number of medical doctors (a total of General practitioner, Specialists, Resident Doctors, and Dentists) has slightly decreased by 0.9% by end of December 2017 (4,558) compared to end of June 2017 (4,600).

Availability of health services

The availability of core health services is monitored through HeRAMS at health centre's level, considering a standard list of health services [includes: General clinical services and essential trauma care, Child Health, Nutrition, Communicable Diseases, Sexual & Reproductive Health, Non-communicable Diseases and Mental Health].

As a result of disrupted healthcare delivery, limited provision of many health services, even within the functional health centres were observed.

Availability of medical equipment

Analysis of availability of essential equipment has been measured across all functioning health centres [fully and partially functioning] (1,179 /1,804), in terms of functional equipment out of the total available equipment in the health centre. The produced analysis provides good indication of the current readiness of the health centres to provide the health services, and also to guide focused planning for procurement and distribution of equipment and machines, to fill-in identified gaps that were observe even within the functional health centres.

Availability of priority medicines

Availability of medicines and consumables at health centres' level has been evaluated based on a standard list of identified priority medicines and medical supplies for duration of one quarter. Gaps of medicines and medical supplies are identified even within the functional health centres.

1. Completeness of reporting

The completeness of reporting of health centres has increased slightly throughout 2017.

In the 4th Quarter 2017, completeness of reporting has reached 99.8% [Figure 1] compared to 99.7% at the end of 3rd Quarter, 99.7% at the end of 2nd Quarter, and 99.6% at the end of 1st Quarter 2017.

The classification of health centres (**1,804**) per type is presented in [Figure 2], of which the majority is primary healthcare centres (86%), followed by medical points (7%), specialized centres (5%), and comprehensive/ polyclinics (2%).

The levels of completeness of reporting of health centres at governorate level are presented in [Figure 3].

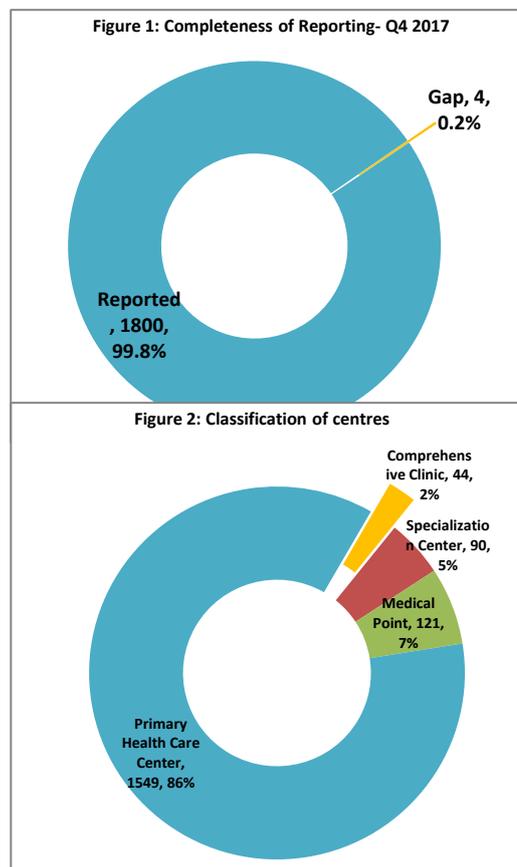
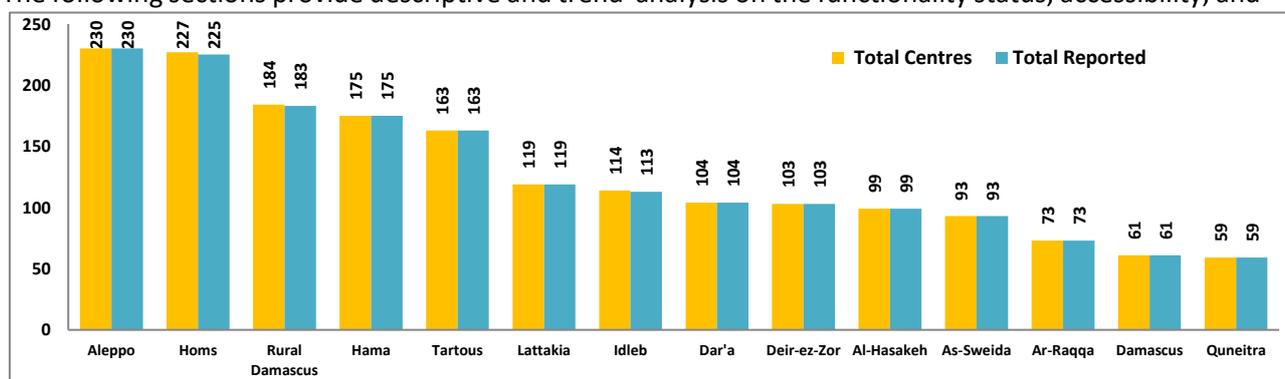


Figure 3: Completeness of reporting of health centres at governorate level, 4th Quarter 2017

The following sections provide descriptive and trend analysis on the functionality status, accessibility, and



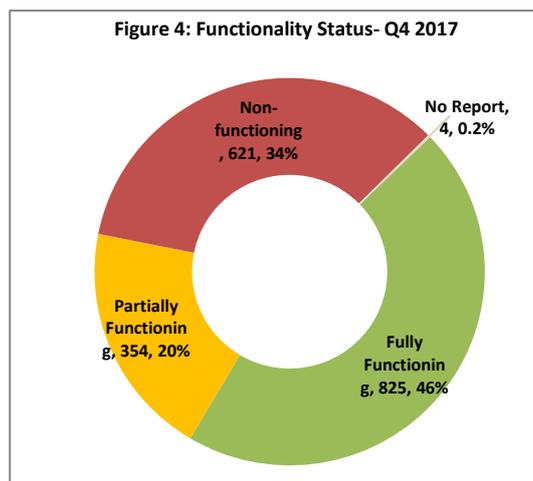
infrastructure of the public health centres, availability of resources & services, and available equipment and medicines during the 4th Quarter 2017 in comparison to other three quarters of 2017.

The provided analysis supports informed decision making, better planning and allocation of resources, and contributes to significant and targeted humanitarian response by WHO and health sector partners.

2. Functionality status

Functionality of the health centres has been defined and assessed at three levels;

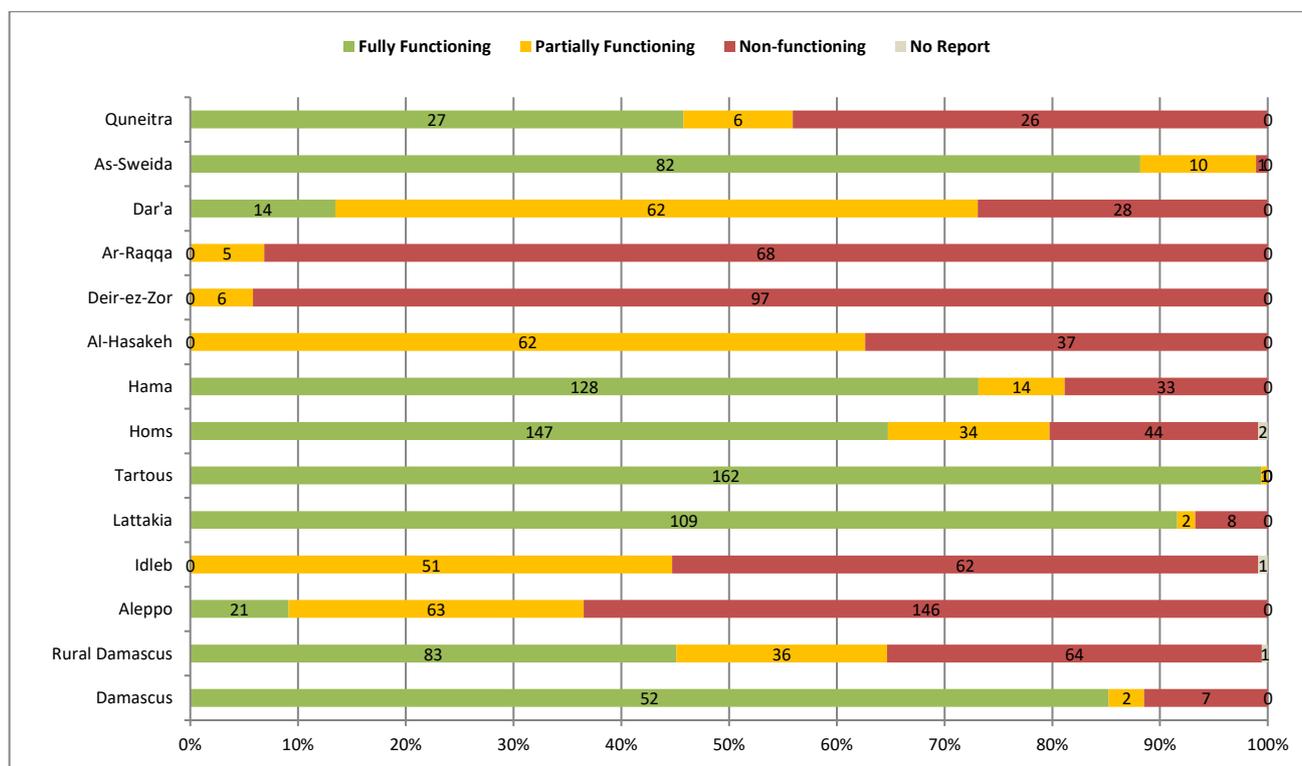
- ◆ **Fully Functioning:** a health centre is open, accessible, and provides healthcare services with full capacity (i.e., staffing, equipment, and infrastructure).
- ◆ **Partially functioning:** a health centre is open and provides healthcare services, but with limited capacity (i.e., either shortage of staffing, equipment, or damage in infrastructure).
- ◆ **Not functioning:** a health centre is out of service, because it is either fully damaged, inaccessible, no available staff, or no equipment.



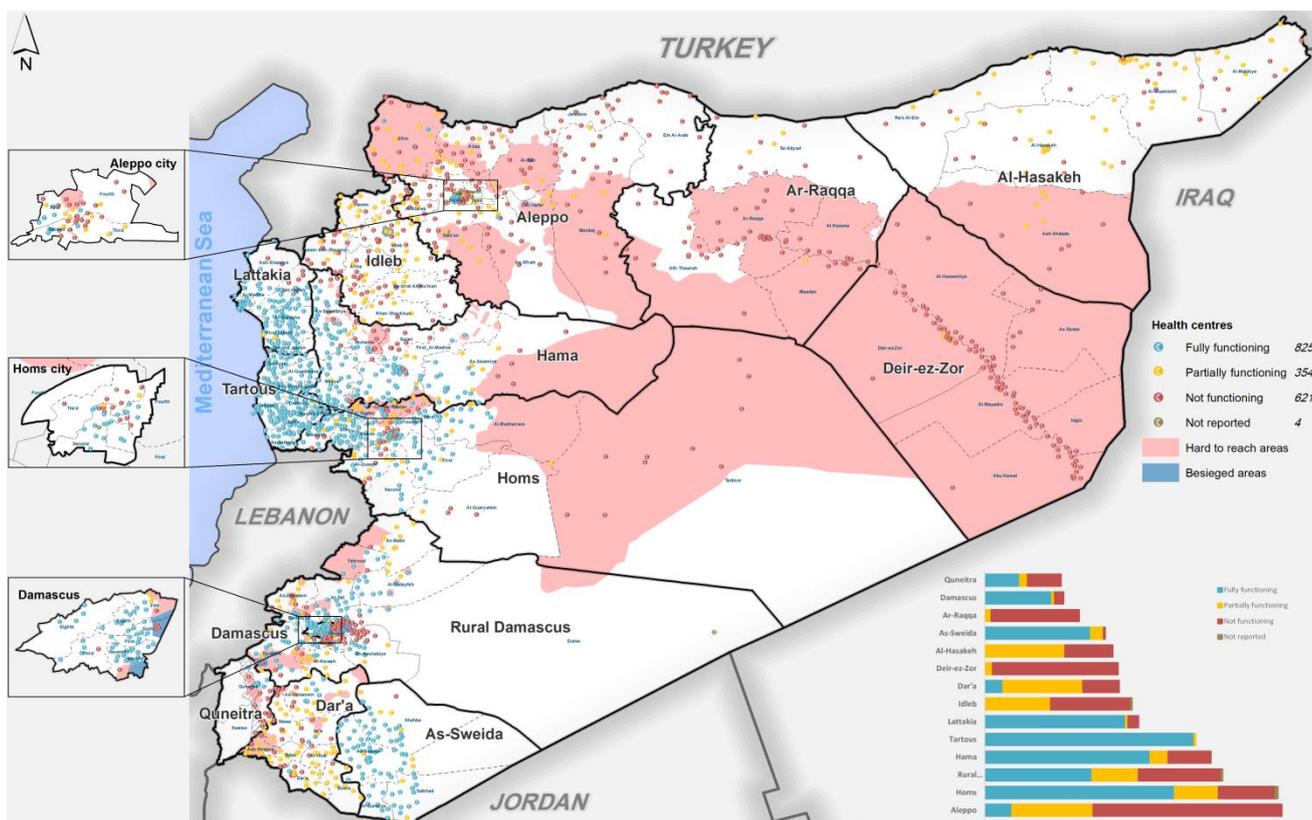
By end of the 4th Quarter 2017 and out of **1,804** assessed public health centres, 46% (825) were reported fully functioning, 20% (354) partially functioning, 34% (621) non-functioning (completely out of service), while the functionality status of 0.2% (4) of health centres were unknown [Figure 4].

Detailed analysis on the functionality status of the health centres at governorate level is shown in [Figure 5] and [Map 1].

Figure 5: Functionality status of health centres per governorate, 4th Quarter 2017



Map 1: Functionality status of the public health centres, 4th Quarter 2017

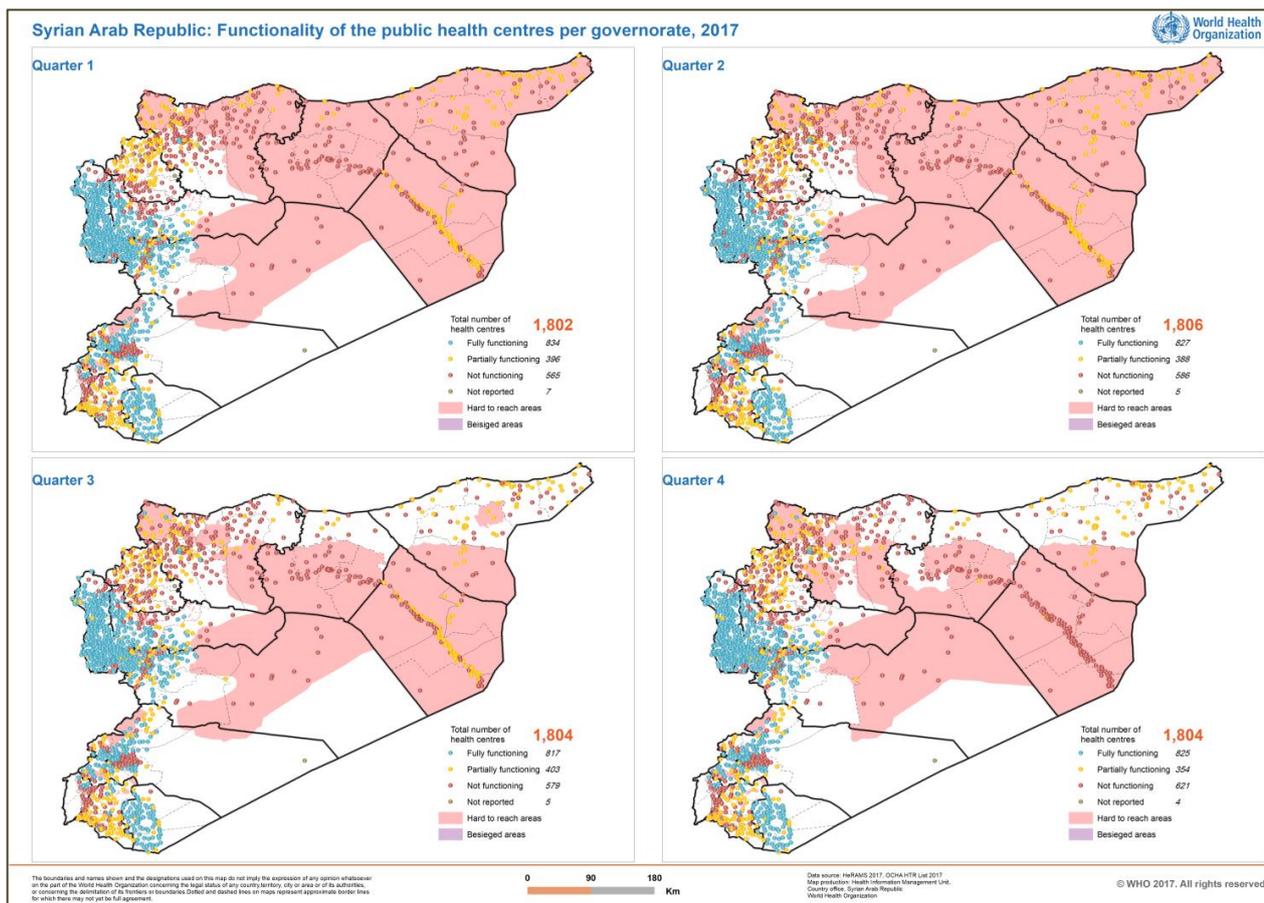


The number of non-functioning health centres has increased slightly from 565 to 621 (between 1st Quarter and 4th Quarter of 2017) [Figure 6] and [Map 2]. as a direct impact of deteriorating security situation.

Figure 6: Trend analysis of functionality status, between 1st Quarter 2014 and 4th Quarter 2017



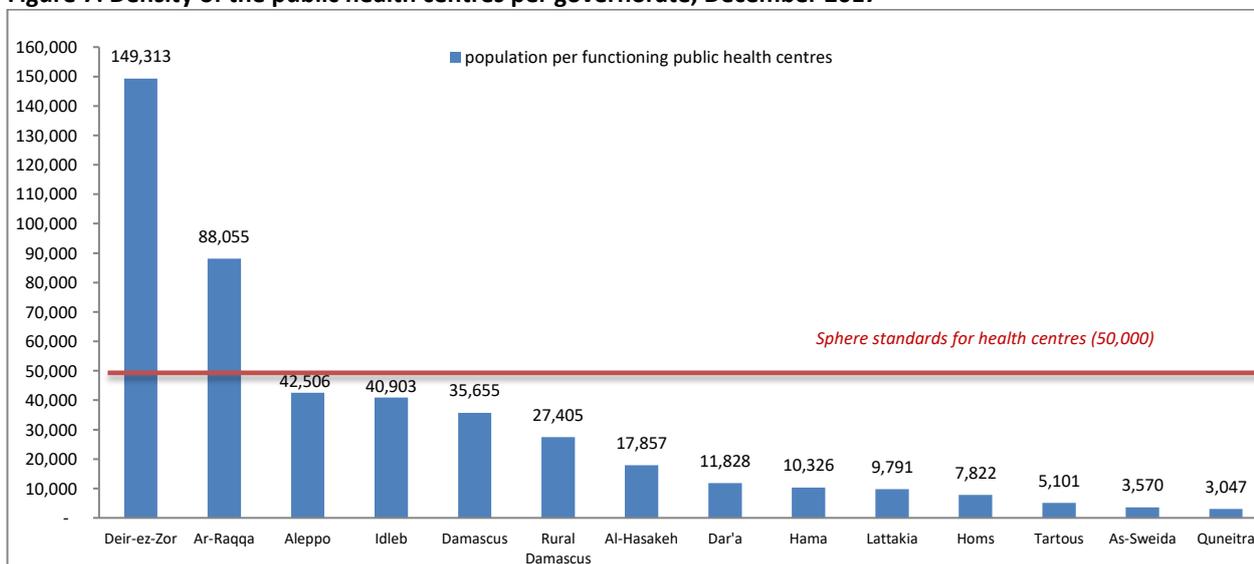
Map 2: Trend analysis of functionality status of public health centres, 1st quarter to 4th Quarter 2017



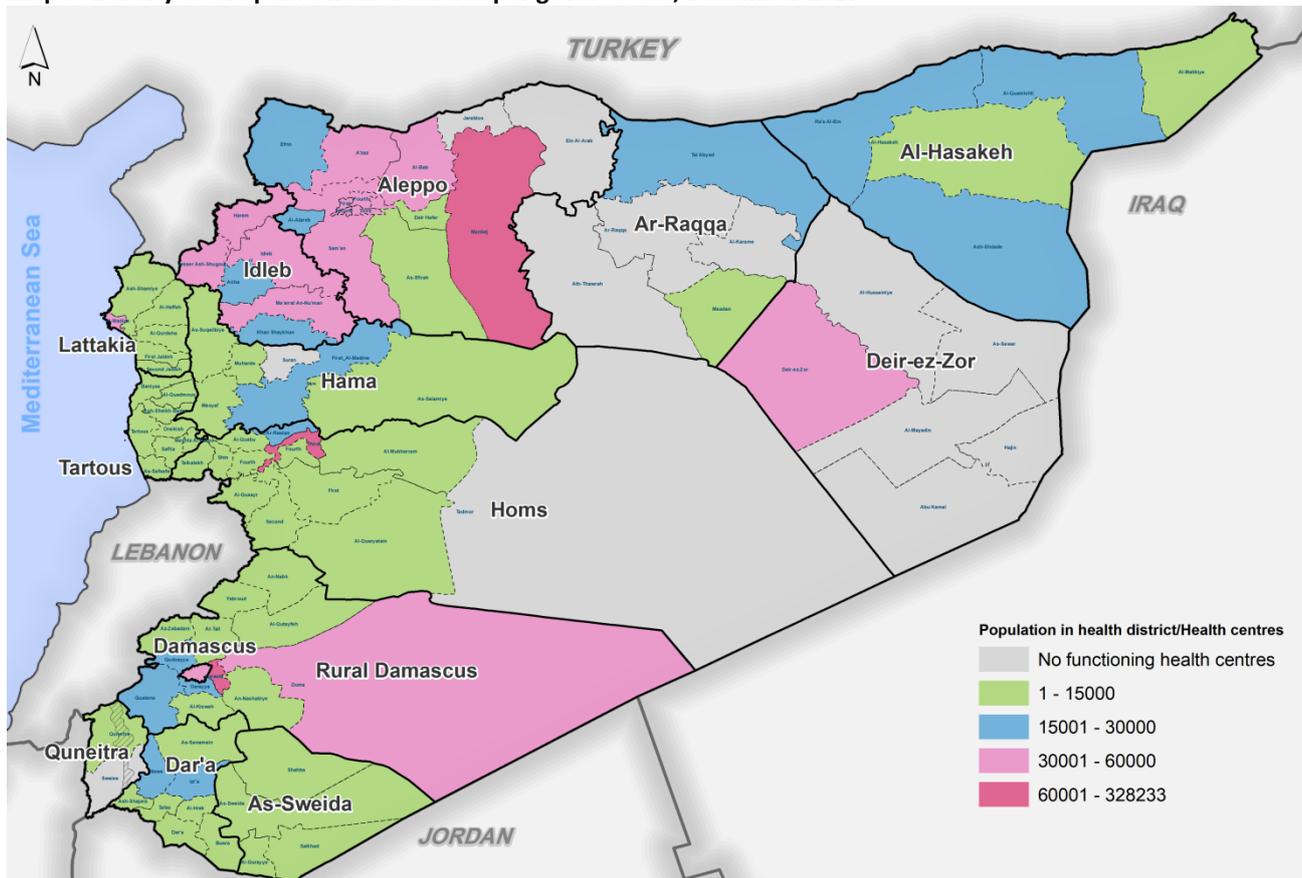
3. Density of the public health centres

Health centres density reflects the total number of health centres relative to population size (based on OCHA HRP 2017), which helps measure physical access to outpatient health care services. Comparing with Sphere standards for health centres (50,000), two governorates (Deir-ez-Zor and Ar-Raqqa) are over the standard density reference; due to high number of population against the available functioning public health centres [Figure 7].

Figure 7: Density of the public health centres per governorate, December 2017



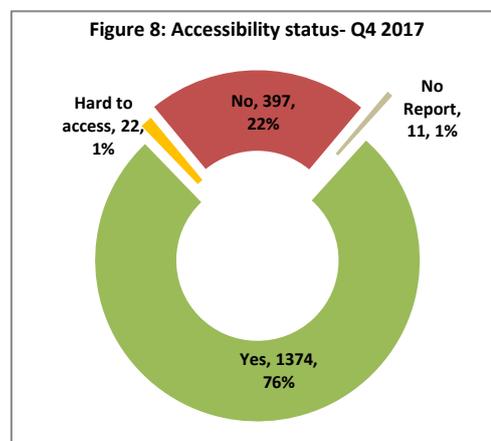
Map 3: Density of the public health centres per governorate, December 2017



4. Accessibility status

Accessibility to health centres is defined at three levels:

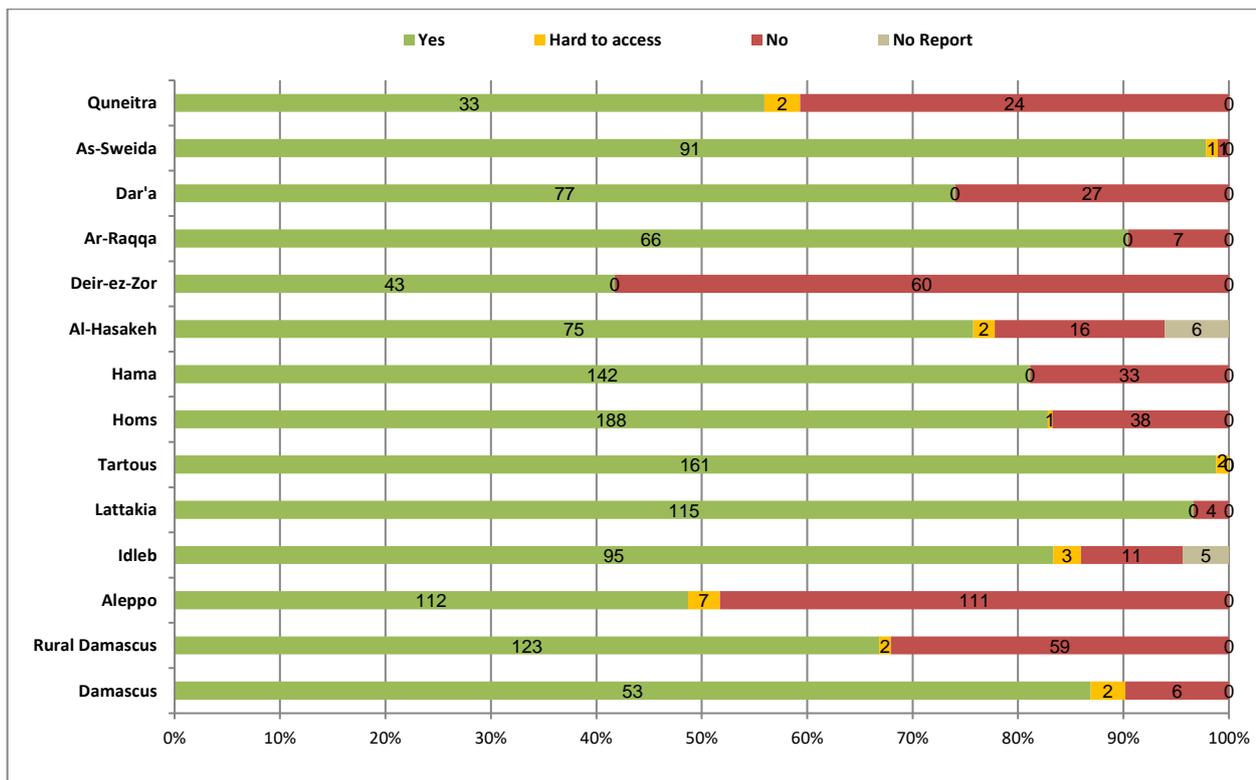
- ◆ **Accessible:** a health centre is easily accessible for patients and health staff.
- ◆ **Hard-to-reach:** a health centre is hardly reached, due to security situation or long distance.
- ◆ **Inaccessible:** a health centre is not accessible because of the security situation, or a centre is accessible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



By end of the 4th Quarter 2017, 76% (1,374) health centres were reported accessible, 1% (22) hard-to-access, and 22% (397) were inaccessible, while the accessibility status of 0.6% (11) health centres were unknown [Figure 8].

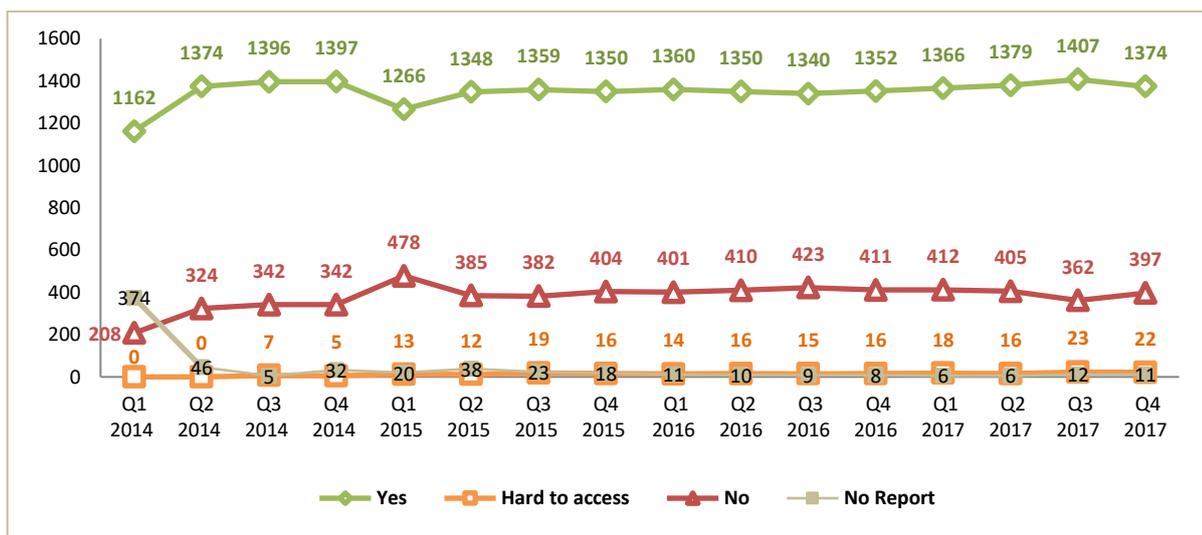
Detailed analysis on the accessibility status of the health centres at governorate level is presented in [Figure 9] and [Map 3].

Figure 9: Accessibility status of the health centres per governorate, 4th Quarter 2017



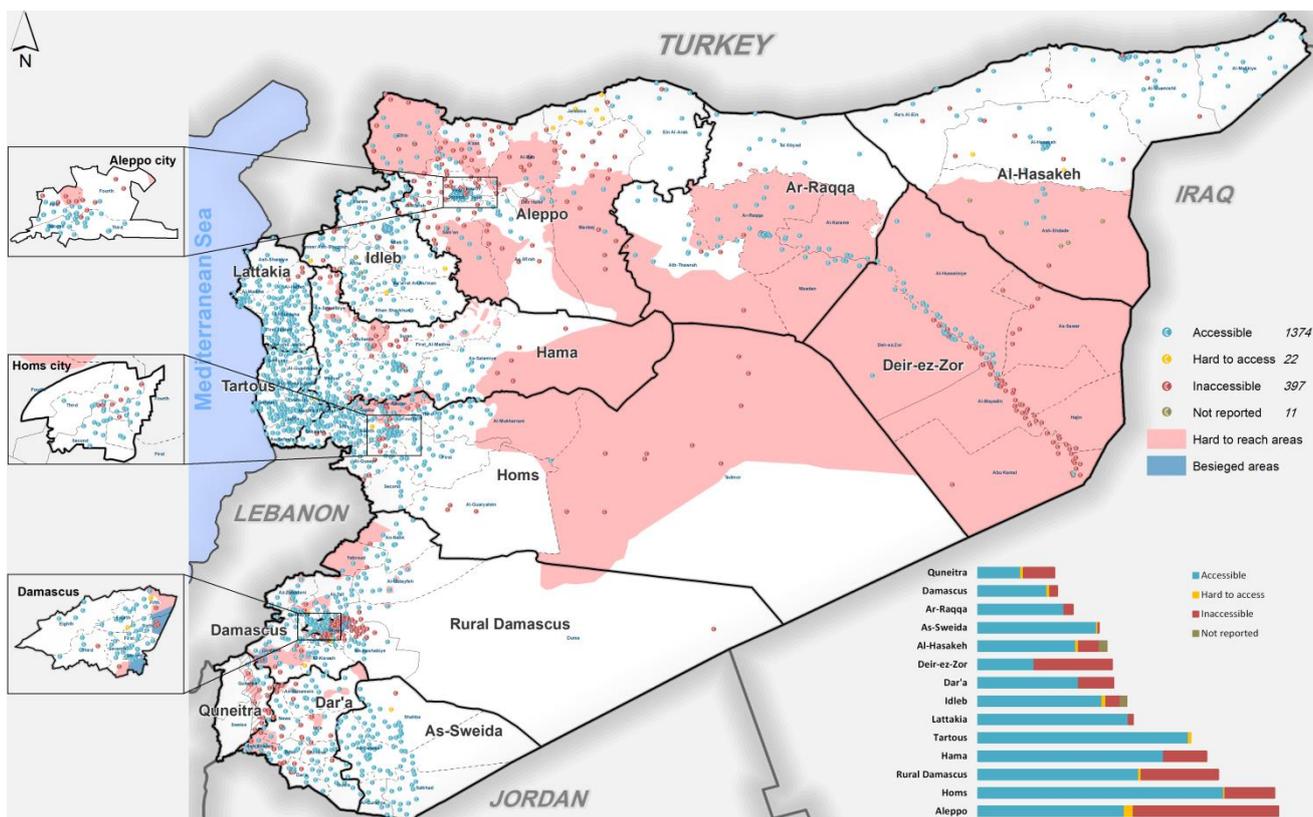
The trend analysis of accessibility status of health centres from 1st Quarter 2014 to 4th Quarter 2017 is presented in Figure 10.

Figure 10: Trend analysis of accessibility status of health centres between 1st Quarter 2014 and 4th Quarter 2017



The number of inaccessible health centres increased slightly from 362 to 397 (between end of 3rd Quarter and 4th Quarter 2017).

Map 3: Accessibility to public health centres , 4th Quarter 2017



5. Infrastructural patterns

The following sub-sections provide analysis on infrastructural patterns of health centres, including building's condition, water sources, availability of electricity generators, and availability of refrigerators.

5.1 Level of damage of the health centres' buildings

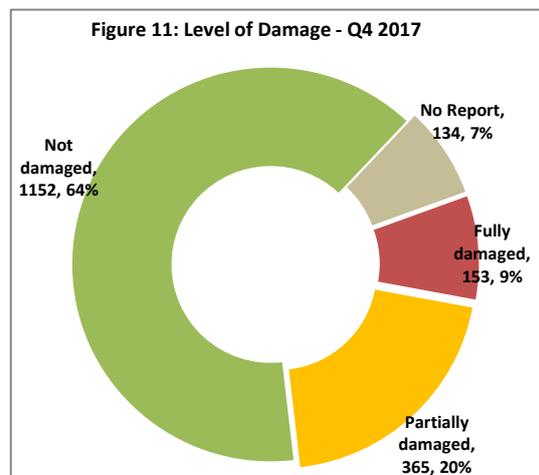
The level of damage to health centres' buildings was measured at three levels:

- ◆ **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:** part of the building is damaged.
- ◆ **Intact:** there is no damage in the building.

Analysis of the level of damage provides good indication on the potential costs for reconstruction.

By end of the 4th Quarter 2017, 29% (518) health centres were reported damaged [9% fully damaged and 20% partially damaged], 64% (1,152) were reported intact, while the building's condition of 7% (134) health centres were unknown [Figure 11].

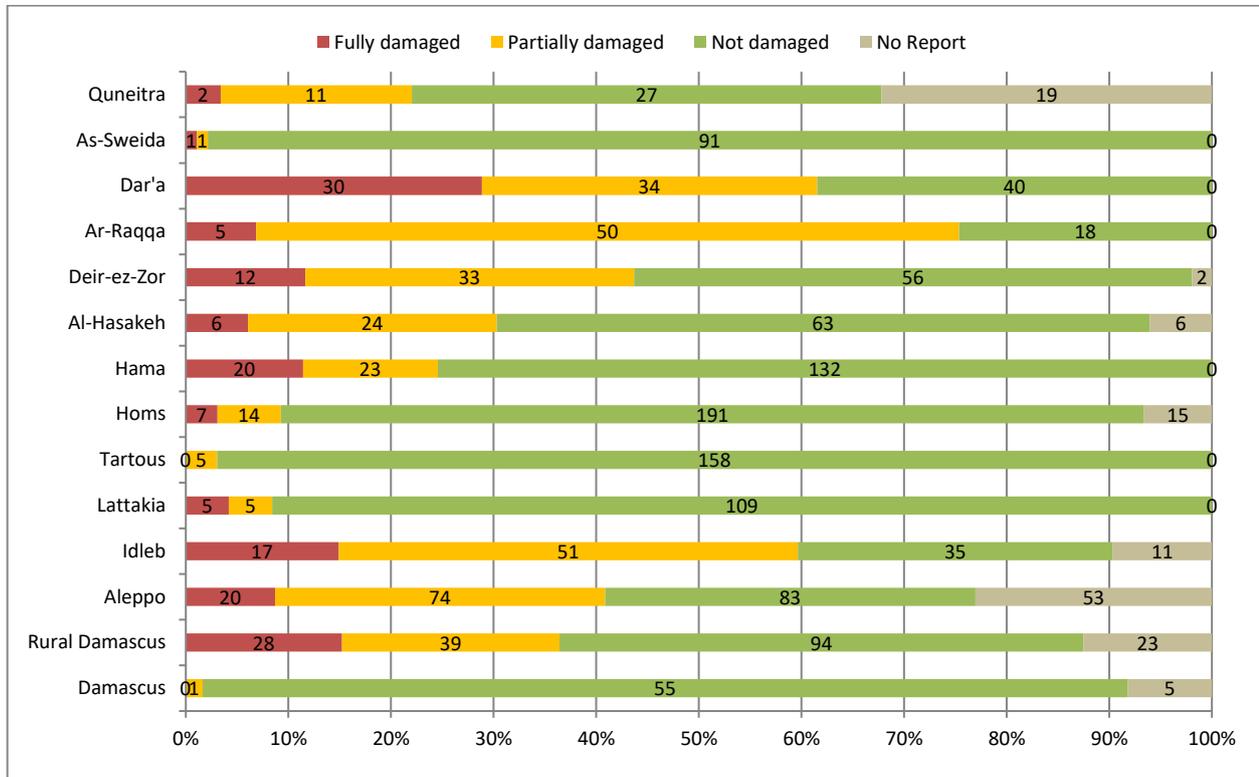
The completeness of reporting level of damage of health centres has increased slightly in the 4th Quarter to reach 92.6%, compared to 92.5% at the end of 3rd Quarter 2017.



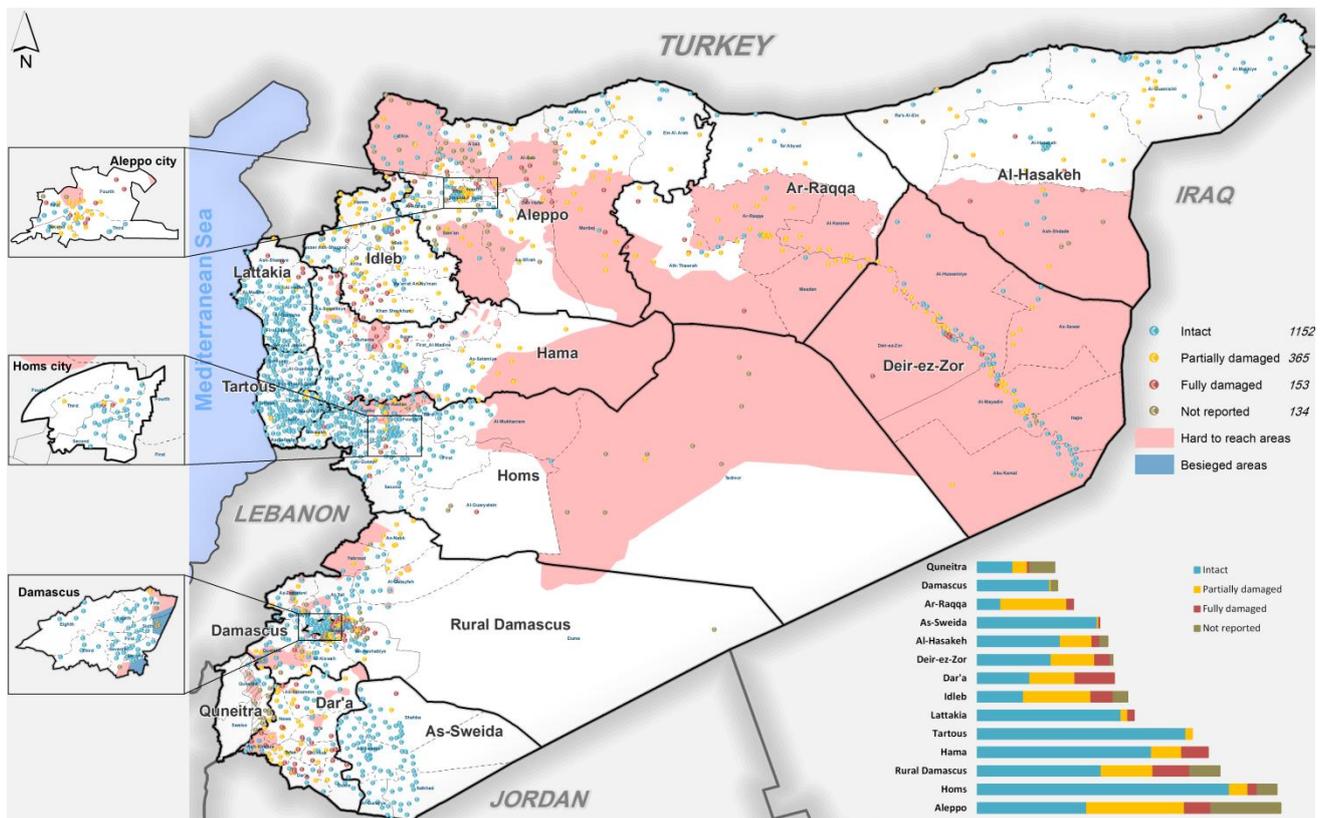
Key gaps on reporting the level of damage of the health centres are observed in Quneitra 32.2% (19/59), Aleppo 23% (53/230), Rural Damascus 12.5% (23/148) and Idleb 9.6% (11/114).

Detailed analysis of the damage status of the health centres at governorate level is presented in [Figure 12] and [Map 4].

Figure 12: level damage of the health centres per governorate, 4th Quarter 2017



Map 4: Distribution and Level of damage of the public health centres, 4th Quarter 2017

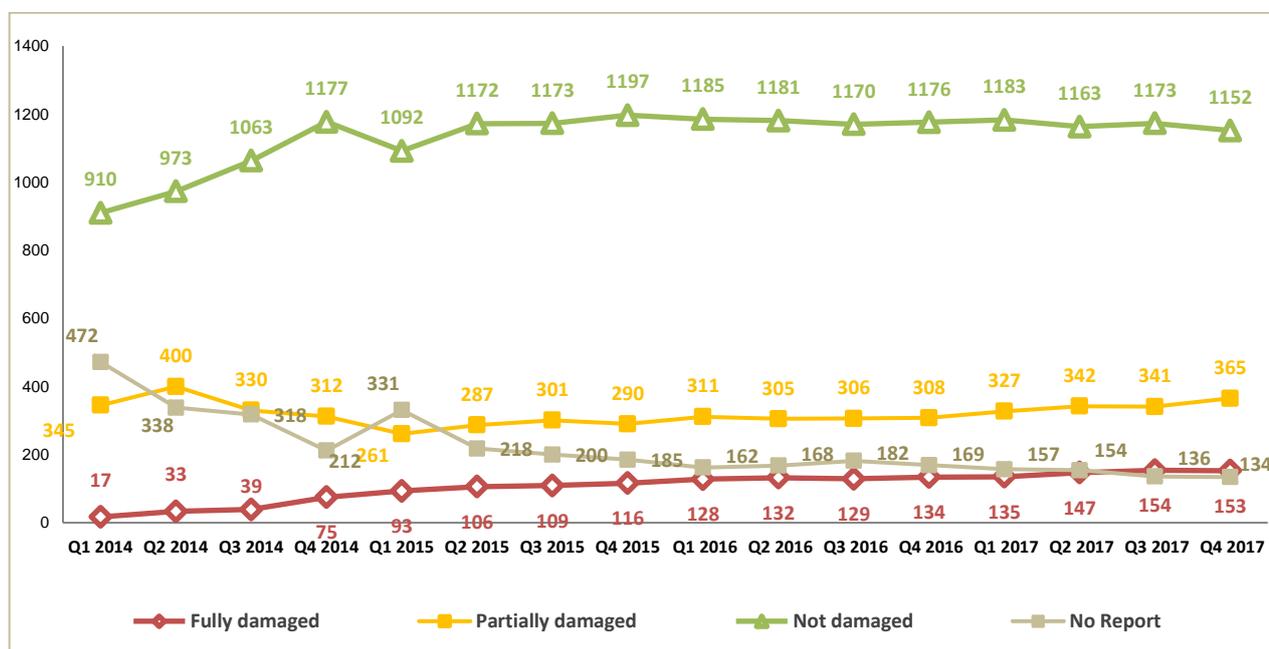


It is essential to cross-analyze the infrastructural damage of the public health centres in relation to the functionality status (i.e. provision of services). Some health centres have resiliently continued to provide services regardless of the level of damage of the building and by optimizing intact parts of the building or in a few cases operating from other neighboring facilities. The national figures translate as follows:

- ◆ Out of the **365 partially damaged health centres**, 124 health centres were reported partially functioning and 220 out of service (non-functioning), the functionality status of 1 health centre was unknown, while 20 health centres were reported to be fully functioning providing all services through salvaging medical equipment from the damaged section of the health centre with full staffing capacity.
- ◆ Out of the **153 fully damaged health centres**, 124 were reported non-functioning and 29 health centres have opted for innovative ways to continue providing health services to populations in need through partially functioning from other nearby temporary locations and provide health services with limited staff capacity and resources.
More details of the 29 health centres are available in the HeRAMS database.
- ◆ Then again, health centres with **intact buildings (1,152 health centres)** does not directly reflect full functionality, only 805 of the 1,152 intact health centres are fully functioning, the functionality status of 2 health centres were unknown, while 201 are partially functioning and 144 health centres are not functioning all together, due to limited access of patients and health staff to the facilities resulting from the dire security situation as well as critical shortage of supplies.

The trend analysis of infrastructural damage of health centres from 1st Quarter 2014 to 4th Quarter 2017 is presented in Figure 13.

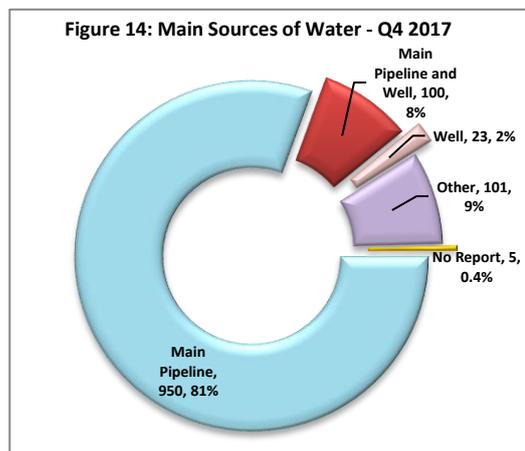
Figure 13: Trend analysis of buildings' damage of health centres, between 1st Quarter 2014 and 4th Quarter 2017



5.2 Water sources and functionality status

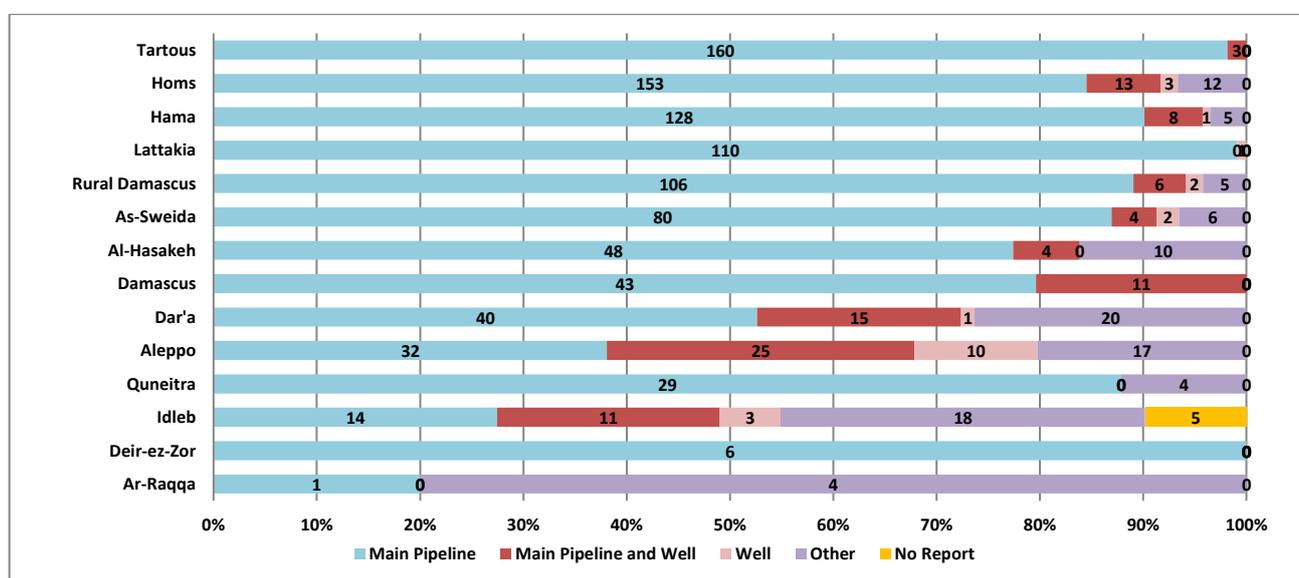
Availability of water sources at health centres was assessed using a standard checklist of main types of water sources (i.e., main pipeline, well, or both [main pipeline and well]).

By end of the 4th Quarter 2017 and out of 1,179 functional health centres, 81% (950) are using main pipelines, 2% (23) are mainly using wells, while 8% (100) are using both (main pipeline and well) [Figure 14].



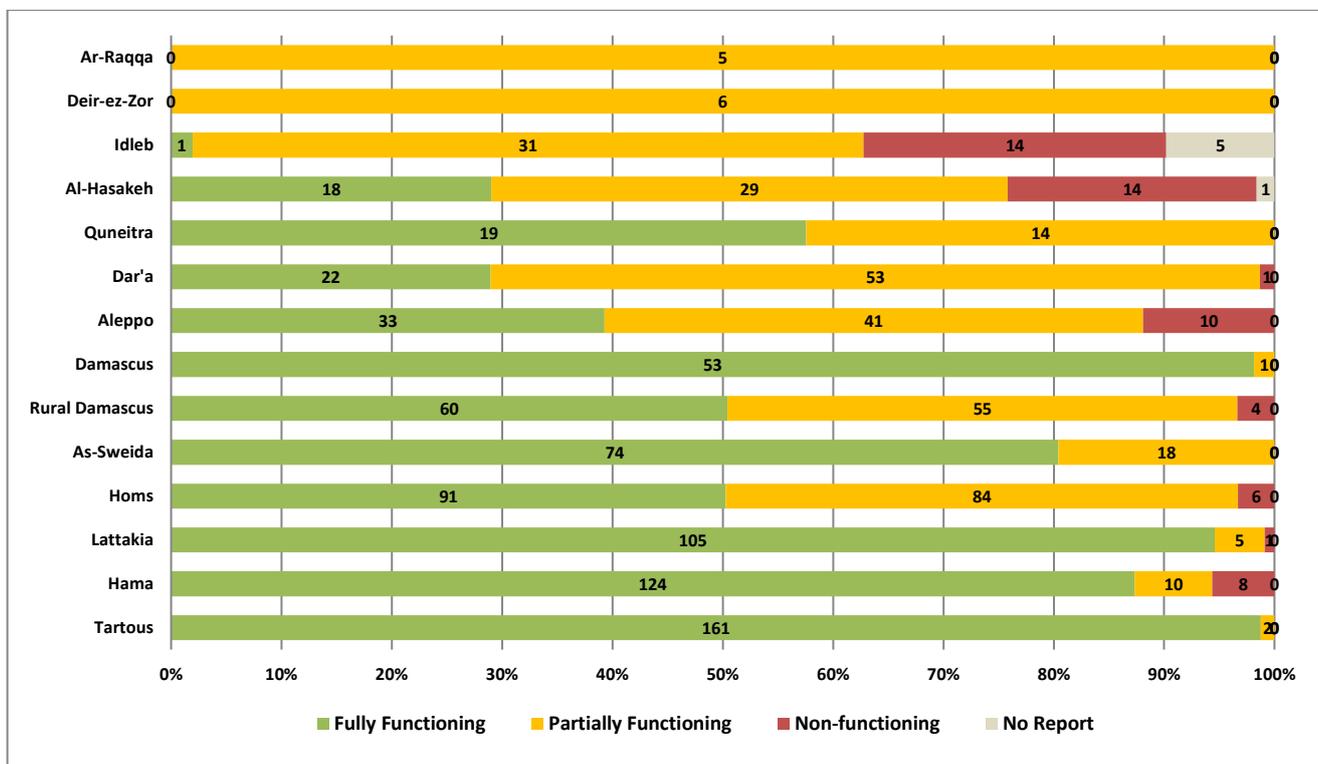
Detailed analysis of availability and distribution of water sources at functional health centres is presented at governorate level on [Figure 15].

Figure 15: Distribution of water sources/ types at functional health centres per governorate, 4th Quarter 2017



Functionality status of the water sources was measured at three levels; fully functioning, partially functioning, and not functioning. Figure 15, provides details on functionality status of water sources at functional health centres, (1,179 /1,804) per governorate.

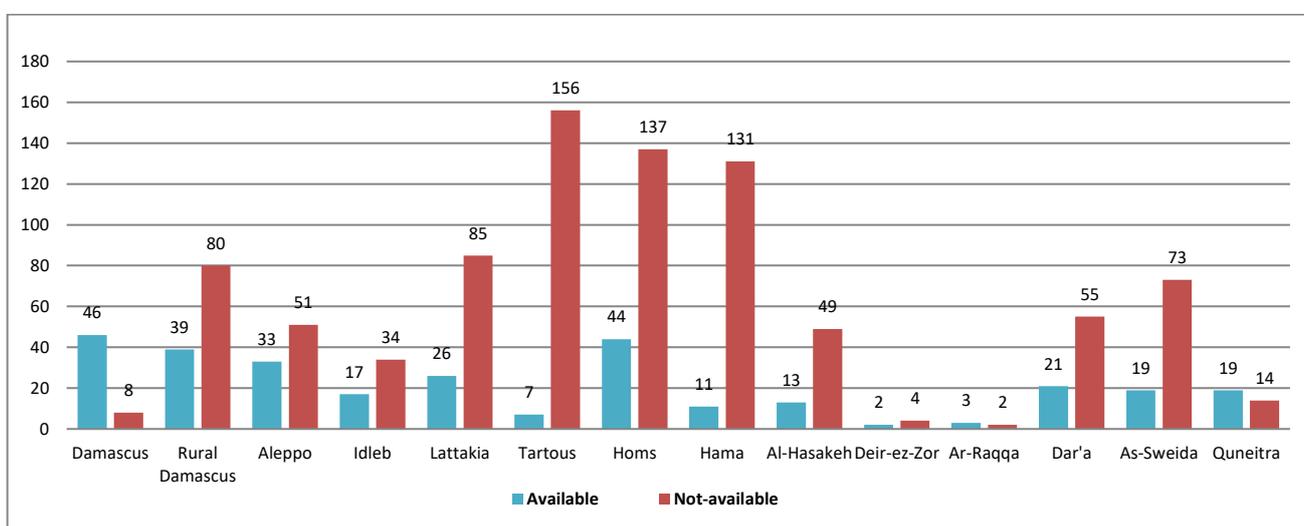
Figure 16: Functionality status of the water sources at health centres, 4th Quarter 2017



5.3 Availability of electricity generators

Electricity generators become highly demanded with the current situation, where electricity power is widely disrupted and majority of public health centres are dependent on generators' power. Availability of electrical generators was measured at functional health centres, and presented in [Figure 17].

Figure 17: Availability of generators in the functional health centres per governorate, 4th Quarter 2017

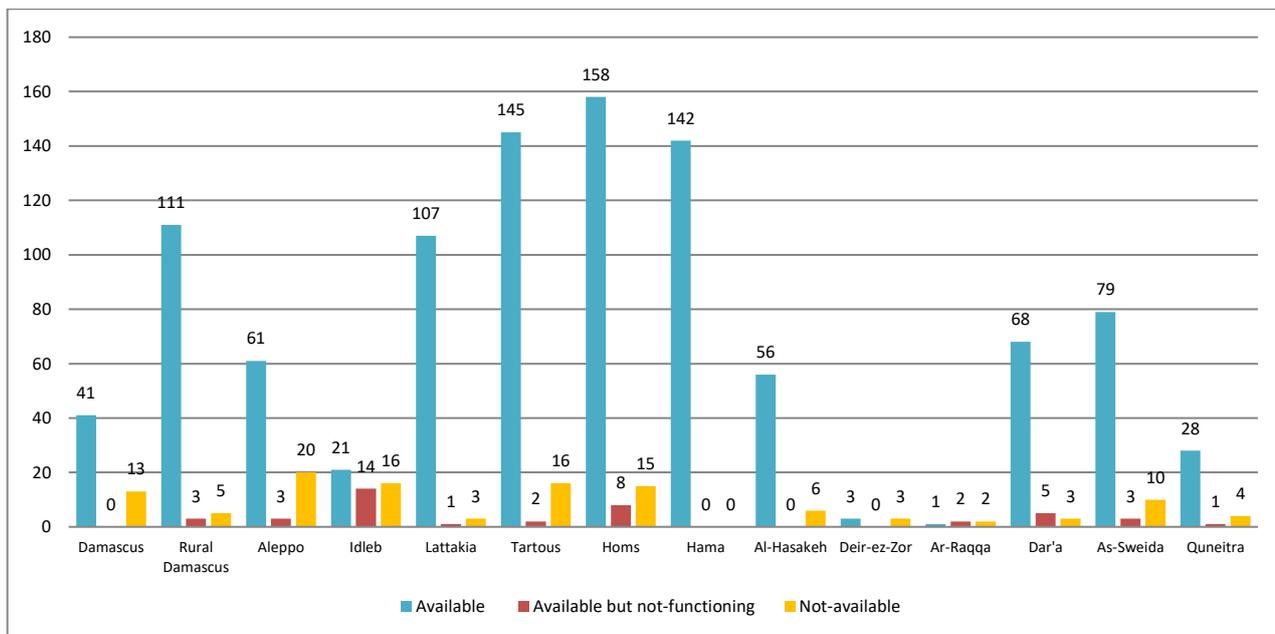


5.4 Availability of refrigerator for vaccine

Availability of refrigerators for vaccine in health centres is measured through HeRAMS at three levels: available and functioning, available but not-functioning, or not-available. The summary figures of availability of refrigerators in functioning health centres are presented [Figure 18].

The health centres with gap on refrigerators for vaccine, seek support of the area municipality, a nearby school, or a nearby house to store vaccines and medicines.

Figure 18: Availability of refrigerators in the functional health centres, per governorate, 4th Quarter 2017

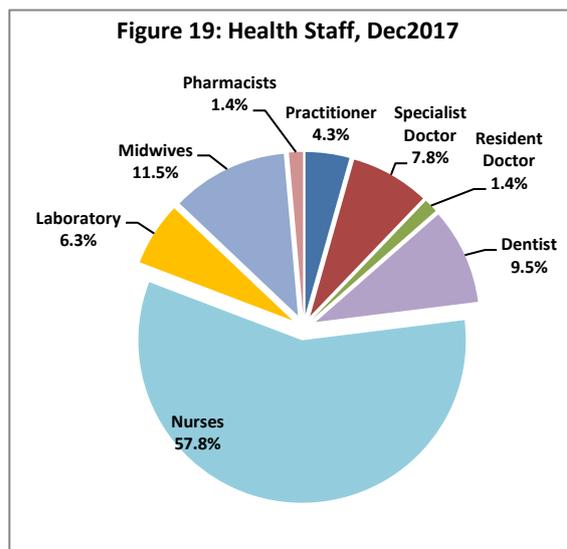


6. Availability of health human resources

Availability of health human resources has been analyzed across functional health centres considering different staffing categories.

Analysis of proportions of available health staff, by end of the 4th Quarter 2017, within the functional health centres (fully and partially) is shown in [Figure 19].

The resident doctors represented (1.4%) of total health staff at centres' level, along with pharmacists(1.4%) followed by general practitioners (4.3%); laboratory (6.3%); Specialist (7.8%); dentists (9.5%); midwives (11.5%); and nurses (57.8%).



The Distribution of the total health staff by end of the 4th Quarter 2017, per staff category and governorate is shown in [Figure 20].

Figure 20: Distribution of total health staff at health centres per governorate, December 2017

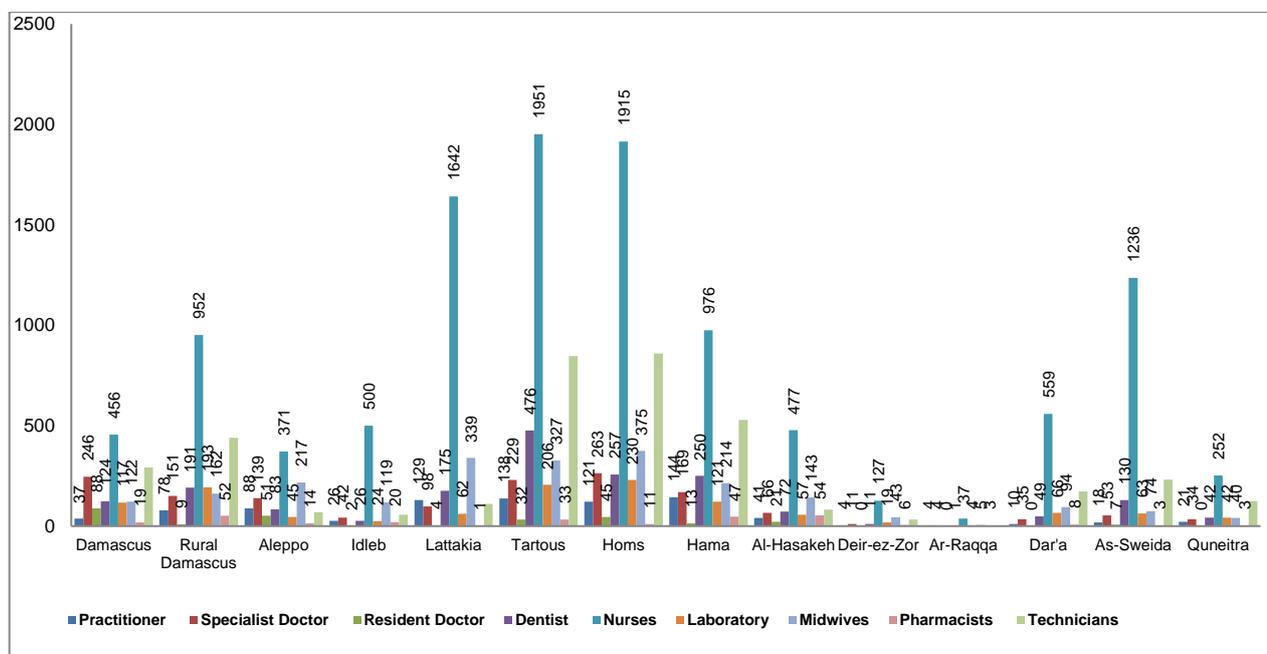
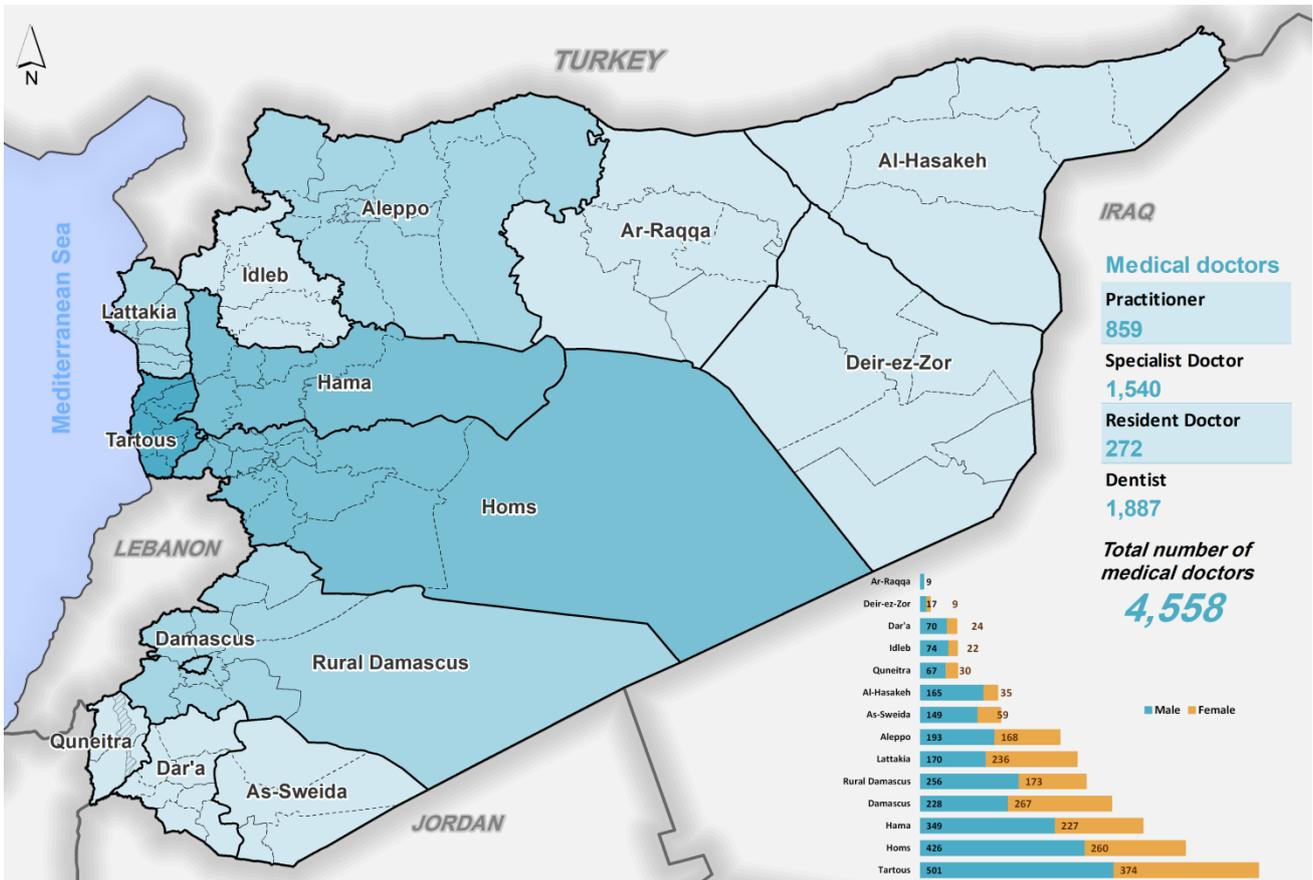


Table 1: Availability of human resources of functioning public health centres, per governorate, December 2017

Governorate	Practitioner	Specialist Doctor	Resident Doctor	Dentist	Nurses	Laboratory	Midwives	Pharmacists	University	Technicians	Others
Damascus	37	246	88	124	456	117	122	19	28	291	431
Rural Damascus	78	151	9	191	952	193	162	52	23	439	623
Aleppo	88	139	51	83	371	45	217	14	32	69	230
Idlib	26	42	2	26	500	24	119	20	18	56	135
Lattakia	129	98	4	175	1642	62	339	1	19	111	673
Tartous	138	229	32	476	1951	206	327	33	42	846	2351
Homs	121	263	45	257	1915	230	375	11	25	860	539
Hama	144	169	13	250	976	121	214	47	50	528	517
Al-Hasakeh	41	66	21	72	477	57	143	54	35	82	161
Deir-ez-Zor	4	11	0	11	127	19	43	6	2	33	43
Ar-Raqqa	4	4	0	1	37	4	5	3	8	3	4
Dar'a	10	35	0	49	559	66	94	8	15	173	217
As-Sweida	18	53	7	130	1236	63	74	3	18	231	234
Quneitra	21	34	0	42	252	42	40	3	9	125	161
Grand Total	859	1540	272	1887	11451	1249	2274	274	324	3847	6319

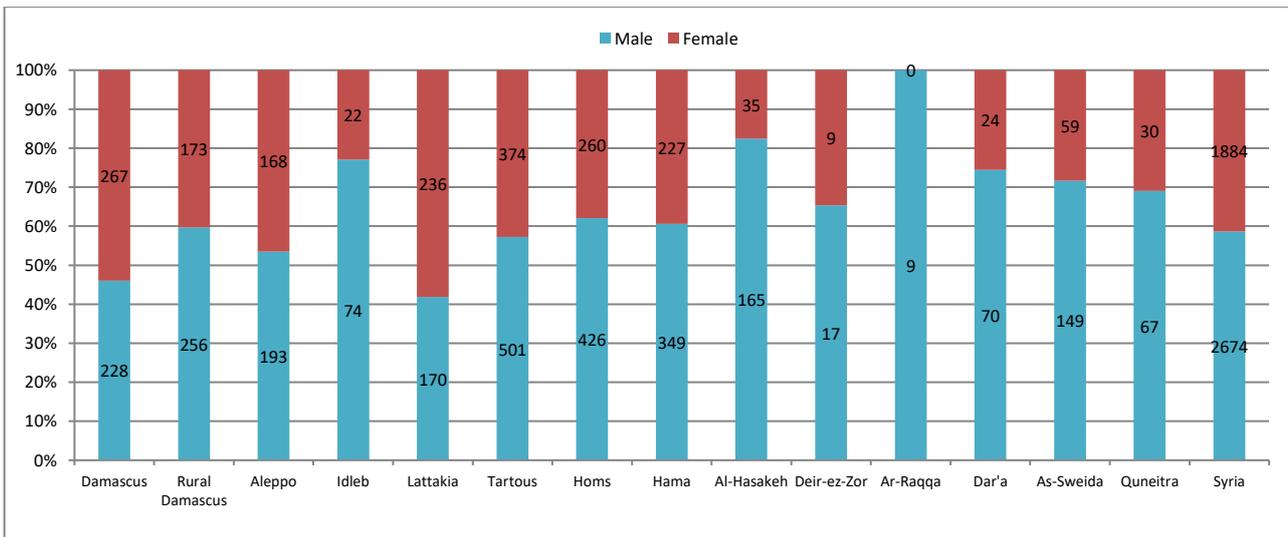
The distribution of medical staff [a total of general practitioner, specialist, resident doctor, dentist], in functional health centres per governorate is presented in [Map 5]. The highest density of medical staff is observed in Tartous [total functional centres is 163], followed by Homs [total functional centres is 181], followed by Hama [total functional centres is 142], and Damascus [total functional centres is 54].

Map 5: Distribution of medical staff [a total of general practitioners, specialist, resident doctors, and dentists] per governorate, December 2017



By analyzing the proportion of male to female doctors (a total of: general practitioners, specialist, resident doctors, and dentists), lowest proportions were seen in Ar-Raqqa, Al-Hasakeh, Idleb, and Dara'a governorates [Figure 21].

Figure 21: Proportion of Doctors by gender per governorate, December 2017



6.1 Availability of medical staff by category

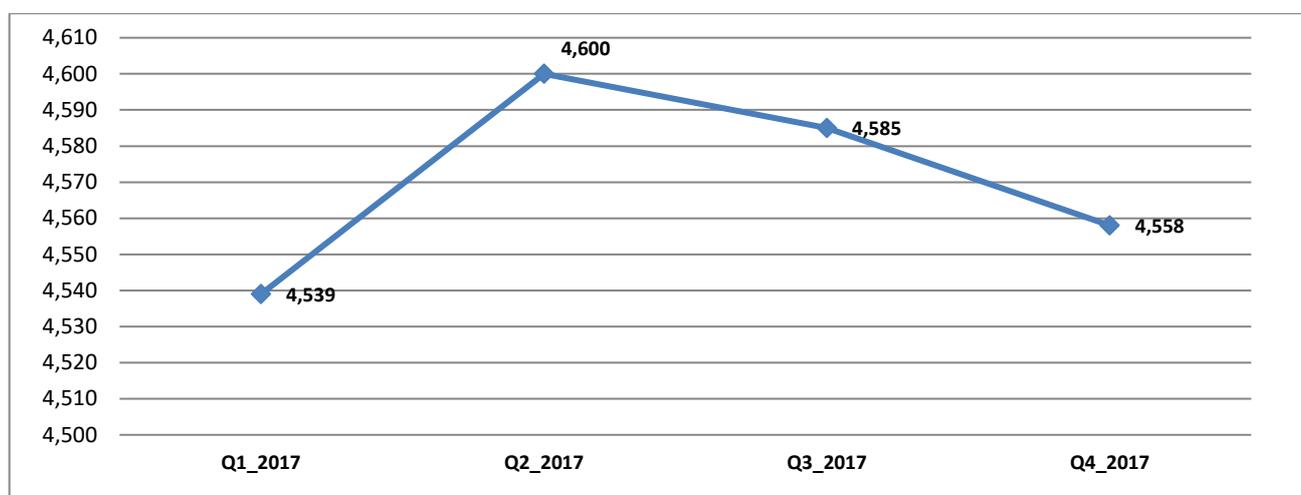
The availability medical staff in functional health centres is analyzed by category [i.e., medical doctors¹, nurses, and midwives], as follows:

i. Trend analysis of medical doctors [a total of general practitioners, specialist, resident doctors, and dentists]:

The number of medical doctors in public health centres has slightly decreased by 0.9% by end of December 2017 (**4,558**) compared to end of June 2017 (**4,600**).

Figure [22] shows trend analysis of reported medical doctors (a total of General practitioner, Specialists, Resident Doctors, and Dentists) on quarterly basis during 2017.

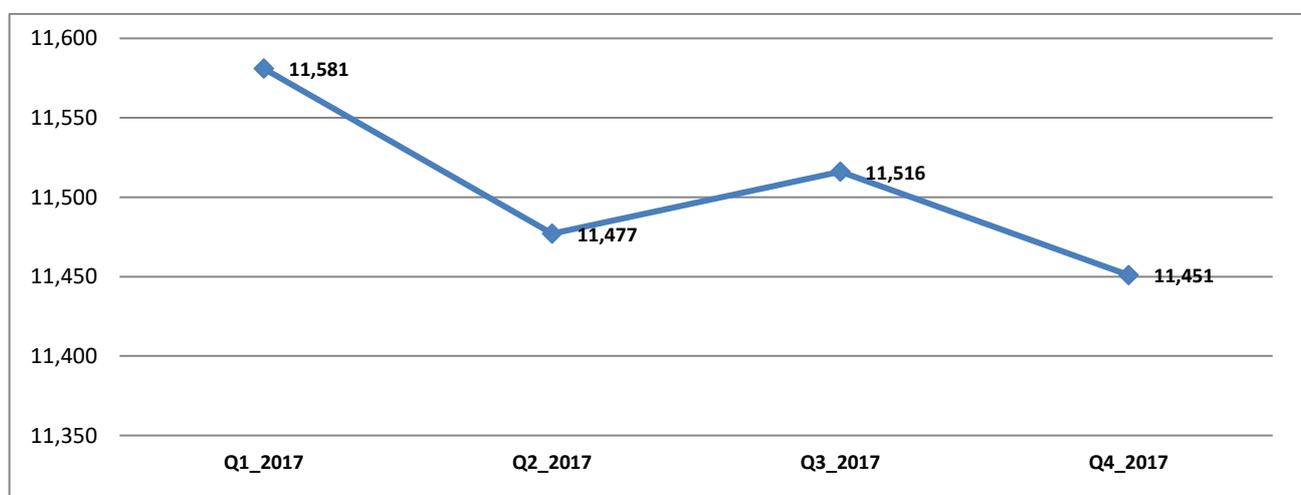
Figure 22: Trend analysis of availability of medical doctors in public health centres during 2017



ii. Trend analysis of Nurses & Midwives:

The number of **nurses** in public health centres has slightly decreased by 1% by end of December 2017 (**11,451**) compared to end of March 2017 (**11,581**).

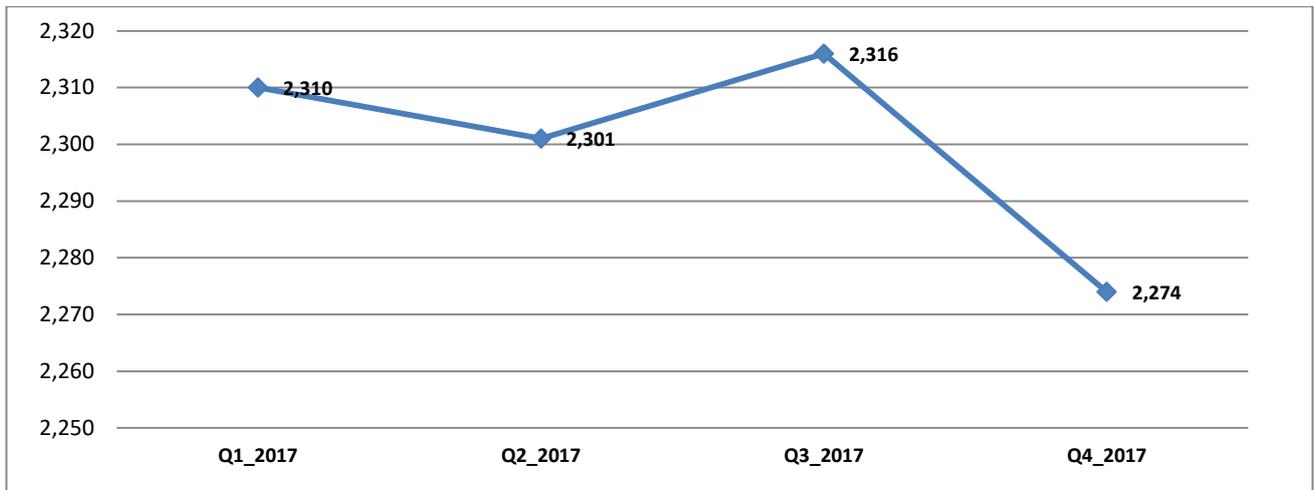
Figure 23: Trend analysis of reported number of midwives on quarterly basis during 2017.



¹ A total of general practitioners, specialist, resident doctors, and dentists

The number of **midwives** in public health centres has slightly decreased by 2% in December 2017 (**2,274**), compared to March 2017 (**2,310**).

Figure 24: Trend analysis of reported number of midwives on quarterly basis during 2017.



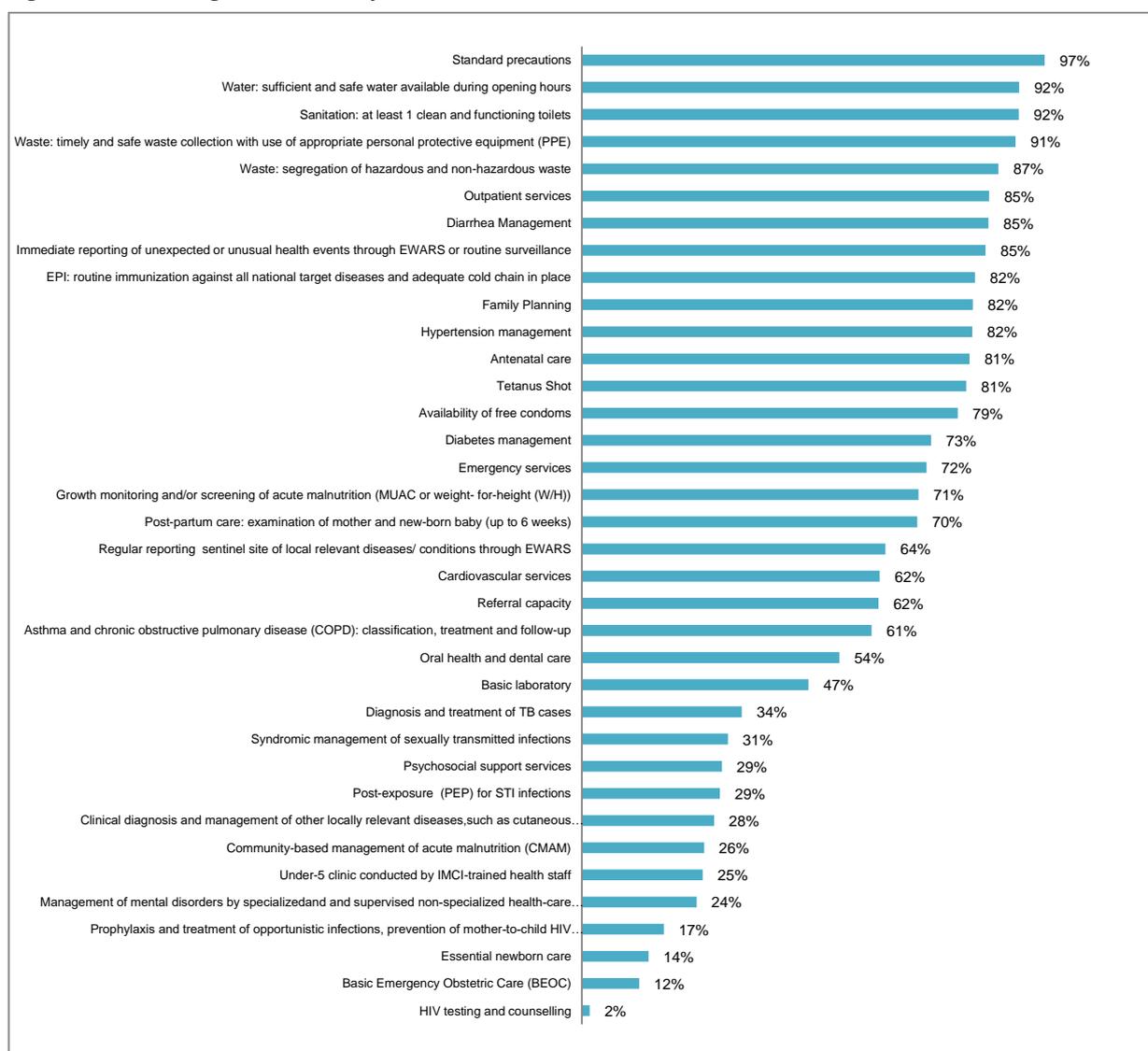
7. Availability of health services

Availability of the core health services is monitored through HeRAMS at a health centre's level, considering a standard list of health services, as follows:

- ◆ General clinical services and essential trauma care
- ◆ Child Health: EPI, Under-5 clinic , and Diarrhea management
- ◆ Nutrition: screening of MUAC, Management of acute malnutrition (CMAM)
- ◆ Communicable Diseases: Diagnosis and treatment of TB cases, and Clinical diagnosis and management of other locally relevant diseases
- ◆ Sexual & Reproductive Health: STI and HIV/AIDS, Maternal and newborn health
- ◆ Non-communicable Diseases: Asthma and chronic obstructive pulmonary disease (COPD), Cardiovascular services, Hypertension management, Diabetes management, and Oral health and dental care
- ◆ Mental health care

Figure 25 shows the percentage of availability of health services across all functional health centres (fully and partially), a total of 1,179.

Figure 25: Percentage of availability of health services, across all functional health centres, 4th Quarter 2017

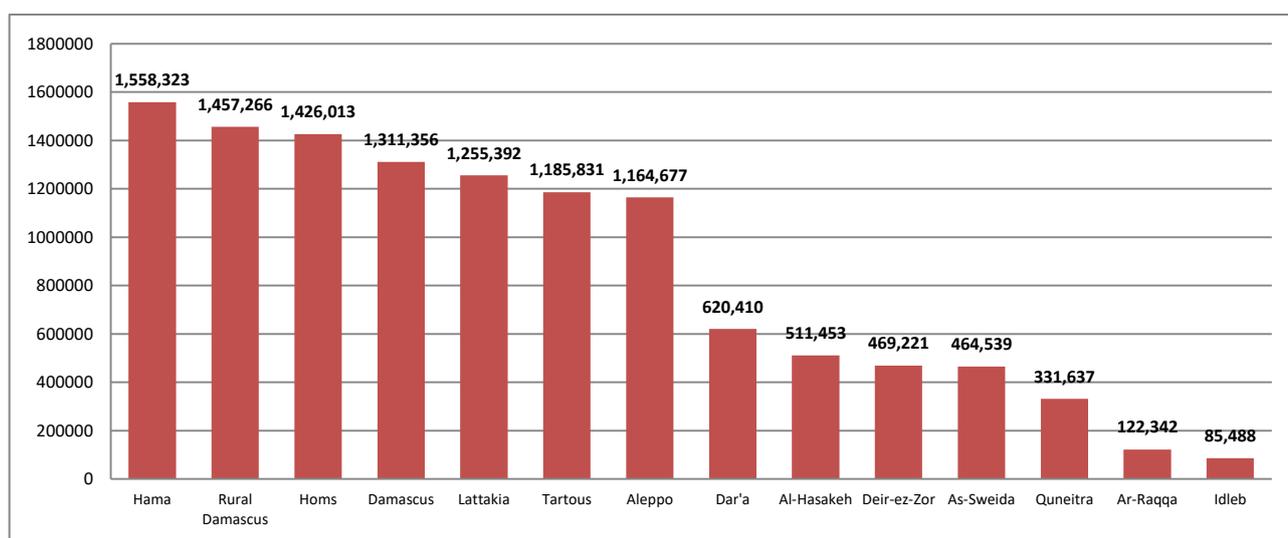


**Detailed information on availability of services per governorate and health centres is available in the HeRAMS Database.

The following section provides descriptive analysis for the workload and utilization of services in functional health centres throughout 2017, per governorate.

The workload was analyzed in terms of total consultations in all functional health centres during January to December 2017 [Figure 26]. The total reported workload across all governorates is **11,963,948**; disaggregated as **2,979,757** in the 1st Quarter, **3,008,512** in the 2nd Quarter, **2,954,133** in the 3rd Quarter and **3,021,546** in the 4th Quarter 2017.

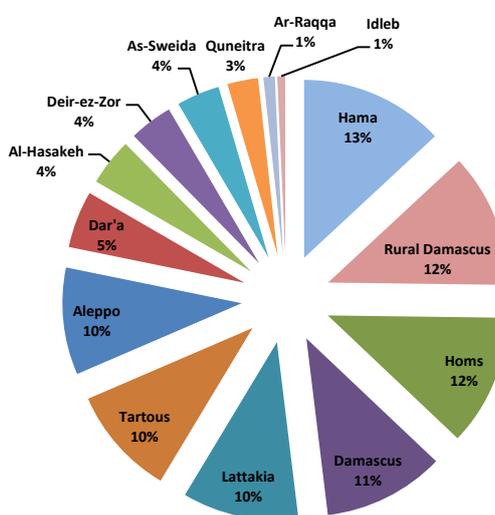
Figure 26: Estimated workload of functional health centres (consultations), 2017



The proportion of workload (consultations) of functional health centres per governorate is presented on Figure 27.

Detailed analysis on utilization of the core health services during the 4th Quarter 2017 is provided on the following sub-sections, including: General clinical services and essential trauma care, Child Health, Nutrition, Communicable Diseases, Sexual & Reproductive Health, Non-communicable Diseases and Mental Health]

Figure 25: Proportions of workload in health centres, January to December 2017, per governorate



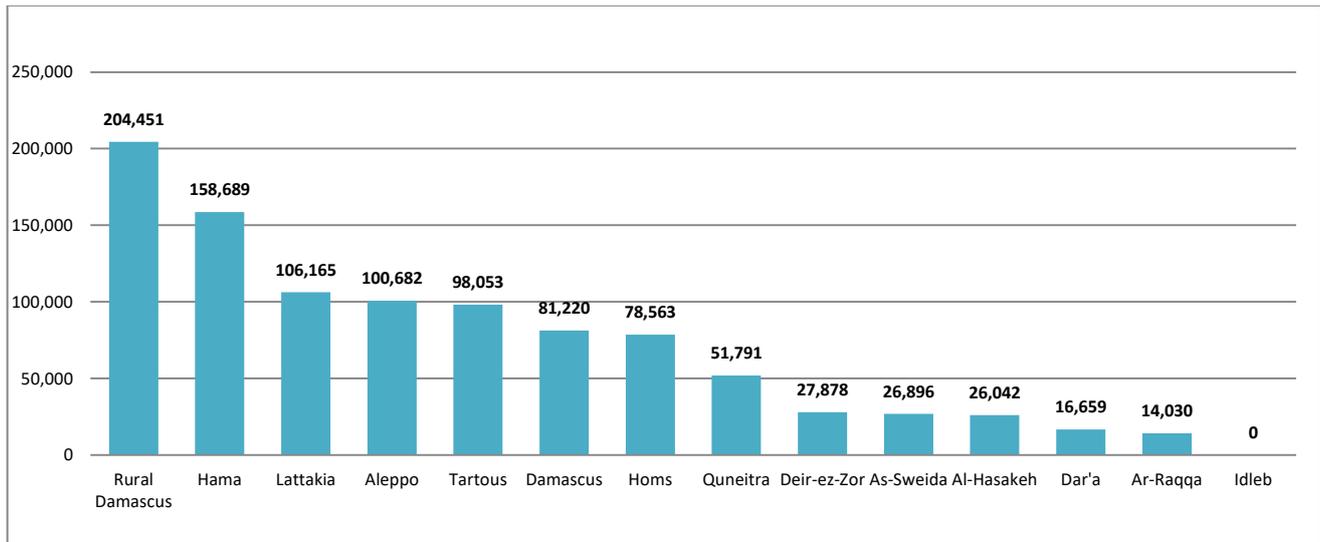
7.1 General clinical services

The following sections provide analysis on the utilization of health services in functional health centres at governorate level.

i. Outpatient

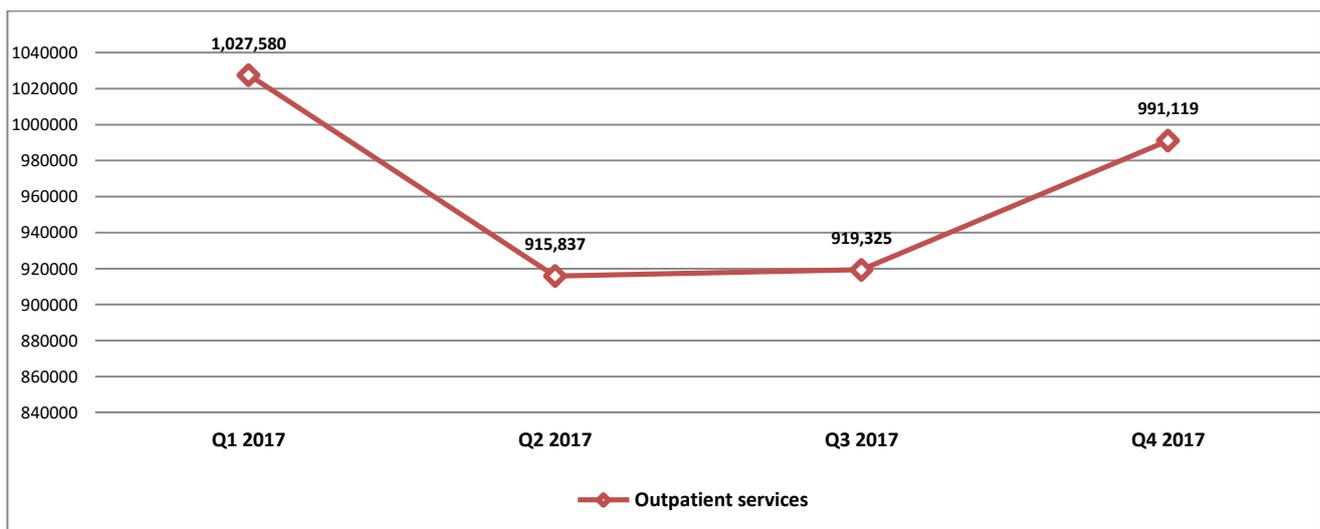
The **outpatient** services with availability of all essential drugs for primary care as per national guidelines were assessed at a health centre level, and the total reported number in the 4th Quarter 2017 is **991,119**; disaggregated at governorate level in Figure 28.

Figure 28: The number of outpatients in health centres, 4th Quarter 2017



In 2017, the total reported outpatients in health centres are **3,853,861**. Trend analysis per quarter is presented in [Figure 29].

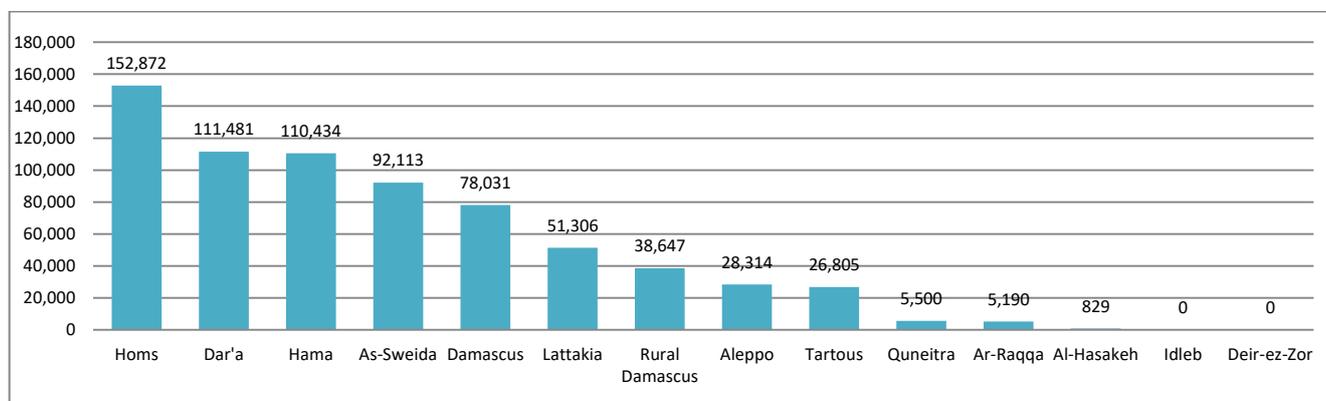
Figure 29: Trend analysis of outpatients in public health centres, per quarter, 2017



ii. Basic laboratory services

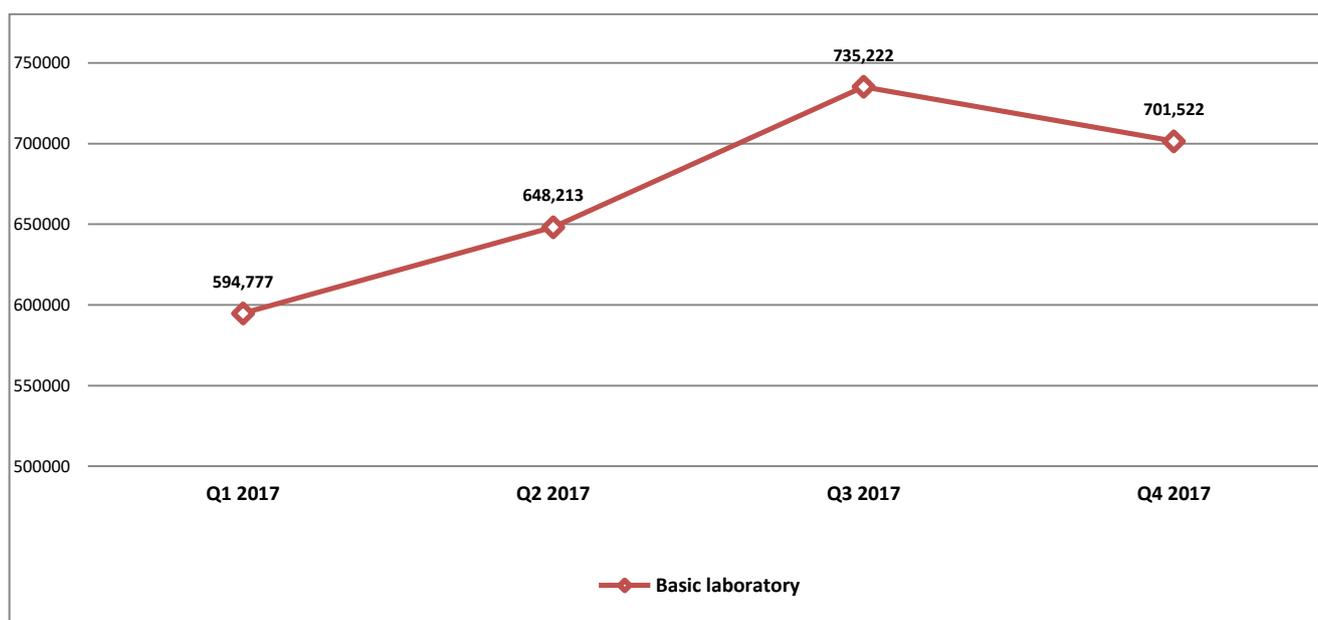
The number of patients received services in health centres' laboratories (i.e., Glycaemia, CBC, ...), was assessed at a health centre level. The total reported number in the 4th Quarter 2017 is **701,522**; disaggregated at governorate level in Figure 30.

Figure 30: The number of patients received services in laboratories in health centres, 4th Quarter 2017



In 2017, the total reported number of patients received services in health centres' laboratories are **2,679,734**. Trend analysis per quarter is presented in [Figure 31].

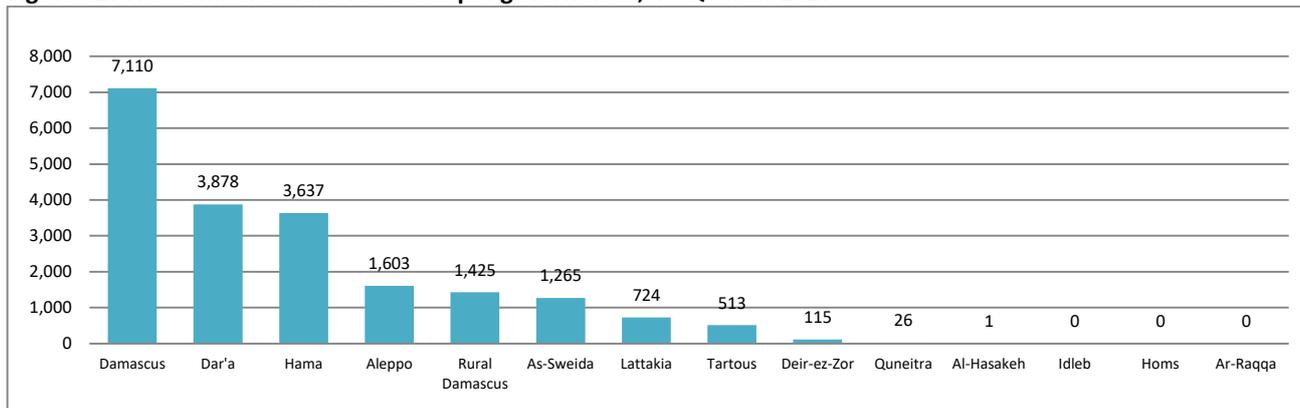
Figure 31: Trend analysis of number of patients received services in health centres' laboratories, per quarter, 2017



iii. Referral capacity

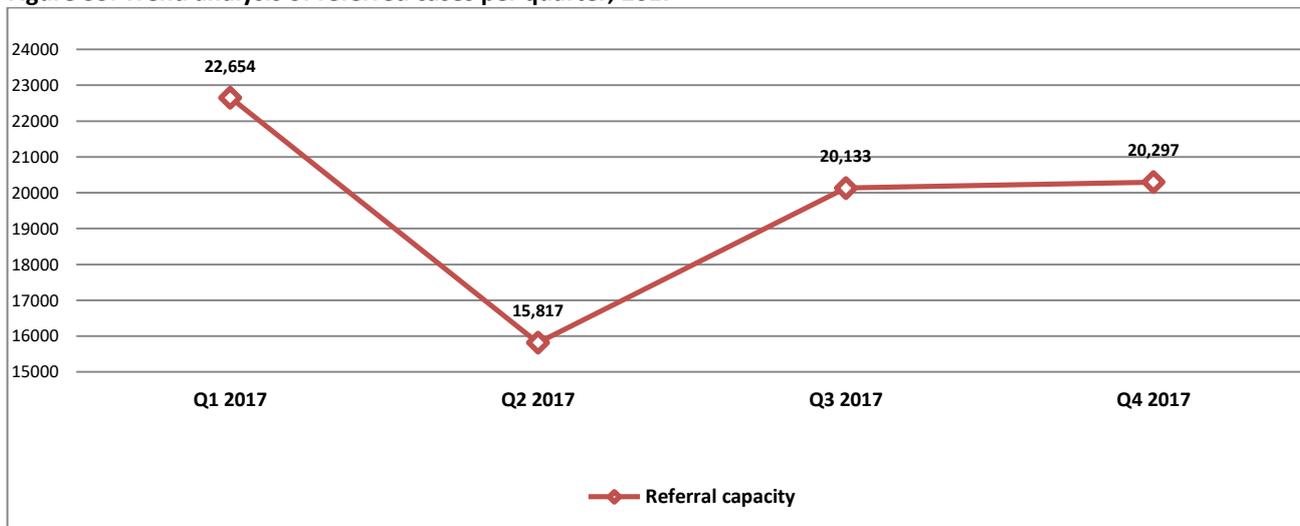
The **referral capacity** including: "referral procedures, means of communication, and access to transportation" was measured at a health centre level. The total reported number of referral cases in the 4th Quarter 2017 is **20,297**; disaggregated at governorate level in Figure 32.

Figure 32: The number of referred cases per governorate, 4th Quarter 2017



In 2017, the total number of referred cases is **78,901**. Trend analysis is presented in [Figure 33].

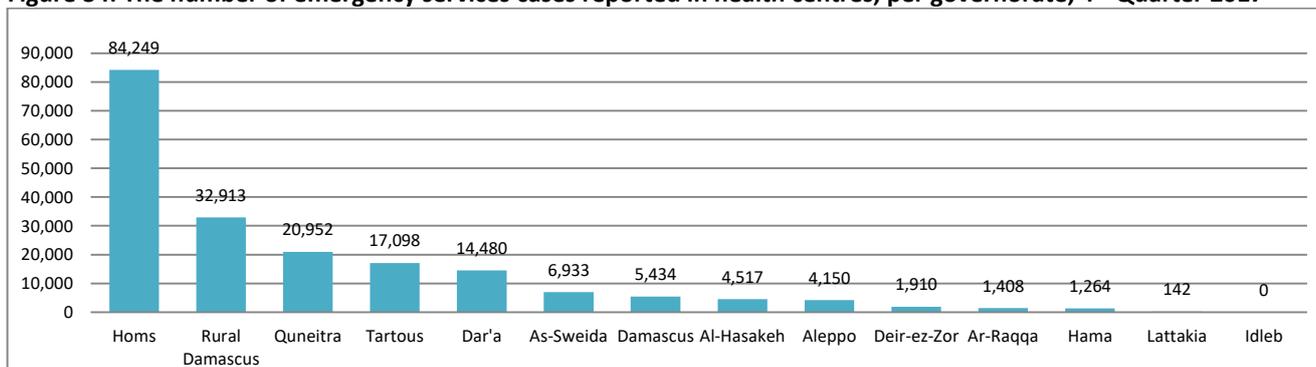
Figure 33: Trend analysis of referred cases per quarter, 2017



7.2 Emergency services

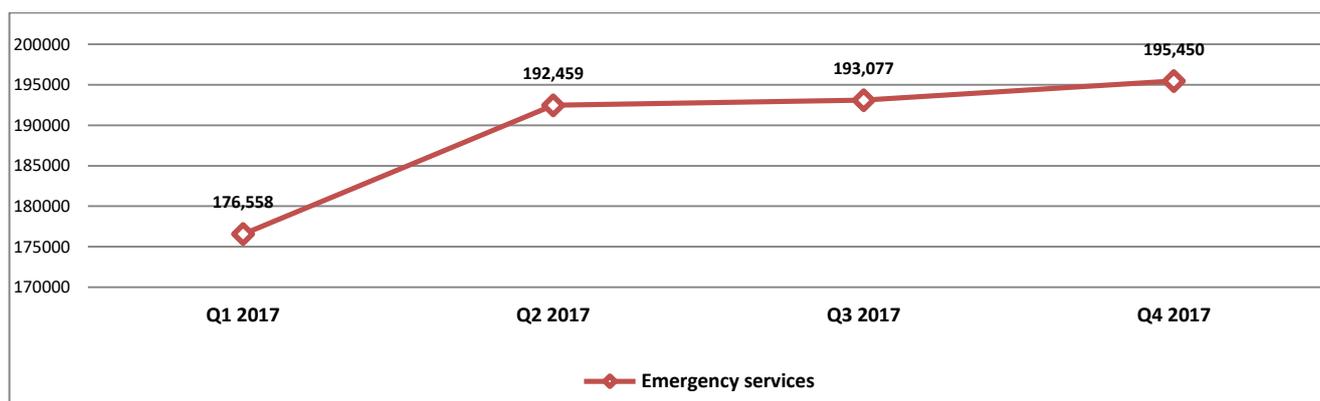
The emergency services including: “triage, assessment, first aid and life support (cardiopulmonary resuscitation (CPR) stabilization of patient with severe trauma and non-trauma emergencies before referral (IV line and saline solution for fluid resuscitation)” was assessed at a health centre level. The total reported number of cases in the 4th Quarter 2017 is **195,450**; disaggregated at governorate level in Figure 34.

Figure 34: The number of emergency services cases reported in health centres, per governorate, 4th Quarter 2017



In 2017, the total number of cases reported in health centres is **757,544**. Trend analysis per quarter in 2017, is presented in [Figure 35].

Figure 35: Trend analysis of emergency services cases in health centres, per quarter, 2017



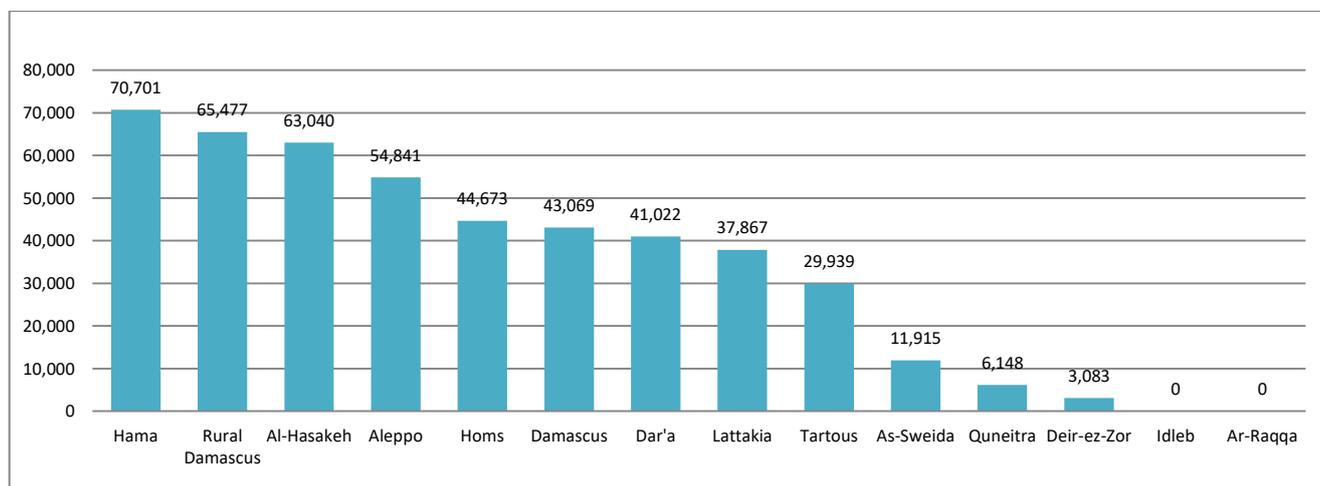
7.3 Child health

Availability and utilization of child health services in health centres is assessed for EPI, Under-5 clinic, and Diarrhea management for children.

i. EPI: routine immunization against all national target diseases and adequate cold chain in place:

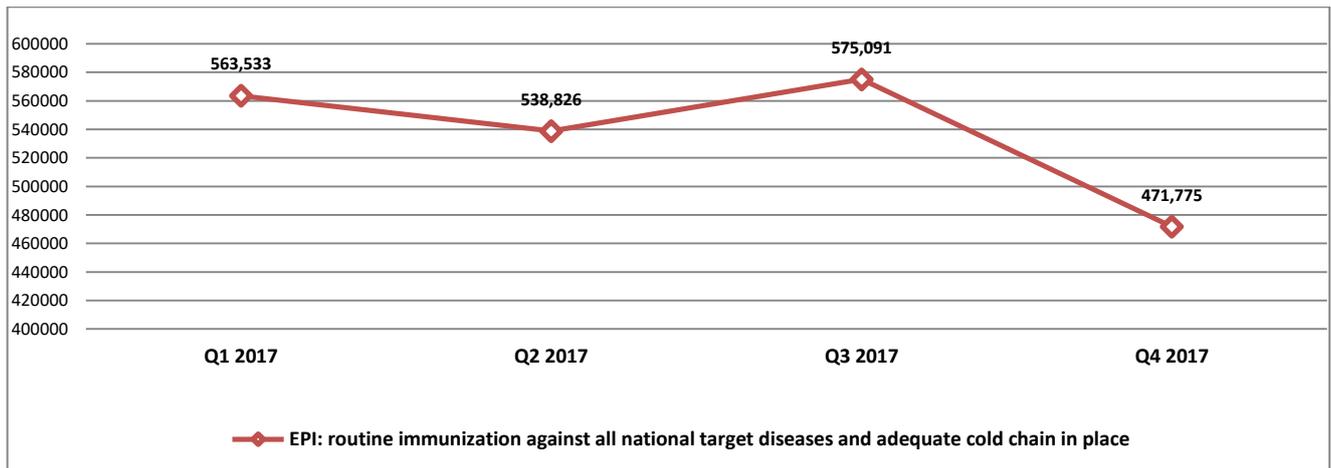
The number of children received routine immunization service through EPI was assessed at a health centre level. The total reported number in the 4th Quarter 2017 is **471,775** children; disaggregated at governorate level in Figure 36.

Figure 36: The number children received routine immunization service in health centres, 4th Quarter 2017



In 2017, the total number of vaccinated children in health centres through EPI is **2,149,225**. Trend analysis per quarter is presented in [Figure 37].

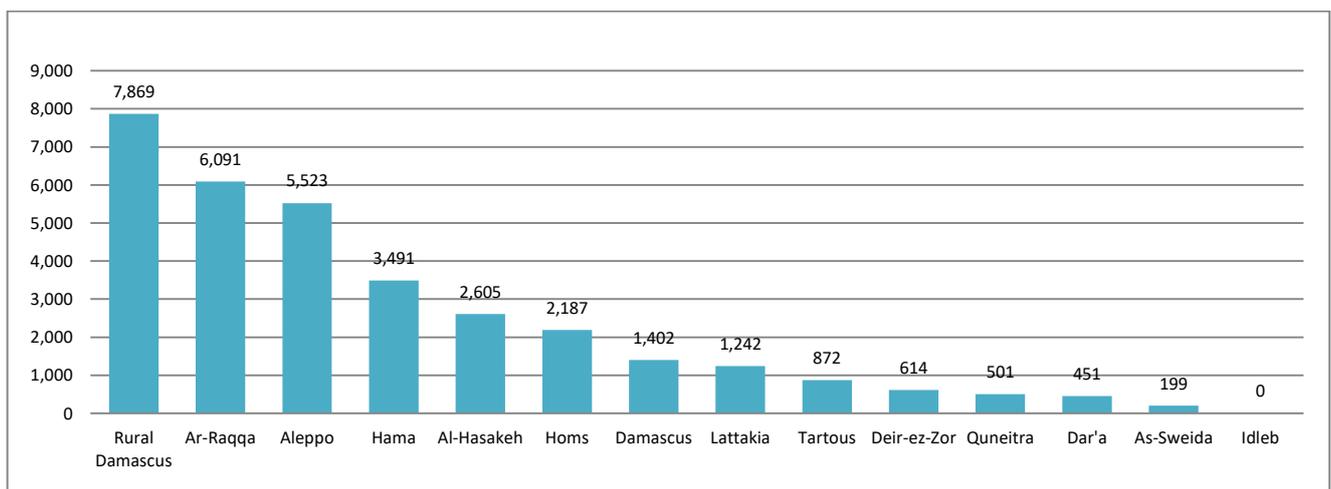
Figure 37: Trend analysis of children received routine immunization service in health centres, per quarter, 2017



ii. Diarrhea Management:

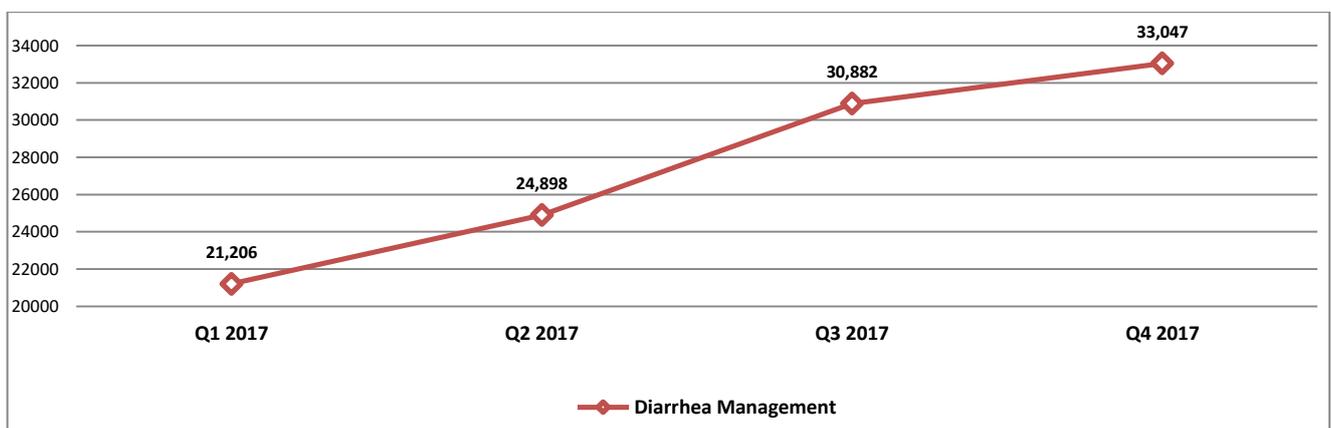
Diarrhea Management for children was assessed at a health centre level. The total reported number in the 4th Quarter 2017 is **33,047**; disaggregated at governorate level in Figure 38.

Figure 38: The number of diarrhea cases (children) in health centres, 4th Quarter 2017



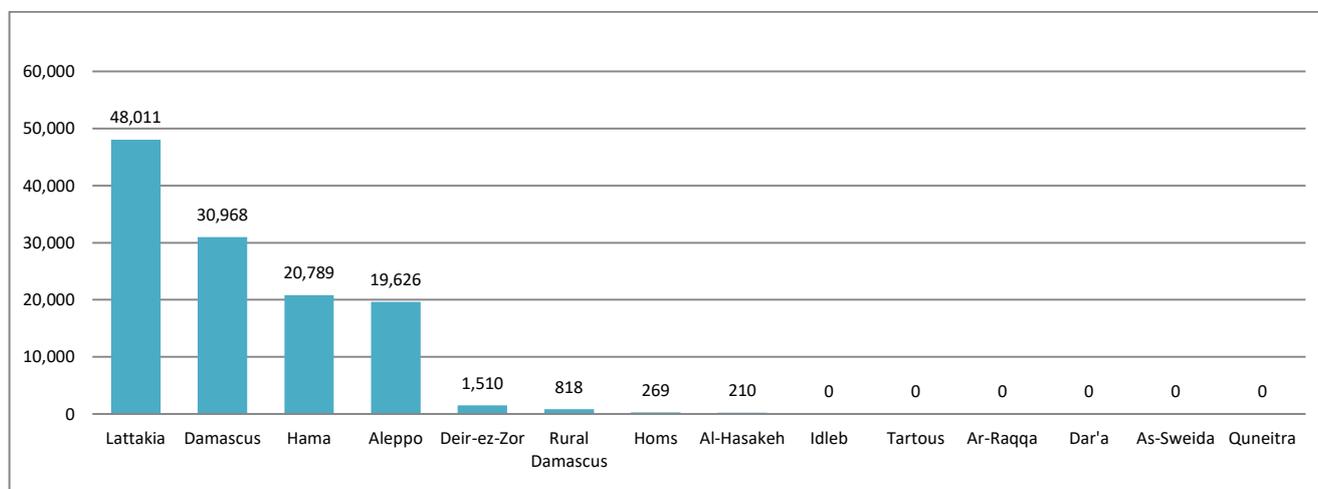
Trend analysis of diarrhea management for children in health centres, from January to December 2017, is presented in [Figure 39]. In 2017, the total number of children reported with diarrhea is **110,033**.

Figure 39: Trend analysis of reported children with diarrhea in health centres, per quarter, 2017



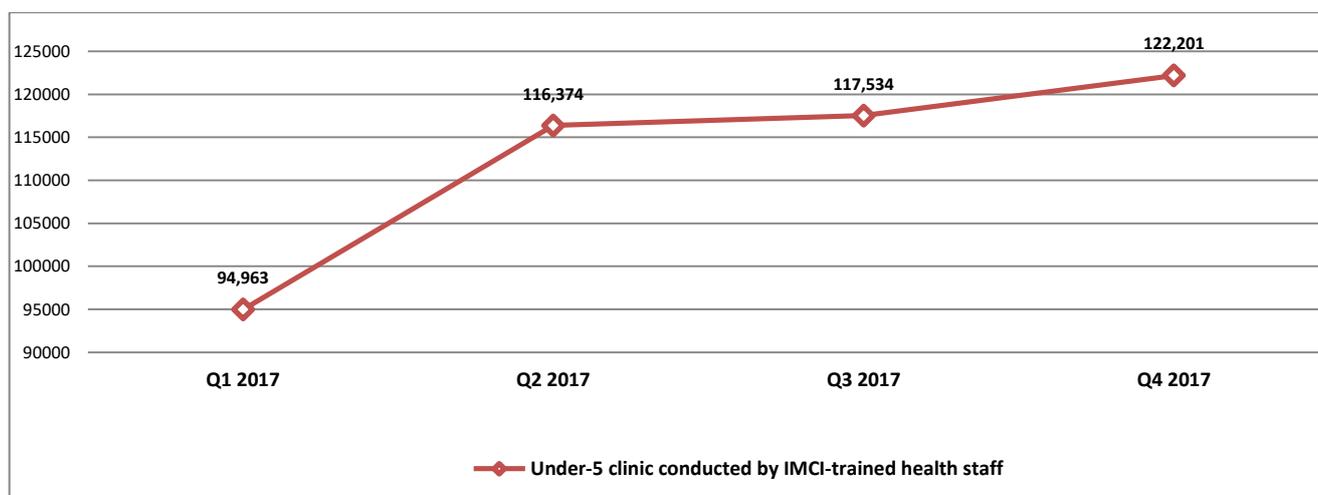
- iii. **Under-5 clinic** conducted by IMCI-trained health staff with available paracetamol, first-line antibiotics, Oral rehydration salts (ORS) and zinc dispersible tablets, national IMCI guidelines and flowcharts was assessed at a health centre level. The total reported number in the 4th Quarter 2017 is **122,201**; disaggregated at governorate level in Figure 40.

Figure 40: The number of Under-5 clinic cases, 4th Quarter 2017



Trend analysis of Under-5 clinic cases in health centres, from January to December 2017, is presented in [Figure 41]. In 2017, the total number of Under-5 clinic cases is **451,072**.

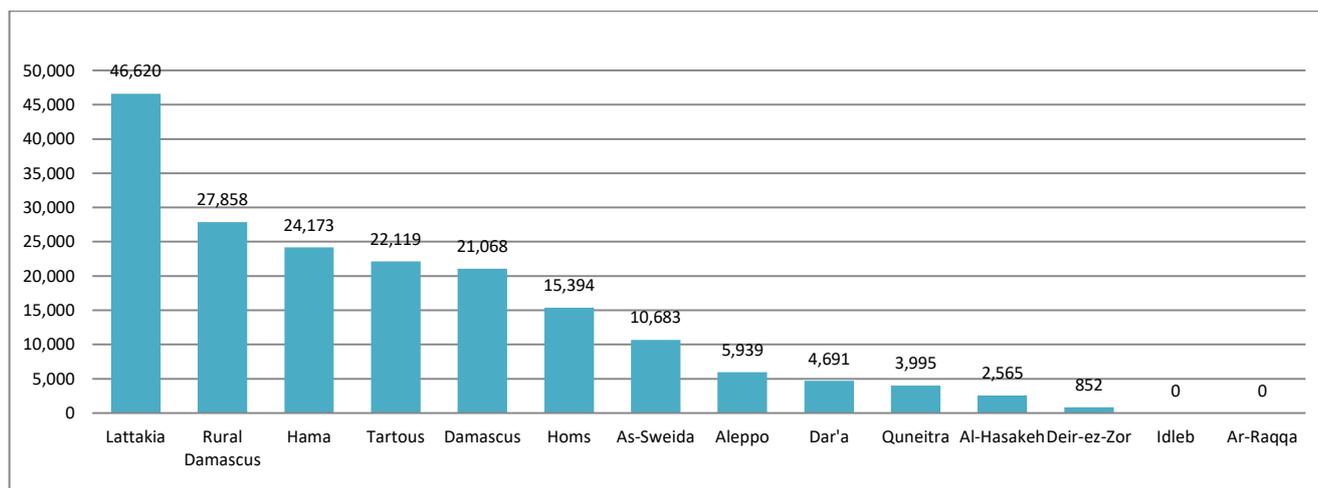
Figure 41: Trend analysis of Under-5 clinic cases in health centres in health centres, per quarter, 2017



7.4 Nutrition

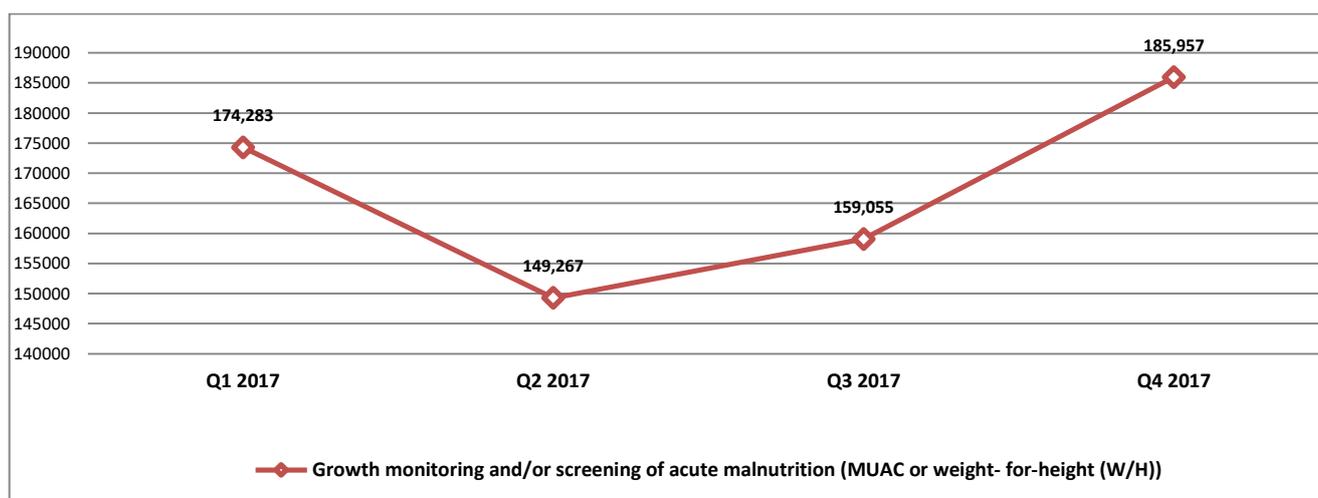
- i. **Growth monitoring and/or screening of acute malnutrition (MUAC or weight- for-height (W/H))** was assessed at a health centre level. The total reported number in the 4th Quarter 2017 is **185,957**; disaggregated at governorate level in Figure 42.

Figure 42: The number of growth monitoring and/or screening of acute malnutrition cases, 4th Quarter 2017



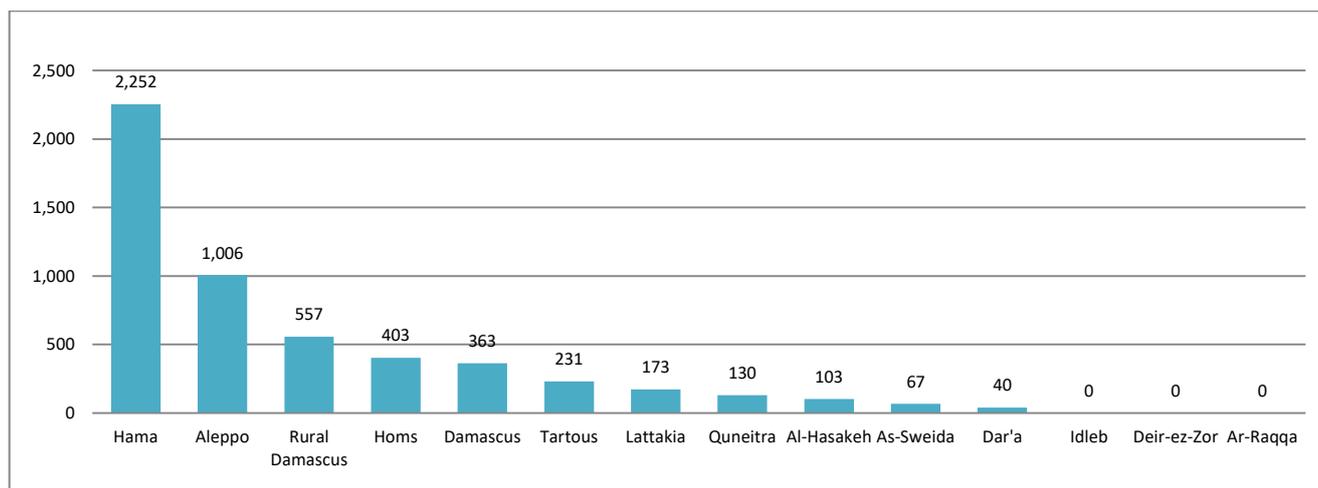
Trend analysis of growth monitoring and/or screening of acute malnutrition cases in health centres, from January to December 2017, is presented in [Figure 43]. In 2017, the total number of growth monitoring and/or screening of acute malnutrition cases is **668,562**.

Figure 43: Trend analysis of growth monitoring and/or screening of acute malnutrition cases in health centres in health centres, per quarter, 2017



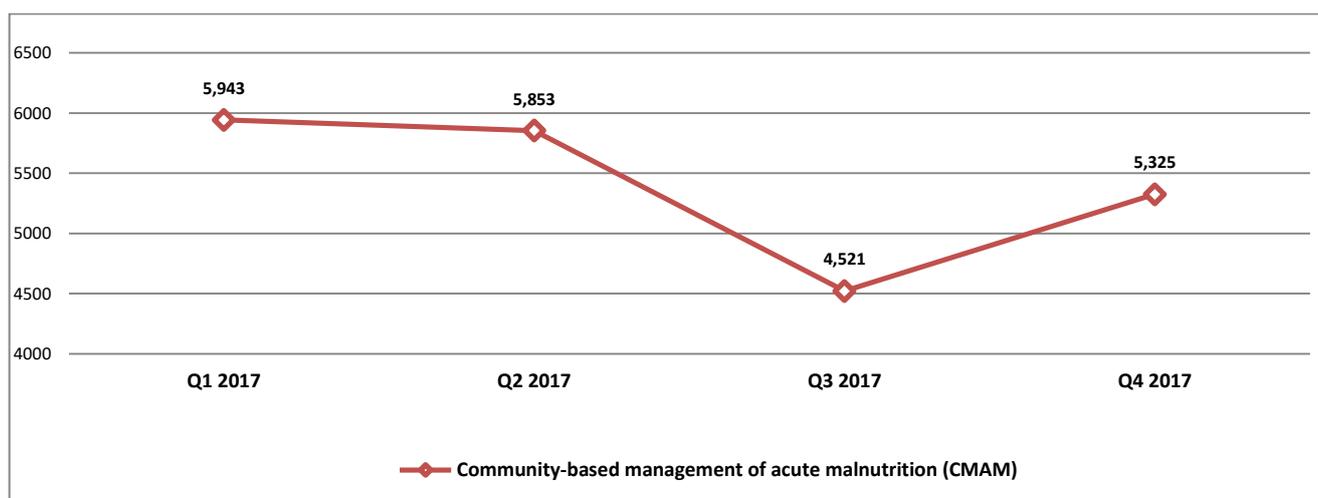
- ii. Community-based **management of acute malnutrition (CMAM)** with outpatient programme for severe acute malnutrition without medical complications with ready-to-use therapeutic foods available was assessed at a health centre level. The total reported number in the 4th Quarter 2017 is **5,325**; disaggregated at governorate level in Figure 44.

Figure 44: The number of management of acute malnutrition (CMAM) cases, 4th Quarter 2017



Trend analysis of management of acute malnutrition (CMAM) cases in health centres, from January to December 2017, is presented in [Figure 45]. In 2017, the total number of management of acute malnutrition (CMAM) is **21,642**.

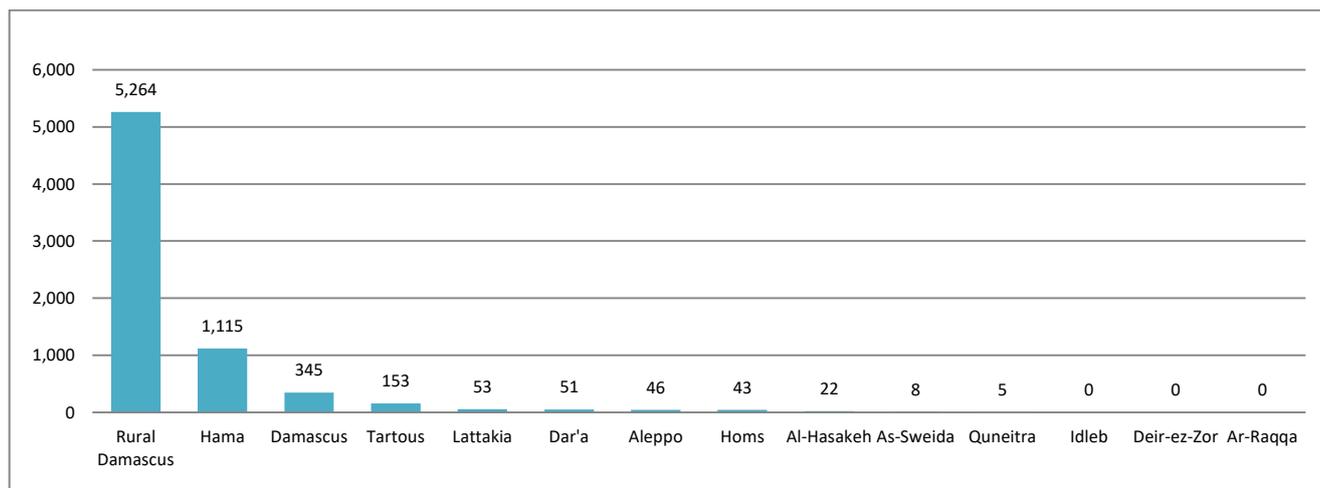
Figure 45: Trend analysis of management of acute malnutrition (CMAM) in health centres in health centres, per quarter, 2017



7.5 Communicable diseases

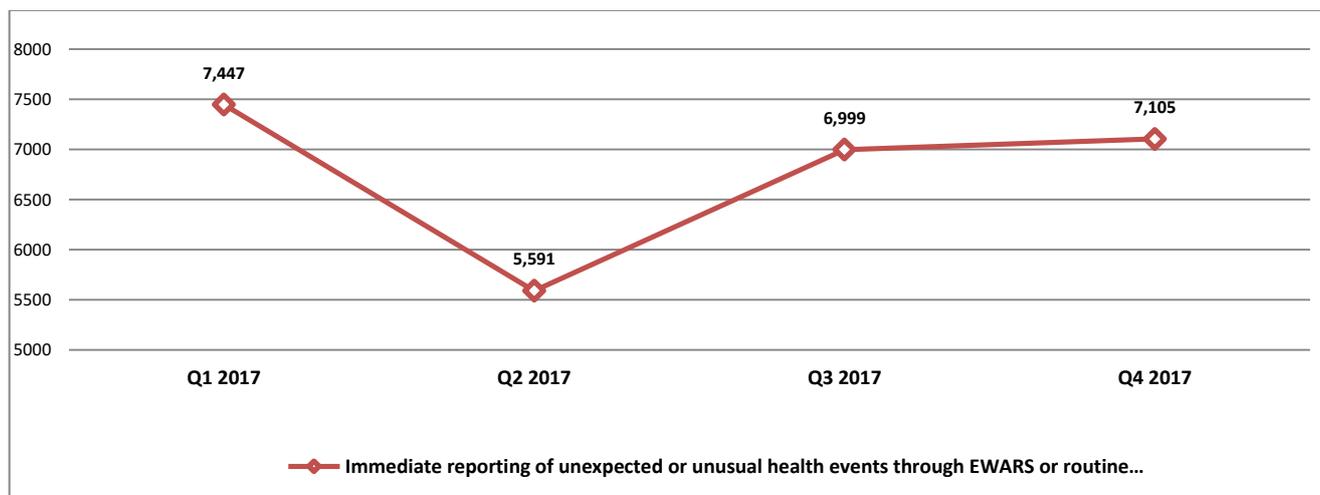
- i. **Immediate reporting of unexpected or unusual health events through EWARS or routine surveillance** was assessed at a health centre level. The total number of reports in the 4th Quarter 2017 is **7,105**; disaggregated at governorate level in Figure 46.

Figure 46: The number of immediate reporting of unexpected or unusual health events through EWARS or routine surveillance, 4th Quarter 2017



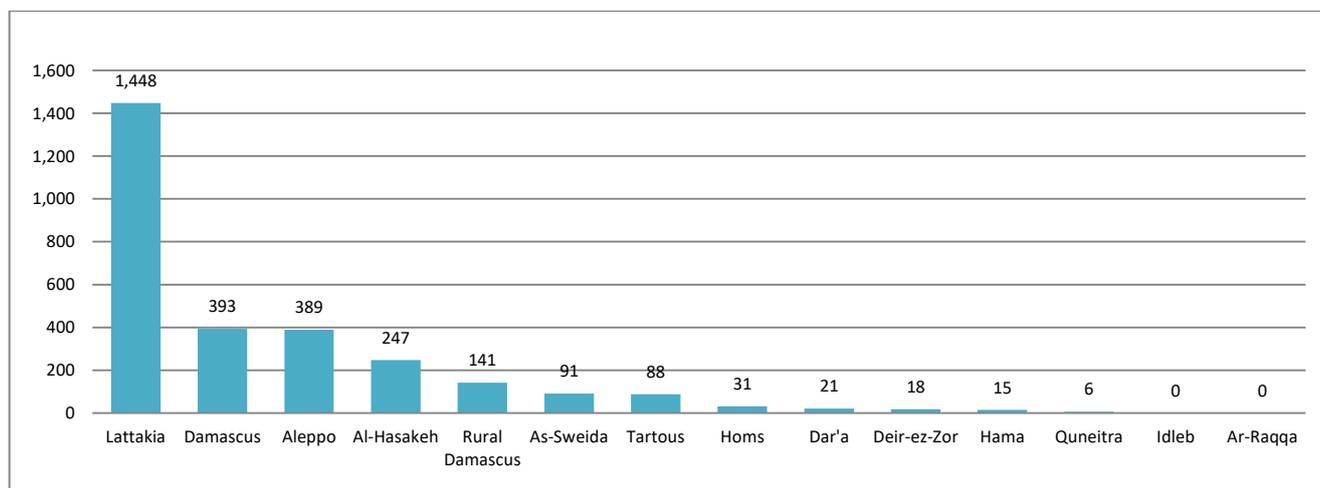
Trend analysis of immediate reporting of unexpected or unusual health events through EWARS or routine surveillance in health centres, from January to December 2017, is presented in [Figure 47]. In 2017, the total number of reports is **27,142**.

Figure 47: Trend analysis of immediate reporting of unexpected or unusual health events through EWARS or routine surveillance in health centres in health centres, per quarter, 2017



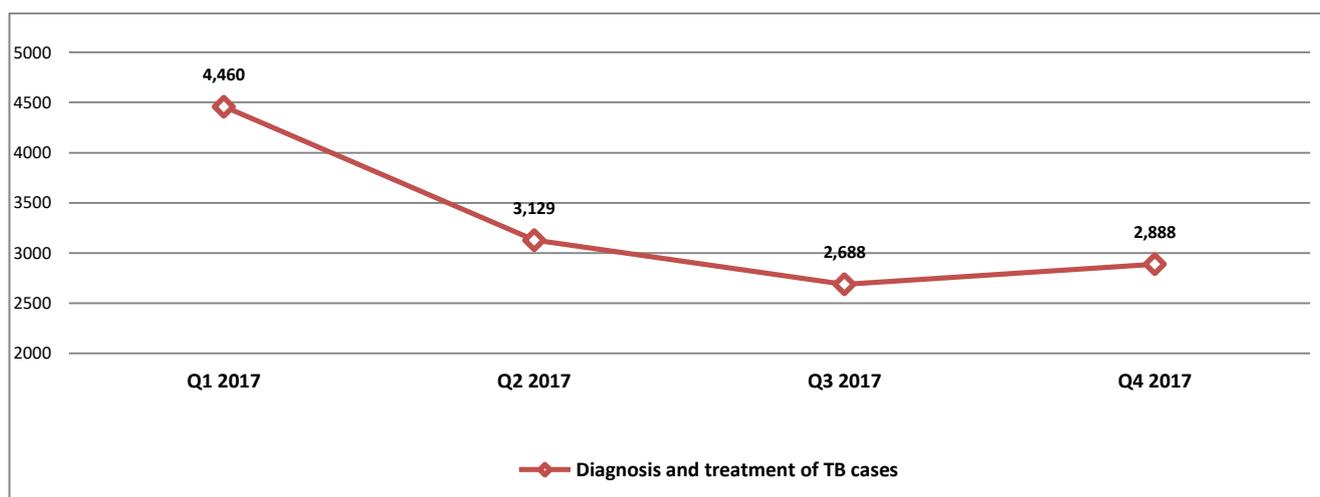
- ii. Diagnosis and treatment of **TB cases**, or detection and referral of suspected cases, and follow-up was assessed at a health centre level. The total reported number in the 4th Quarter 2017 is **2,888**; disaggregated at governorate level in Figure 48.

Figure 48: The number of diagnosis and treatment of TB cases, 4th Quarter 2017



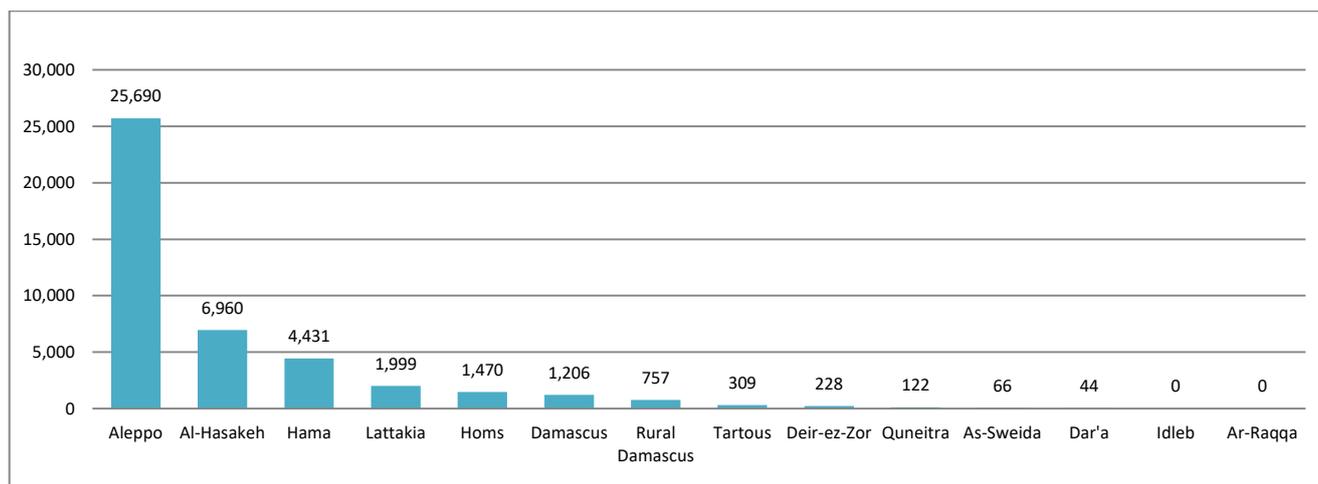
Trend analysis of diagnosis and treatment of TB cases in health centres, from January to December 2017, is presented in [Figure 49]. In 2017, the total number of diagnosis and treatment of TB cases is **13,165**.

Figure 49: Trend analysis of diagnosis and treatment of TB cases in health centres in health centres, per quarter, 2017



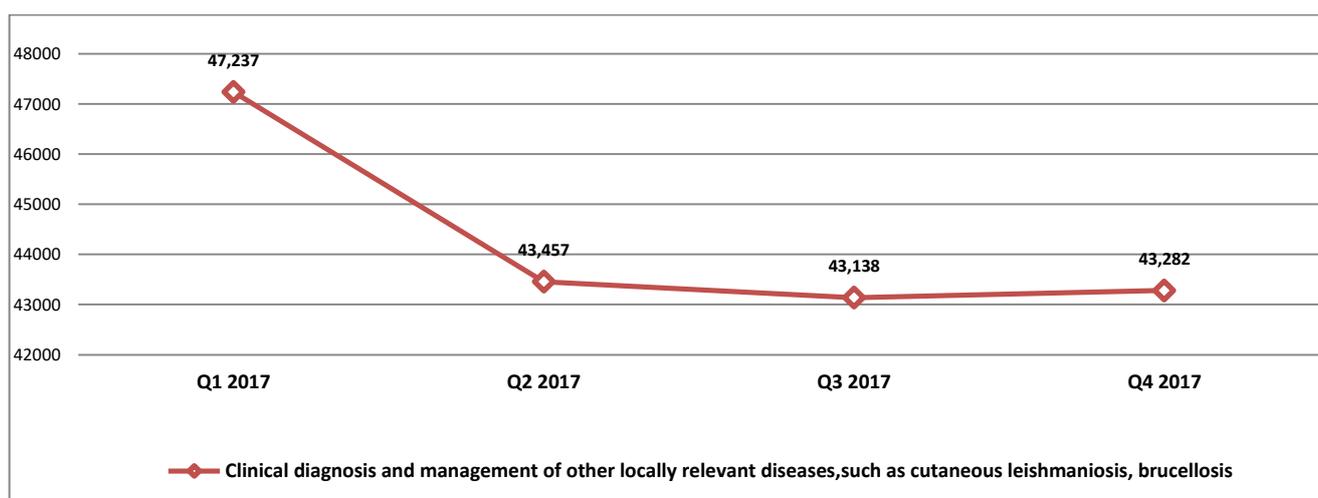
- iii. Clinical diagnosis and management of **other locally relevant diseases, (such as cutaneous leishmaniosis, brucellosis)**, with protocols available for identification, classification, stabilization and referral of severe cases was assessed at a health centre level. The total reported number in the 4th Quarter 2017 is **43,282**; disaggregated at governorate level in Figure 50.

Figure 50: The number of diagnosis and management of other locally relevant diseases cases, 4th Quarter 2017



Trend analysis of diagnosis and management of other locally relevant diseases cases in health centres, from January to December 2017, is presented in [Figure 51]. In 2017, the total number of diagnosis and management of other locally relevant diseases cases is **177,114**.

Figure 51: Trend analysis of diagnosis and management of other locally relevant diseases cases in health centres, per quarter, 2017



7.6 Sexual and reproductive health

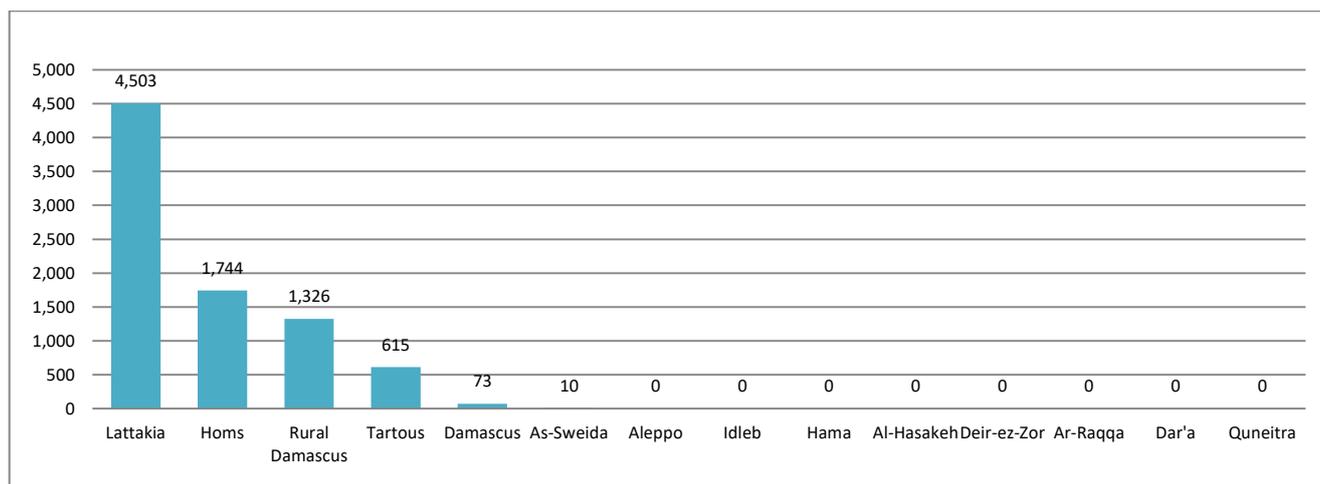
Availability and utilization of sexual & reproductive health care in health centres is assessed at a health centre level for syndromic management of sexually transmitted infections, family planning, antenatal care, normal deliveries, essential newborn care, Post-partum care, and tetanus shots.

i. Syndromic management of sexually transmitted infections:

The number of patients with **sexually transmitted infections (STIs)** was assessed at a health centre level. The total reported number in the 4th Quarter 2017 is **8,271**; disaggregated at governorate level in Figure 52.

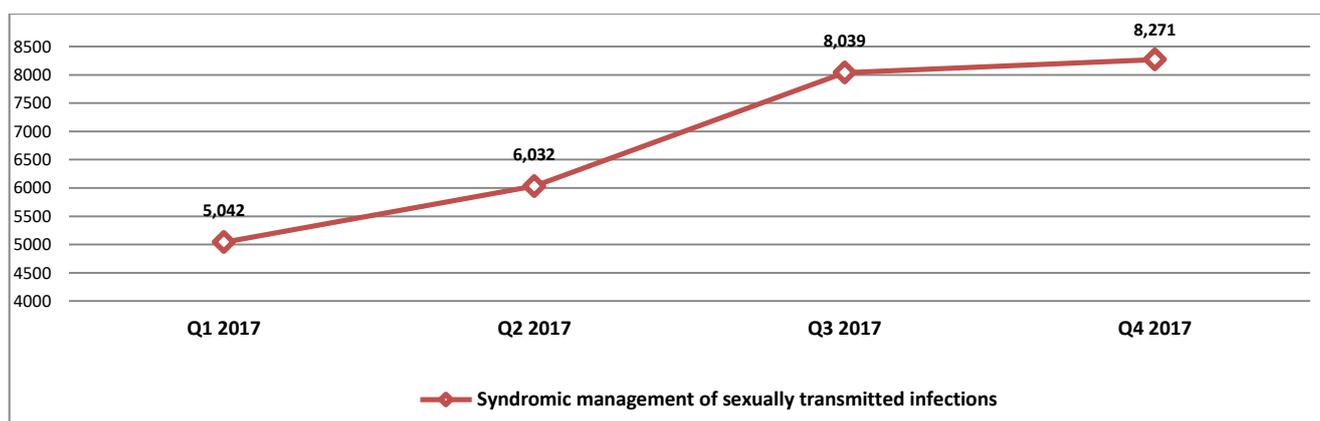
Of note: the availability of **Syndromic management of STIs** is reported in six governorates and mainly in comprehensive/ poly clinics. In other governorates, *if any case reported to a health centre, they refer it to the health centres based on available capacity.*

Figure 52: The number of cases reported with sexually transmitted infections in health centres, 4th Quarter 2017



Trend analysis of number of reported cases with sexually transmitted infections (STIs) in health centres, from January to December 2017, is presented in [Figure 53]. In 2017, the total number of reported STIs cases is **27,384**.

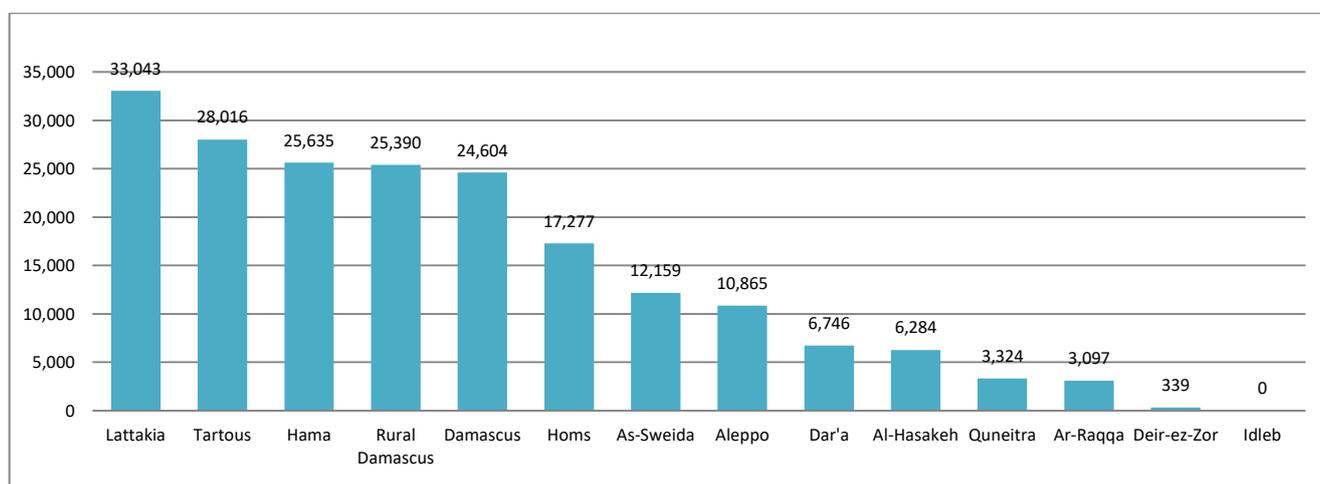
Figure 53: Trend analysis of reported cases of STIs in health centres, per quarter, 2017



ii. Family Planning:

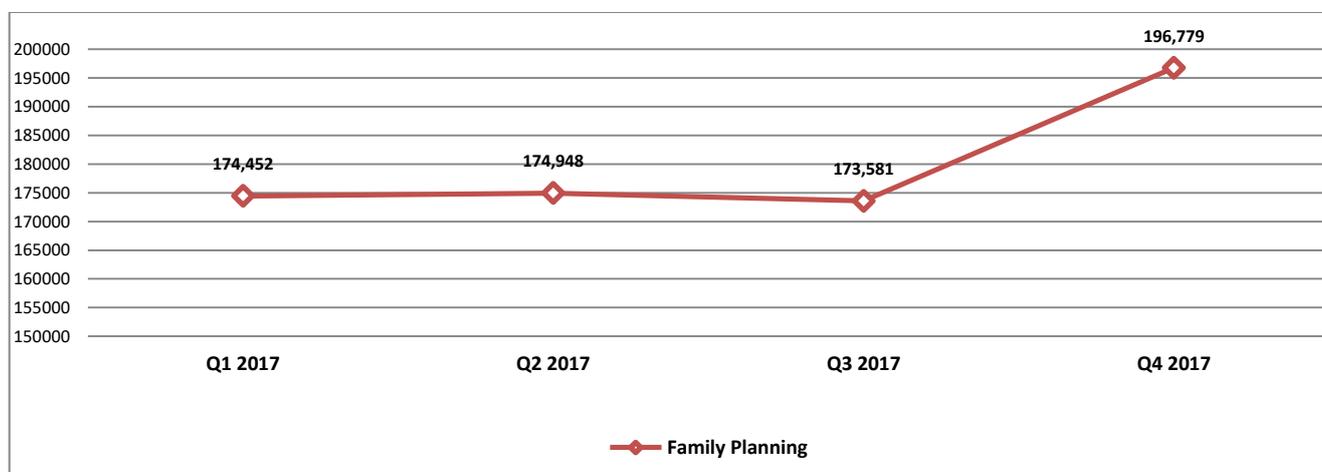
The **family planning** service was assessed at a health centre level. The total reported number of women received the service in the 4th Quarter 2017 is **196,779**; disaggregated at governorate level in Figure 54.

Figure 54: The number of women received family planning services in health centres, 4th Quarter 2017



Trend analysis of number of women received family planning services in health centres, from January to December 2017, is presented in [Figure 55]. In 2017, the total number of women received family planning services in health centres is **719,760**.

Figure 55: Trend analysis of number of pregnant women received family planning services in health centres, per quarter, 2017

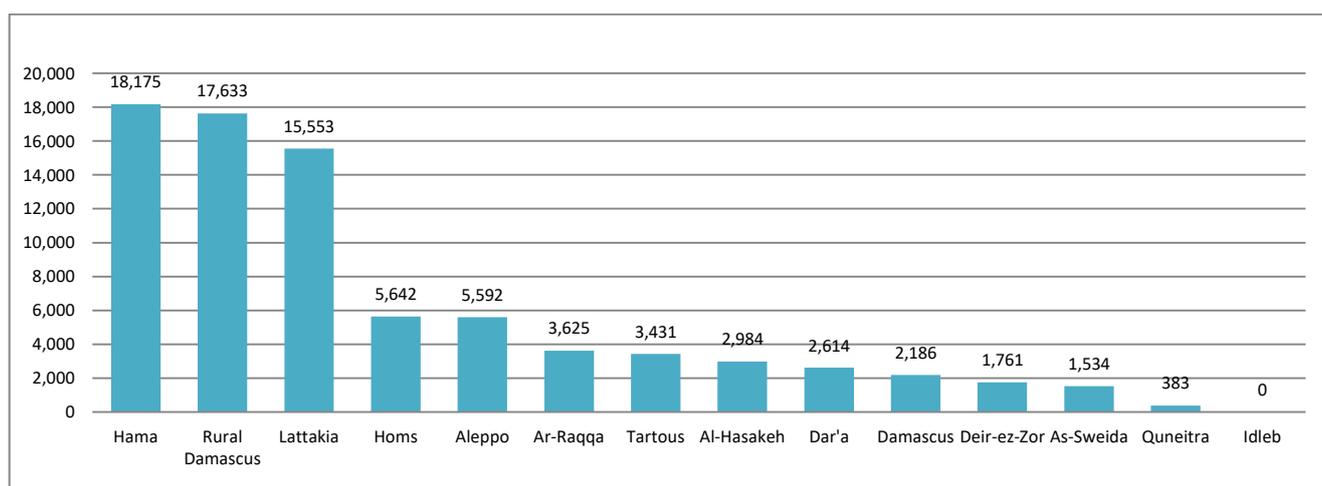


iii. Antenatal care

a) Antenatal Care:

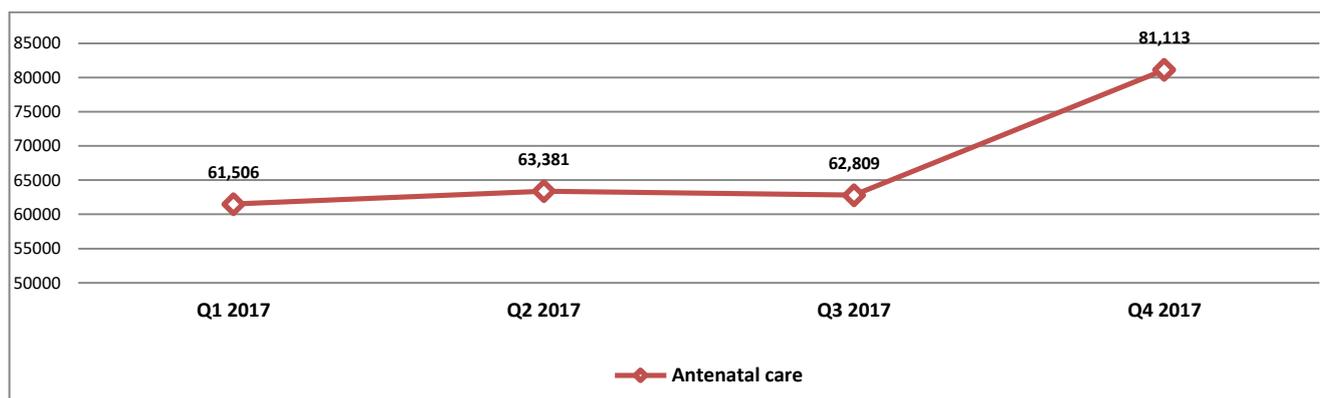
The **antenatal care** (i.e., assess pregnancy, birth and emergency plan, respond to problems (observed and/or reported), advise/counsel on nutrition & breastfeeding, self-care and family planning, preventive treatment(s) as appropriate) was assessed at a health centre level. The total reported number of pregnant women received the service in the 4th Quarter 2017 is **81,113**; disaggregated at governorate level in Figure 56.

Figure 56: The number of pregnant women received antenatal services in health centres, 4th Quarter 2017



Trend analysis of number of pregnant women received antenatal services in health centres, from January to December 2017, is presented in [Figure 57]. In 2017, the total number of pregnant women received antenatal services in health centres is **268,809**.

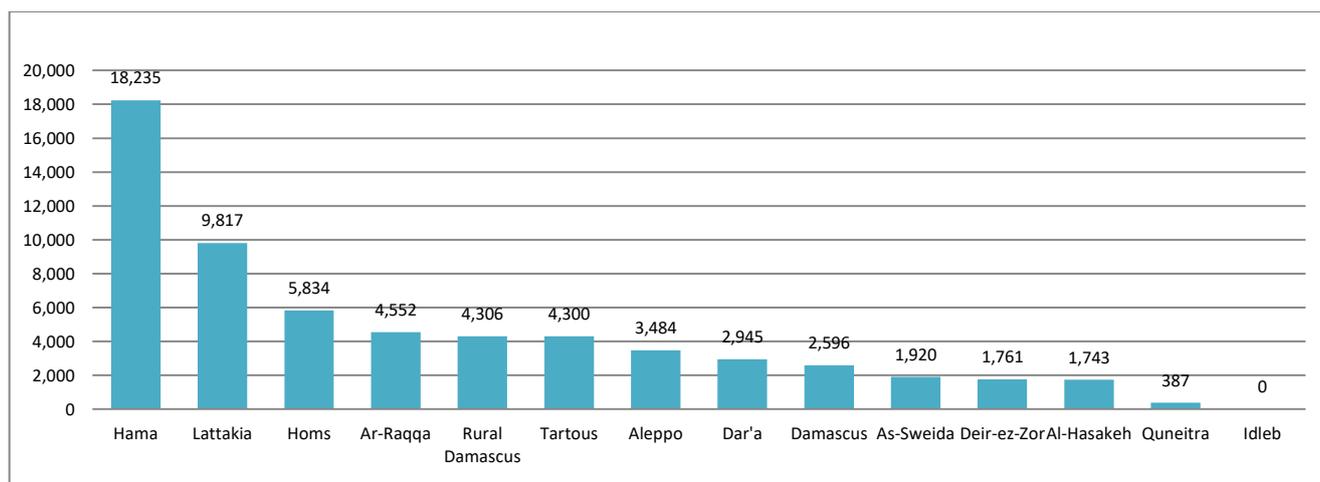
Figure 57: Trend analysis of number of pregnant women received antenatal services in health centres, per quarter, 2017



b) Antenatal visits:

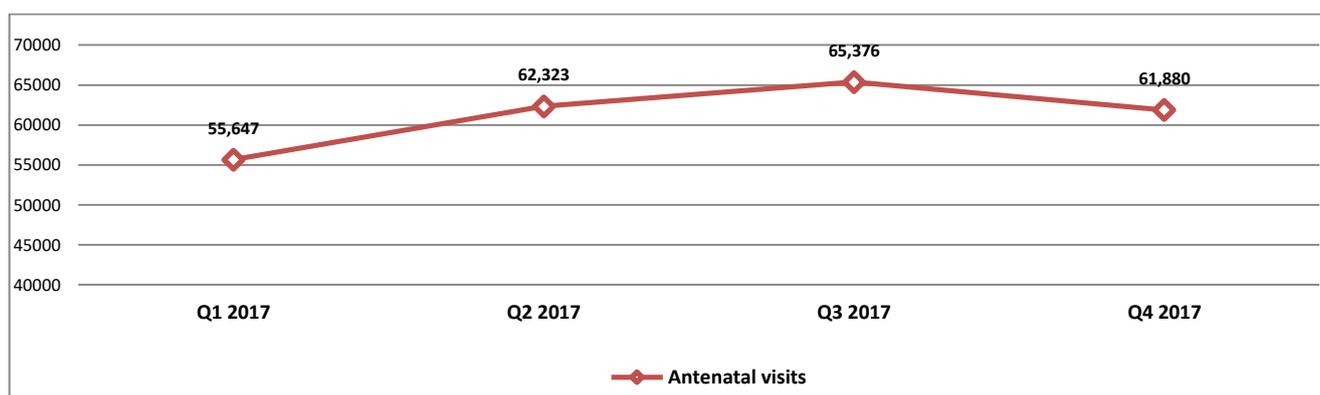
The number of **antenatal visits** was assessed at a health centre level. The total reported number of visits for pregnant women received the service in the 4th Quarter 2017 is **61,880**; disaggregated at governorate level in Figure 58.

Figure 58: The number of antenatal visits in health centres, 4th Quarter 2017



Trend analysis of number of antenatal visits in health centres, from January to December 2017, is presented in [Figure 59]. In 2017, the total number of antenatal visits in health centres is **245,226**.

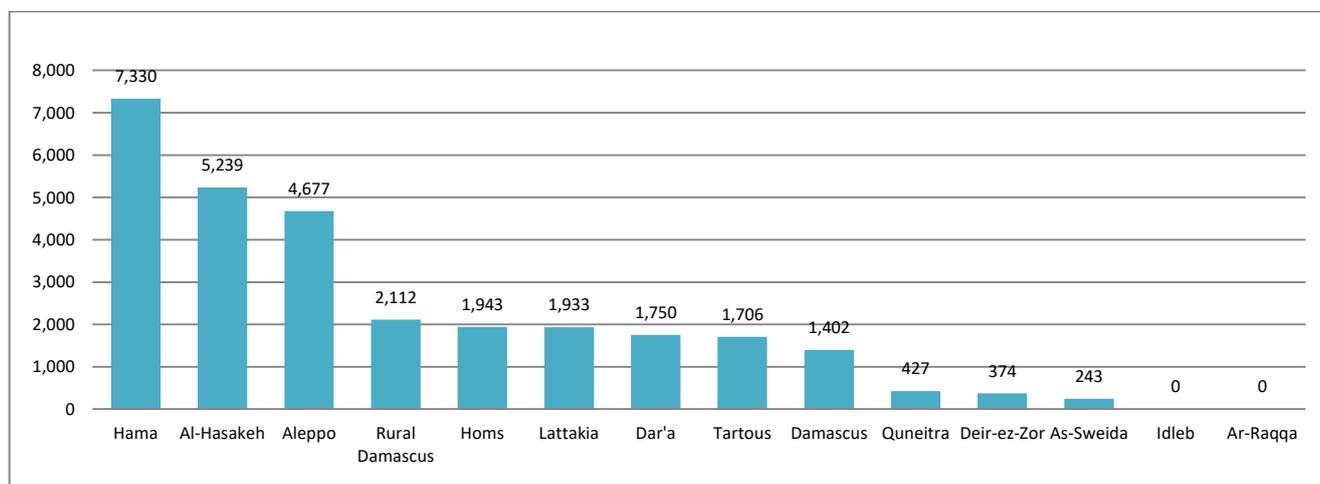
Figure 59: Trend analysis of antenatal visits in health centres, per quarter, 2017



c) Tetanus Shots:

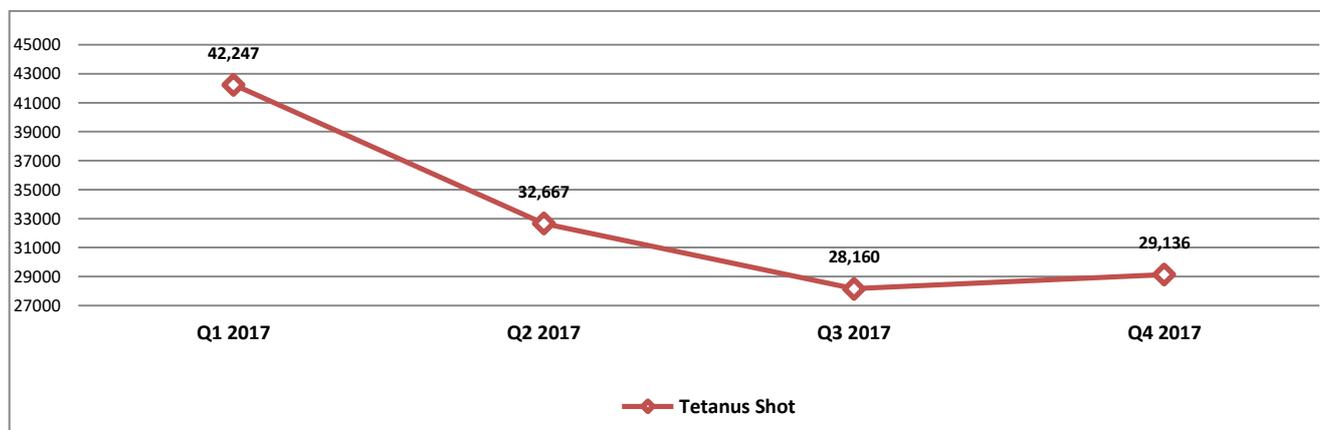
The number of pregnant women received **Tetanus Shots** was assessed at a health centre level. The total reported number of women received the service in the 4th Quarter 2017 is **29,136**; disaggregated at governorate level in Figure 60.

Figure 60: The number of pregnant women received Tetanus Shot in health centres, 4th Quarter 2017



Trend analysis of number of pregnant women received tetanus shots in health centres, from January to December 2017, is presented in [Figure 61]. In 2017, the total number of pregnant women is **132,210**.

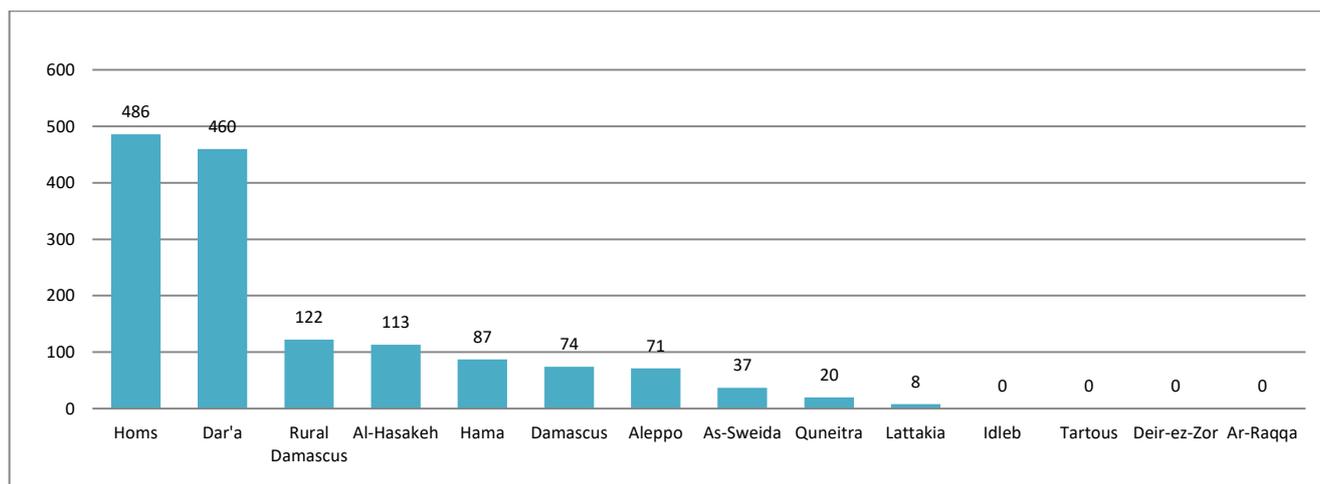
Figure 61: Trend analysis of number of pregnant women received tetanus shots, per quarter, 2017



d) Normal deliveries:

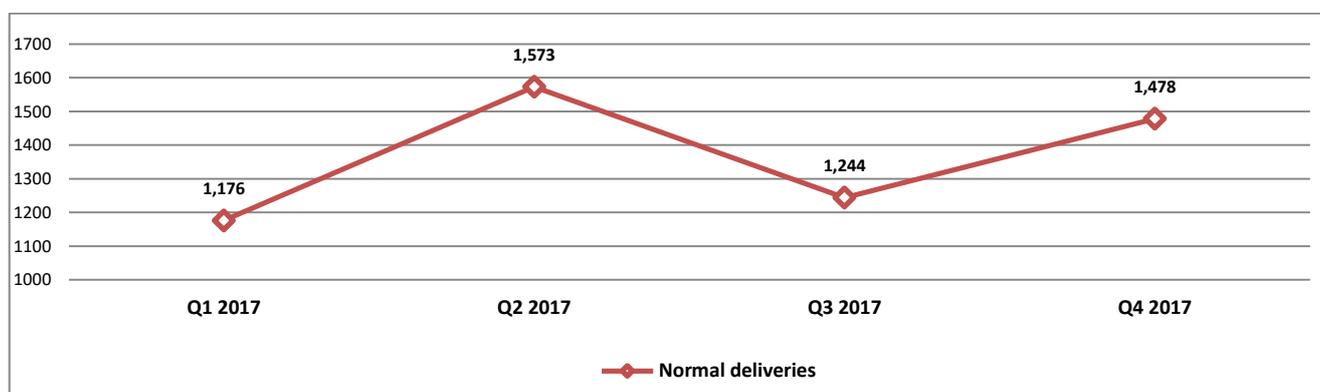
The number of **Normal deliveries** was assessed at a health centre level. The total reported number in the 4th Quarter 2017 is **1,478**; disaggregated at governorate level in Figure 62.

Figure 62: The number of normal deliveries in health centres, 4th Quarter 2017



Trend analysis of number of normal deliveries in health centres, from January to December 2017, is presented in [Figure 63]. In 2017, the total number of normal deliveries is **5,471**.

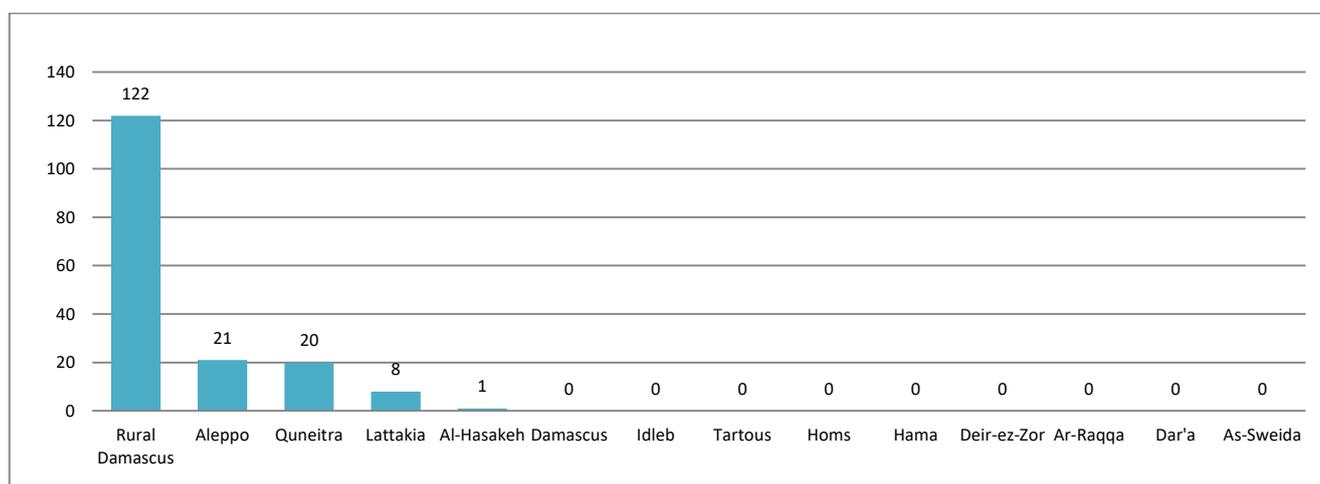
Figure 63: Trend analysis of normal deliveries in health centres, per quarter, 2017



e) Basic Emergency Obstetric Care (BEOC):

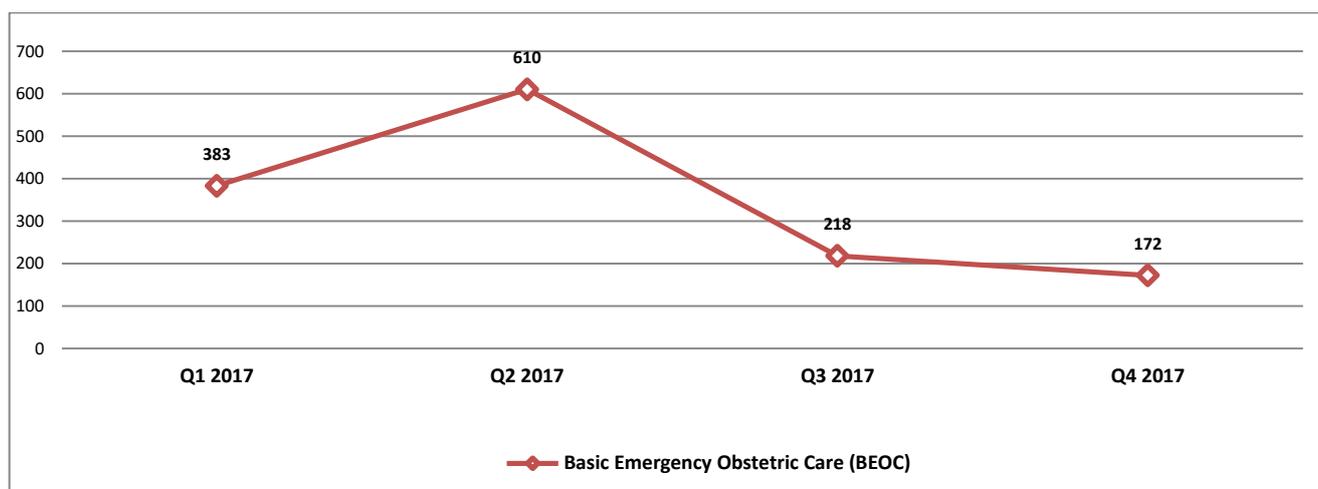
Availability and utilization of **BEOC** service (including: parenteral antibiotics + oxytocic/anticonvulsant drugs + manual removal of placenta + removal of retained products with manual vacuum aspiration (MVA) + assisted vaginal delivery 24/24 & 7/7)*), was assessed at a health centre level. The total reported number of women received the service in the 4th Quarter 2017 is **172**; disaggregated at governorate level in Figure 64.

Figure 64: The number of women received BEOC in health centres, 4th Quarter 2017



Trend analysis of number of women received BEOC service in health centres, from January to December 2017, is presented in [Figure 65]. In 2017, the total number of women is **1,383**.

Figure 65: Trend analysis of women received BEOC in health centres in health centres, per quarter, 2017

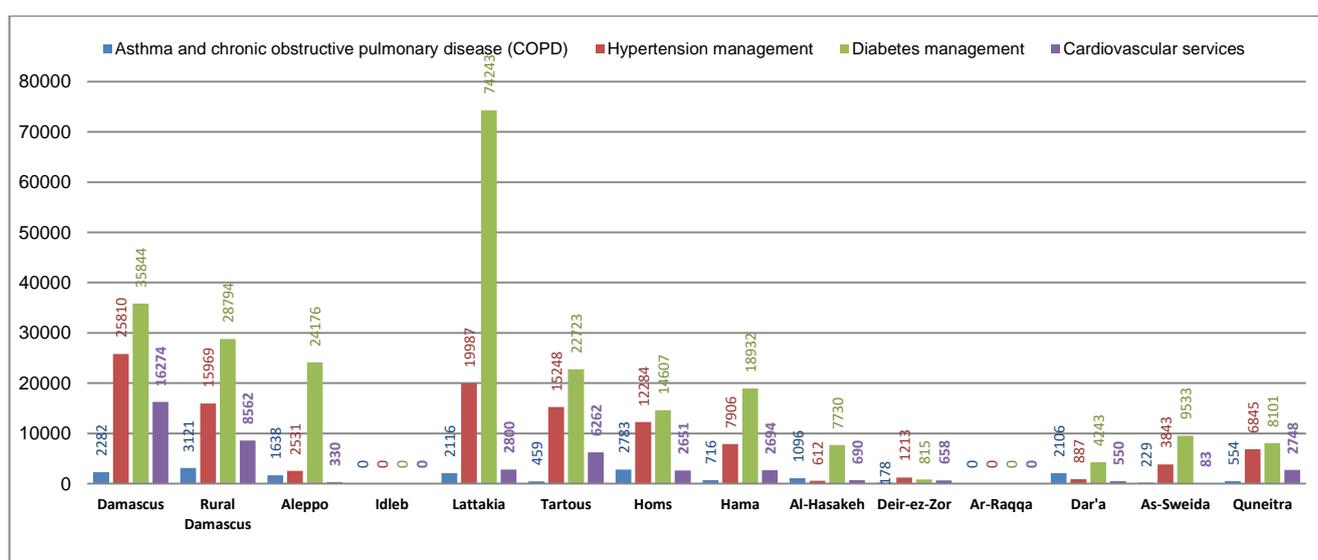


7.7 Noncommunicable diseases

Availability and utilization of NCDs health care services in health centres is assessed at a health centre level for Asthma and chronic obstructive pulmonary disease (COPD), Cardiovascular services, Hypertension management, and Diabetes management.

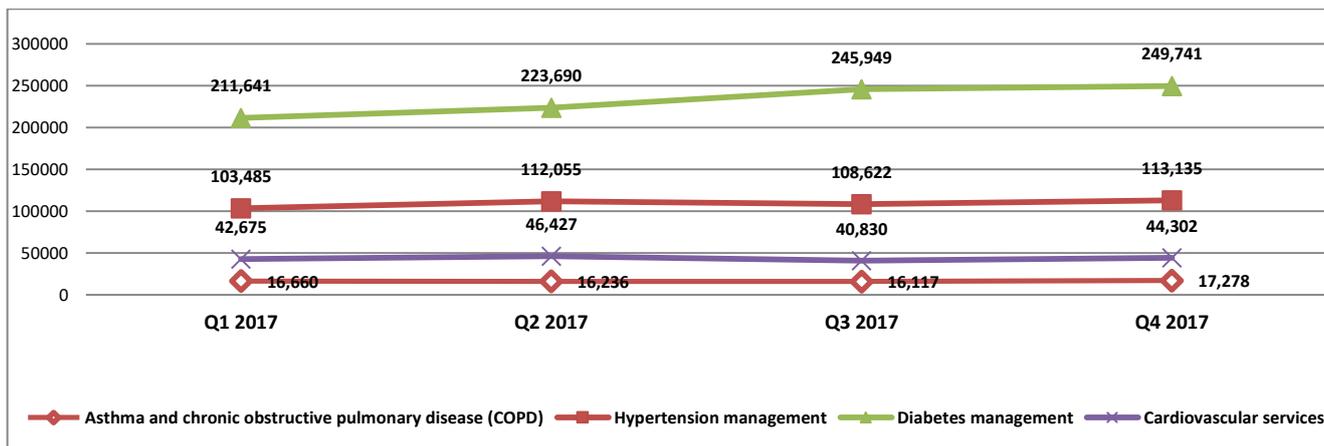
The total reported number of NCDs' consultations in the 4th Quarter 2017 is as follows: Asthma and chronic obstructive pulmonary disease (COPD) [17,278], Cardiovascular services [44,302], Hypertension management [113,135], and Diabetes management [249,741]; disaggregated figures are provided at governorate level in [Figure 66].

Figure 66: The number of NCDs consultations (COPD, Cardiovascular, Hypertension, and Diabetes in health centres, 4th Quarter 2017



Trend analysis of number of patients received NCDs health care services in health centres, from January to December 2017, is presented in [Figure 67]. In 2017, the total number of patients received NCDs' services are **1,608,843**, disaggregated as follows: **66,291** for Asthma and chronic obstructive pulmonary disease (COPD), **174,234** for cardiovascular, **437,297** for hypertension, and **931,021** for diabetes.

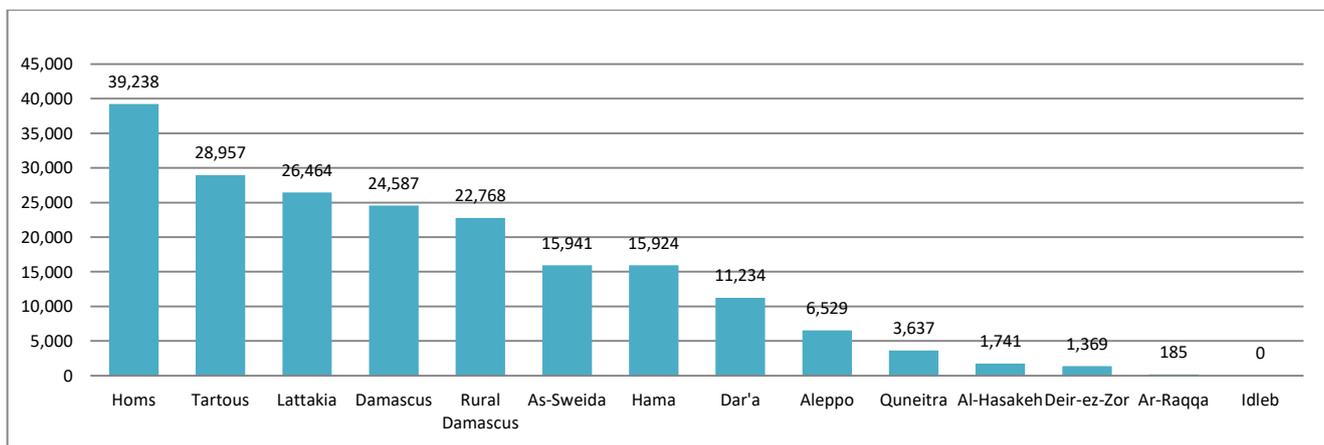
Figure 67: Trend analysis of NCDs' consultations in health centres, per quarter, 2017



7.8 Oral health and dental care

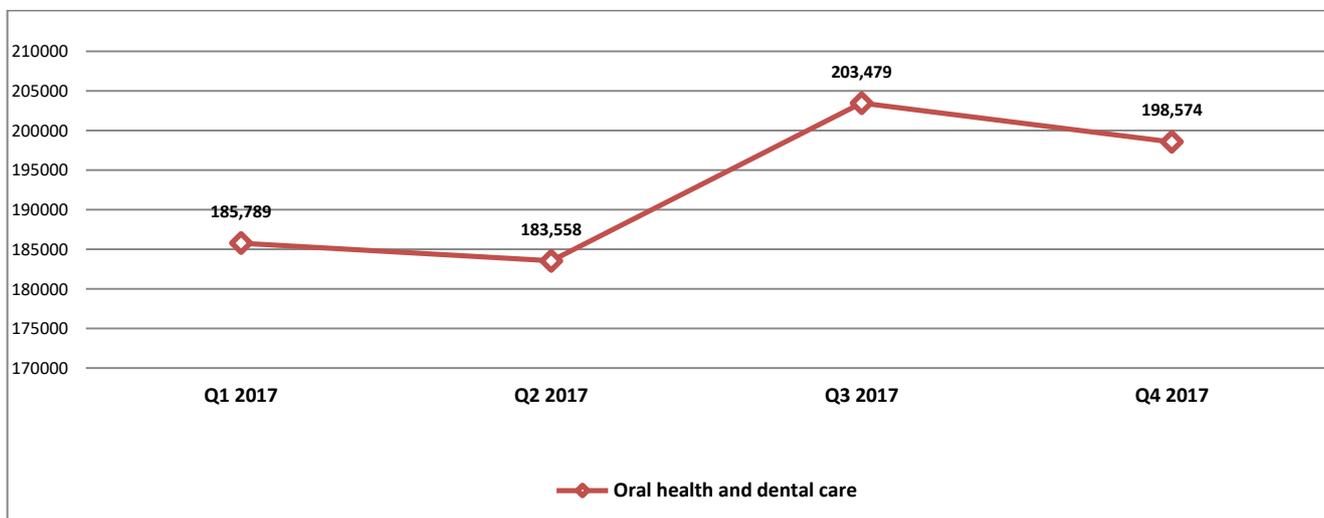
The total reported number in the 4th Quarter 2017 is **198,574**; disaggregated at governorate level in [Figure 68].

Figure 68: The number of oral health and dental care cases in health centres, 4th Quarter 2017



Trend analysis of number of oral health and dental care cases in health centres, from January to December 2017, is presented in [Figure 69]. In 2017, the total number of patients is **771,400**.

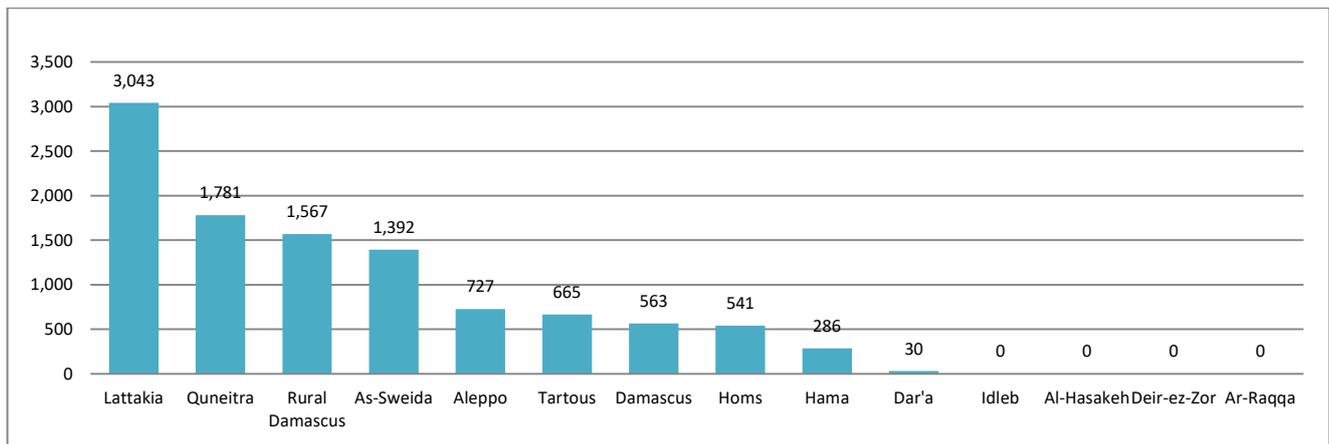
Figure 69: Trend analysis of oral health and dental care cases in health centres, per quarter, 2017



7.9 Mental health care

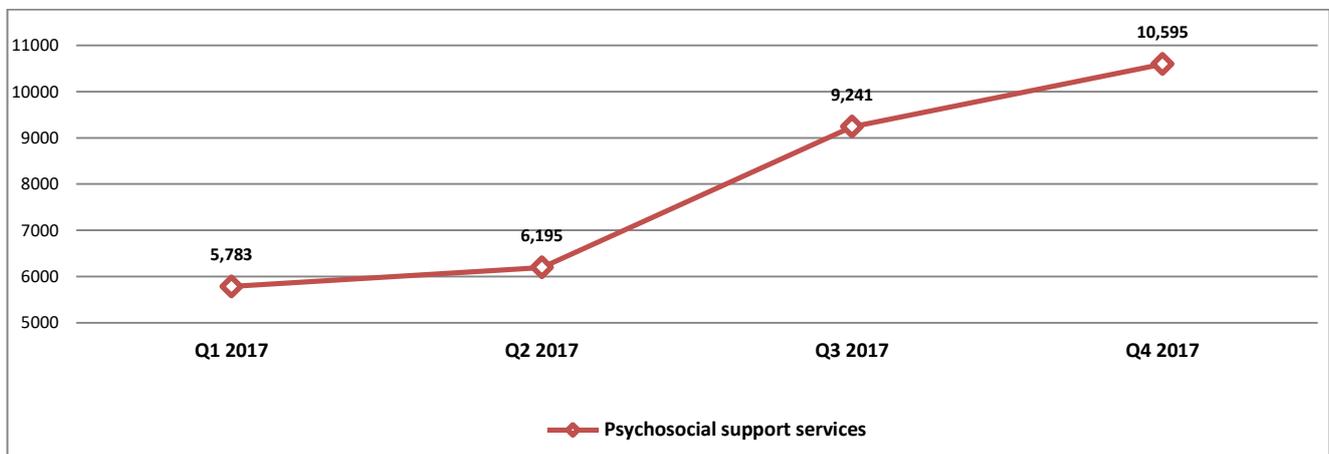
- i. **Psychosocial support services** for distressed people, survivors of assault, abuse, neglect, and domestic violence, including Psychological first aid (PFA), and linking vulnerable individuals/families with resource (such as health services, livelihood assistance etc) was assessed at a health centre level. The total reported number in the 4th Quarter 2017 is **10,595**; disaggregated at governorate level in [Figure 68].

Figure 68: The number of psychosocial support cases in health centres, 4th Quarter 2017



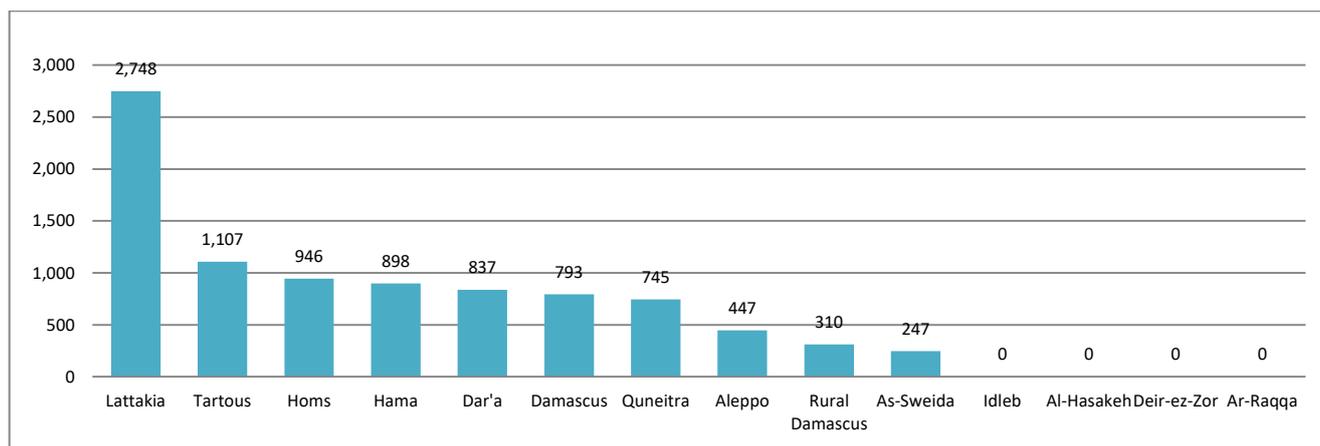
Trend analysis of number of patients received psychosocial support services in health centres, from January to December 2017, is presented in [Figure 69]. In 2017, the total number of patients is **31,814**.

Figure 69: Trend analysis of patients received psychosocial support services in health centres, per quarter, 2017



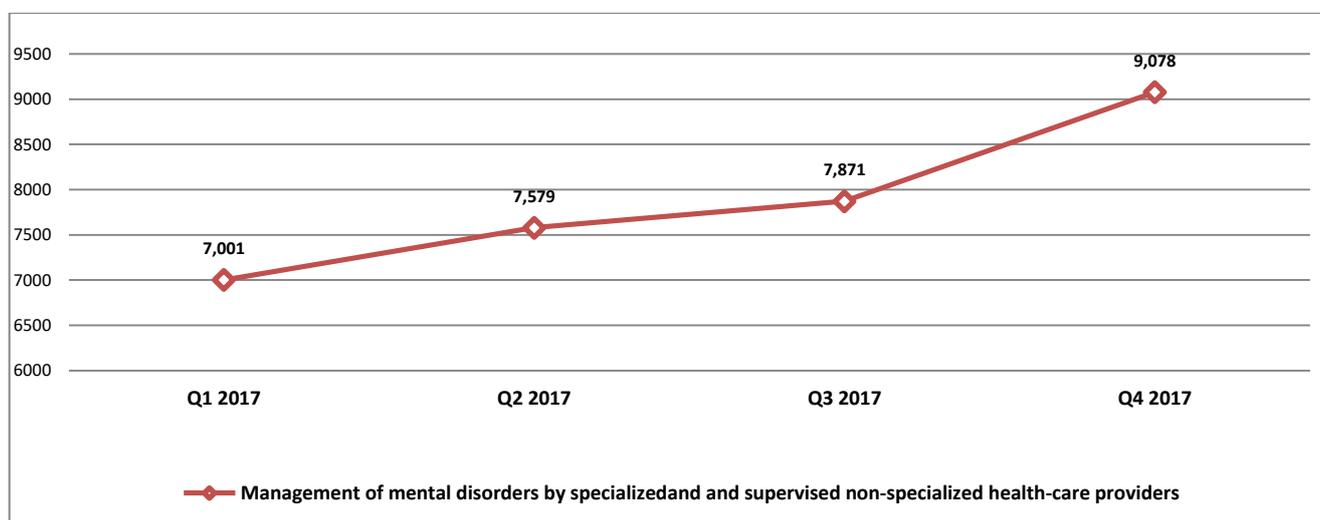
- ii. **Management of mental disorders** by specialized and/or trained and supervised non-specialized health-care providers (mhGAP – Intervention Guide) , and/or availability of at least one medicine from each group, antipsychotics, antidepressants, antiepileptic and anxiolytics was assessed at a health centre level. The total reported number in the 4th Quarter 2017 is **9,078**; disaggregated at governorate level in [Figure 70].

Figure 70: The number of management of mental disorders cases in health centres, 4th Quarter 2017



Trend analysis of number of patients received management of mental disorders services in health centres, from January to December 2017, is presented in [Figure 71]. In 2017, the total number of patients is **31,529**.

Figure 71: Trend analysis of patients received management of mental disorders services in health centres, per quarter, 2017



8. Availability of medical equipment

The availability of different types of essential equipment and supplies was assessed at a health centre level, based on a standard checklist².

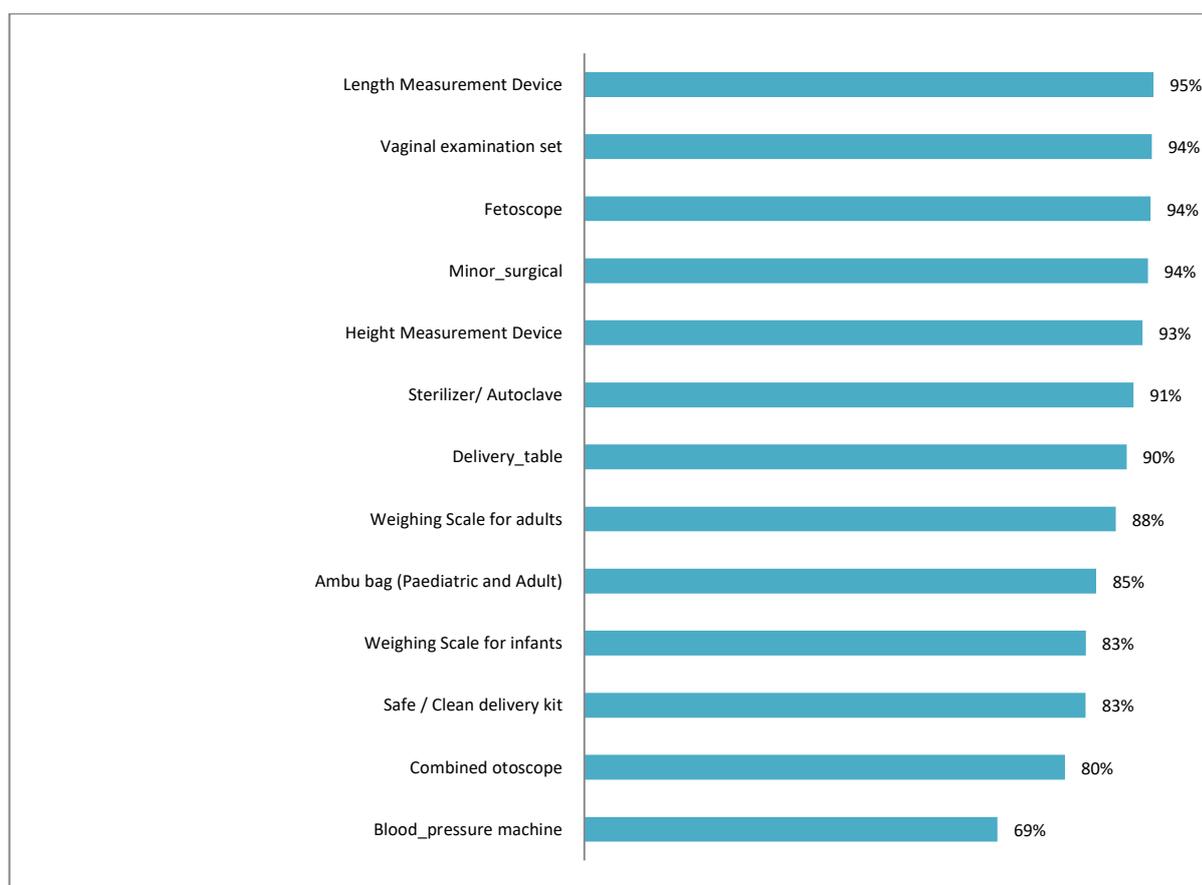
In its seventh year of crisis, Syria's public health centres are still suffering from shortages and/or malfunction of medical devices/ equipment to provide health care services. In insecure governorates, medical devices are either destroyed, burned, or malfunctioned, while in safe areas the medical devices are overburdened by increased numbers of people (actual numbers of people in the area, in addition to IDPs and patients /injured people from surrounding areas).

Maintenance of malfunctioned devices remains a concern, due to non-availability of spare parts, accredited agent to provide maintenance support, or difficulty of accessibility in many cases.

Analysis of availability of essential equipment was measured across all functional health centres (1,179 / 1,804), in terms of functional equipment out of the total available equipment in the health centre. The produced analysis provides good indication of the current readiness of the health centres to provide health services, and also to guide focused planning for procurement of equipment and machines, to fill-in identified gaps.

Gaps on essential equipment and machines were observed, even within the functional health centres. Further details are provided in [Figure 72].

Figure 72: Percentage of functional essential equipment/ total available equipment in functional health centres, 4th Quarter 2017



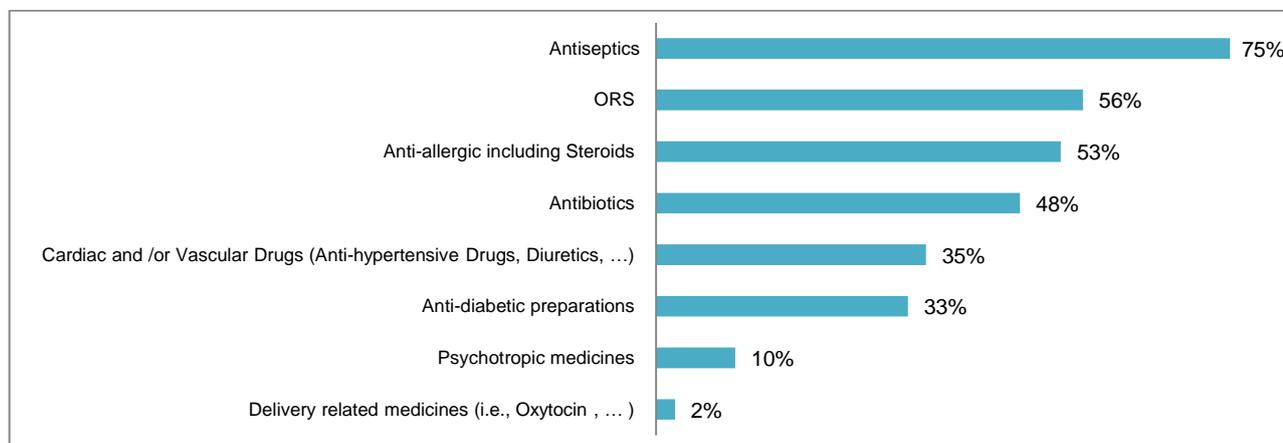
² A more detailed list of essential equipment is available upon request.

9. Availability of priority medicines

Availability of medicines and consumables at health centres' level has been evaluated based on a standard list of identified priority medicines (driven from the national Essential Medicine List), and medical supplies for duration of one month.

Gaps of medicines and medical supplies are identified even within the functional health centres [Figure 73].

Figure 73: Availability of medicines and medical consumables at functional health centres, 4th Quarter 2017



**More details on availability of medicines and consumables at a health centre level are available in HeRAMS Database.

10. Conclusions and recommendations

- ◆ Constant deterioration of functionality status of public health centres was observed throughout 2017; for example the number of non-functioning health centres has increased slightly from 565 to 621 (between 1st Quarter and 4th Quarter of 2017) as a direct impact of deteriorating security situation.
- ◆ Damage of the health centres' infrastructure had a direct impact on the functionality status and provision of primary healthcare services, however some health centres have resiliently continued to provide services regardless of the level of damage of the building; through optimizing intact parts of the building or in a few cases operating from other neighboring facilities. Rehabilitation of the damaged health centres' infrastructure is highly needed to improve functionality status and availability of essential health services at primary care level.
- ◆ Provision or maintenance of electricity generators for health centres in need (identified in the HeRAMS database) would result in noticeable improvement of availability of services.
- ◆ Decline of the available number of medical doctors throughout 2017 was observed and interpreted as fleeing of medical staff out of the country in some cases, and relocation / reassignment of medical staff to DoHs/ health centres in other cases, based on functionality status of the health centres, and security situation in the area. Increased capacity building activities and training courses of the national health staff will help in improving technical capacity of healthcare providers and filling gaps in certain areas.
- ◆ Increasing provision of medical equipment and machines, in addition to spare parts (in certain cases) will improve readiness of health centres' primary level of care, and accordingly fill-in the highlighted gaps and urgent needs reported at different governorates.
- ◆ Furthermore, the crisis aggravated the inequalities among regions, leaving many people deprived of the minimum level of health services. HeRAMS can help in directing the interventions of different players to the most vulnerable groups and those with the greatest needs, and in assessing the efficiency of interventions
- ◆ Increasing supply of ICT means for health districts and reporting facilities especially in hard-to-reach and inaccessible areas has proven to improve timeliness & completeness of reporting, quality of data, and flow of information.
- ◆ Conducting a qualitative survey on provision of health services from the populations' point of view, *using HeRAMS data as a baseline*, will help in concretely measuring the impact of the crisis on public health sector in terms of responsiveness of hospitals and quality of provided services.

