

HeRAMS Annual Report

January - December 2019

Public Health Centres in the Syrian Arab Republic



World Health
Organization

HeRAMS Annual Report

January - December 2019

Public Health Centres in the Syrian Arab Republic

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



World Health
Organization

This is to acknowledge that the data provided in this report is a product of joint collaboration between the World Health Organization and Ministry of Health in the Syrian Arab Republic. The report covers the months of January to December 2019.

© World Health Organization 2020

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

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

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

Suggested citation. [Title]. Cairo: WHO Regional Office for the Eastern Mediterranean; 2019. Licence: CC BY-NC-SA 3.0 IGO.

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

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

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

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

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

Contents

Introduction	1
Executive summary	1
1. Completeness of reporting	3
2. Functionality status	4
3. Density of the public health centres	8
4. Special cases	9
5. Accessibility status	9
6. Infrastructural patterns	12
6.1 Level of damage of the health centres' buildings	12
6.2 Water sources and functionality status	15
6.3 Availability of electricity generators	16
6.4 Availability of refrigerator for vaccine	17
7. Availability of health human resources	18
7.1 Availability of medical staff by category	23
8. Availability of health services	25
8.1 General clinical services	28
8.2 Emergency services	31
8.3 Child health	32
8.4 Nutrition	35
8.5 Communicable diseases	37
8.6 Sexual and reproductive health	40
8.7 Noncommunicable diseases	48
8.8 Oral health and dental care	49
8.9 Mental health care	50
9. Availability of medical equipment	52
10. Availability of priority medicines	53
11. Conclusions and recommendations	54

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 Monitoring 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 2019 in comparison to other three quarters of 2019. The total assessed health centres in the 4th Quarter 2019 is 1,813.

Completeness of Centre's reporting

The completeness of reporting of public health centres across Syria has become 100% during the 4th Quarter 2019.

Functionality status

By end of the 4th Quarter 2019 and out of 1,813 assessed public health centres, 47% (853) were reported fully functioning, 22% (405) partially functioning, 31% (555) non-functioning (completely out of service).

Accessibility status

By end of the 4th Quarter 2019, 83% (1,501) health centres were reported accessible, 2% (40) hard-to-access, and 15% (265) were inaccessible, while the accessibility status of 0.4% (7) health centres were unknown.

Infrastructural patterns

By end of the 4th Quarter 2019, 28% (520) health centres were reported damaged [6% fully damaged and 22% partially damaged], 67% (1,208) were reported intact, while the building's condition of 5% (85) health centres were unknown.

Assessing the availability of water sources at functional public centres indicated that 84% (1,056) are using main pipelines, 1% (17) are mainly using wells, while 6% (72) 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

The pharmacists represented (1%) of total health staff at centres' level, followed by resident doctors (2%); general practitioners (4%); laboratory (6%); Specialist (7%); dentists (10%); midwives (11%); and nurses (59%).

Trend analysis of available number of medical doctors during 2019 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 4.3% by end of December 2019 (4,168) compared to end of Mar 2019 (4,356).

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] (1,258 /1,813), 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 public health centres across Syria has become 100% during 4th Quarter of 2019.

The classification of health centres (1,813) 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 1: Completeness of reporting, 4th Quarter 2019

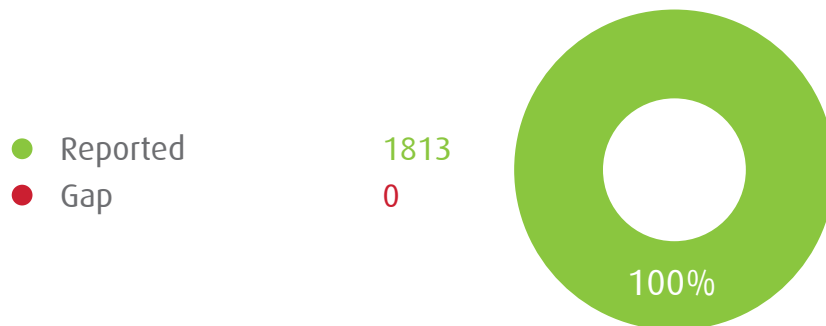


Figure 2: Classification of centres, 4th Quarter 2019

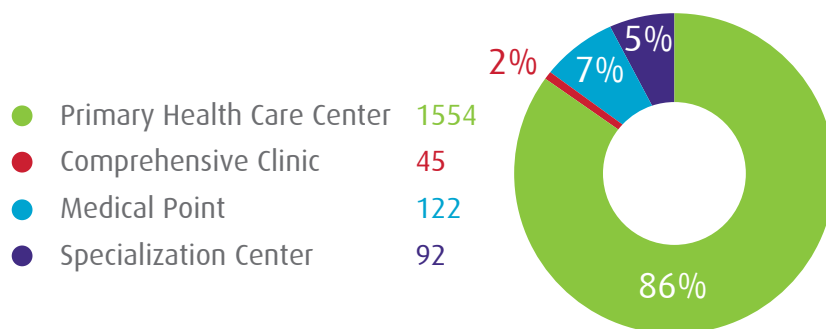
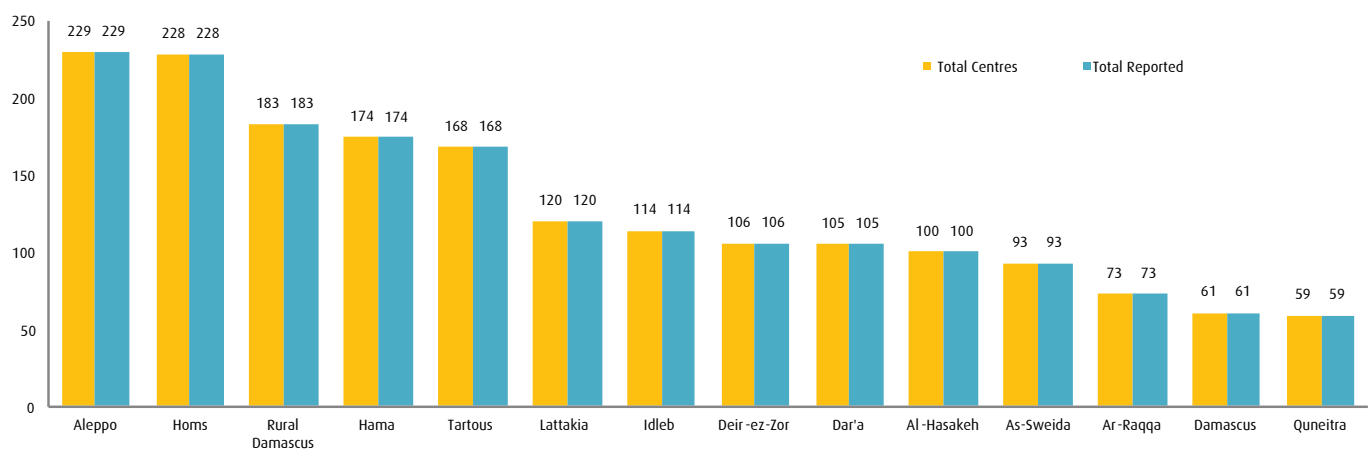


Figure 3: Completeness of reporting of health centres at governorate level, 4th Quarter 2019

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 2019 in comparison to other three quarters of 2019.

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 2019 and out of 1,813 assessed public health centres, 47% (853) were reported fully functioning, 22% (405) partially functioning, 31% (555) non-functioning (completely out of service), [Figure 4].

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

Figure 4: Functionality Status- 4th Quarter 2019

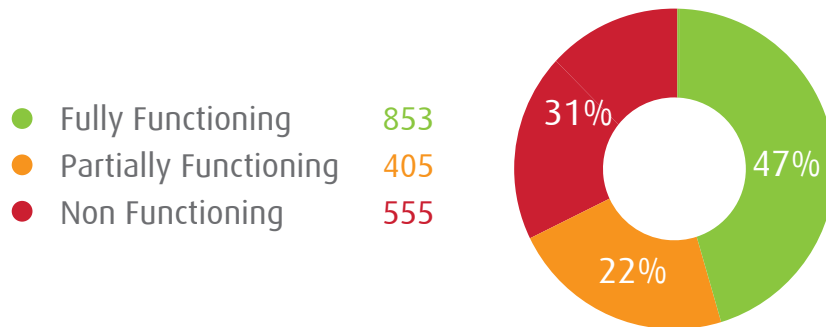
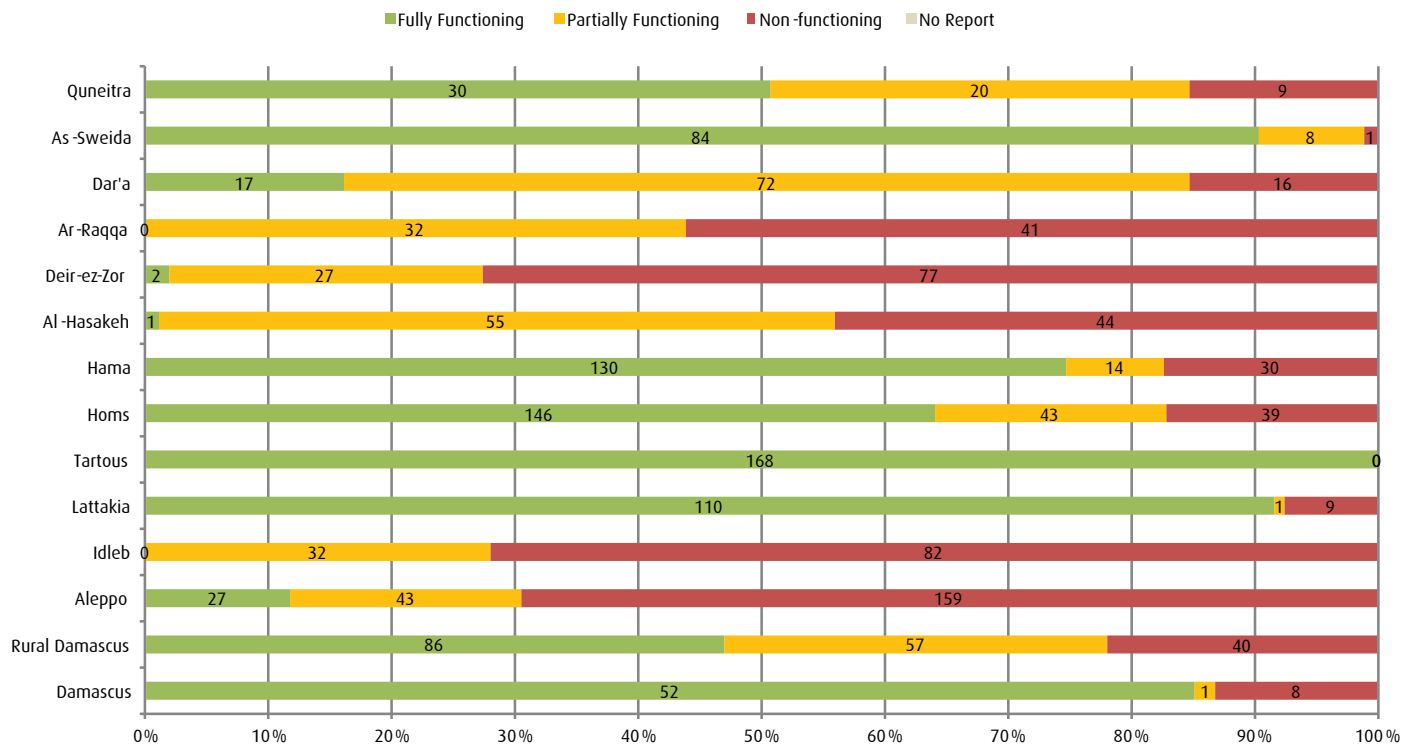
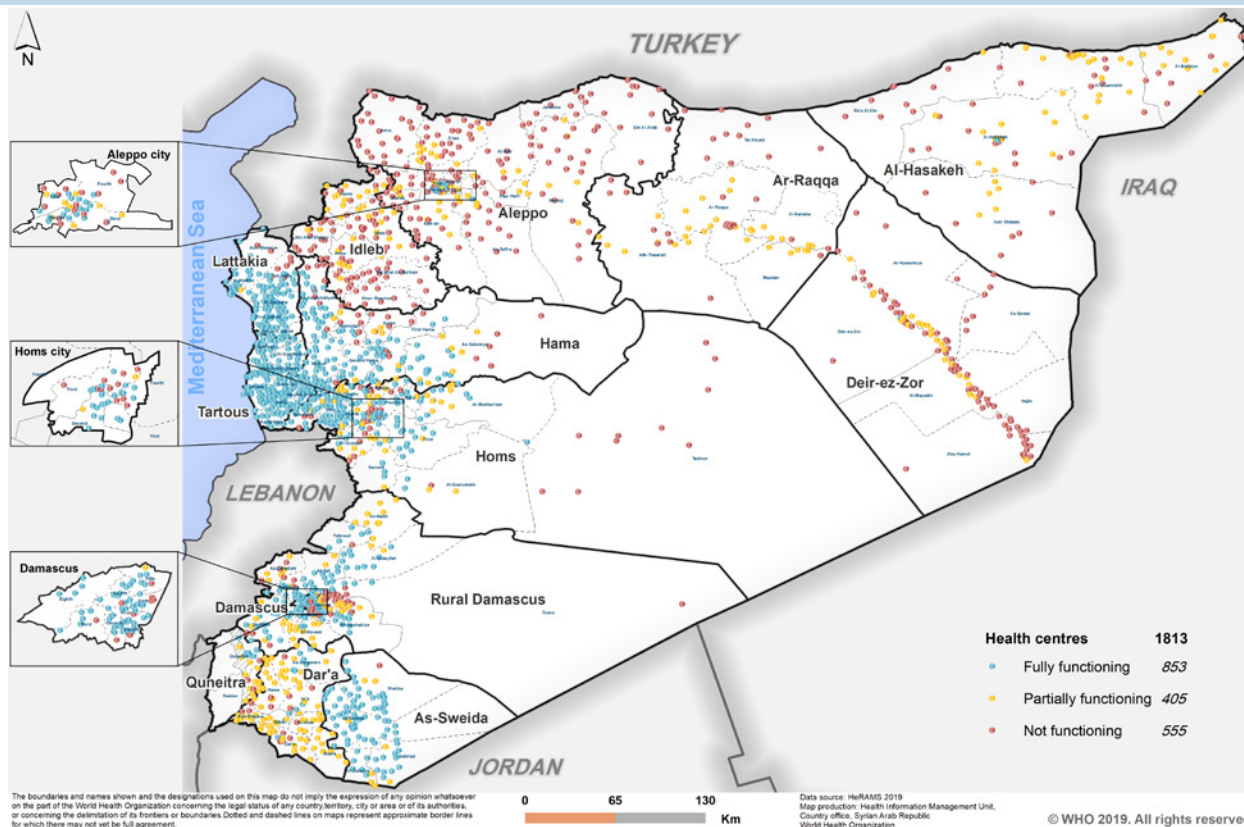


Figure 5: Functionality status of health centres per governorate, 4th Quarter 2019

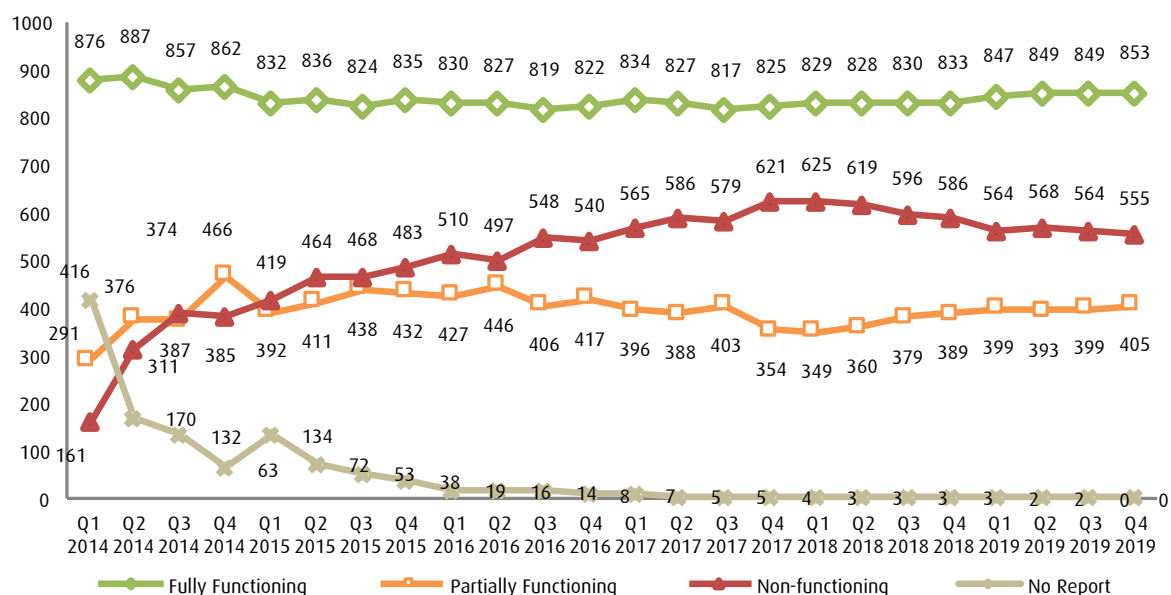


Map 1: Functionality status of the public health centres, 4th Quarter 2019

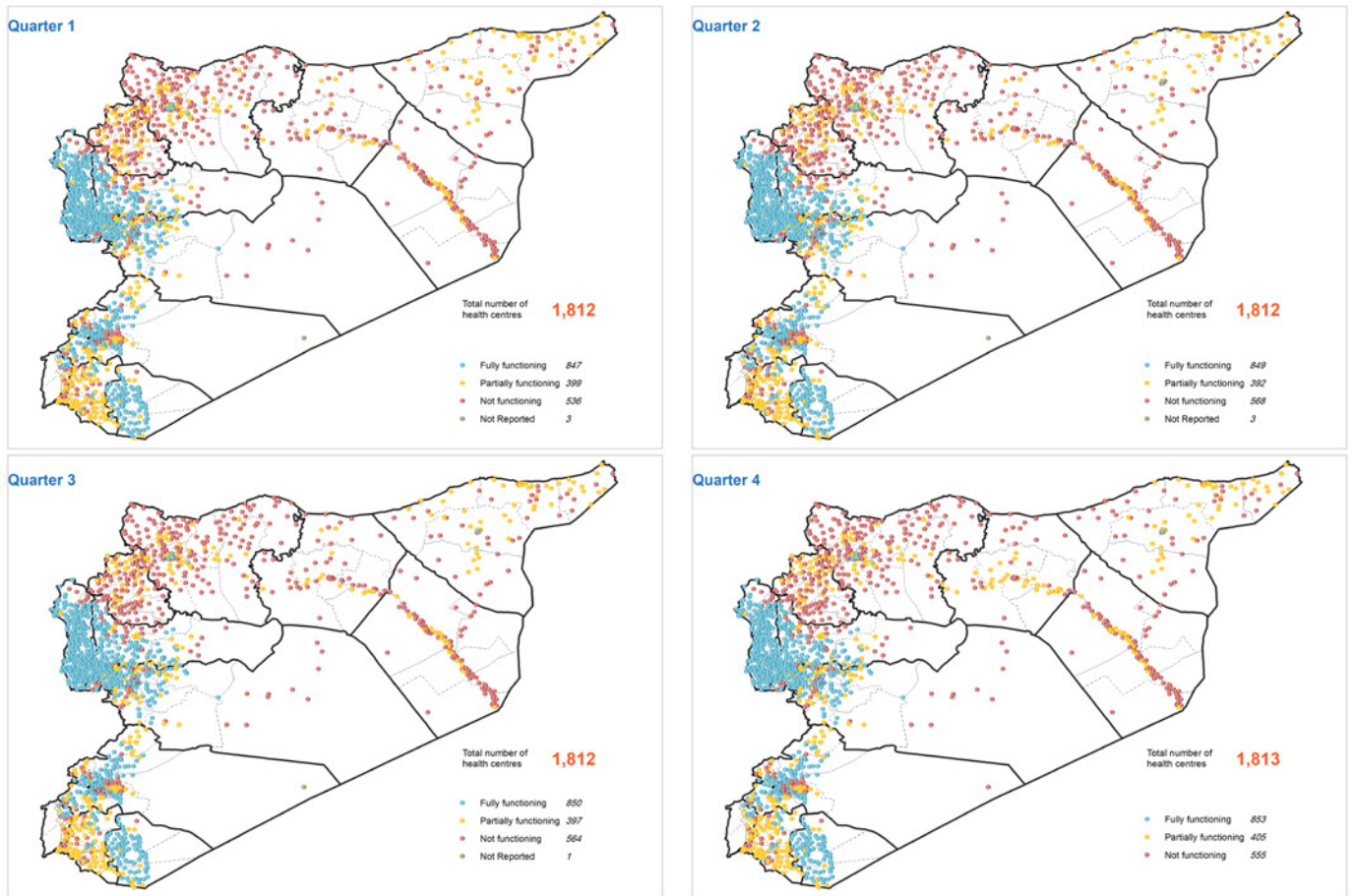


The number of non-functioning health centres has increased slightly from 564 to 555 (between 1st Quarter and 4th Quarter of 2019) [Figure 6] and [Map 2] as a direct impact of deteriorating security situation.

Figure 6: Trend analysis of functionality status, between 1st Quarter 2014 and 4th Quarter 2019



Map 2: Trend analysis of functionality status of public health centres, 1st quarter to 4th Quarter 2019



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its borders or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

0 90 180
Km

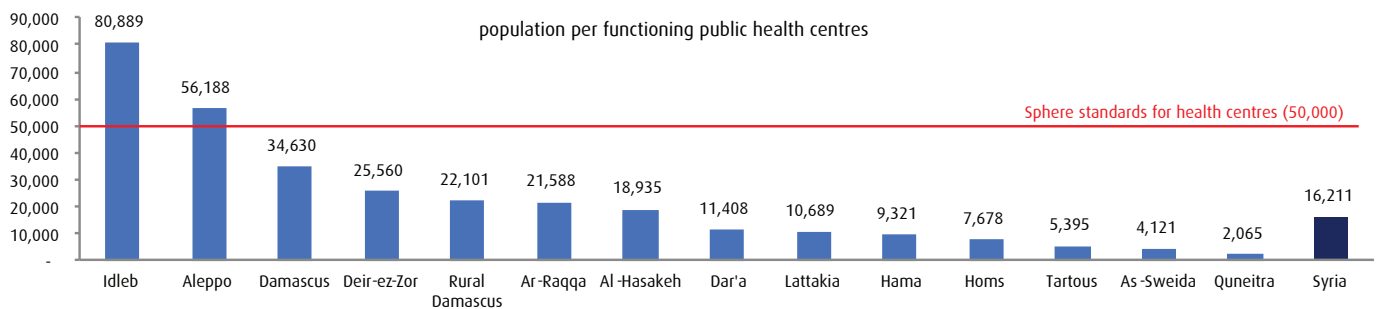
Date source: HeRAMS 2019
Map production: Health Information Management Ltd,
Country office, Syrian Arab Republic,
World Health Organization

© WHO 2019. All rights reserved

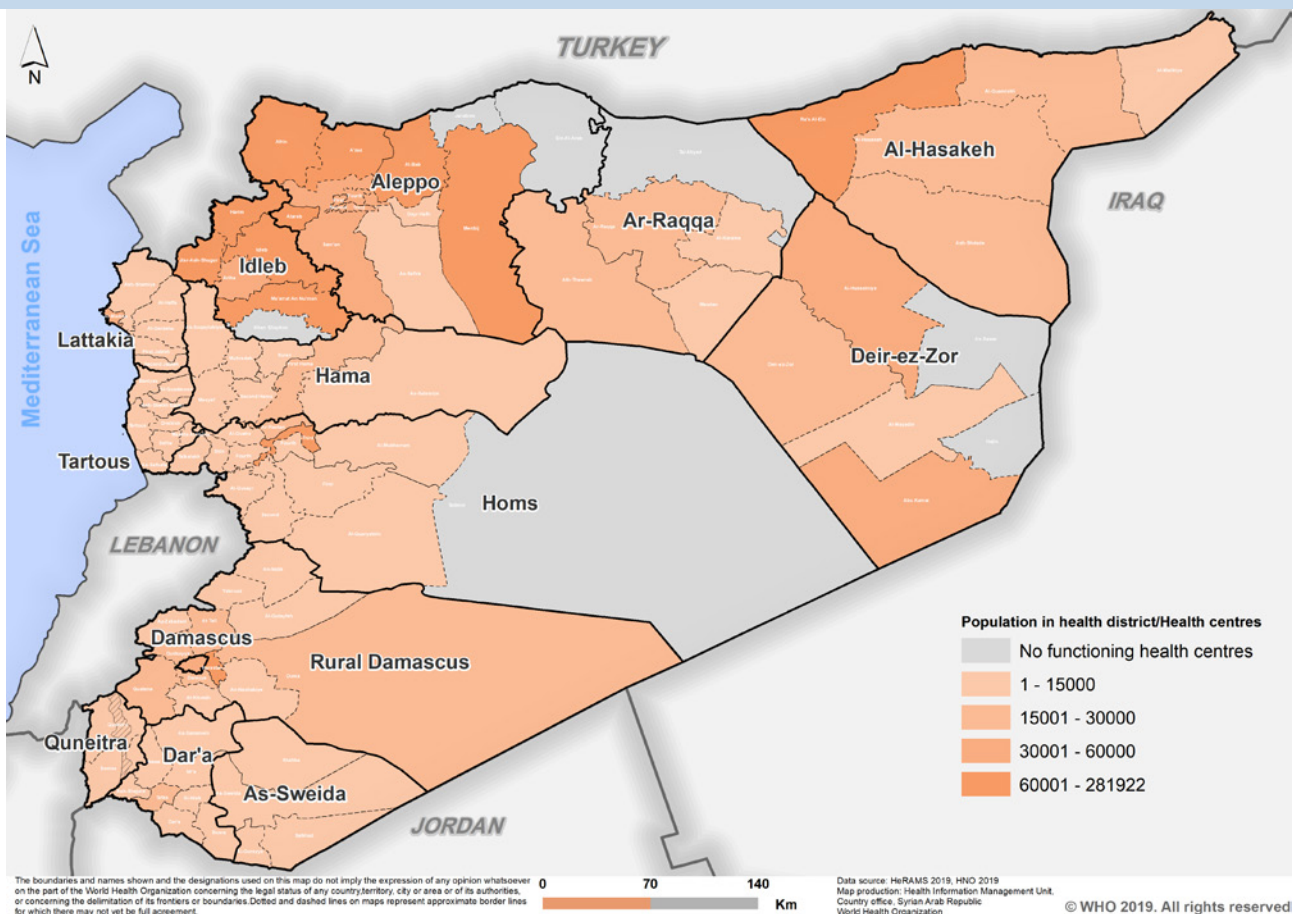
3. Density of the public health centres

Health centres density reflects the total number of health centres relative to population size (based on OCHA HRP 2019), which helps measure physical access to outpatient health care services. Comparing with Sphere standards for health centres (50,000), two governorates (Aleppo and Idleb) 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 2019



Map 3: Density of the public health centres per governorate, December 2019



4. Special cases

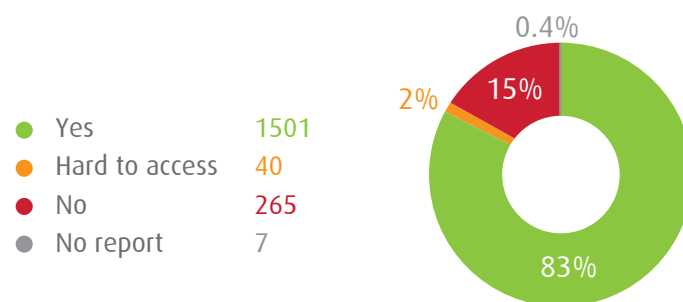
Some public health centres in Idleb and Aleppo have been considered as non-functioning, but are providing health services by non-MoH staff with no information available, where data is being collected by cross-border partners.

5. 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).

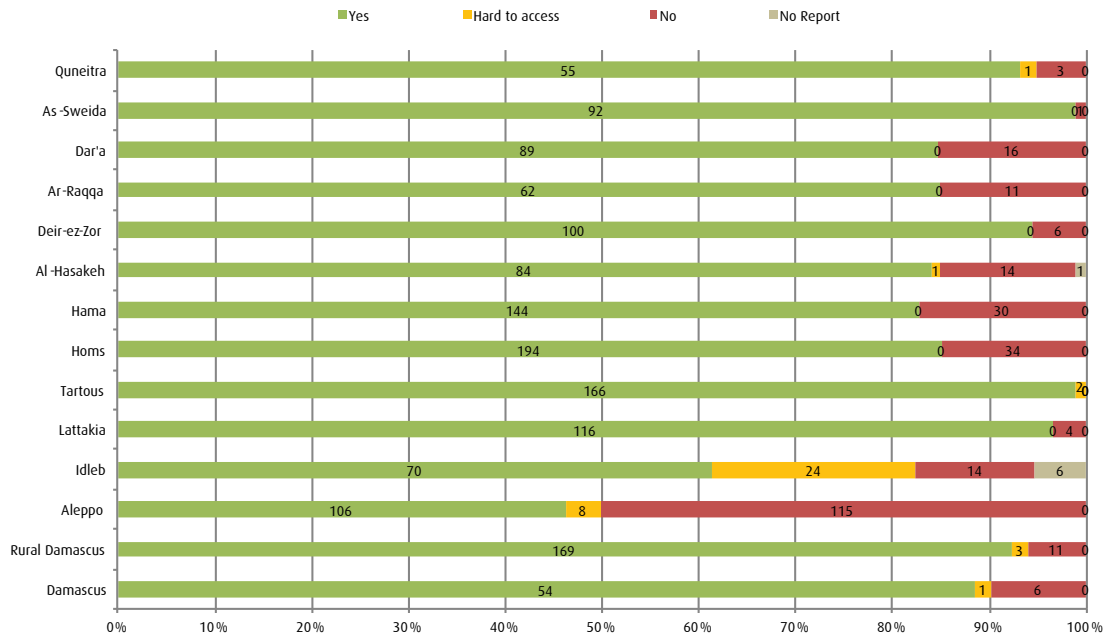
Figure 8: Accessibility status, 4th Quarter 2019



By end of the 4th Quarter 2019, 83% (1,501) health centres were reported accessible, 2% (40) hard-to-access, and 15% (265) were inaccessible, while the accessibility status of 0.4% (7) health centres were unknown [Figure 8].

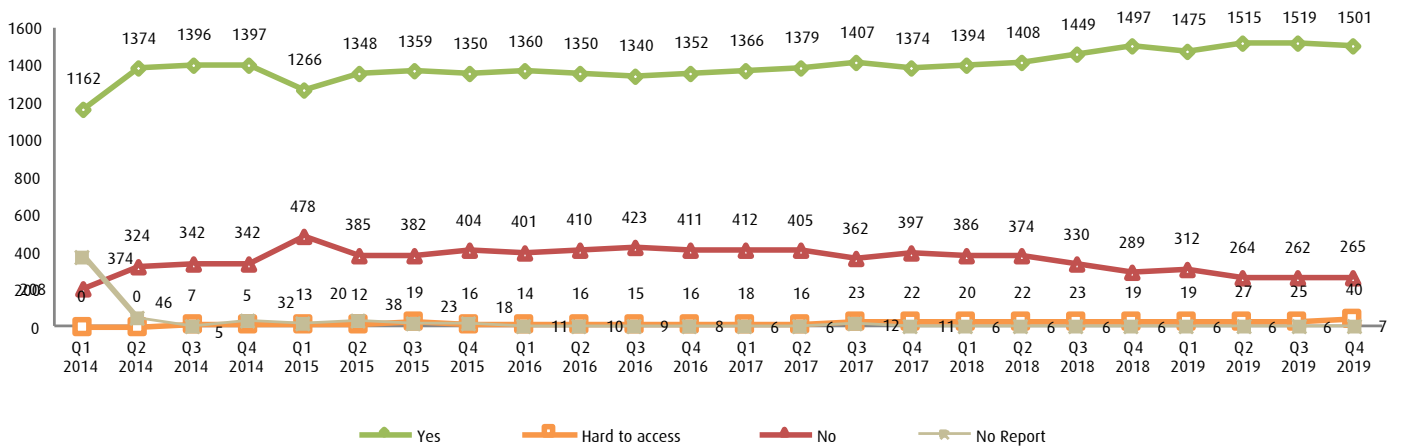
Detailed analysis on the accessibility status of the health centres at governorate level is presented in [Figure 9] and [Map 3].

Figure 9: Accessibility status of the health centres per governorate, 4th Quarter 2019



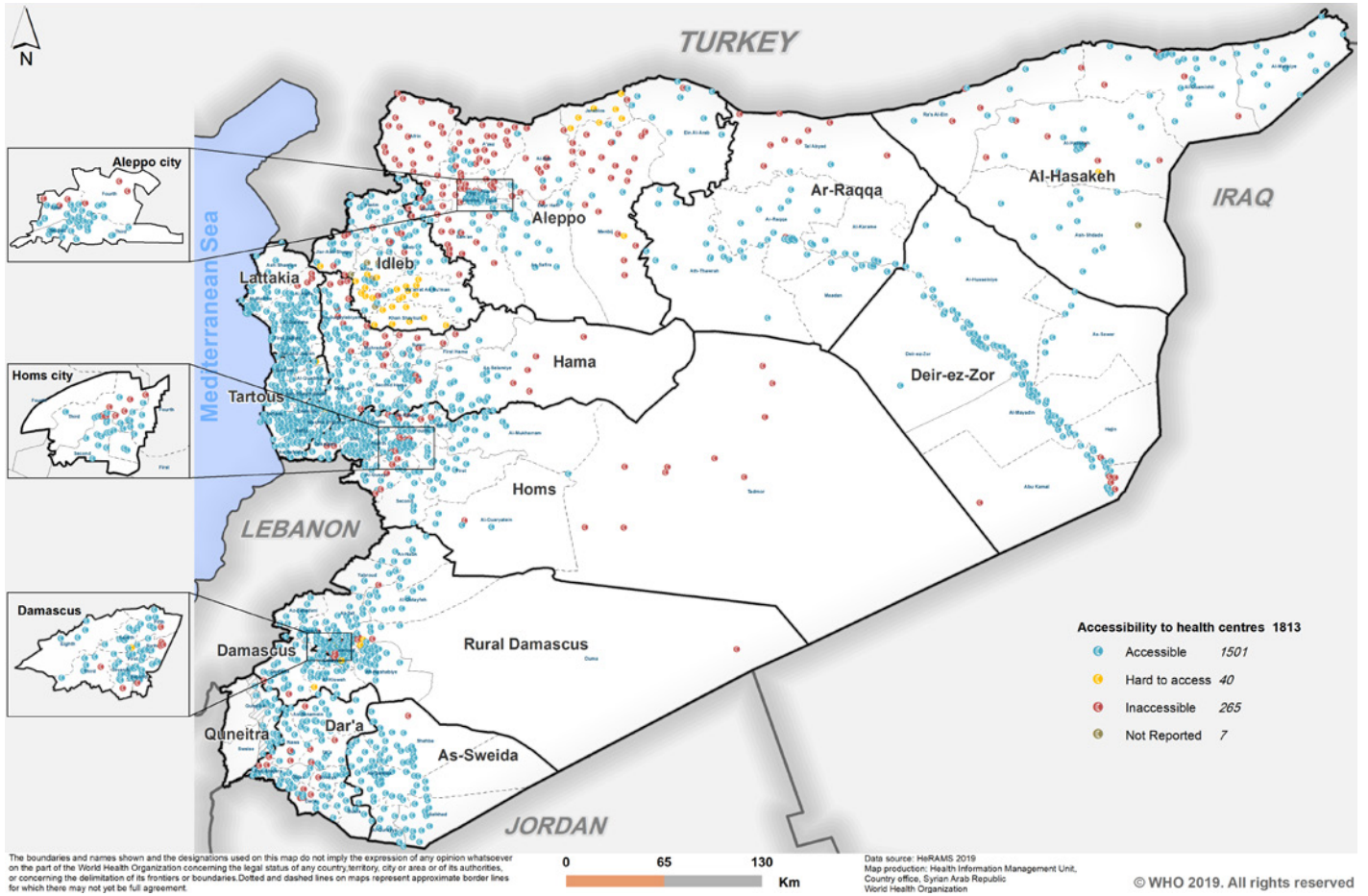
The trend analysis of accessibility status of health centres from 1st Quarter 2014 to 4th Quarter 2019 is presented in Figure 10.

Figure 10: Trend analysis of accessibility status of health centres between 1st Quarter 2014 and 4th Quarter 2019



The number of inaccessible health centres decreased slightly from 312 to 265 (between end of 1st Quarter and 4th Quarter 2019).

Map 3: Accessibility to public health centres , 4th Quarter 2019



6. 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.

6.1 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 2019, 28% (520) health centres were reported damaged [6% fully damaged and 22% partially damaged], 67% (1,208) were reported intact, while the building's condition of 5% (85) 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 95.3%, compared to 94.9% at the end of 4th Quarter 2019.

Key gaps on reporting the level of damage of the health centres are observed mainly in Aleppo 21% (48/229) and Idlib 11% (13/114).

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

Figure 11: level of damage, 4th Quarter 2019

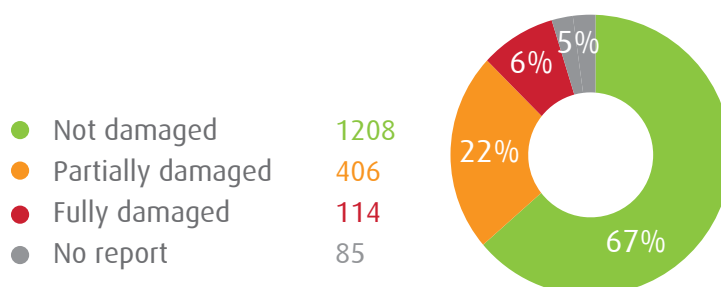
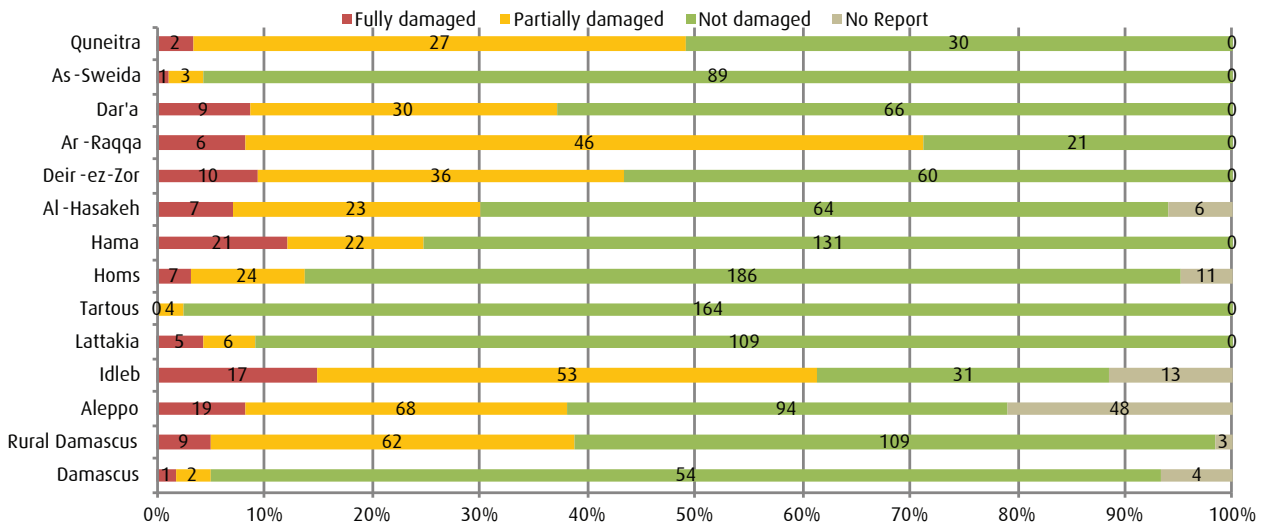
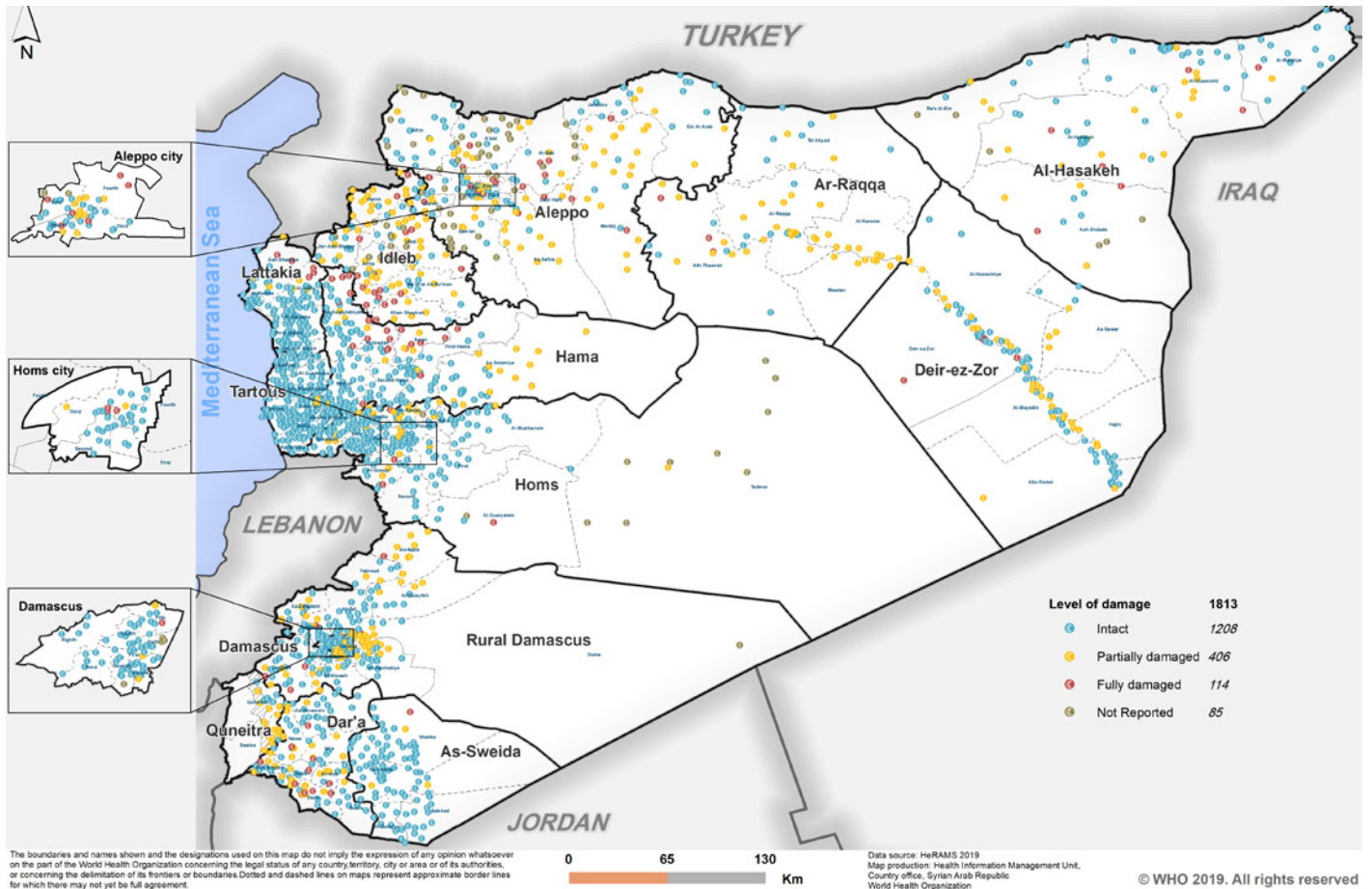


Figure 12: level damage of the health centres per governorate, 4th Quarter 2019



Map 4: Distribution and Level of damage of the public health centres, 4th Quarter 2019

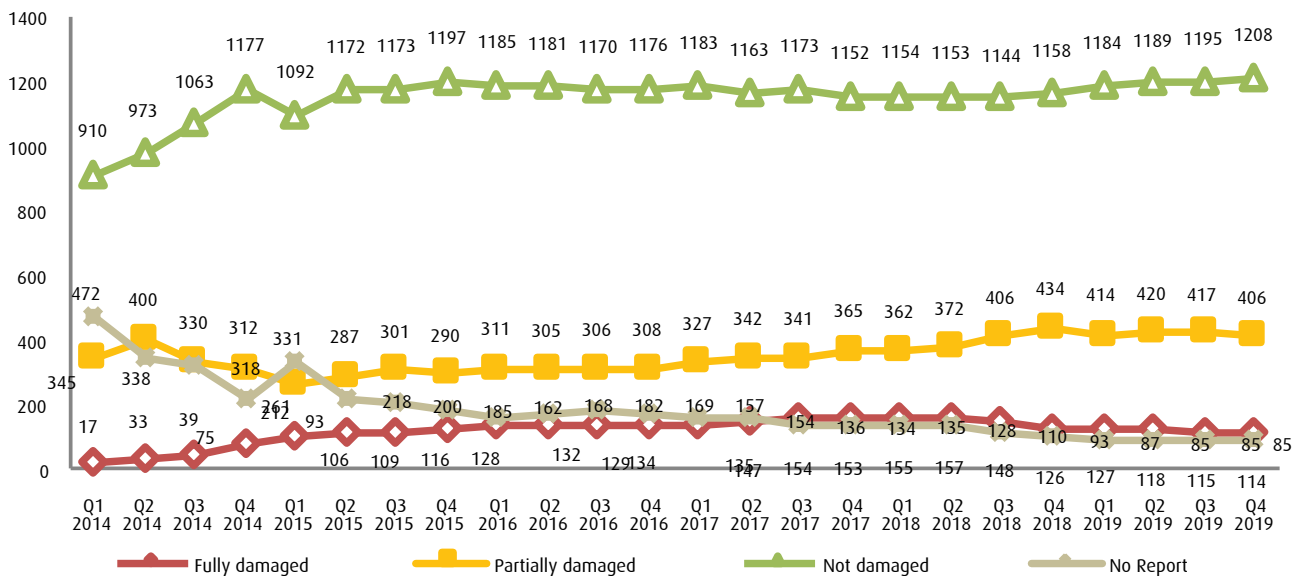


It is essential to cross-analyze the infrastructural damage of the public health centres in relation to the functionality status (i.e. provision of services). Some health centres have resiliently continued to provide services regardless of the level of damage of the building and by optimizing intact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

- Out of the 406 partially damaged health centres, 167 health centres were reported partially functioning and 210 out of service (non-functioning), while 29 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 114 fully damaged health centres, 91 were reported non-functioning, 1 health centre reported fully functioning from other nearby temporary location, and 22 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 22 health centres are available in the HeRAMS database.
- Then again, health centres with intact buildings (1,207 health centres) does not directly reflect full functionality, only 823 of the 1,208 intact health centres are fully functioning, while 216 are partially functioning and 169 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 2019 is presented in Figure 13.

Figure 13: Trend analysis of buildings' damage of health centres, between 1st Quarter 2014 and 4th Quarter 2019

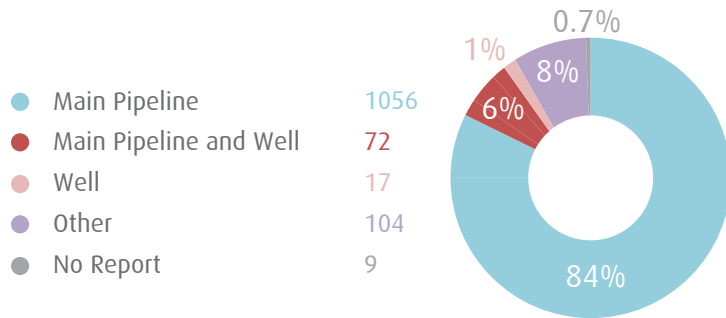


6.2 Water sources and functionality status

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]).

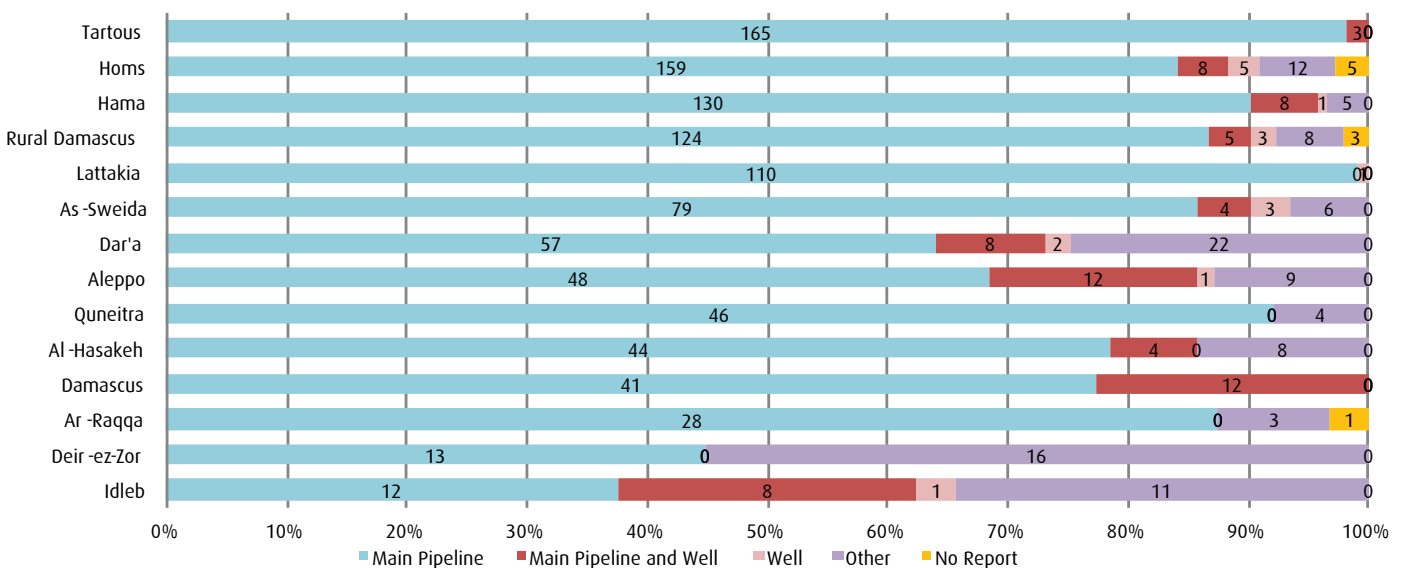
By end of the 4th Quarter 2019 and out of 1,258 functional health centres, 84% (1056) are using main pipelines, 1% (17) are mainly using wells, while 6% (72) are using both (main pipeline and well) [Figure 14].

Figure 14: Main Sources of Water, 4th Quarter 2019



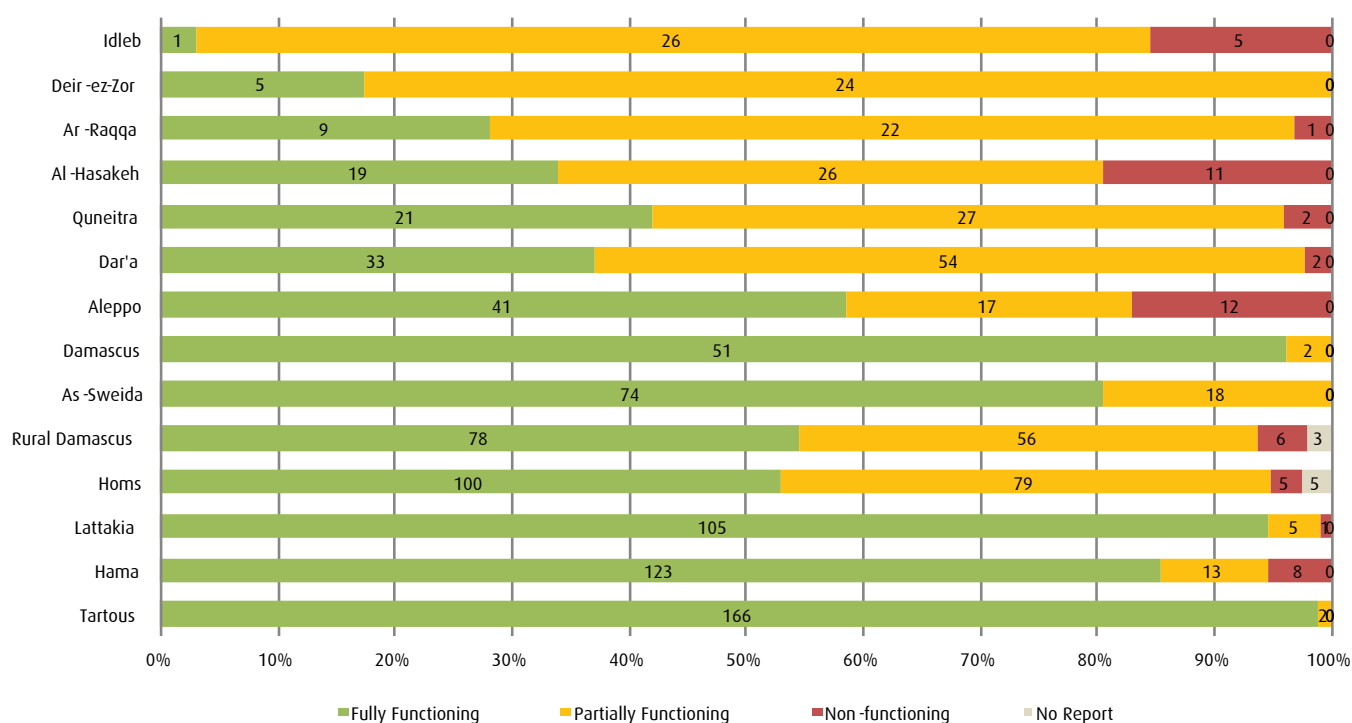
Detailed analysis of availability and distribution of water sources at functional health centres is presented at governorate level on [Figure 15].

Figure 15: Distribution of water sources/ types at functional health centres per governorate, 4th Quarter 2019



Functionality status of the water sources was measured at three levels; fully functioning, partially functioning, and not functioning. Figure 16, provides details on functionality status of water sources at functional health centres, (1,258 /1,813) per governorate.

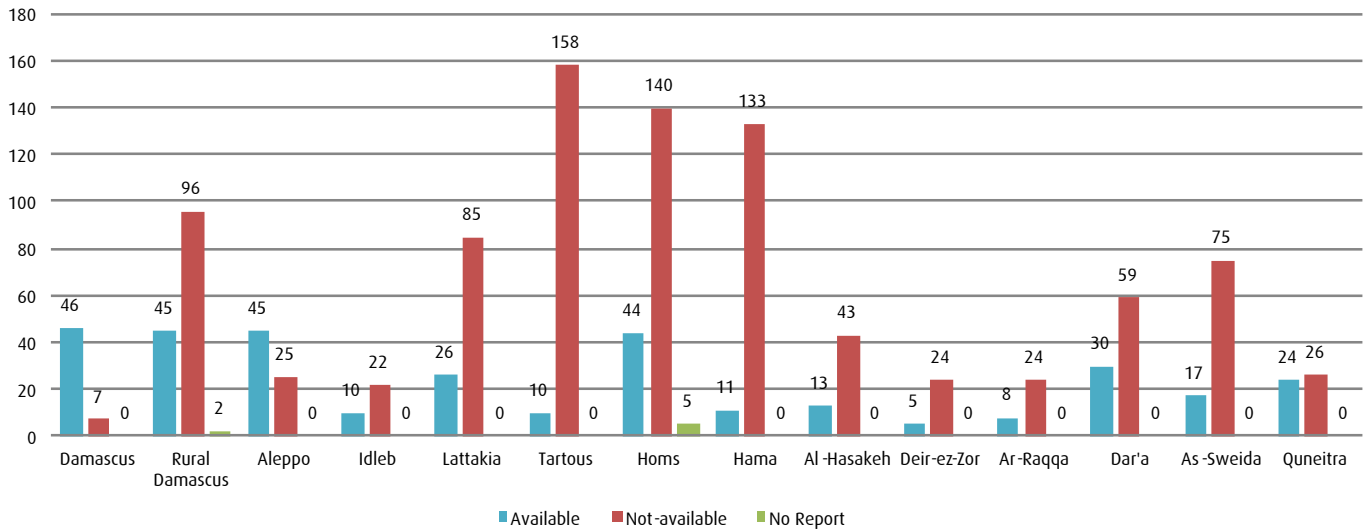
Figure 16: Functionality status of the water sources at health centres, 4th Quarter 2019



6.3 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 2019

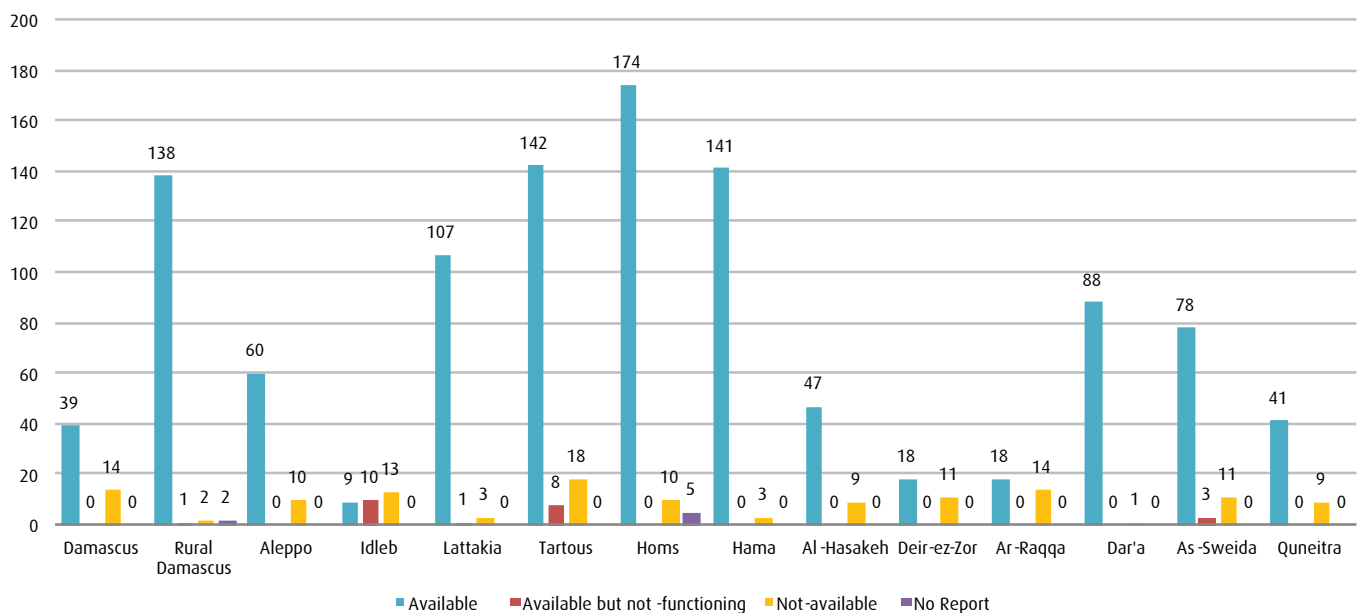


6.4 Availability of refrigerator for vaccine

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 2019



7. 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 2019, within the functional health centres (fully and partially) is shown in [Figure 19].

The pharmacists represented (1%) of total health staff at centres' level, followed by resident doctors (2%); general practitioners (4%); laboratory (6%); Specialist (7%); dentists (10%); midwives (11%); and nurses (59%).

The Distribution of the total health staff by end of the 4th Quarter 2019, per staff category and governorate is shown in [Figure 20].

Figure 19: Health staff, 4th Quarter 2019

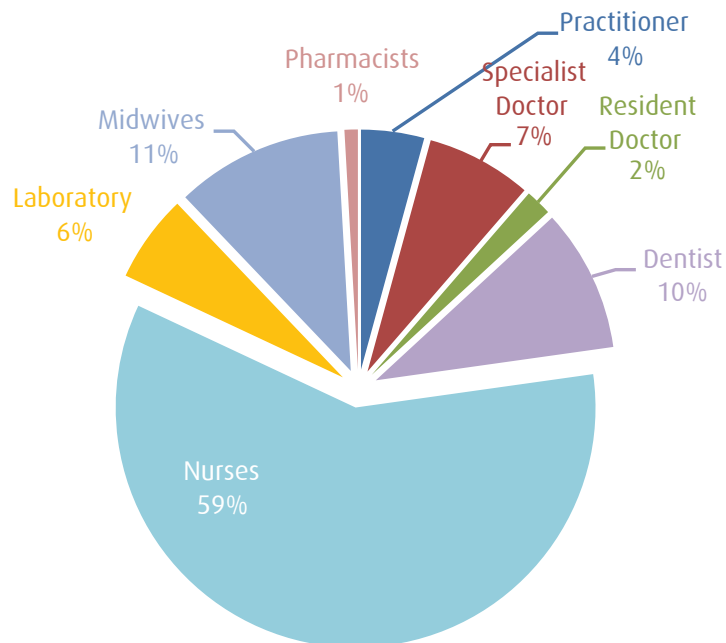


Figure 20: Distribution of total health staff at health centres per governorate, December 2019

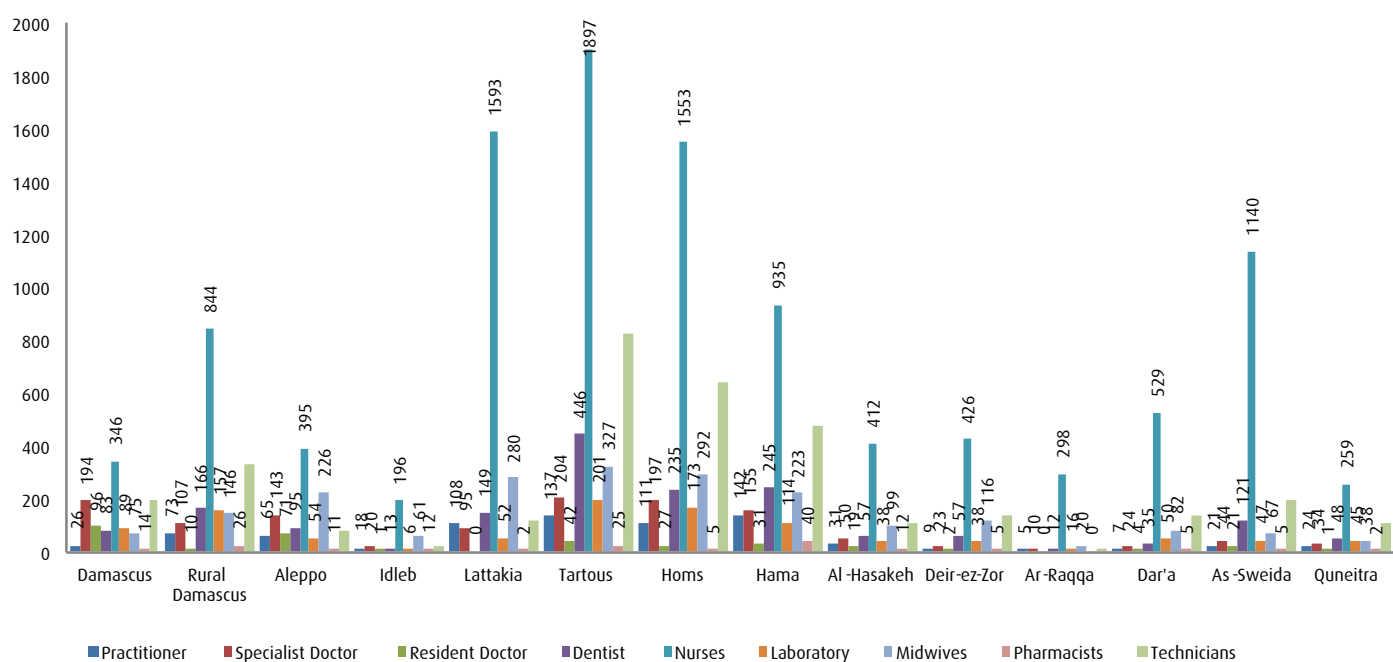
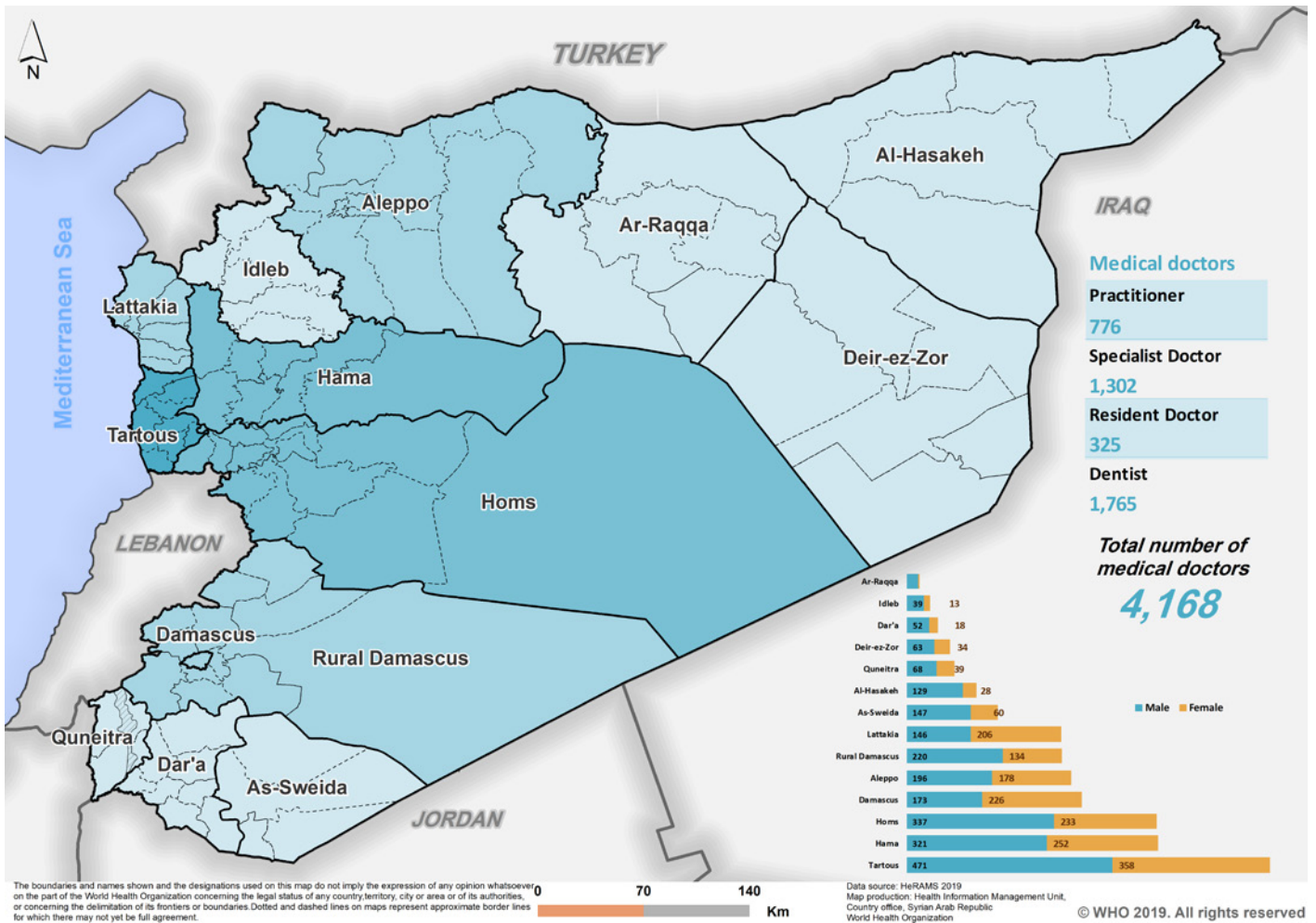


Table 1: Availability of human resources of functioning public health centres, per governorate, December 2019

Governorate	Practitioner	Specialist Doctor	Resident Doctor	Dentist	Nurses	Laboratory	Midwives	Pharmacists	University*	Technicians	Others
Damascus	26	194	96	83	346	89	75	14	16	200	391
Rural Damascus	72	107	10	165	844	156	147	26	12	332	539
Aleppo	65	143	71	95	395	54	226	11	51	78	252
Idleb	18	20	1	13	196	6	61	12	5	20	57
Lattakia	108	95	0	149	1593	52	280	2	18	116	718
Tartous	137	204	42	446	1897	201	327	25	39	825	2265
Homs	111	197	27	235	1553	173	292	5	10	640	633
Hama	142	155	31	245	935	114	223	40	49	477	562
Al-Hasakeh	31	50	19	57	412	38	99	12	20	107	153
Deir-ez-Zor	9	25	2	61	426	38	116	5	11	153	300
Ar-Raqqa	5	10	0	12	308	16	20	0	4	10	91
Dar'a	7	24	4	35	529	50	82	5	20	135	236
As-Sweida	21	44	21	121	1140	47	67	5	14	193	228
Quneitra	24	34	1	48	259	45	38	2	11	110	136
Grand Total	776	1,302	325	1,765	10,833	1,079	2,053	164	280	3,396	6,561

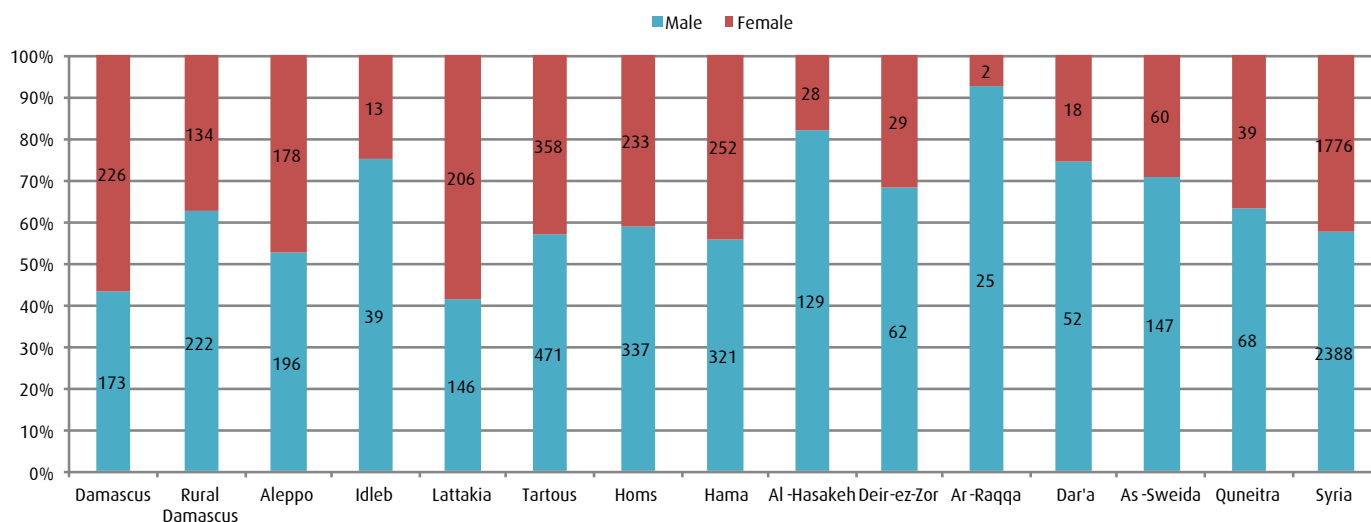
* Health workers in the health centres who hold university degrees (engineer, law, trade and economics)

Map 5: Distribution of medical staff [a total of general practitioners, specialist, resident doctors, and dentists] per governorate, December 2019



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].

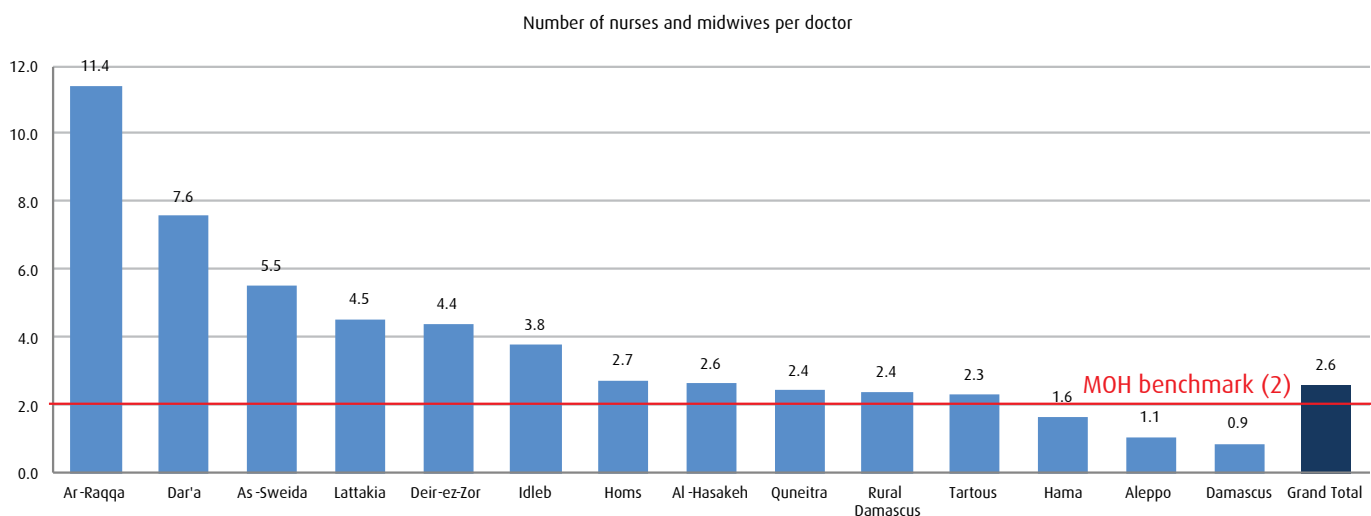
Figure 21: Proportion of Doctors by gender per governorate, December 2019



The follow figure shows the number of nurses and midwives per doctor, given that the benchmark is at least 2 nurses and midwives for each doctor (MoH, 2011).

Three governorates (Hama, Damascus, and Aleppo) are below or equal benchmark in [Figure 22].

Figure 22: Number of nurses and midwives per doctor in public health centres, December 2019



The follow figure shows the number of health staff (doctors, nurses and midwives) per 10,000 population, given that the benchmark is greater than 22 health staff per 10,000 population (Inter-Agency Standing Committee (IASC) Standards).

The national levels in addition to eleven governorates (Lattakia, Homs, Hama, Deir-ez-Zor, Dar'a, Al-Hasakeh, Ar-Raqqa, Damascus, Rural Damascus, Aleppo, and Idleb) are below or equal benchmark in [Figure 23].

Figure 23: Number of health staff (doctors, nurses and midwives) per 10,000 population in public health centres, December 2019

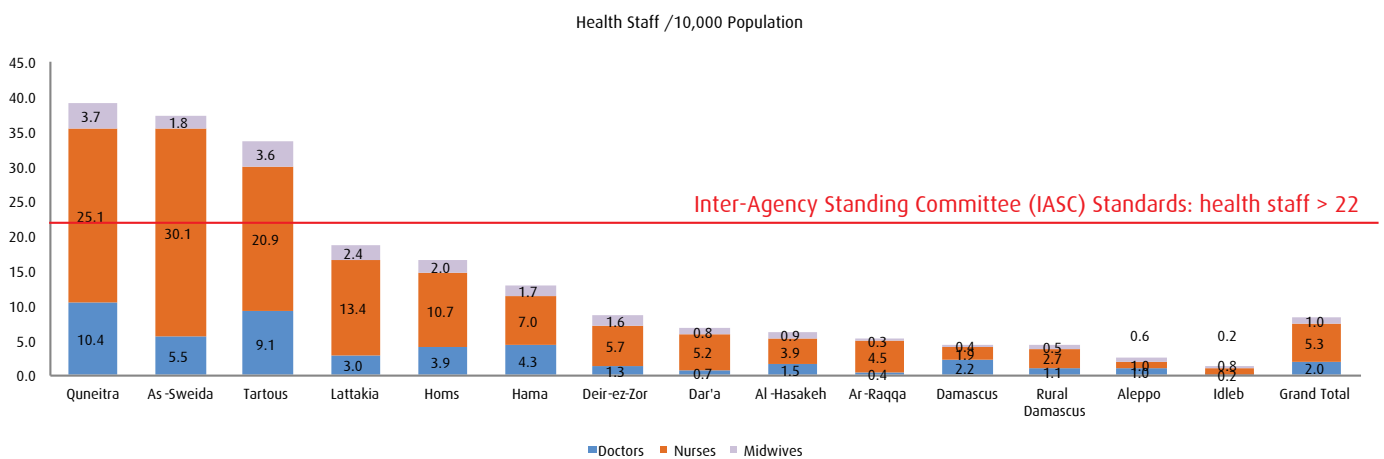
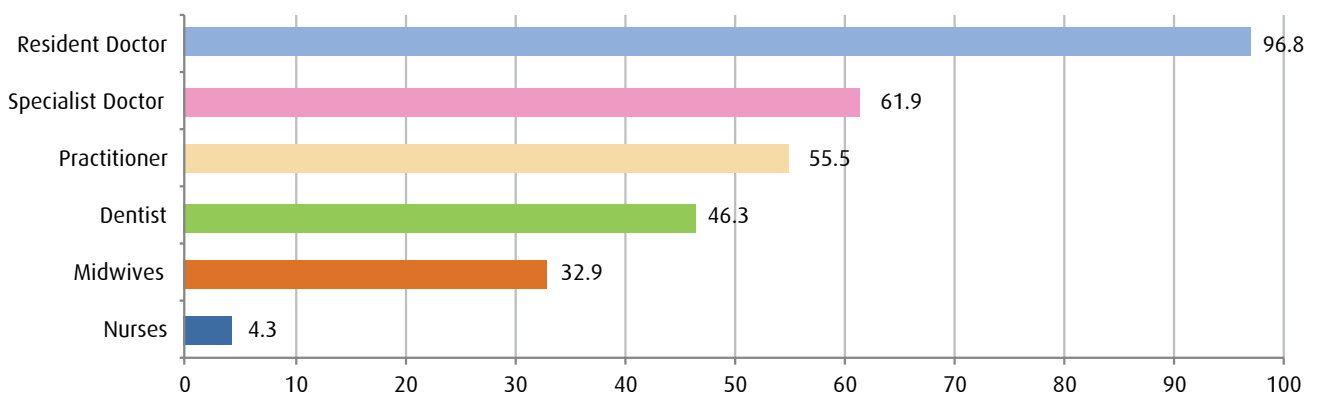


Figure 24: Percentage of functioning public health centres without medical staff (gaps), December 2019



7.1 Availability of medical staff by category

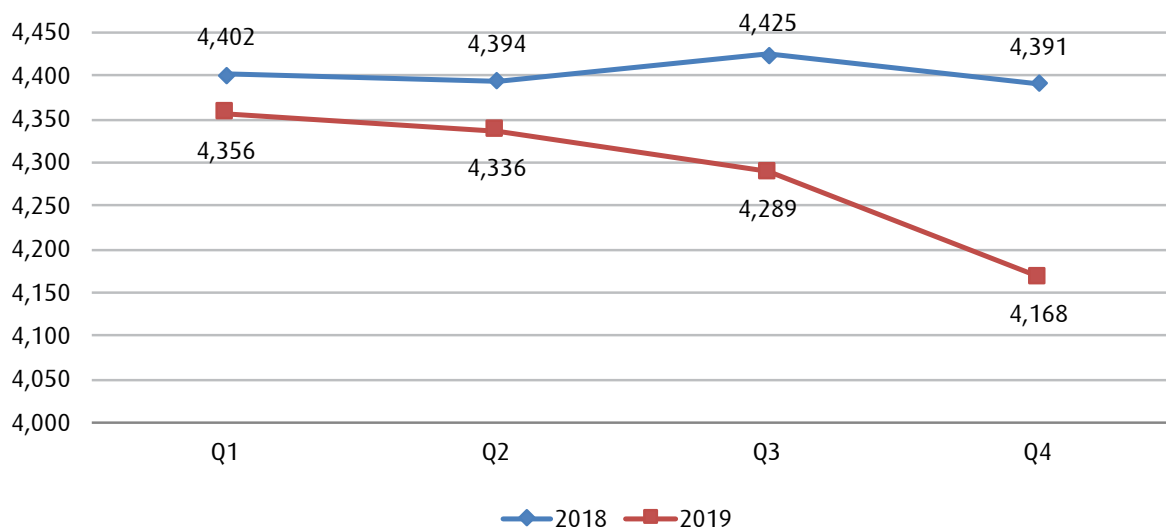
The availability medical staff in functional health centres is analyzed by category [i.e., medical doctors¹, nurses, and midwives], as follows:

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 4.3% by end of December 2019 (4,168) compared to end of March 2019 (4,356).

Figure [25] shows trend analysis of reported medical doctors (a total of General practitioner, Specialists, Resident Doctors, and Dentists) on quarterly basis during 2019.

Figure 25: Trend analysis of availability of medical doctors in public health centres during 2018 and 2019

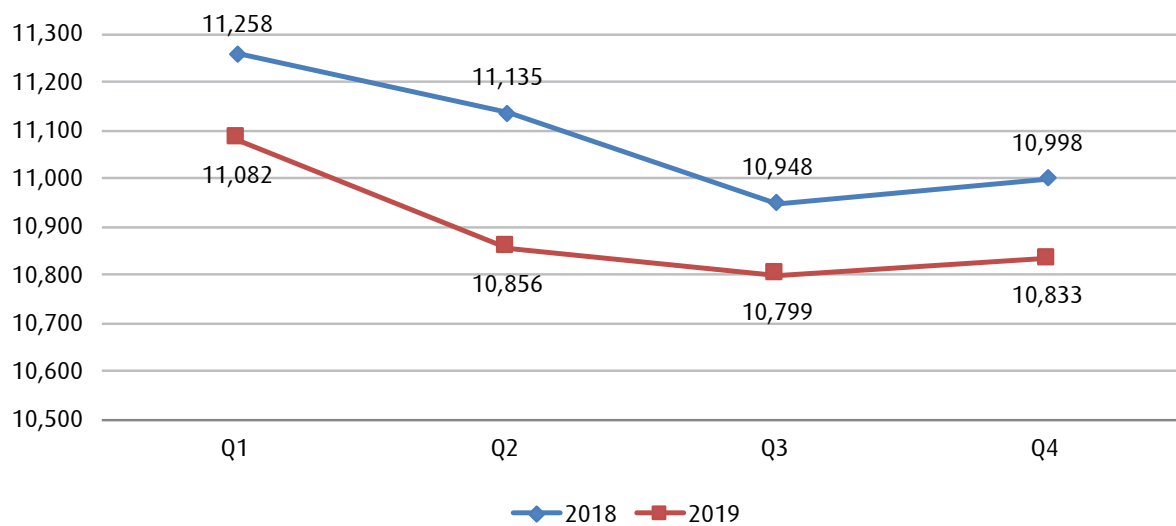


¹ A total of general practitioners, specialist, resident doctors, and dentists

ii. Trend analysis of Nurses & Midwives:

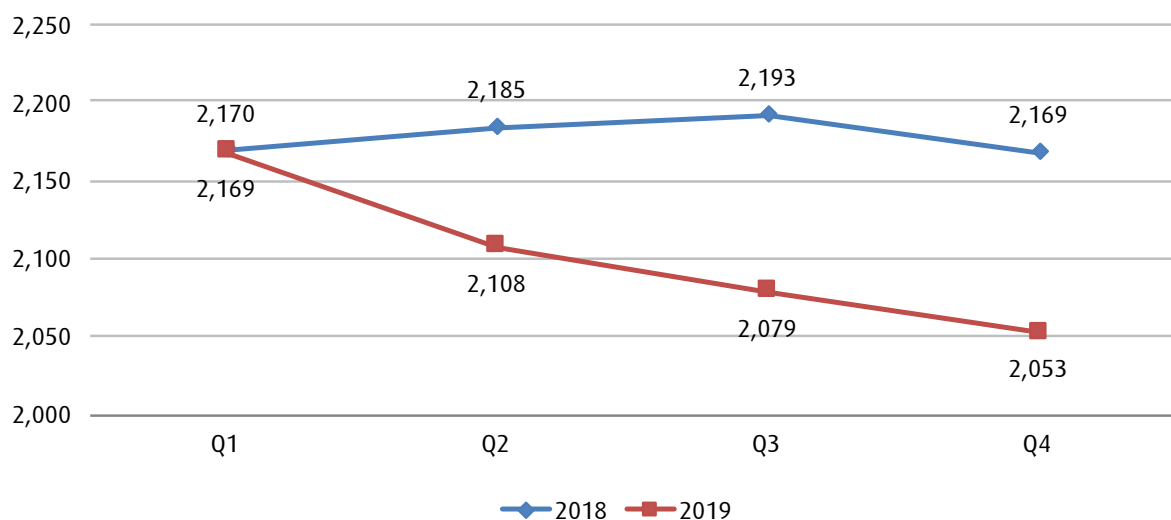
The number of nurses in public health centres has slightly decreased by 2.2% by end of December 2019 (10,833) compared to end of March 2019 (11,082).

Figure 26: Trend analysis of reported number of nurses on quarterly basis during 2018 and 2019



The number of midwives in public health centres has slightly decreased by 5.3% in December 2019 (2,053), compared to March 2019 (2,169).

Figure 27: Trend analysis of reported number of midwives on quarterly basis during 2018 and 2019



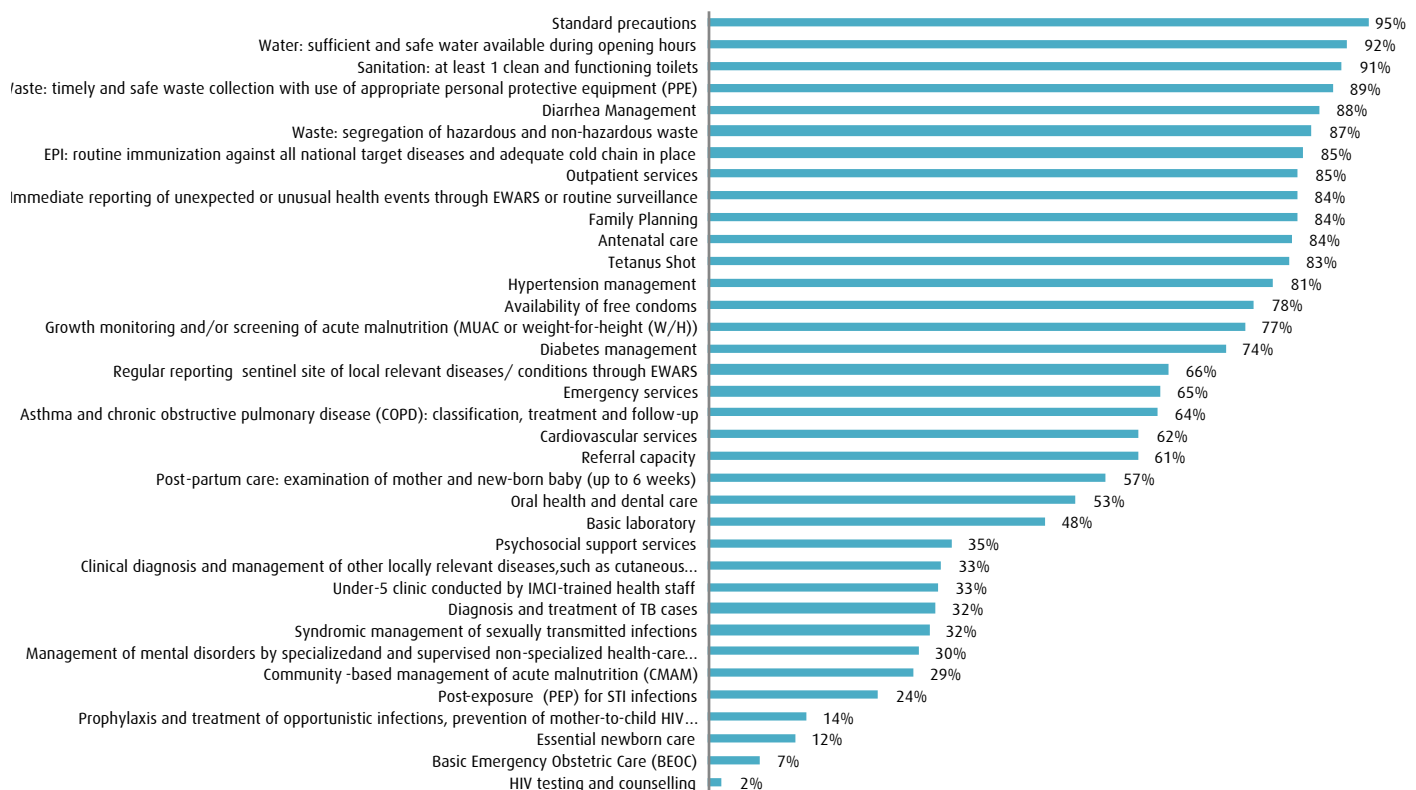
8. Availability of health services

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 28 shows the percentage of availability of health services across all functional health centres (fully and partially), a total of 1,258.

Figure 28: Percentage of availability of health services, across all functional health centres, 4th Quarter 2019

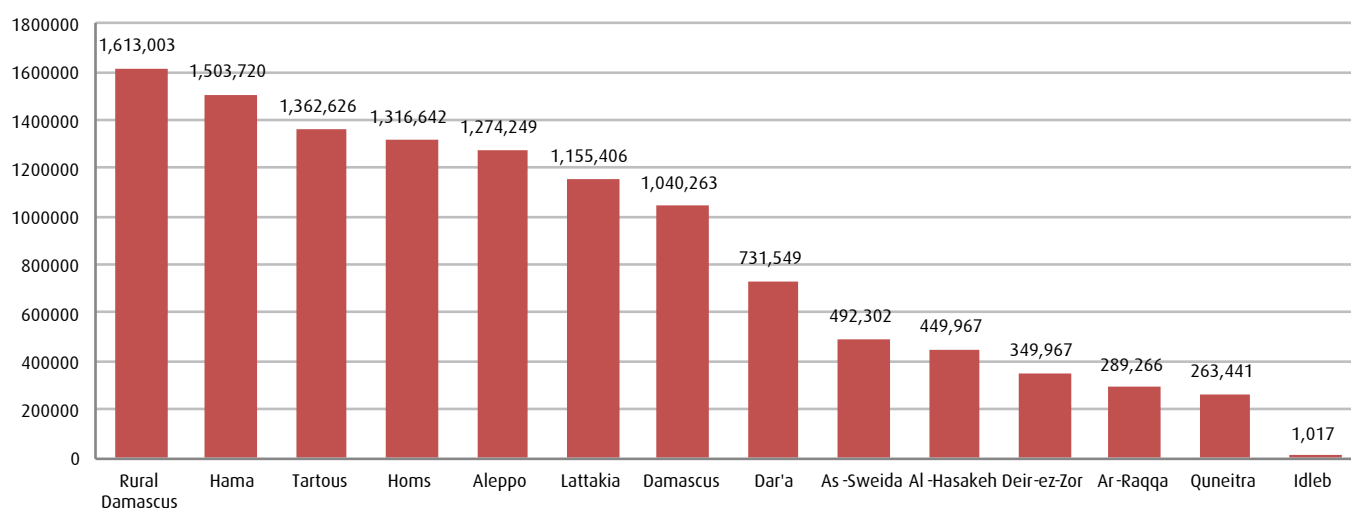


** Detailed information on availability of services per governorate and health centres is available in the HeRAMS Database.

The following section provides descriptive analysis for the workload and utilization of services in functional health centres throughout 2019, per governorate.

The workload was analyzed in terms of total consultations in all functional health centres during January to December 2019 [Figure 29]. The total reported workload across all governorates is 11,843,418; disaggregated as 3,123,225 in the 1st Quarter, 2,718,898 in the 2nd Quarter, 2,875,805 in the 3rd Quarter and 3,125,490 in the 4th Quarter 2019.

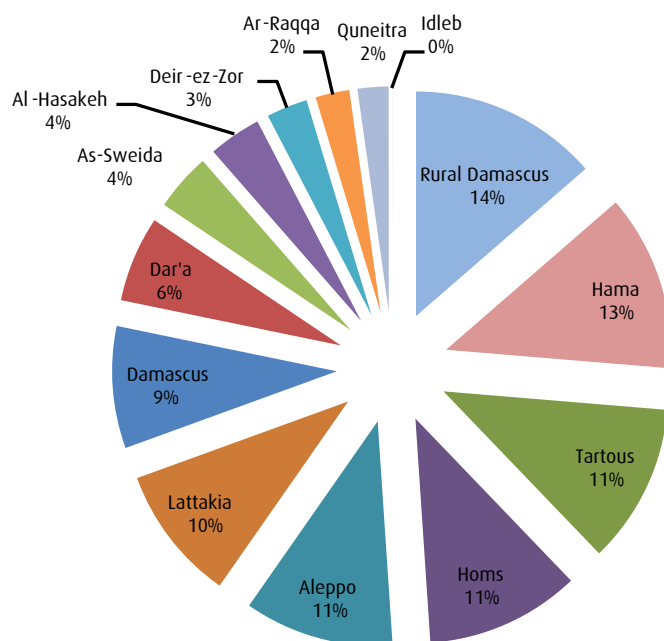
Figure 29: Estimated workload of functional health centres (consultations), 2019



The proportion of workload (consultations) of functional health centres per governorate is presented on Figure 30.

Detailed analysis on utilization of the core health services during the 4th Quarter 2019 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 30: Proportions of workload in health centres, January to December 2019, per governorate



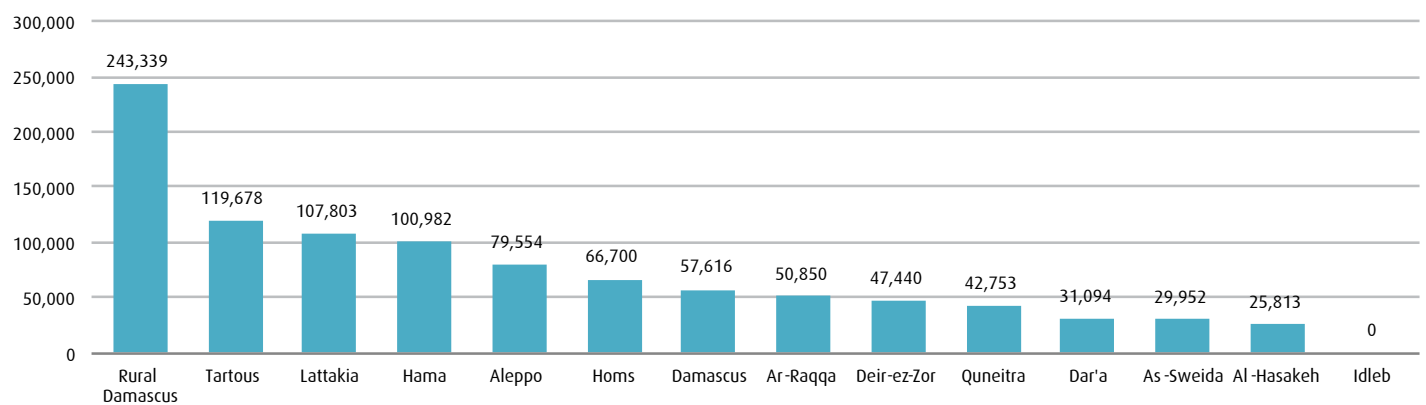
8.1 General clinical services

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

i. Outpatient

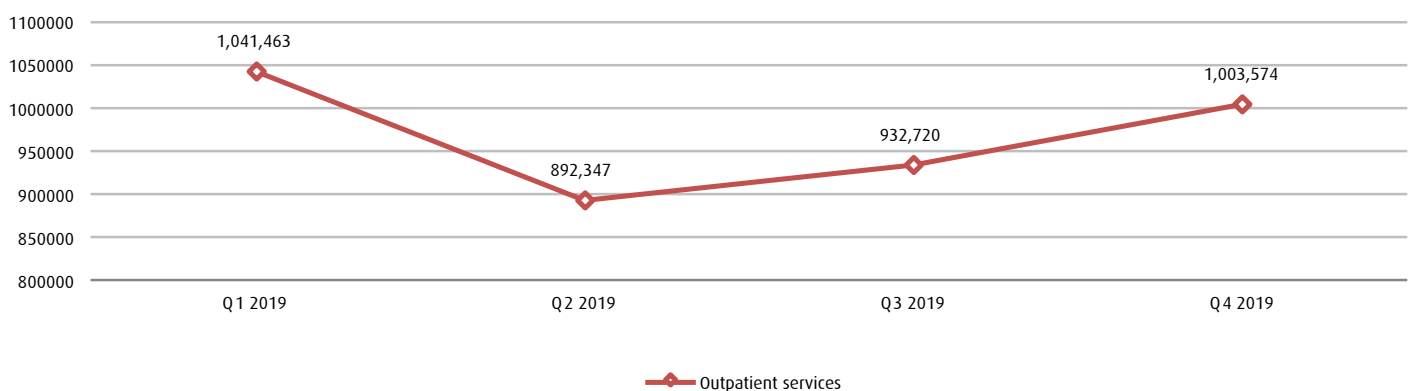
The outpatient services with availability of all essential drugs for primary care as per national guidelines were assessed at a health centre level, and the total reported number in the 4th Quarter 2019 is 1,003,574; disaggregated at governorate level in Figure 31.

Figure 31: The number of outpatients in health centres, 4th Quarter 2019



In 2019, the total reported outpatients in health centres are 3,870,104. Trend analysis per quarter is presented in [Figure 32].

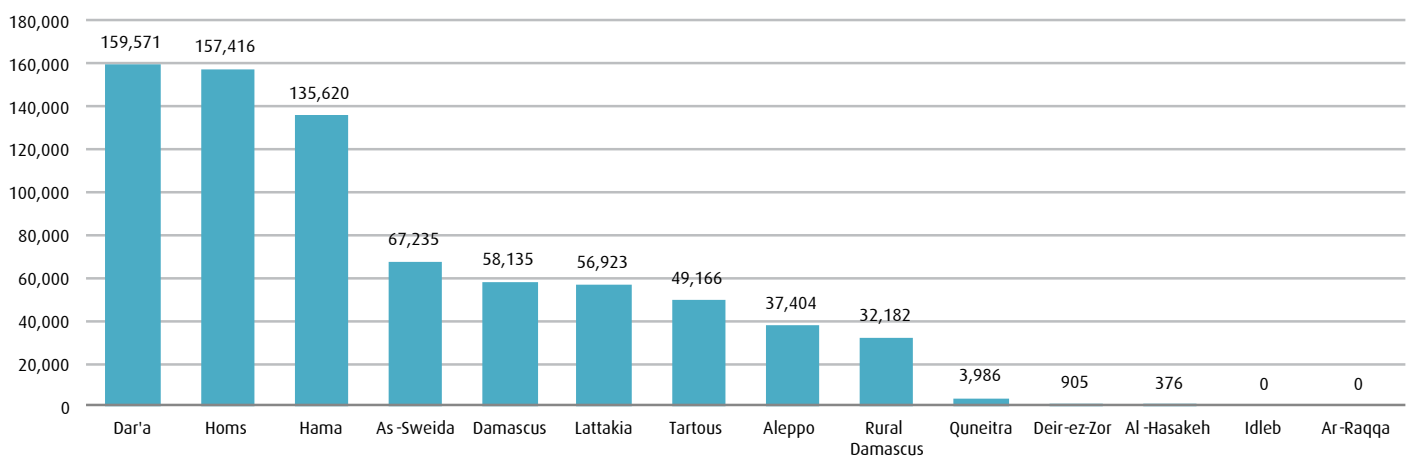
Figure 32: Trend analysis of outpatients in public health centres, per quarter, 2019



ii. Basic laboratory services

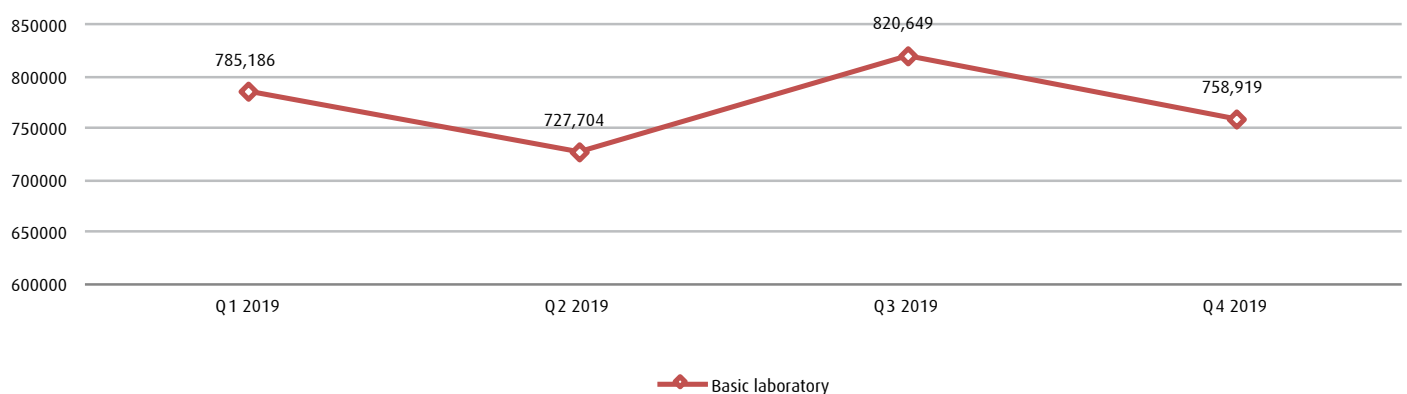
The number of patients received services in health centres' laboratories (i.e., Glycaemia, CBC, ...), was assessed at a health centre level. The total reported number in the 4th Quarter 2019 is 758,919; disaggregated at governorate level in Figure 33.

Figure 33: The number of patients received services in laboratories in health centres, 4th Quarter 2019



In 2019, the total reported number of patients received services in health centres' laboratories are 3,092,458. Trend analysis per quarter is presented in [Figure 34].

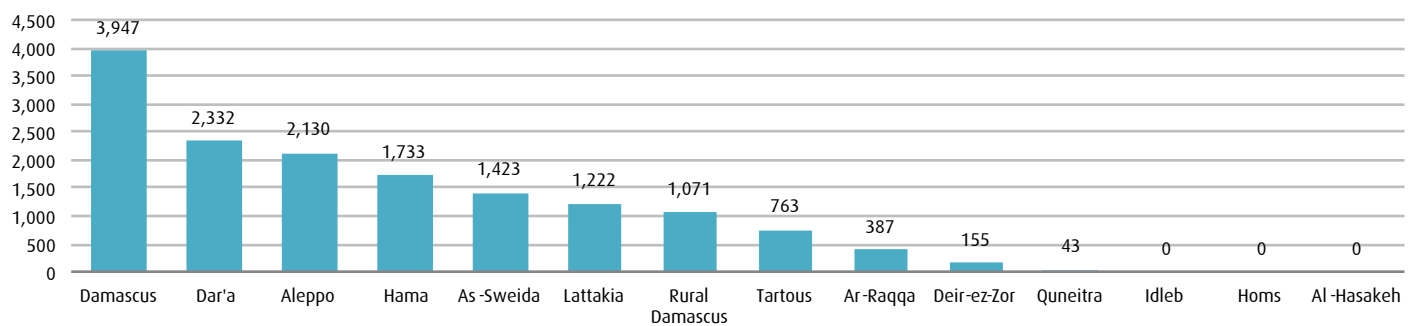
Figure 34: Trend analysis of number of patients received services in health centres' laboratories, per quarter, 2019



iii. Referral capacity

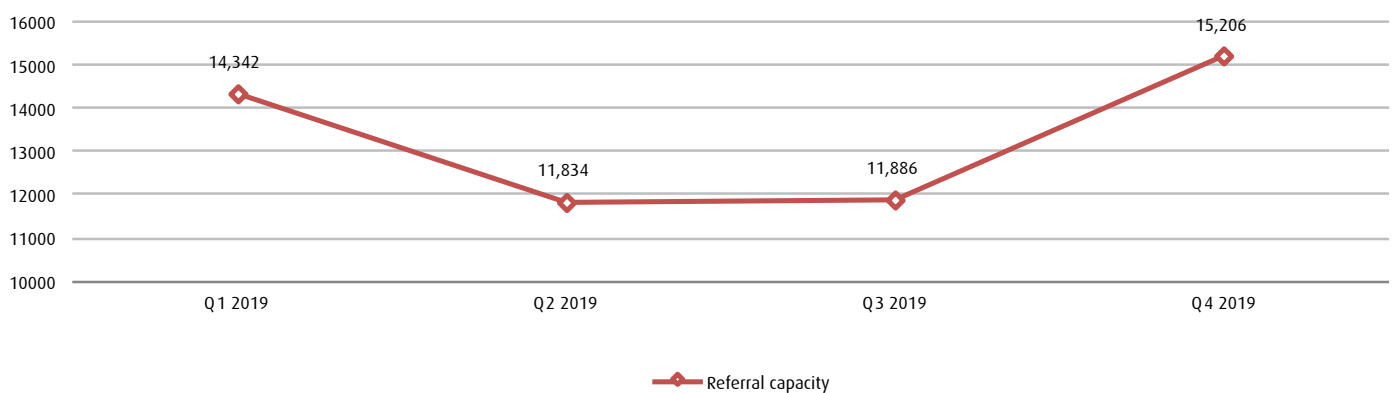
The referral capacity including: “referral procedures, means of communication, and access to transportation” was measured at a health centre level. The total reported number of referral cases in the 4th Quarter 2019 is 15,206; disaggregated at governorate level in Figure 35.

Figure 35: The number of referred cases per governorate, 4th Quarter 2019



In 2019, the total number of referred cases is 53,268. Trend analysis is presented in [Figure 36].

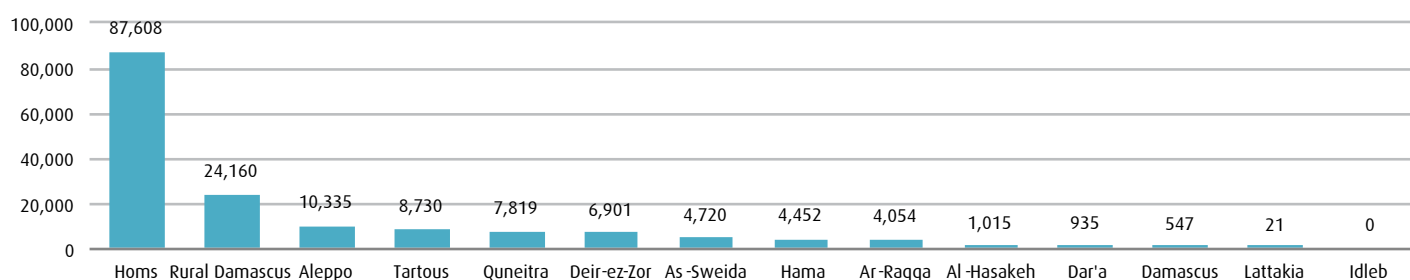
Figure 36: Trend analysis of referred cases per quarter, 2019



7.2 Emergency services

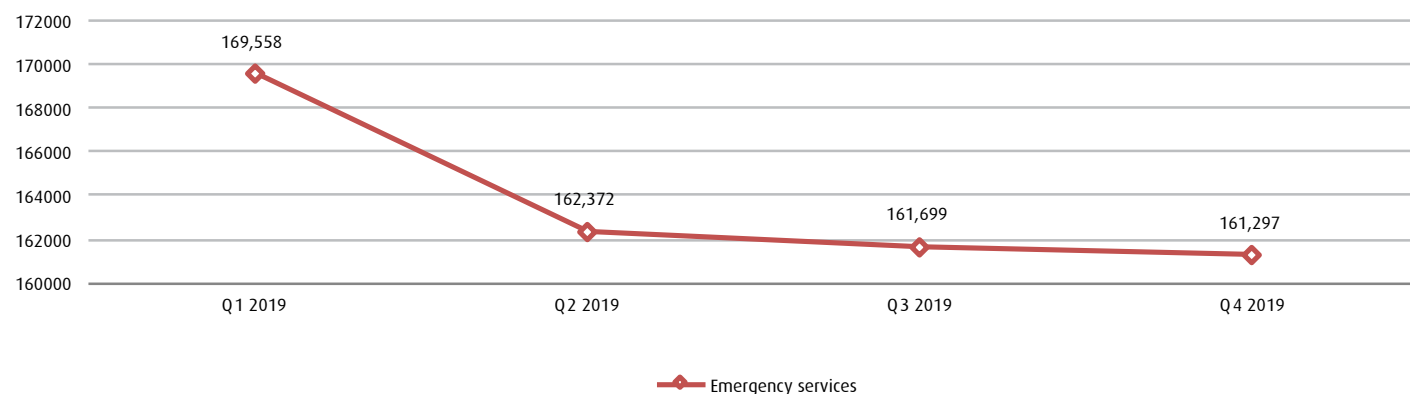
The emergency services including: “triage, assessment, first aid and life support (cardiopulmonary resuscitation (CPR) stabilization of patient with severe trauma and non-trauma emergencies before referral (IV line and saline solution for fluid resuscitation)” was assessed at a health centre level. The total reported number of cases in the 4th Quarter 2019 is 161,297; disaggregated at governorate level in Figure 37.

Figure 37: The number of emergency services cases reported in health centres, per governorate, 4th Quarter 2019



In 2019, the total number of cases reported in health centres is 654,926. Trend analysis per quarter in 2019, is presented in [Figure 38].

Figure 38: Trend analysis of emergency services cases in health centres, per quarter, 2019



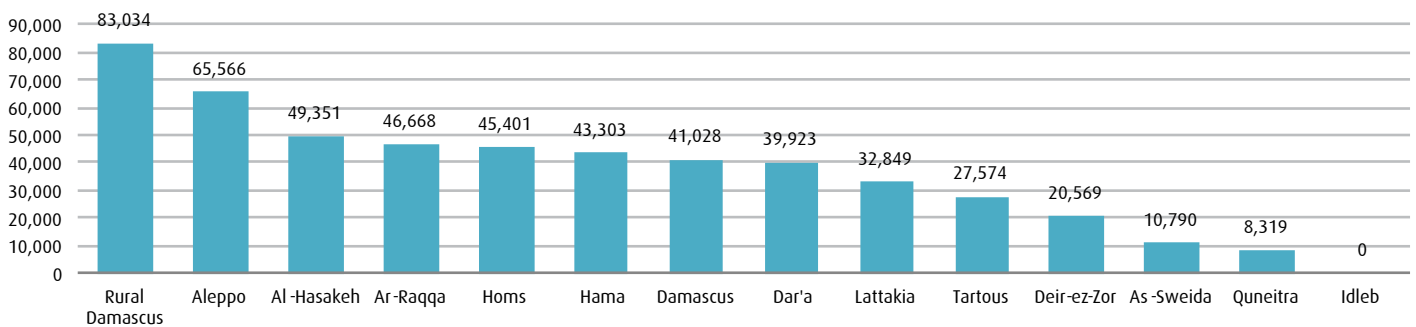
8.3 Child health

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:

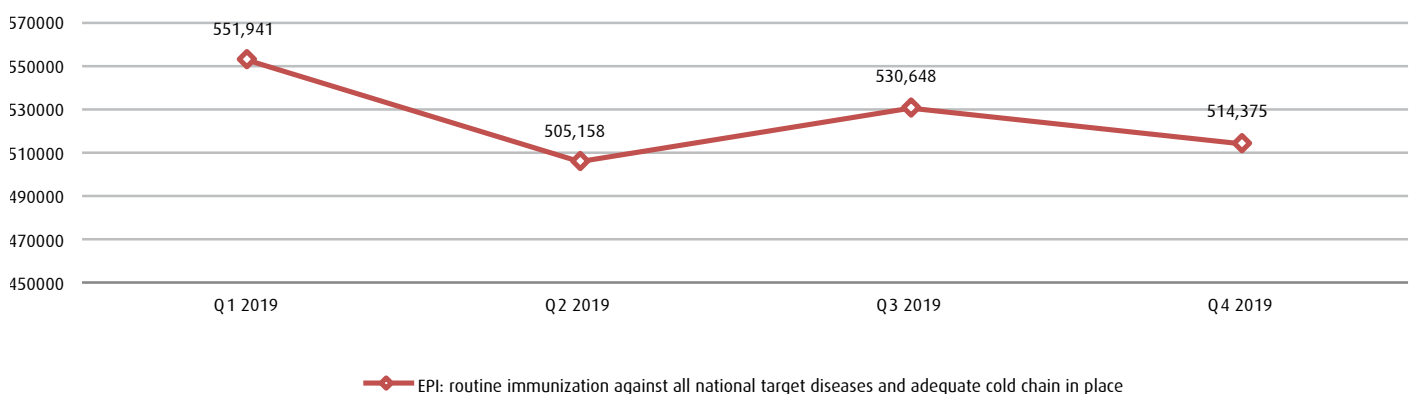
The number of children received routine immunization service through EPI was assessed at a health centre level. The total reported number in the 4th Quarter 2019 is 514,375 children; disaggregated at governorate level in Figure 39.

Figure 39: The number children received routine immunization service in health centres, 4th Quarter 2019



In 2019, the total number of vaccinated children in health centres through EPI is 2,102,122. Trend analysis per quarter is presented in [Figure 40].

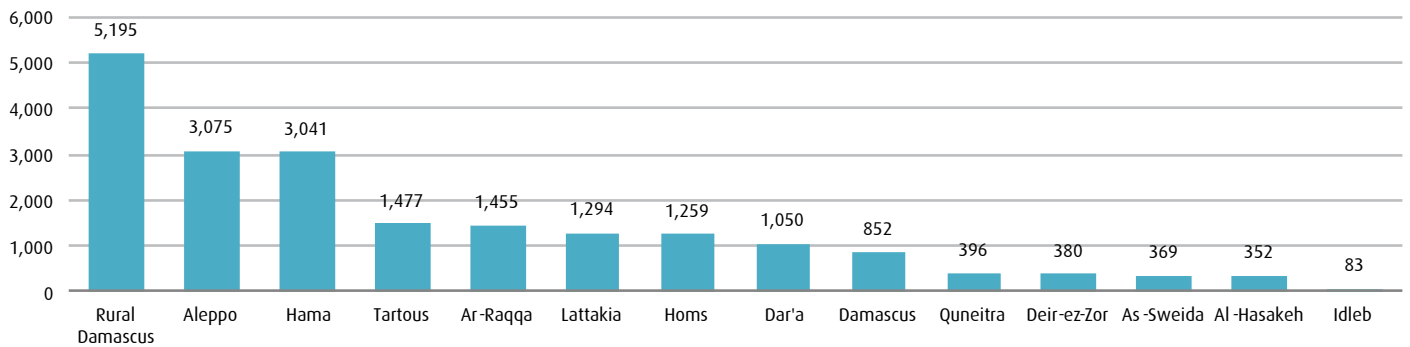
Figure 40: Trend analysis of children received routine immunization service in health centres, per quarter, 2019



ii. Diarrhea Management:

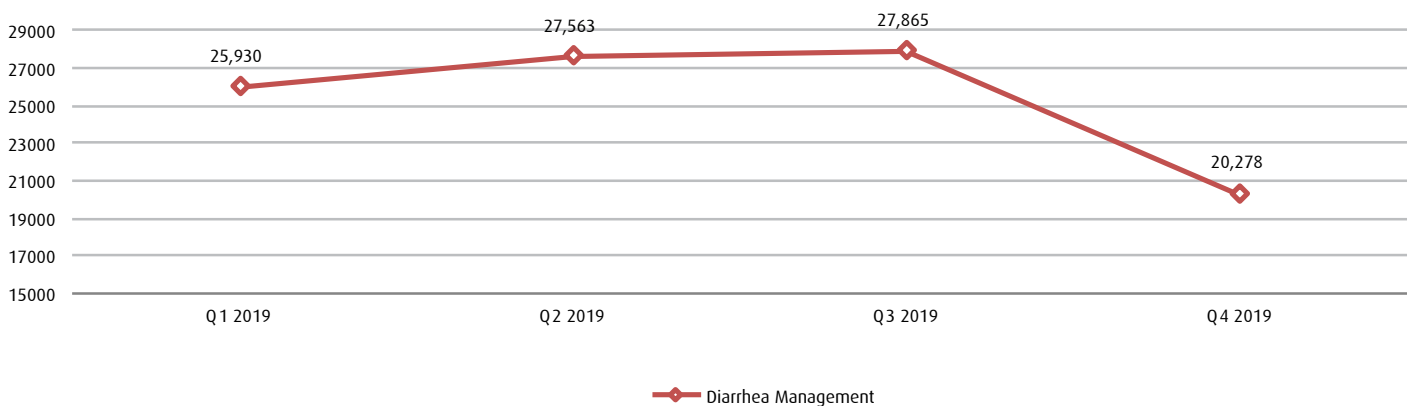
Diarrhea Management for children was assessed at a health centre level. The total reported number in the 4th Quarter 2019 is 20,278; disaggregated at governorate level in Figure 41.

Figure 41: The number of diarrhea cases (children) in health centres, 4th Quarter 2019



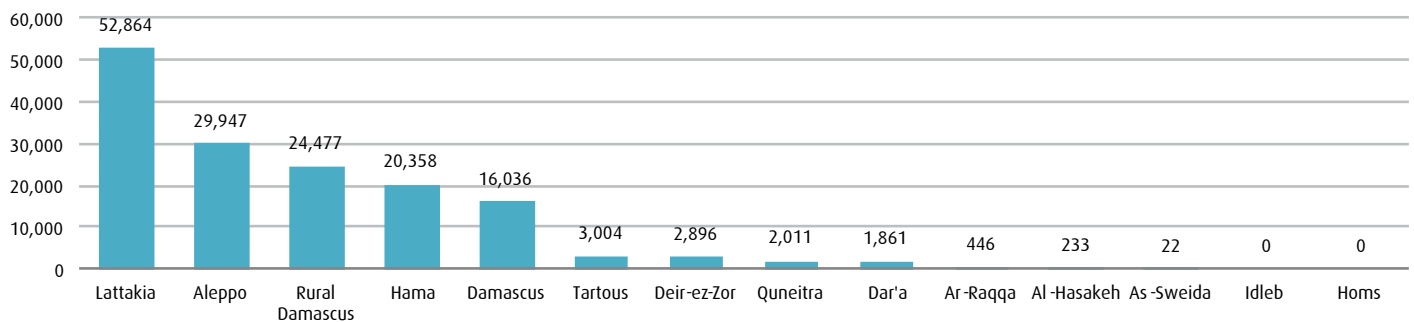
Trend analysis of diarrhea management for children in health centres, from January to December 2019, is presented in [Figure 42]. In 2019, the total number of children reported with diarrhea is 101,636.

Figure 42: Trend analysis of reported children with diarrhea in health centres, per quarter, 2019



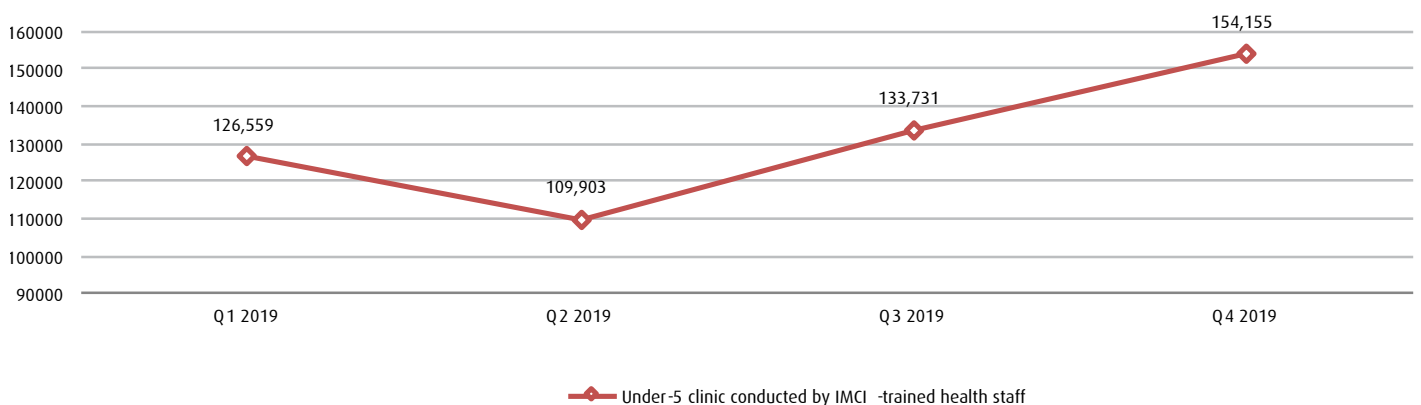
iii. **Under-5 clinic** conducted by IMCI-trained health staff with available paracetamol, first-line antibiotics, Oral rehydration salts (ORS) and zinc dispersible tablets, national IMCI guidelines and flowcharts was assessed at a health centre level. The total reported number in the 4th Quarter 2019 is 154,155; disaggregated at governorate level in Figure 43.

Figure 43: The number of Under-5 clinic cases, 4th Quarter 2019



Trend analysis of Under-5 clinic cases in health centres, from January to December 2019, is presented in [Figure 44]. In 2019, the total number of Under-5 clinic cases is 524,348.

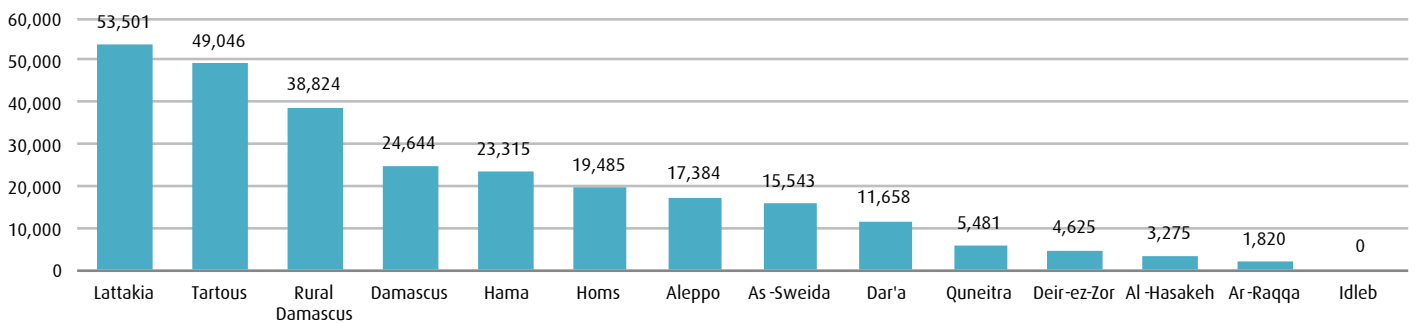
Figure 44: Trend analysis of Under-5 clinic cases in health centres, per quarter, 2019



8.4 Nutrition

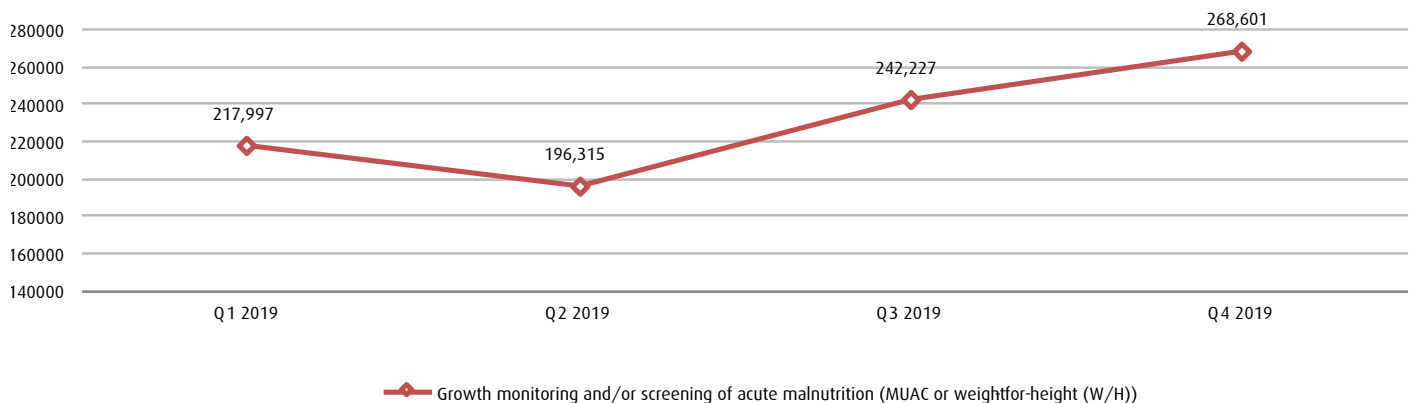
i. Growth monitoring and/or screening of acute malnutrition (MUAC or weight-for-height (W/H)) was assessed at a health centre level. The total reported number in the 4th Quarter 2019 is 268,601; disaggregated at governorate level in Figure 45.

Figure 45: The number of growth monitoring and/or screening of acute malnutrition cases, 4th Quarter 2019



Trend analysis of growth monitoring and/or screening of acute malnutrition cases in health centres, from January to December 2019, is presented in [Figure 46]. In 2019, the total number of growth monitoring and/or screening of acute malnutrition cases is 925,140.

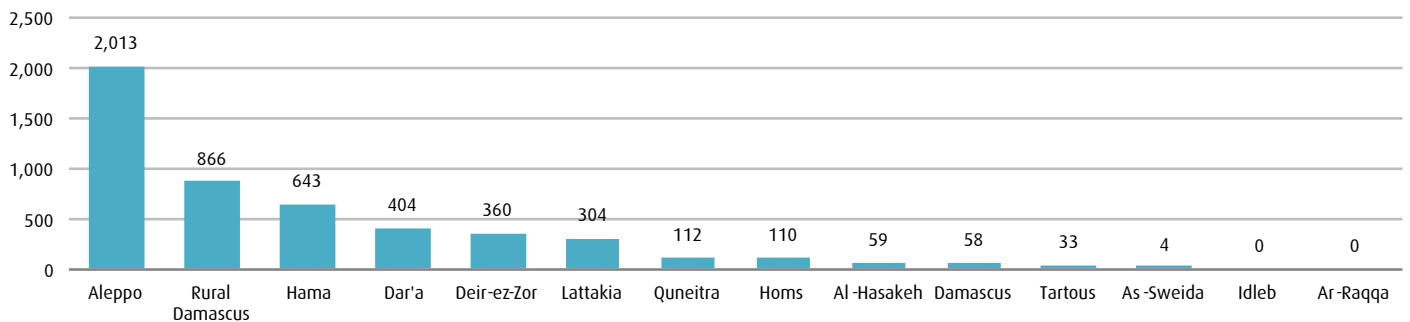
Figure 46: Trend analysis of growth monitoring and/or screening of acute malnutrition cases in health centres, per quarter, 2019



◆ Growth monitoring and/or screening of acute malnutrition (MUAC or weightfor-height (W/H))

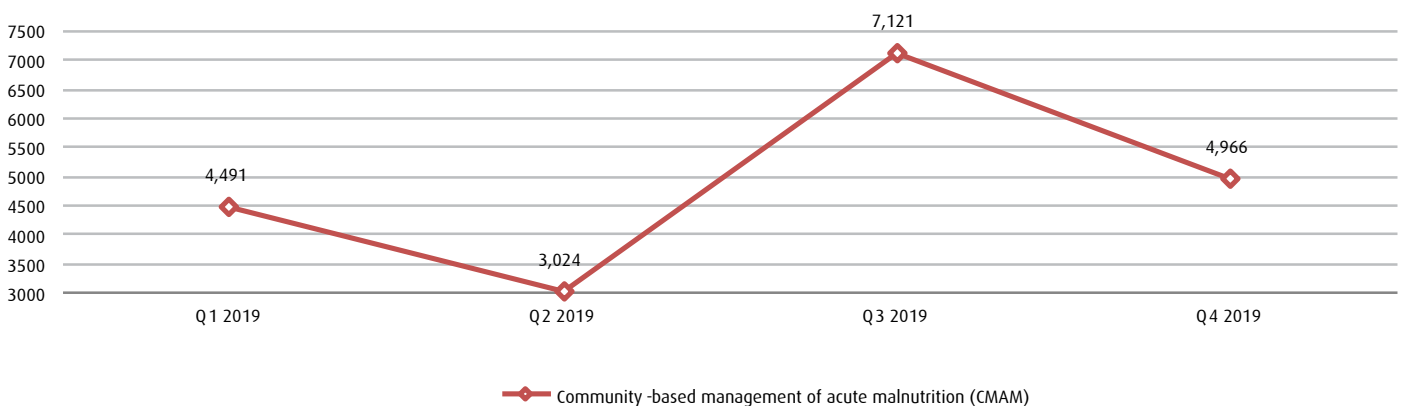
ii. Community-based **management of acute malnutrition (CMAM)** with outpatient programme for severe acute malnutrition without medical complications with ready-to-use therapeutic foods available was assessed at a health centre level. The total reported number in the 4th Quarter 2019 is 4,966; disaggregated at governorate level in Figure 47.

Figure 47: The number of management of acute malnutrition (CMAM) cases, 4th Quarter 2019



Trend analysis of management of acute malnutrition (CMAM) cases in health centres, from January to December 2019, is presented in [Figure 48]. In 2019, the total number of management of acute malnutrition (CMAM) is 19,602.

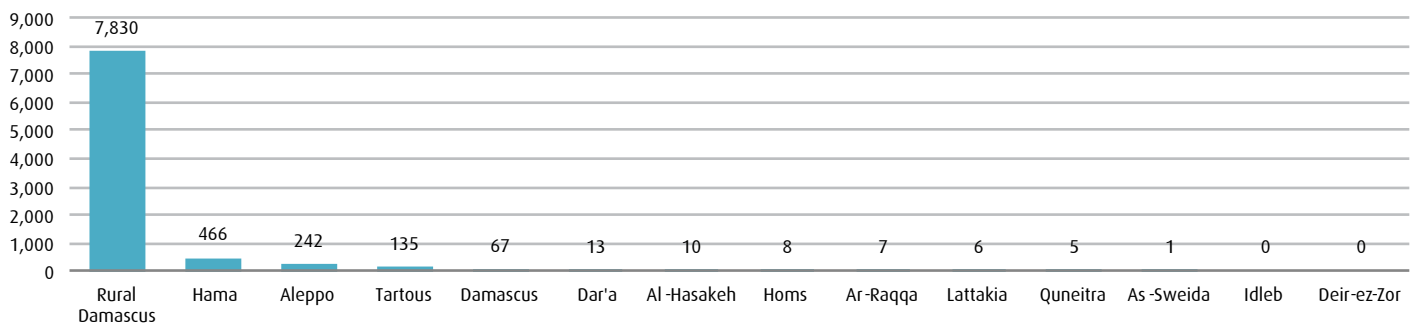
Figure 48: Trend analysis of management of acute malnutrition (CMAM) in health centres in health centres, per quarter, 2019



8.5 Communicable diseases

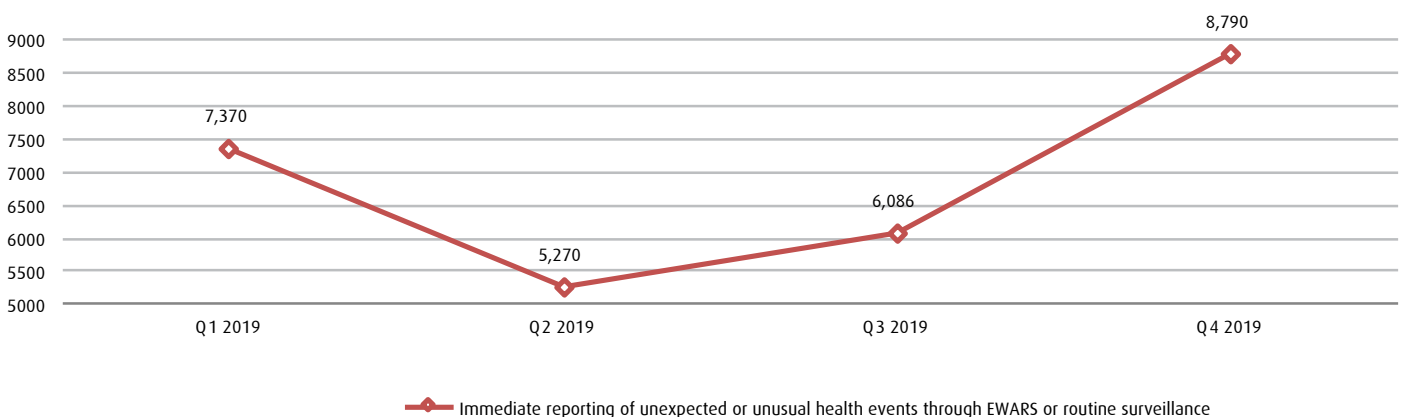
i. Immediate reporting of unexpected or unusual health events through EWARS or routine surveillance was assessed at a health centre level. The total number of reports in the 4th Quarter 2019 is 8,790; disaggregated at governorate level in Figure 49.

Figure 49: The number of immediate reporting of unexpected or unusual health events through EWARS or routine surveillance, 4th Quarter 2019



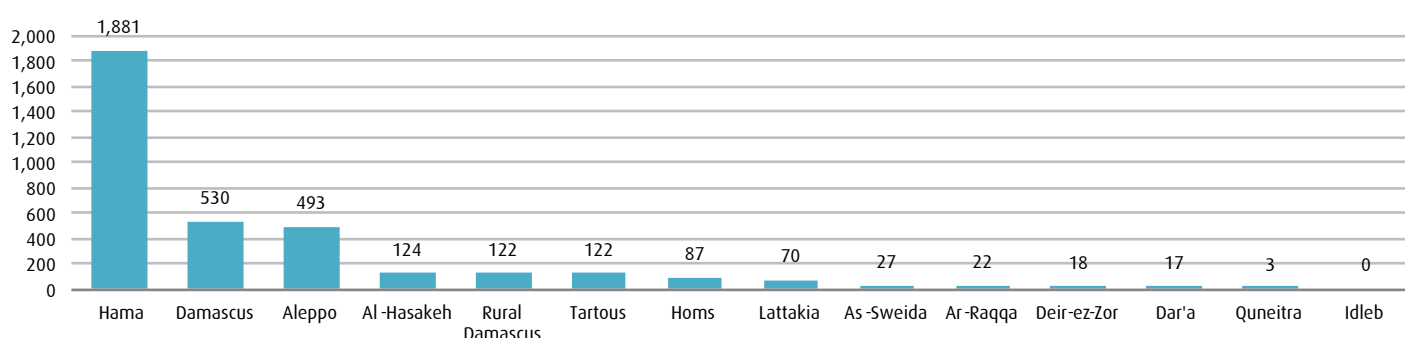
Trend analysis of immediate reporting of unexpected or unusual health events through EWARS or routine surveillance in health centres, from January to December 2019, is presented in [Figure 50]. In 2019, the total number of reports is 27,516.

Figure 50: Trend analysis of immediate reporting of unexpected or unusual health events through EWARS or routine surveillance in health centres in health centres, per quarter, 2019



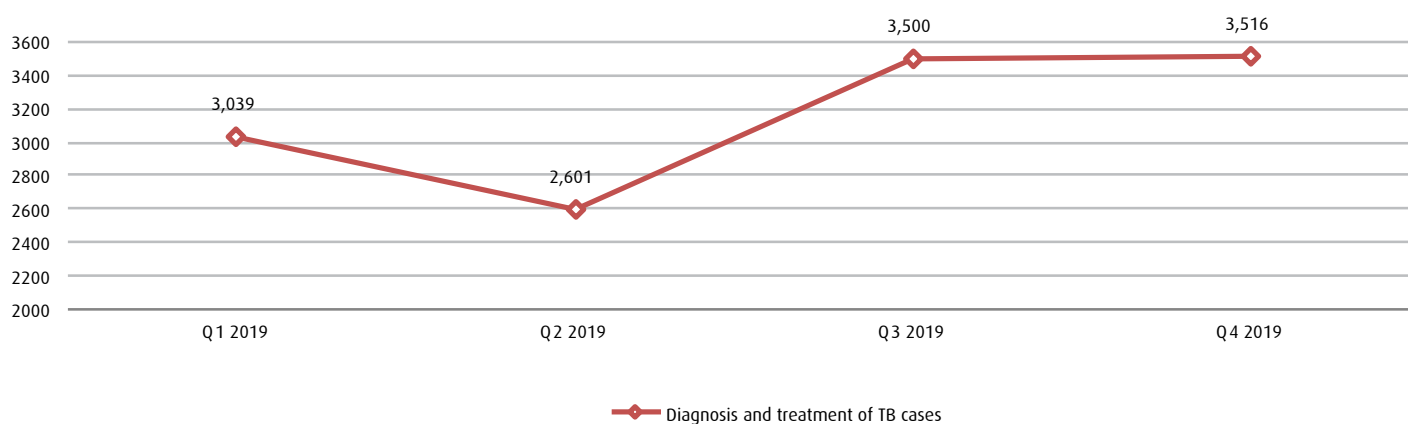
ii. Diagnosis and treatment of TB cases, or detection and referral of suspected cases, and follow-up was assessed at a health centre level. The total reported number in the 4th Quarter 2019 is 3,516; disaggregated at governorate level in Figure 51.

Figure 51: The number of diagnosis and treatment of TB cases, 4th Quarter 2019



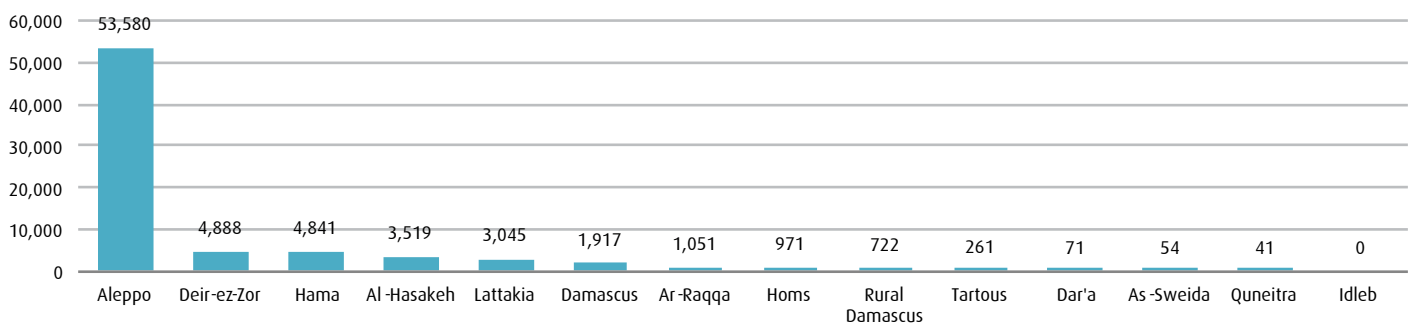
Trend analysis of diagnosis and treatment of TB cases in health centres, from January to December 2019, is presented in [Figure 52]. In 2019, the total number of diagnosis and treatment of TB cases is 12,656.

Figure 52: Trend analysis of diagnosis and treatment of TB cases in health centres, per quarter, 2019



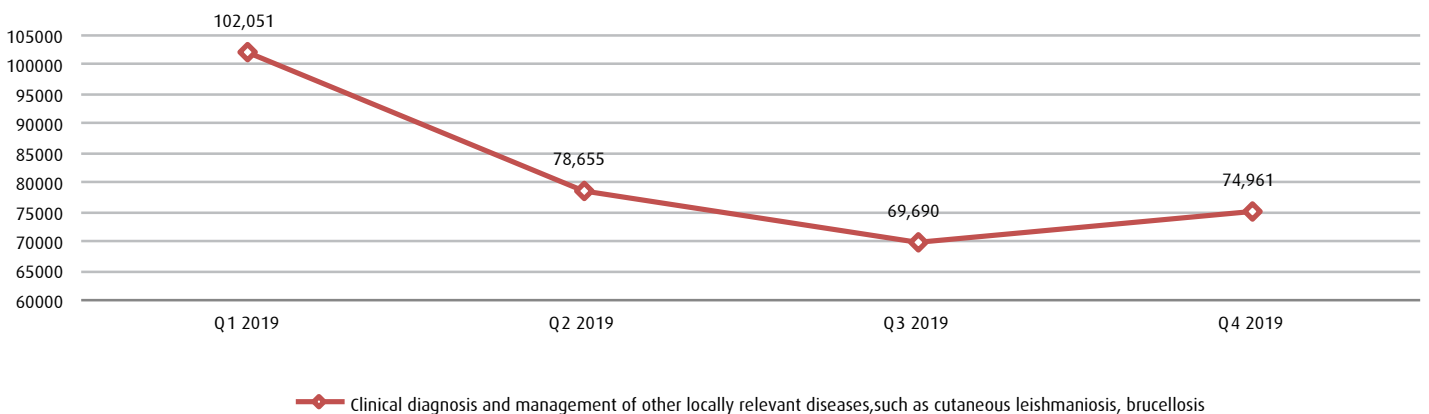
iii. Clinical diagnosis and management of **other locally relevant diseases, (such as cutaneous leishmaniosis, brucellosis)**, with protocols available for identification, classification, stabilization and referral of severe cases was assessed at a health centre level. The total reported number in the 4th Quarter 2019 is 74,961; disaggregated at governorate level in Figure 53.

Figure 53: The number of diagnosis and management of other locally relevant diseases cases, 4th Quarter 2019



Trend analysis of diagnosis and management of other locally relevant diseases cases in health centres, from January to December 2019, is presented in [Figure 54]. In 2019, the total number of diagnosis and management of other locally relevant diseases cases is 325,357.

Figure 54: Trend analysis of diagnosis and management of other locally relevant diseases cases in health centres in health centres, per quarter, 2019



8.6 Sexual and reproductive health

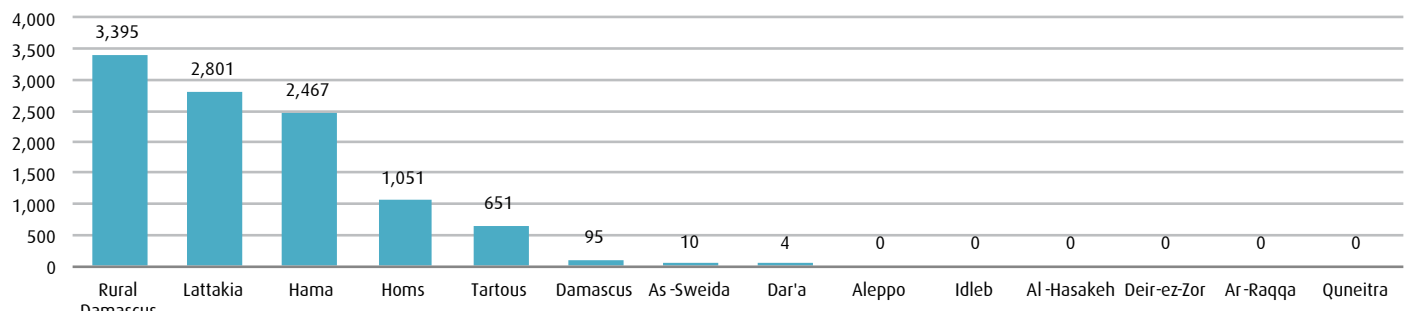
Availability and utilization of sexual & reproductive health care in health centres is assessed at a health centre level for syndromic management of sexually transmitted infections, family planning, antenatal care, normal deliveries, essential newborn care, Post-partum care, and tetanus shots.

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 2019 is 10,474; disaggregated at governorate level in Figure 55.

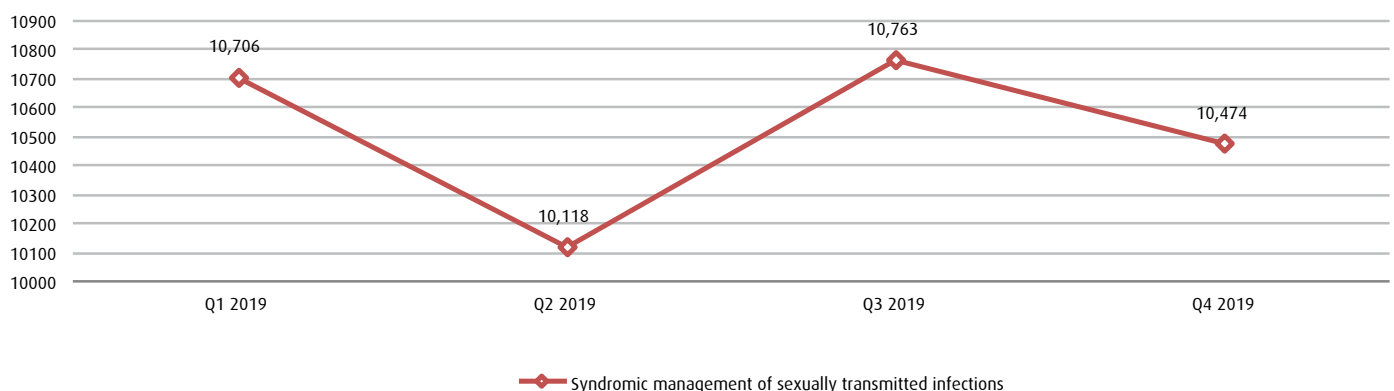
Of note: the availability of Syndromic management of STIs is reported in six governorates and mainly in comprehensive/ poly clinics. In other governorates, if any case reported to a health centre, they refer it to the health centres based on available capacity.

Figure 55: The number of cases reported with sexually transmitted infections in health centres, 4th Quarter 2019



Trend analysis of number of reported cases with sexually transmitted infections (STIs) in health centres, from January to December 2019, is presented in [Figure 56]. In 2019, the total number of reported STIs cases is 42,061.

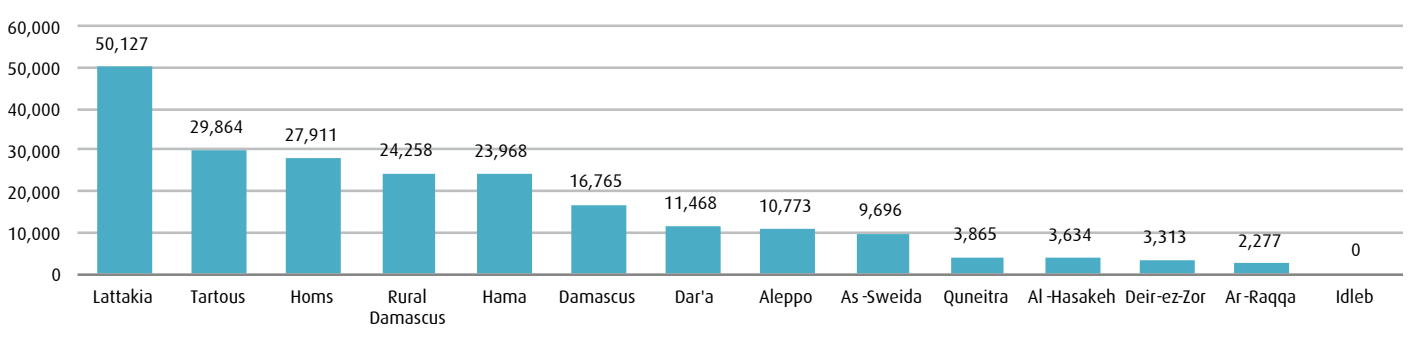
Figure 56: Trend analysis of reported cases of STIs in health centres, per quarter, 2019



ii. Family Planning:

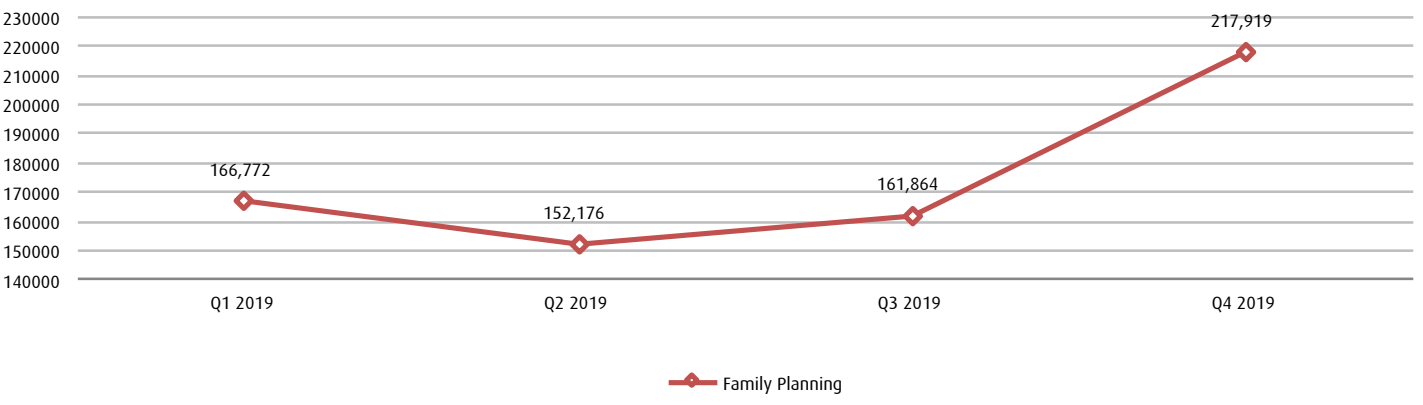
The family planning service was assessed at a health centre level. The total reported number of women received the service in the 4th Quarter 2019 is 217,919; disaggregated at governorate level in Figure 57.

Figure 57: The number of women received family planning services in health centres, 4th Quarter 2019



Trend analysis of number of women received family planning services in health centres, from January to December 2019, is presented in [Figure 58]. In 2019, the total number of women received family planning services in health centres is 698,731.

Figure 58: Trend analysis of number of pregnant women received family planning services in health centres, per quarter, 2019

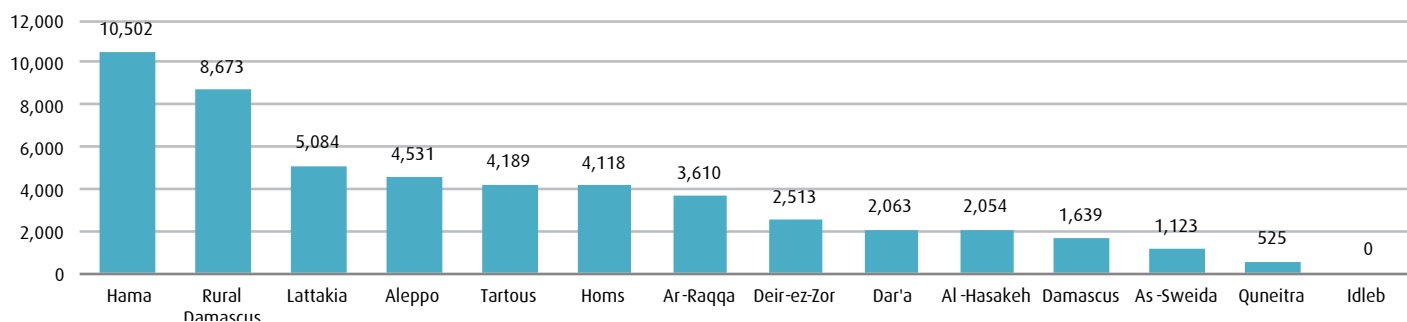


iii. Antenatal care

a) Antenatal Care:

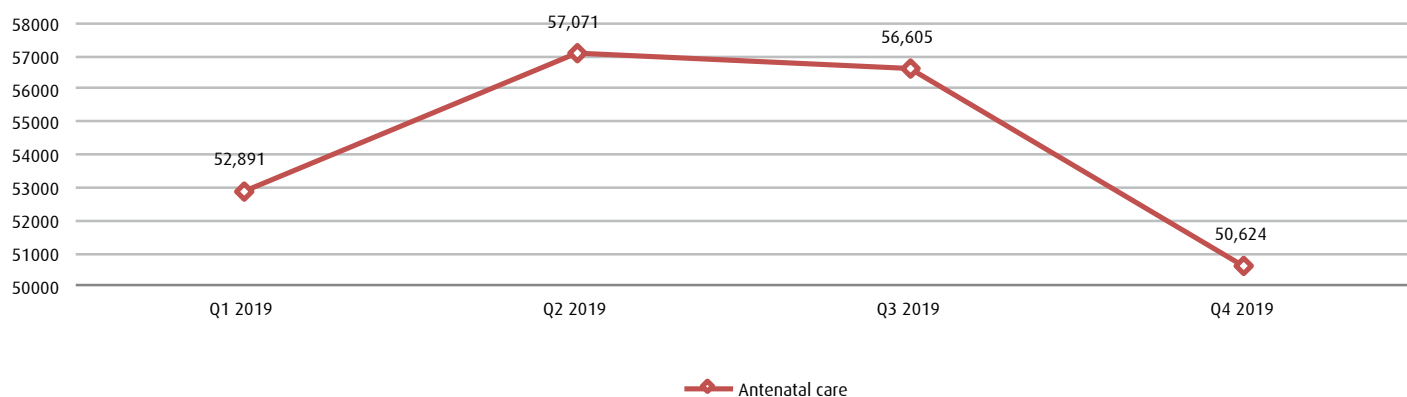
The antenatal care (i.e., assess pregnancy, birth and emergency plan, respond to problems (observed and/or reported), advise/counsel on nutrition & breastfeeding, self-care and family planning, preventive treatment(s) as appropriate) was assessed at a health centre level. The total reported number of pregnant women received the service in the 4th Quarter 2019 is 50,624; disaggregated at governorate level in Figure 59.

Figure 59: The number of pregnant women received antenatal services in health centres, 4th Quarter 2019



Trend analysis of number of pregnant women received antenatal services in health centres, from January to December 2019, is presented in [Figure 60]. In 2019, the total number of pregnant women received antenatal services in health centres is 217,191.

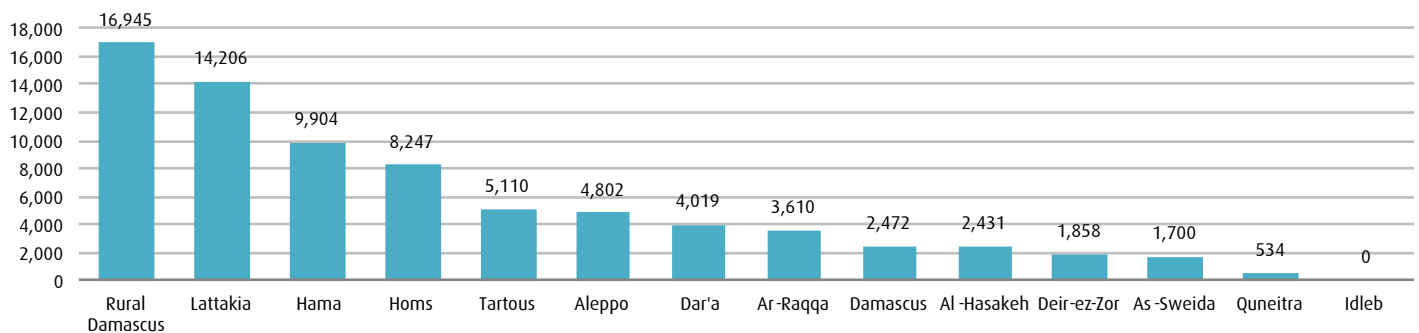
Figure 60: Trend analysis of number of pregnant women received antenatal services in health centres, per quarter, 2019



b) Antenatal visits:

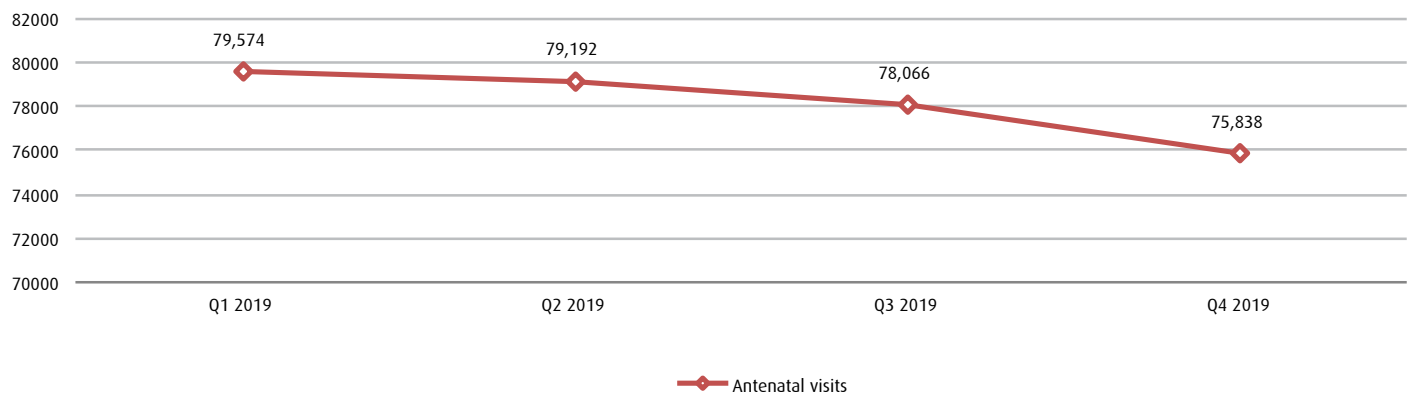
The number of antenatal visits was assessed at a health centre level. The total reported number of visits for pregnant women received the service in the 4th Quarter 2019 is 75,838; disaggregated at governorate level in Figure 61.

Figure 61: The number of antenatal visits in health centres, 4th Quarter 2019



Trend analysis of number of antenatal visits in health centres, from January to December 2019, is presented in [Figure 62]. In 2019, the total number of antenatal visits in health centres is 312,670.

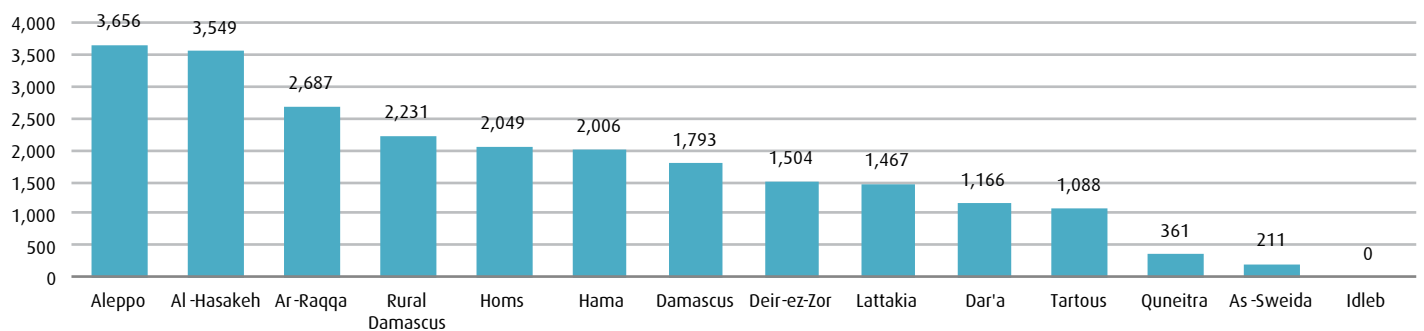
Figure 62: Trend analysis of antenatal visits in health centres, per quarter, 2019



c) Tetanus Shots:

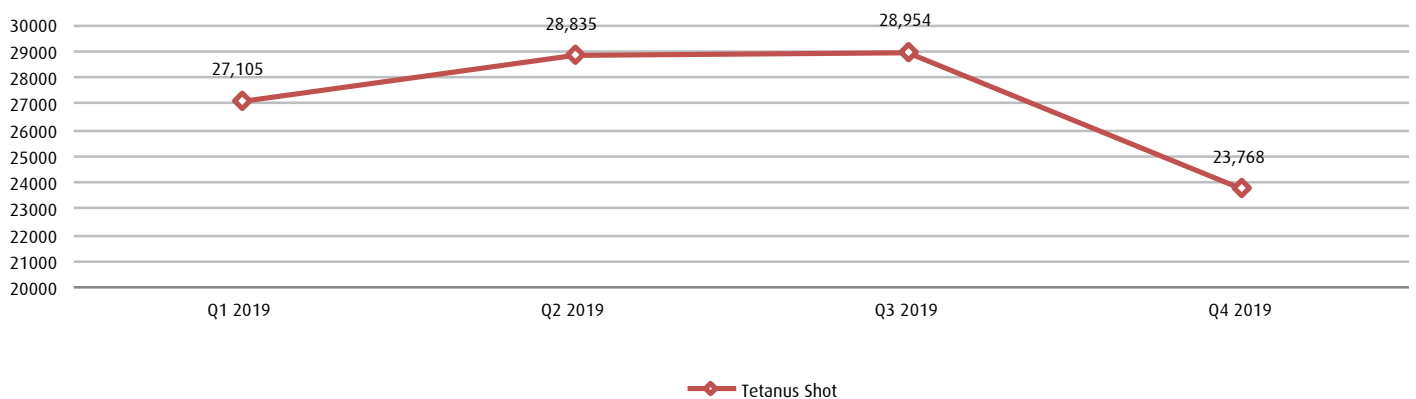
The number of pregnant women received Tetanus Shots was assessed at a health centre level. The total reported number of women received the service in the 4th Quarter 2019 is 23,768; disaggregated at governorate level in Figure 63.

Figure 63: The number of pregnant women received tetanus shot in health centres, 4th Quarter 2019



Trend analysis of number of pregnant women received tetanus shots in health centres, from January to December 2019, is presented in [Figure 64]. In 2019, the total number of pregnant women is 108,662.

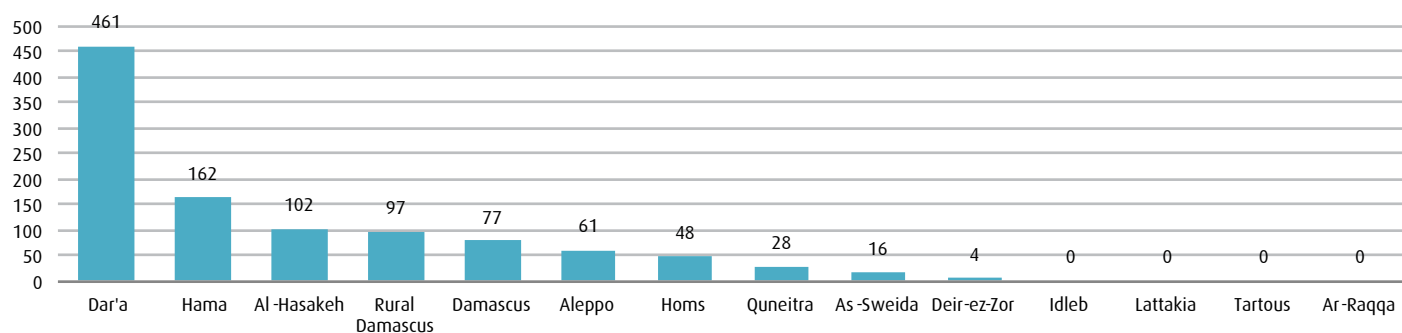
Figure 64: Trend analysis of number of pregnant women received tetanus shots, per quarter, 2019



d) Normal deliveries:

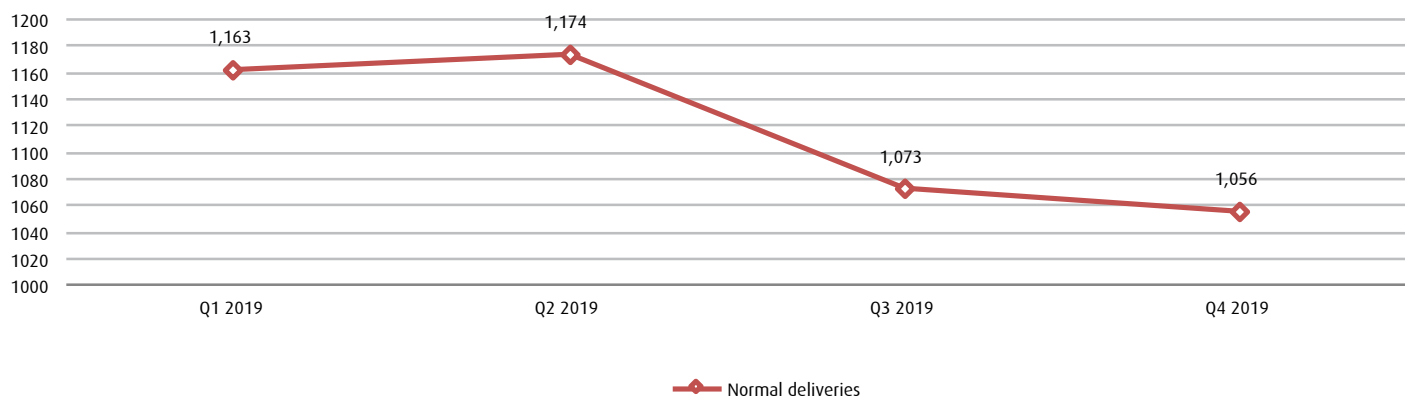
The number of Normal deliveries was assessed at a health centre level. The total reported number in the 4th Quarter 2019 is 1,056; disaggregated at governorate level in Figure 65.

Figure 65: The number of normal deliveries in health centres, 4th Quarter 2019



Trend analysis of number of normal deliveries in health centres, from January to December 2019, is presented in [Figure 66]. In 2019, the total number of normal deliveries is 4,466.

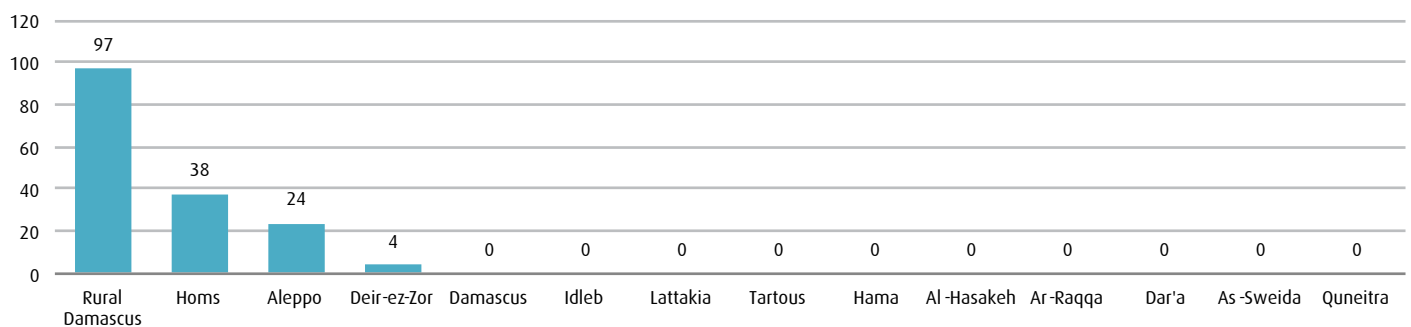
Figure 66: Trend analysis of normal deliveries in health centres, per quarter, 2019



e) Basic Emergency Obstetric Care (BEOC):

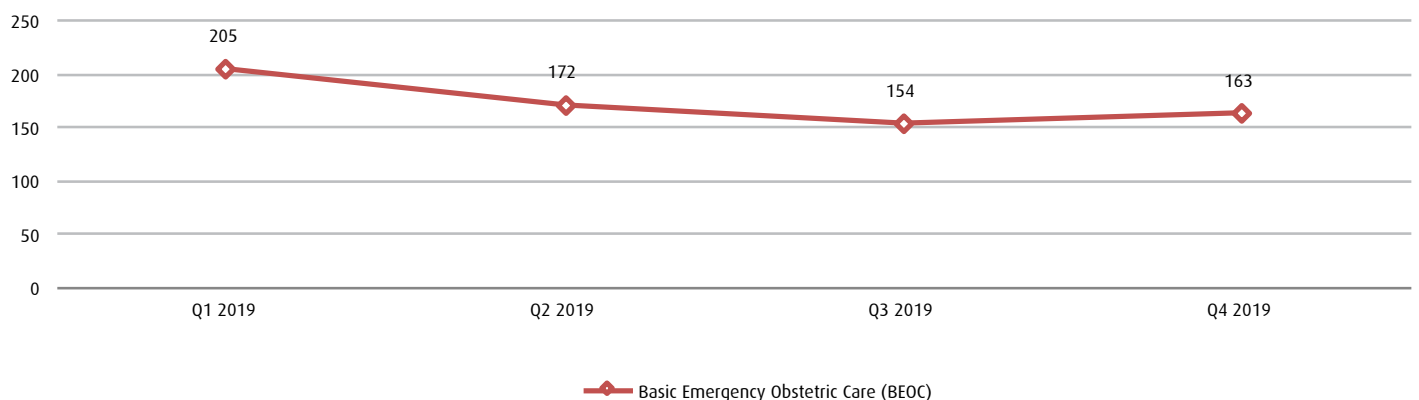
Availability and utilization of BEOC service (including: parenteral antibiotics + oxytocic/anticonvulsant drugs + manual removal of placenta + removal of retained products with manual vacuum aspiration (MVA) + assisted vaginal delivery 24/24 & 7/7^{*}), was assessed at a health centre level. The total reported number of women received the service in the 4th Quarter 2019 is 163; disaggregated at governorate level in Figure 67.

Figure 67: The number of women received BEOC in health centres, 4th Quarter 2019



Trend analysis of number of women received BEOC service in health centres, from January to December 2019, is presented in [Figure 68]. In 2019, the total number of women is 694.

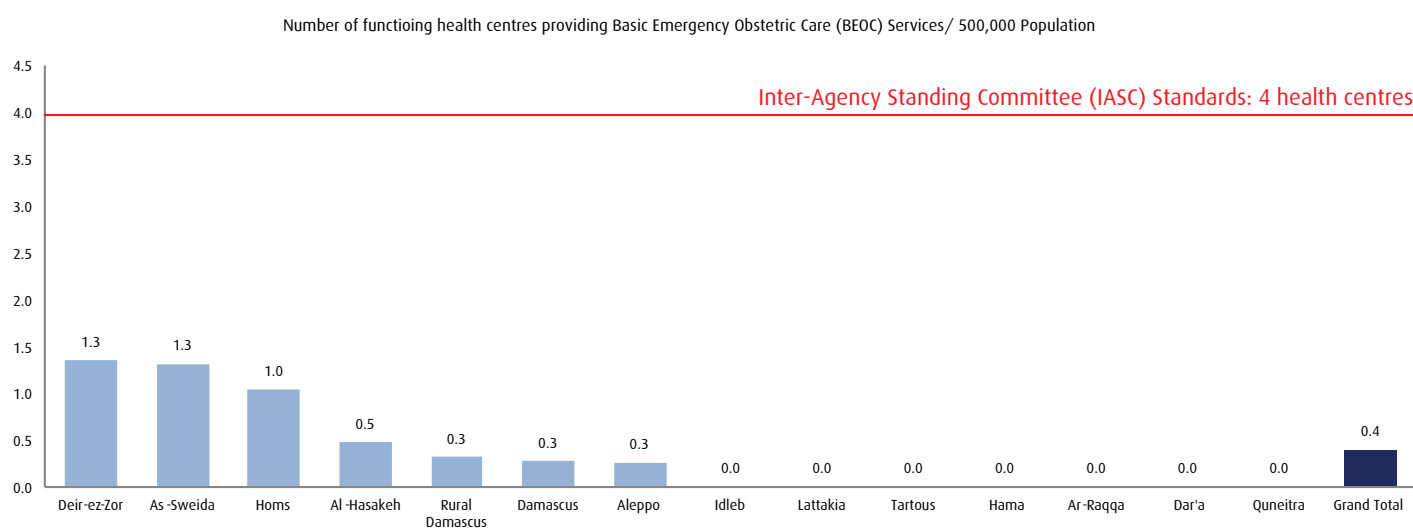
Figure 68: Trend analysis of women received BEOC in health centres, per quarter, 2019



The follow figure shows the number of functioning health centres providing (BEOC) Basic Emergency Obstetric Care (BEOC) (i.e., 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) services/ 500,000 population, given that the benchmark is at least 4 health centres providing BEOC services (Inter-Agency Standing Committee (IASC) Standards).

All governorates are below benchmark in [Figure 69].

Figure 69: Number of functioning health centres providing BEOC services/ 500,000 Population, December 2019

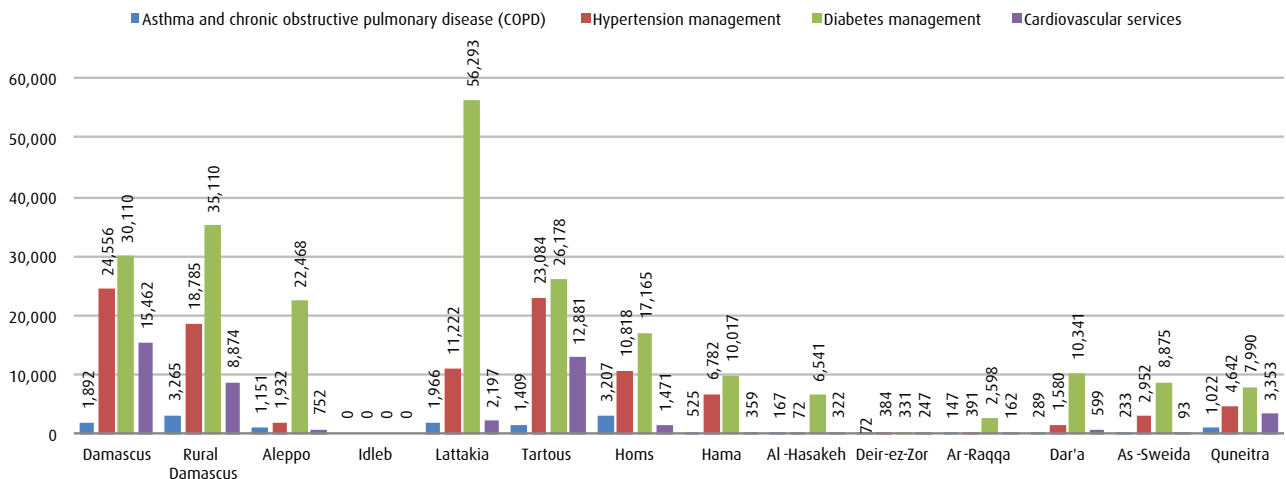


8.7 Noncommunicable diseases

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.

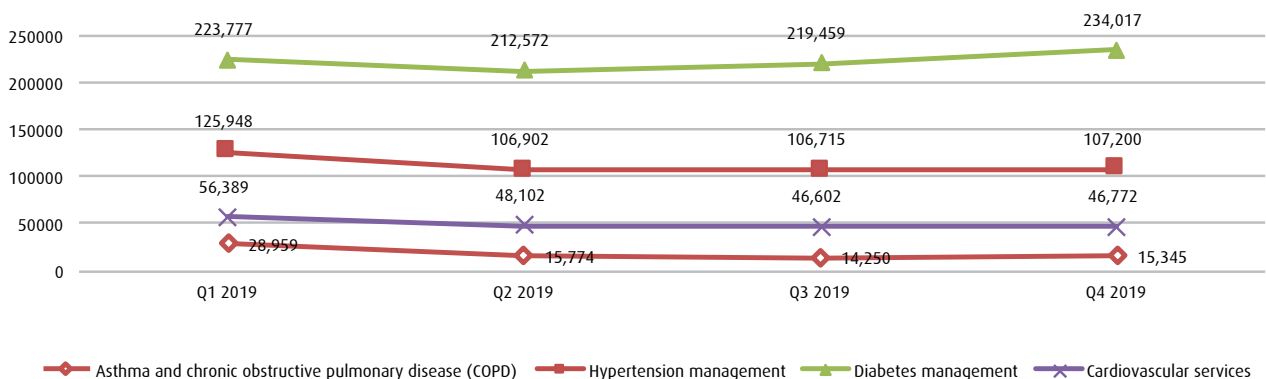
The total reported number of NCDs' consultations in the 4th Quarter 2019 is as follows: Asthma and chronic obstructive pulmonary disease (COPD) [15,345], Cardiovascular services [46,772], Hypertension management [107,200], and Diabetes management [234,017]; disaggregated figures are provided at governorate level in [Figure 70].

Figure 70: The number of NCDs consultations (COPD, Cardiovascular, Hypertension, and Diabetes in health centres, 4th Quarter 2019



Trend analysis of number of patients received NCDs health care services in health centres, from January to December 2019, is presented in [Figure 71]. In 2019, the total number of patients received NCDs' services are 1,608,783 , disaggregated as follows: 74,328 for Asthma and chronic obstructive pulmonary disease (COPD), 197,865 for cardiovascular, 446,765 for hypertension, and 889,825 for diabetes.

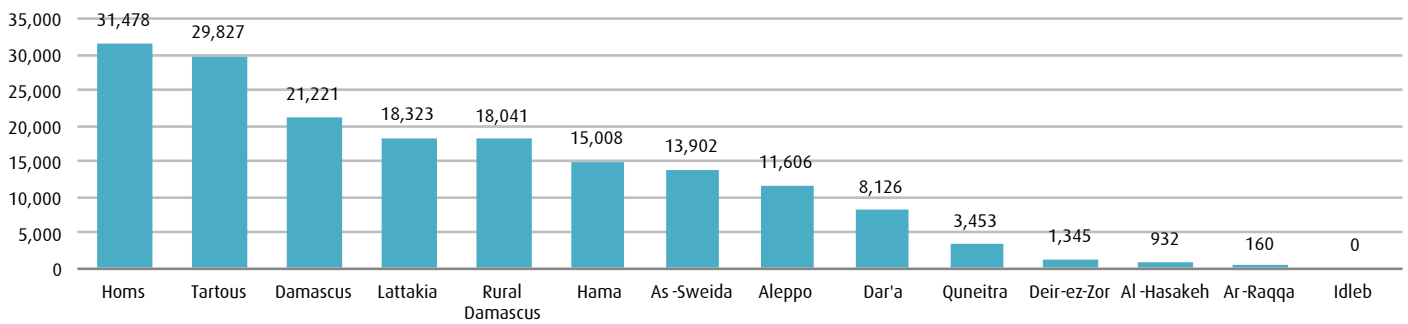
Figure 71: Trend analysis of NCDs' consultations in health centres, per quarter, 2019



8.8 Oral health and dental care

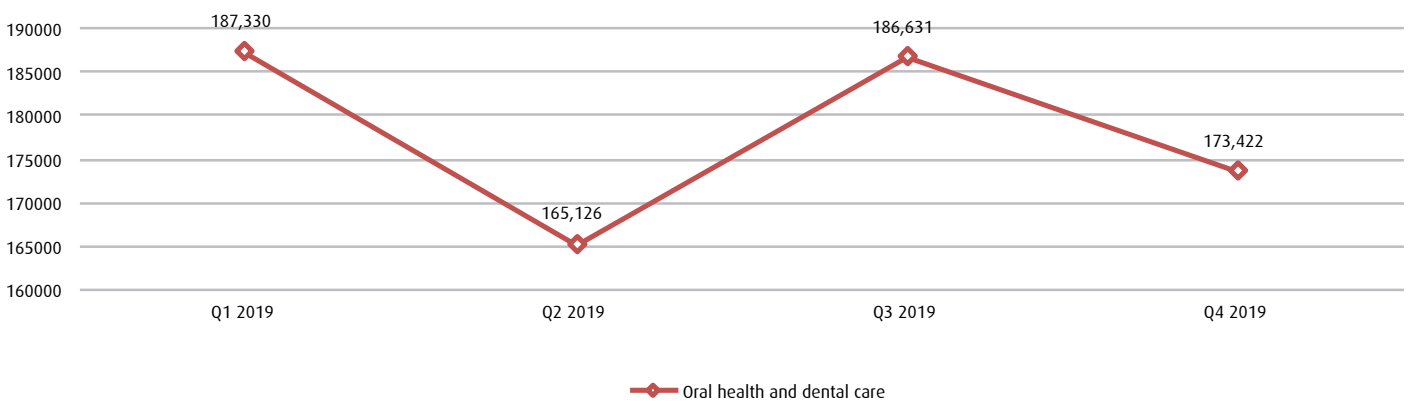
The total reported number in the 4th Quarter 2019 is 173,422; disaggregated at governorate level in [Figure 72].

Figure 72: The number of oral health and dental care cases in health centres, 4th Quarter 2019



Trend analysis of number of oral health and dental care cases in health centres, from January to December 2019, is presented in [Figure 73]. In 2019, the total number of patients is 712,509.

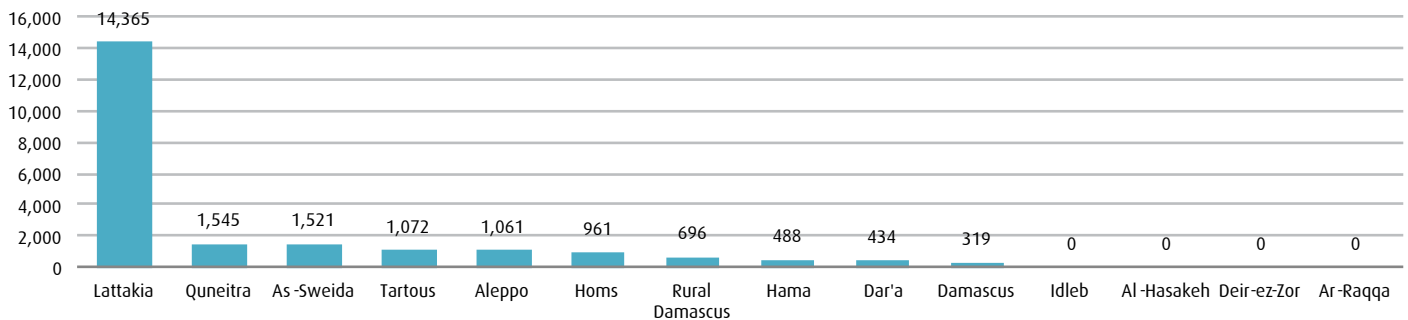
Figure 73: Trend analysis of oral health and dental care cases in health centres, per quarter, 2019



8.9 Mental health care

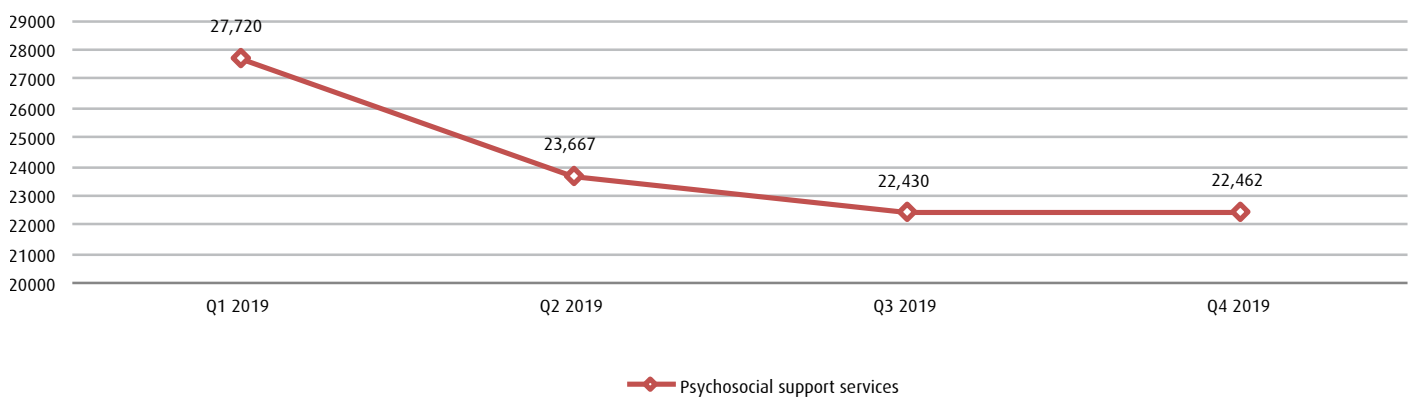
i. **Psychosocial support services** for distressed people, survivors of assault, abuse, neglect, and domestic violence, including Psychological first aid (PFA), and linking vulnerable individuals/families with resource (such as health services, livelihood assistance etc) was assessed at a health centre level. The total reported number in the 4th Quarter 2019 is 22,462; disaggregated at governorate level in [Figure 74].

Figure 74: The number of psychosocial support cases in health centres, 4th Quarter 2019



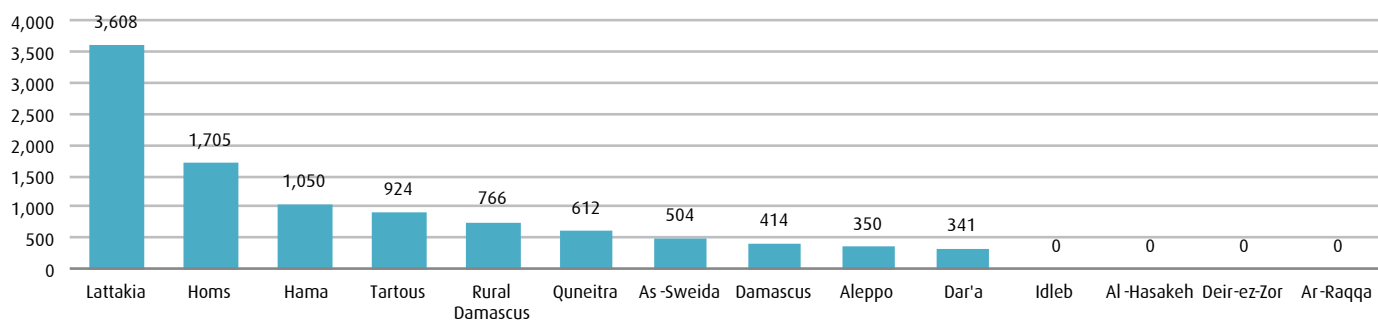
Trend analysis of number of patients received psychosocial support services in health centres, from January to December 2019, is presented in [Figure 75]. In 2019, the total number of patients is 96,279.

Figure 75: Trend analysis of patients received psychosocial support services in health centres, per quarter, 2019



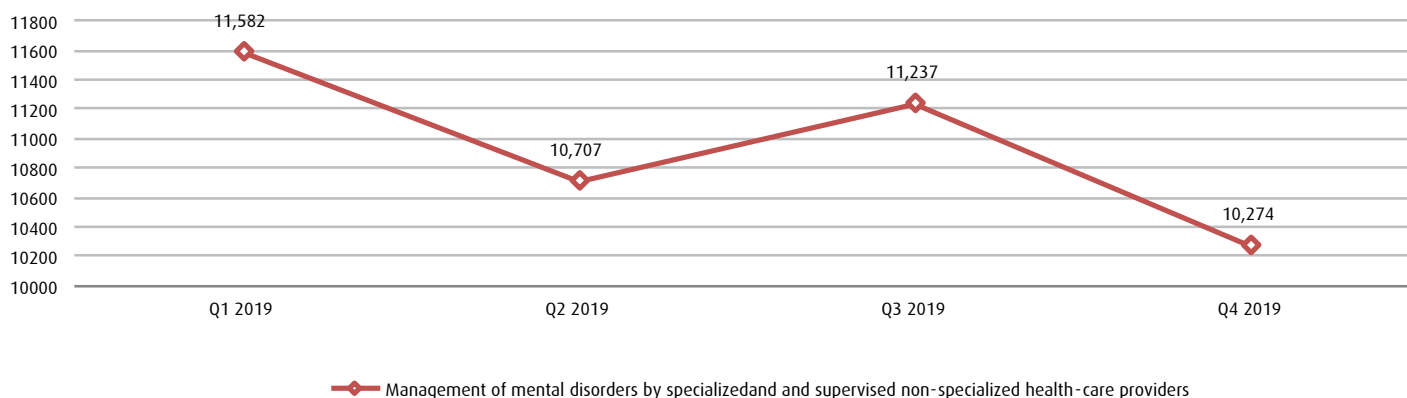
ii. **Management of mental disorders** by specialized and/or trained and supervised non-specialized health-care providers (mhGAP – Intervention Guide), and/or availability of at least one medicine from each group, antipsychotics, antidepressants, antiepileptic and anxiolytics was assessed at a health centre level. The total reported number in the 4th Quarter 2019 is 10,274; disaggregated at governorate level in [Figure 76].

Figure 76: The number of management of mental disorders cases in health centres, 4th Quarter 2019



Trend analysis of number of patients received management of mental disorders services in health centres, from January to December 2019, is presented in [Figure 77]. In 2019, the total number of patients is 43,800.

Figure 77: Trend analysis of patients received management of mental disorders services in health centres, per quarter, 2019



9. 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.

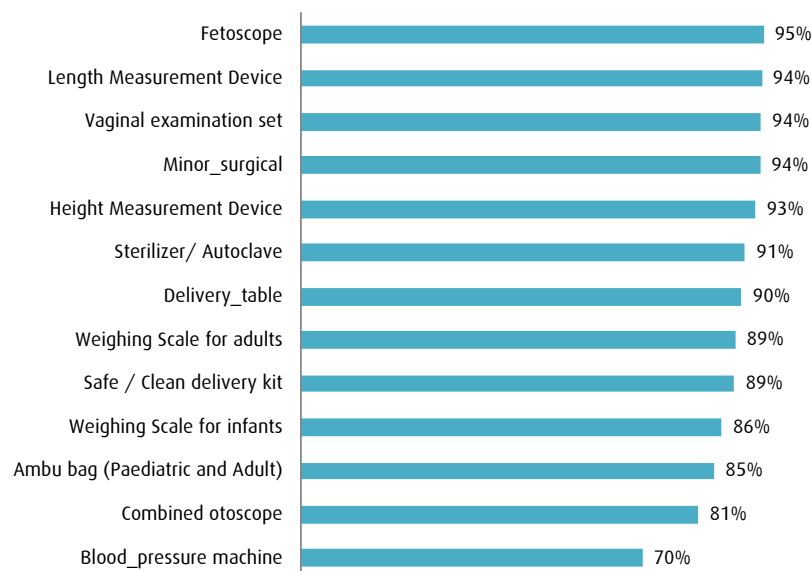
In its seventh year of crisis, Syria's public health centres are still suffering from shortages and/or malfunction of medical devices/ equipment to provide health care services. In insecure governorates, medical devices are either destroyed, burned, or malfunctioned, while in safe areas the medical devices 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 (1,258 / 1,813), 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 78].

Figure 78: Percentage of functional essential equipment/ total available equipment in functional health centres, 4th Quarter 2019



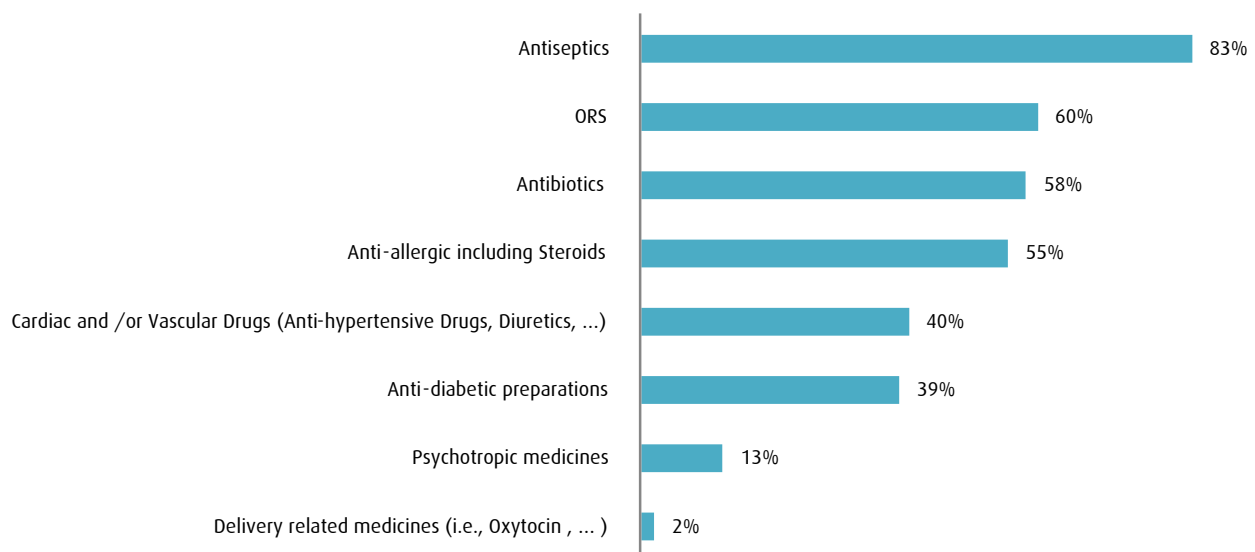
² A more detailed list of essential equipment is available upon request.

10. 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 79].

Figure 79: Availability of medicines and medical consumables at functional health centres, 4th Quarter 2019



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

11. Conclusions and recommendations

- Constant deterioration of functionality status of public health centres was observed throughout 2019; for example, the number of non-functioning health centres has increased slightly from 564 to 555 (between 1st Quarter and 4th Quarter of 2019) 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 2019 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.

