



**World Health  
Organization**  
Syrian Arab Republic



# HeRAMS

# Annual Report

# 2021

**Public Health Centres**

January - December

in the Syrian Arab Republic

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in the Syrian Arab Republic

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



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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 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 4<sup>th</sup> Quarter 2021 in comparison to other three quarters of 2021. The total assessed health centres in the 4<sup>th</sup> Quarter 2021 is 1,789.

### Completeness of Centre's reporting

The completeness of reporting of public health centres across Syria has become 100% during the 4<sup>th</sup> Quarter 2021.

### Functionality status

By end of the 4<sup>th</sup> Quarter 2021 and out of 1,789 assessed public health centres, 48% (851) were reported fully functioning, 22% (385) partially functioning (i.e., shortage of staff, equipment, medicines or damage of the building in some cases), 31% (553) non-functioning (completely out of service).

### Accessibility status

By end of the 4<sup>th</sup> Quarter 2021, 83% (1,477) health centres were reported accessible, 3% (55) hard-to-access, and 14% (251) were inaccessible, while the accessibility status of 0.3% (6) health centres were unknown.

### **Infrastructural patterns**

By end of the 4th Quarter 2021, 26% (457) health centres were reported damaged [6% fully damaged and 20% partially damaged], 70% (1,255) were reported intact, while the building's condition of 4% (77) health centres were unknown.

Assessing the availability of water sources at functional public centres indicated that 87% (1,073) are using main pipelines, 1% (9) are mainly using wells, while 7% (85) 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 (10 %); and nurses (60%).

Trend analysis of available number of medical doctors during 2021 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 3.7% by end of December 2021 (3,815) compared to end of Mar 2021 (3,960).

### **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] (1,236 /1,789), 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 still 100% during the four quarters of 2021.

The classification of health centres (1,789) per type is presented in [Figure 2], of which the majority is primary healthcare centres (87%), followed by medical points (6%), 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, 4<sup>th</sup> Quarter 2021

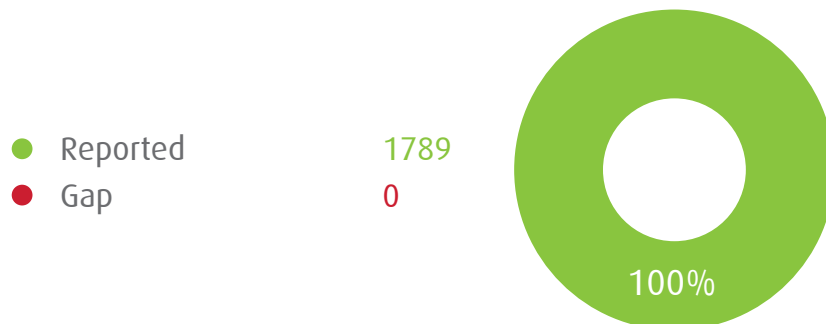


Figure 2: Classification of centres, 4<sup>th</sup> Quarter 2021

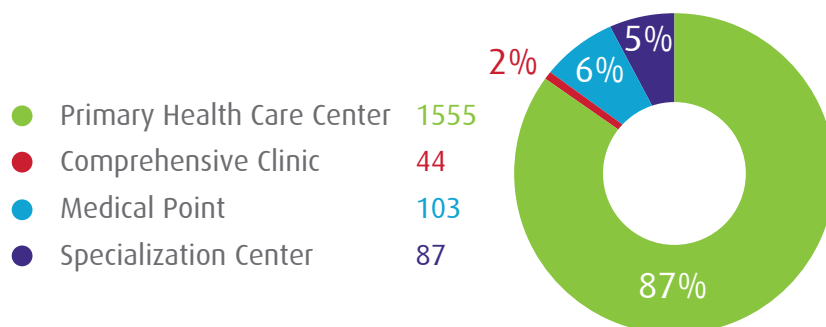
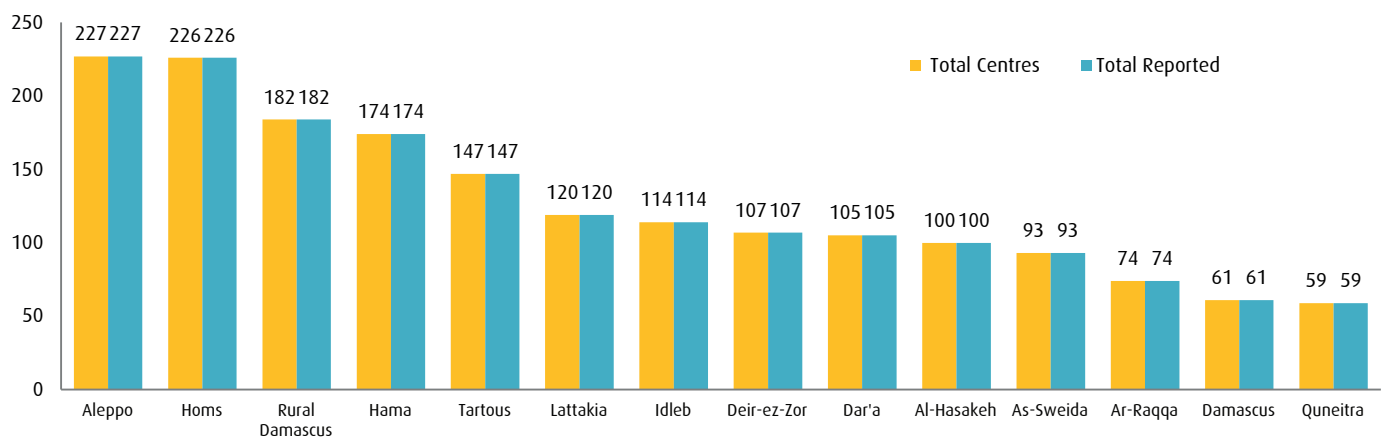


Figure 3: Completeness of reporting of health centres at governorate level, 4<sup>th</sup> Quarter 2021

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 4<sup>th</sup> Quarter 2021 in comparison to other three quarters of 2021.

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 4<sup>th</sup> Quarter 2021 and out of 1,789 assessed public health centres, 48% (851) were reported fully functioning, 21% (358) partially functioning, 31% (553) 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- 4<sup>th</sup> Quarter 2021

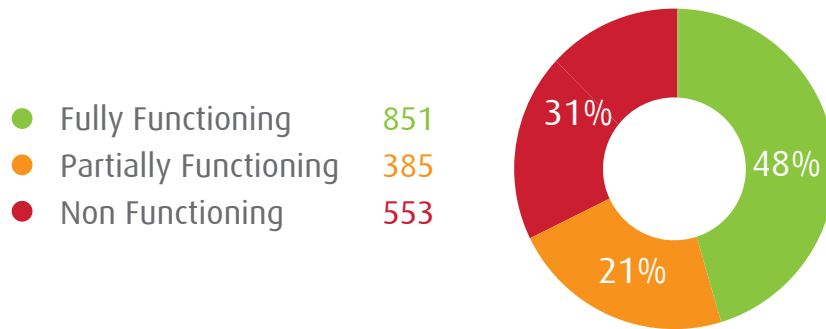
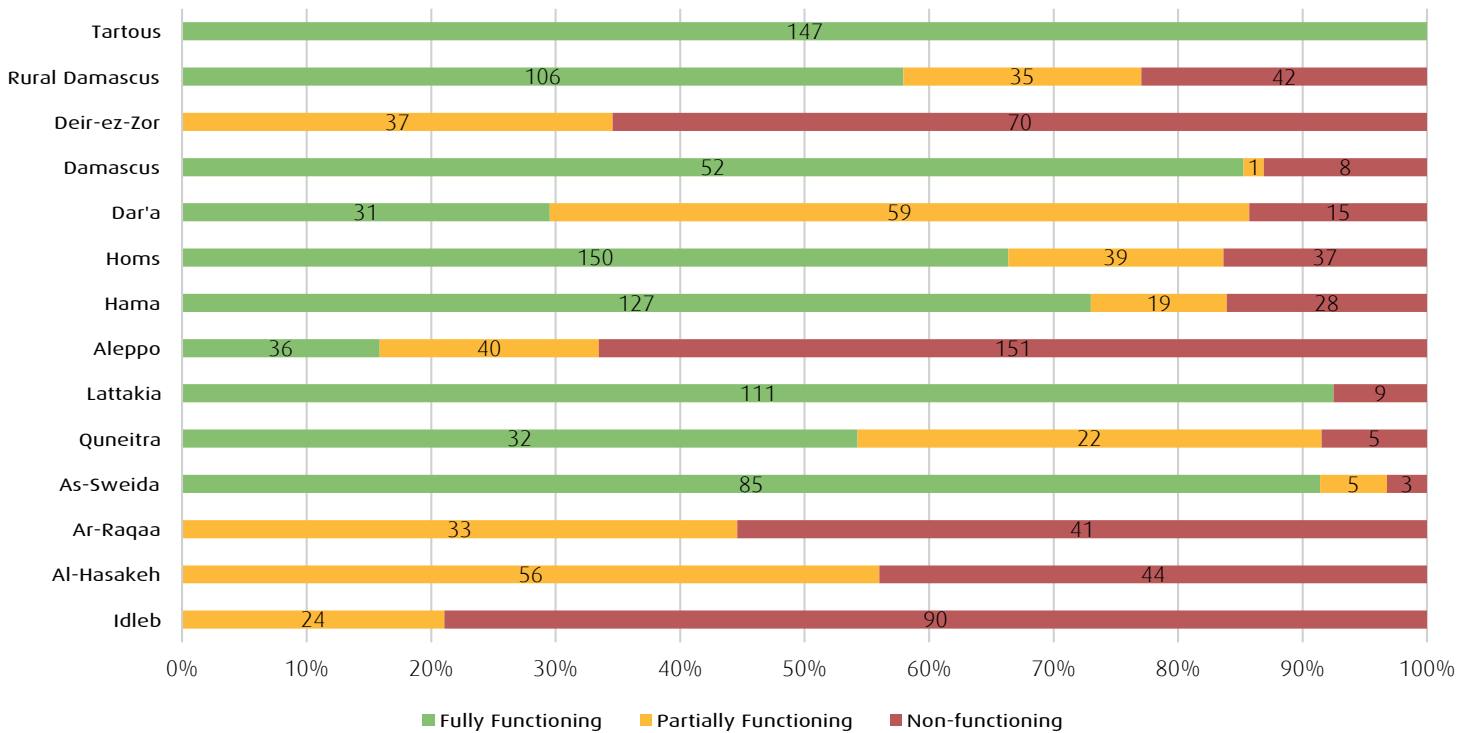
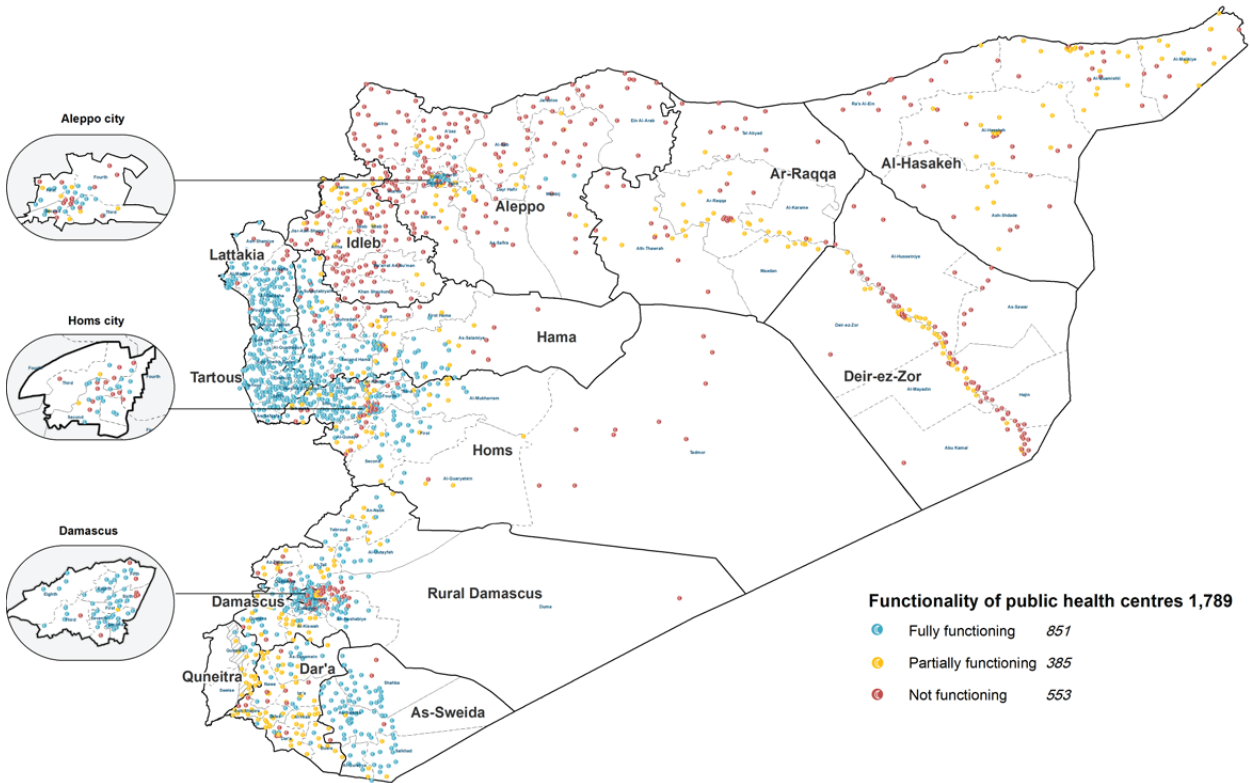


Figure 5: Functionality status of health centres per governorate, 4<sup>th</sup> Quarter 2021

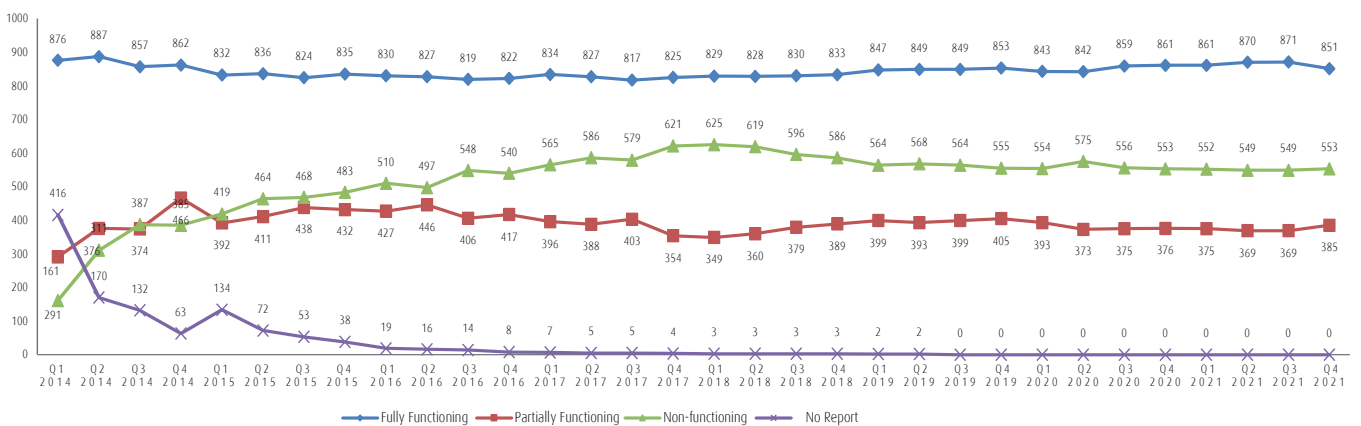


Map 1: Functionality status of the public health centres, 4<sup>th</sup> Quarter 2021



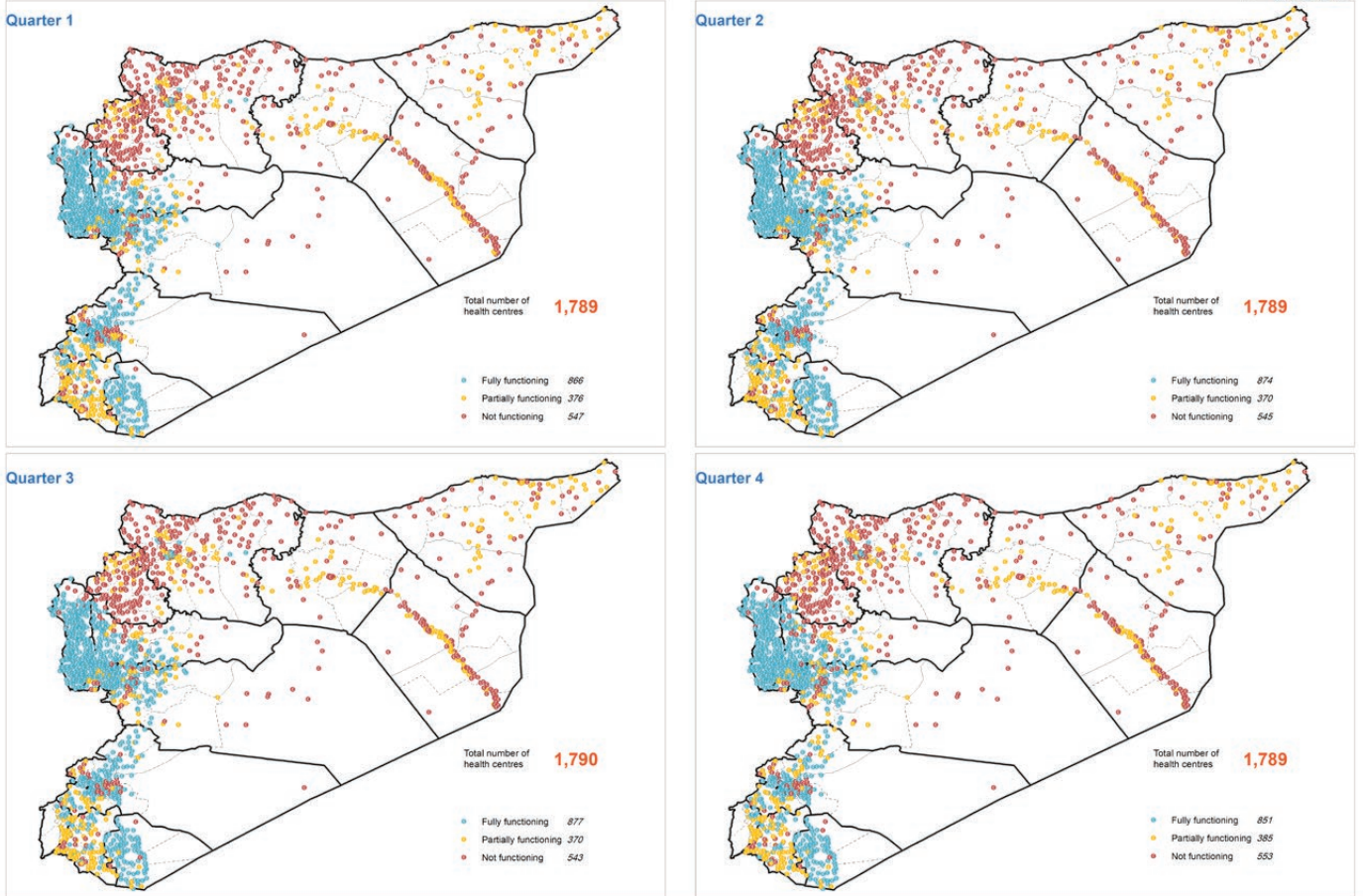
The number of non-functioning health centres has increased slightly from 552 to 553 (between 1<sup>st</sup> Quarter and 4<sup>th</sup> Quarter of 2021) [Figure 6] and [Map 2]. as a direct impact of deteriorating security situation.

Figure 6: Trend analysis of functionality status, between 1<sup>st</sup> Quarter 2014 and 4<sup>th</sup> Quarter 2021



Map 2: Trend analysis of functionality status of public health centres, 1<sup>st</sup> quarter to 4<sup>th</sup> Quarter 2021

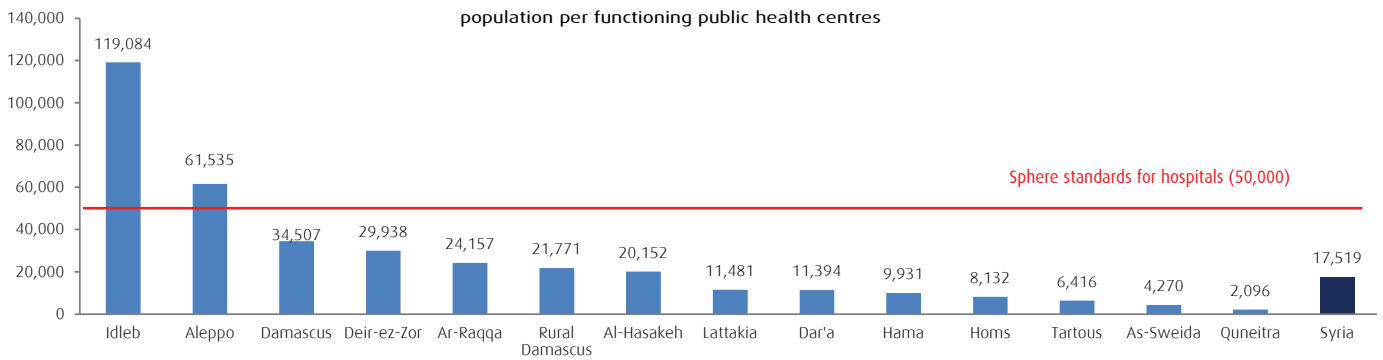
Syrian Arab Republic: Functionality of the public health centres per governorate, 2021



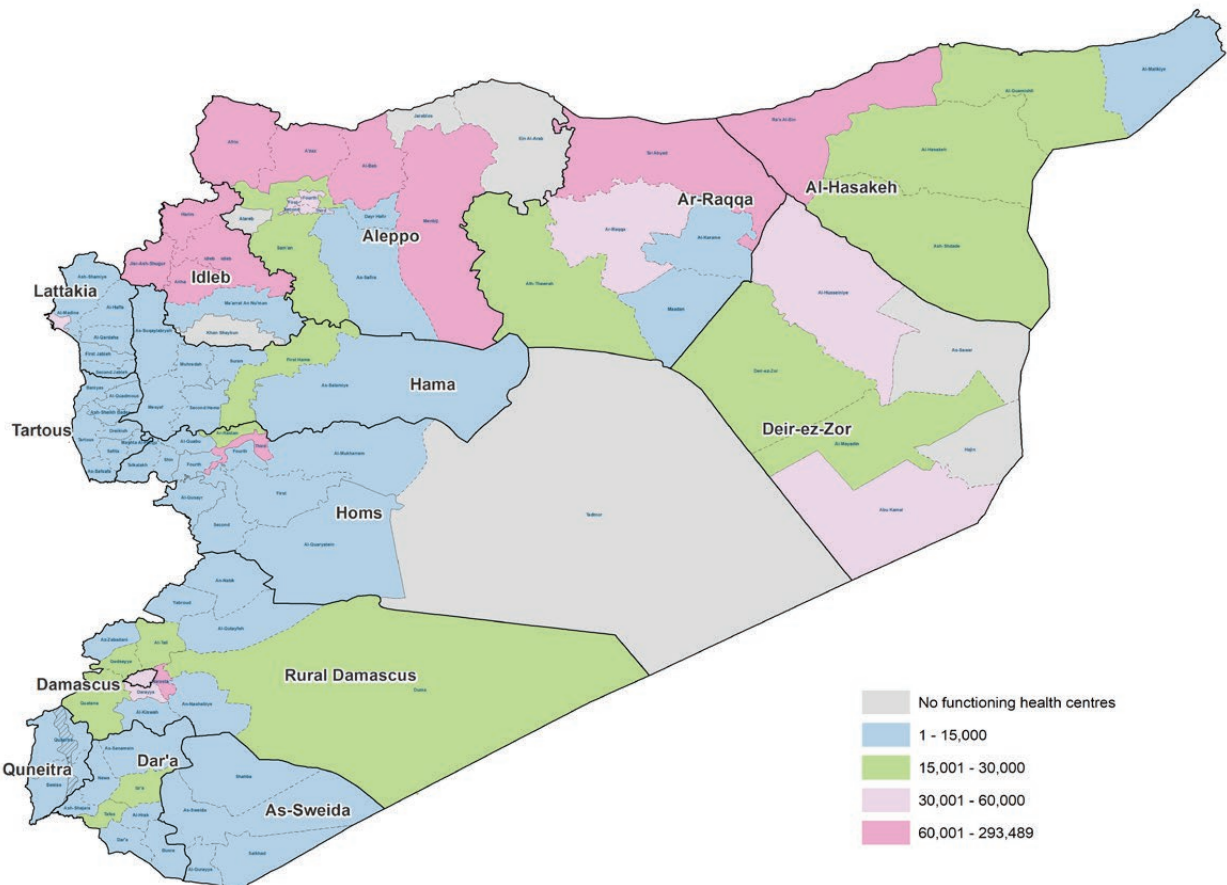
### 3. Density of the public health centres

Health centres density reflects the total number of health centres relative to population size (based on OCHA HRP 2021), which helps measure physical access to outpatient health care services. Comparing with Sphere standards for health centres (50,000), two governorates (Aleppo and Idlib) 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 2021



Map 3: Density of the public health centres per governorate, December 2021



## 4. Special cases

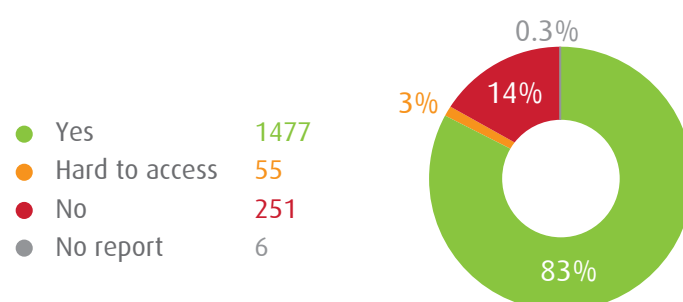
Some public health centres in Idleb and Aleppo have been considered as non-functioning, but are providing health services by non-MoH staff with no information available, where data is being collected by cross-border partners.

## 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, 4<sup>th</sup> Quarter 2021



By end of the 4th Quarter 2021, 83% (1,477) health centres were reported accessible, 3% (55) hard-to-access, and 14% (251) were inaccessible, while the accessibility status of 0.3% (6) health centres were unknown [Figure 8].

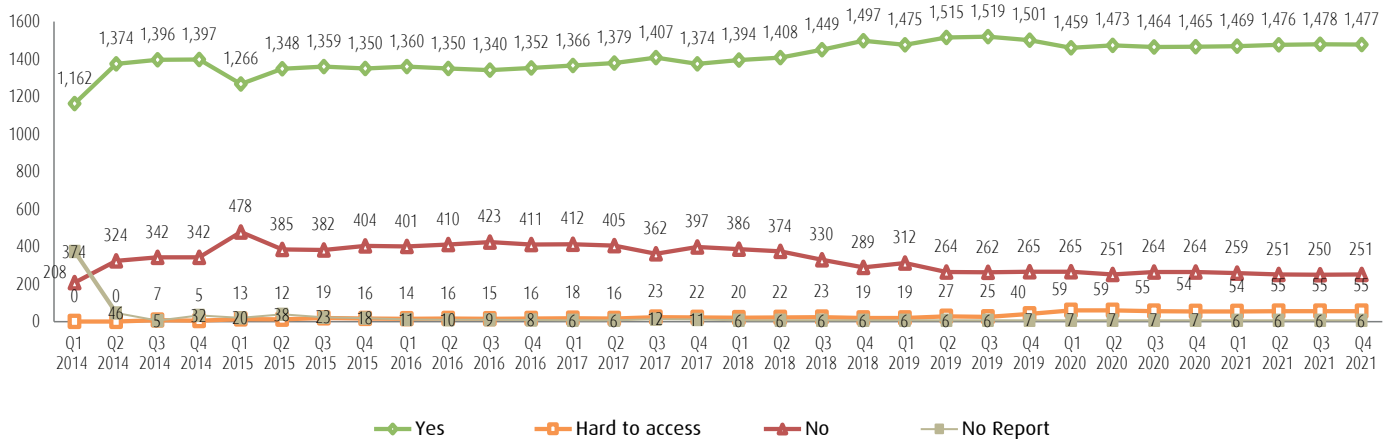
Detailed analysis on the accessibility status of the health centres at governorate level is presented in [Figure 9] and [Map 4].

Figure 9: Accessibility status of the health centres per governorate, 4<sup>th</sup> Quarter 2021



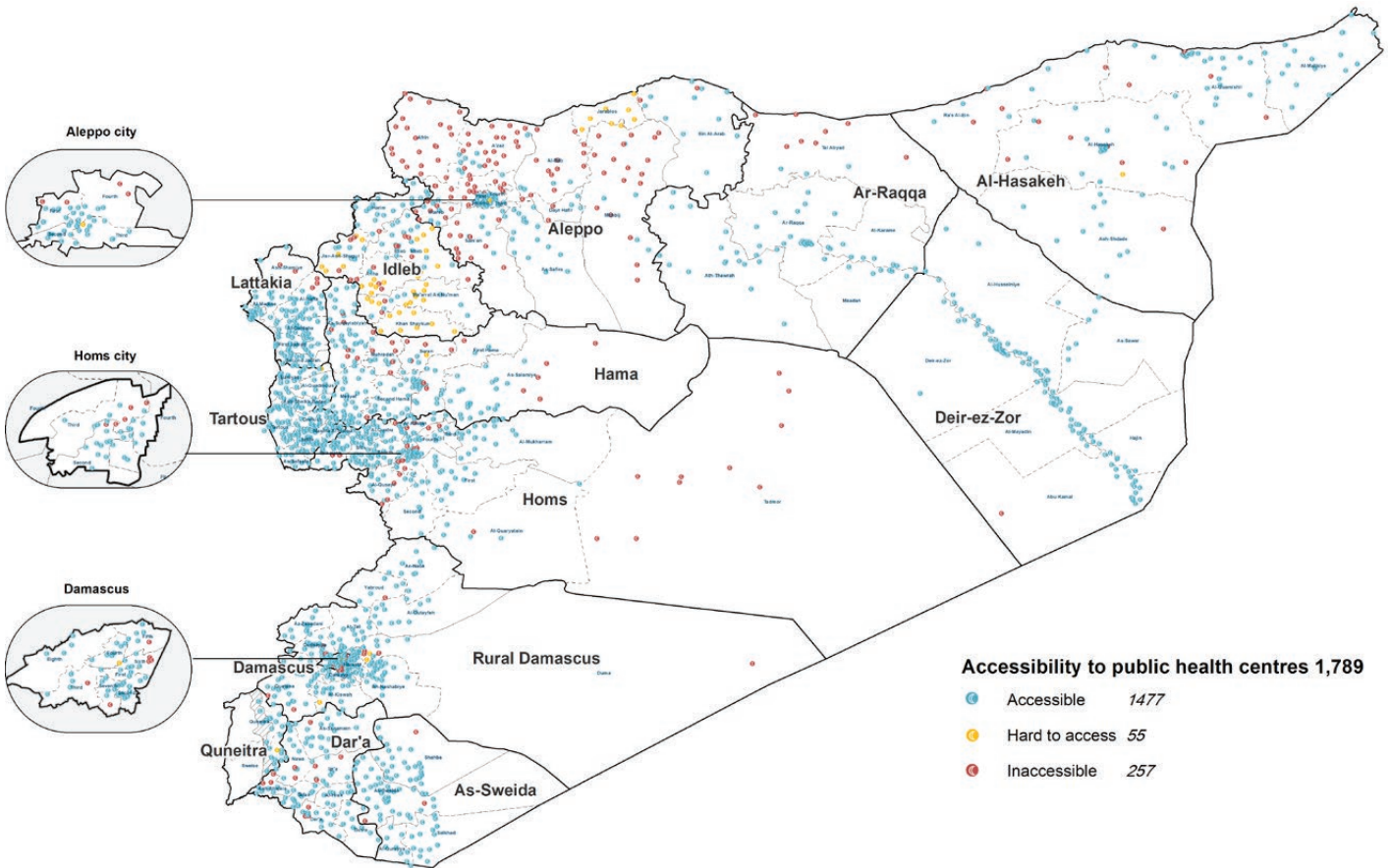
The trend analysis of accessibility status of health centres from 1<sup>st</sup> Quarter 2014 to 4<sup>th</sup> Quarter 2021 is presented in Figure 10.

Figure 10: Trend analysis of accessibility status of health centres between 1<sup>st</sup> Quarter 2014 and 4<sup>th</sup> Quarter 2021



The number of inaccessible health centres decreased slightly from 259 to 251 (between end of 1<sup>st</sup> Quarter and 4<sup>th</sup> Quarter 2021).

Map 4: Accessibility to public health centres , 4<sup>th</sup> Quarter 2021



## 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 2021, 6% (100) of public health centres were reported fully damaged, 20% (357) partially damaged, 70% (1,255) were reported intact, while the building's condition of 4% (77) health centres were unknown [Figure 11].

The completeness of reporting level of damage of health centres has remained 96% during 2021 quarters.

Key gaps on reporting the level of damage of the health centres are observed mainly in Aleppo 20% (46/227) and Idleb 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, 4<sup>th</sup> Quarter 2021

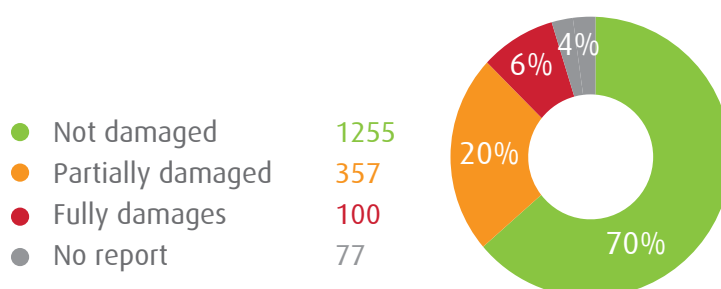
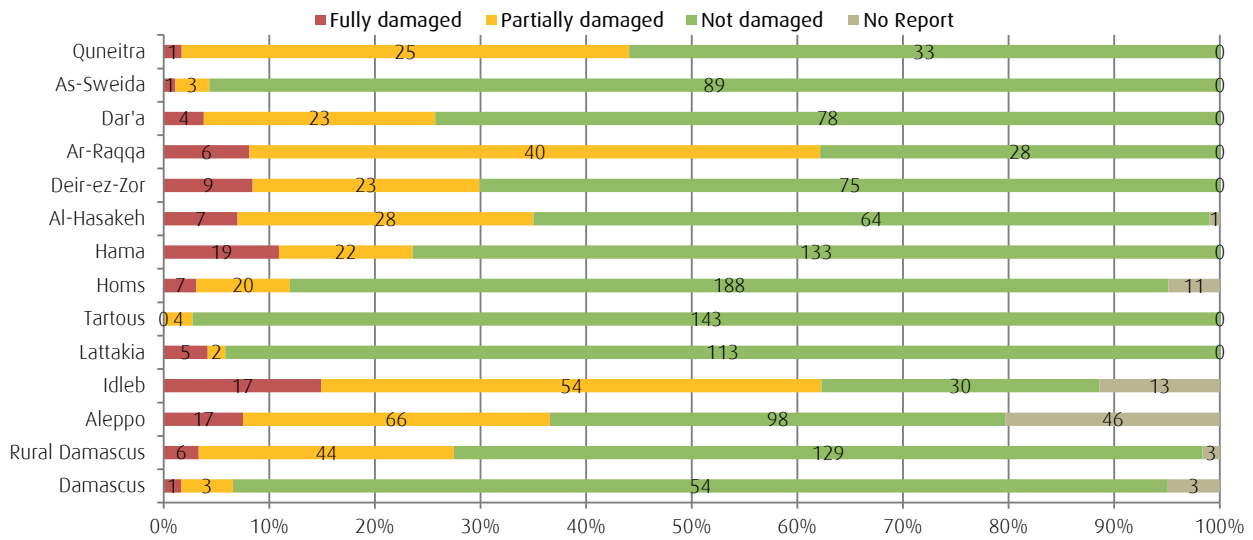
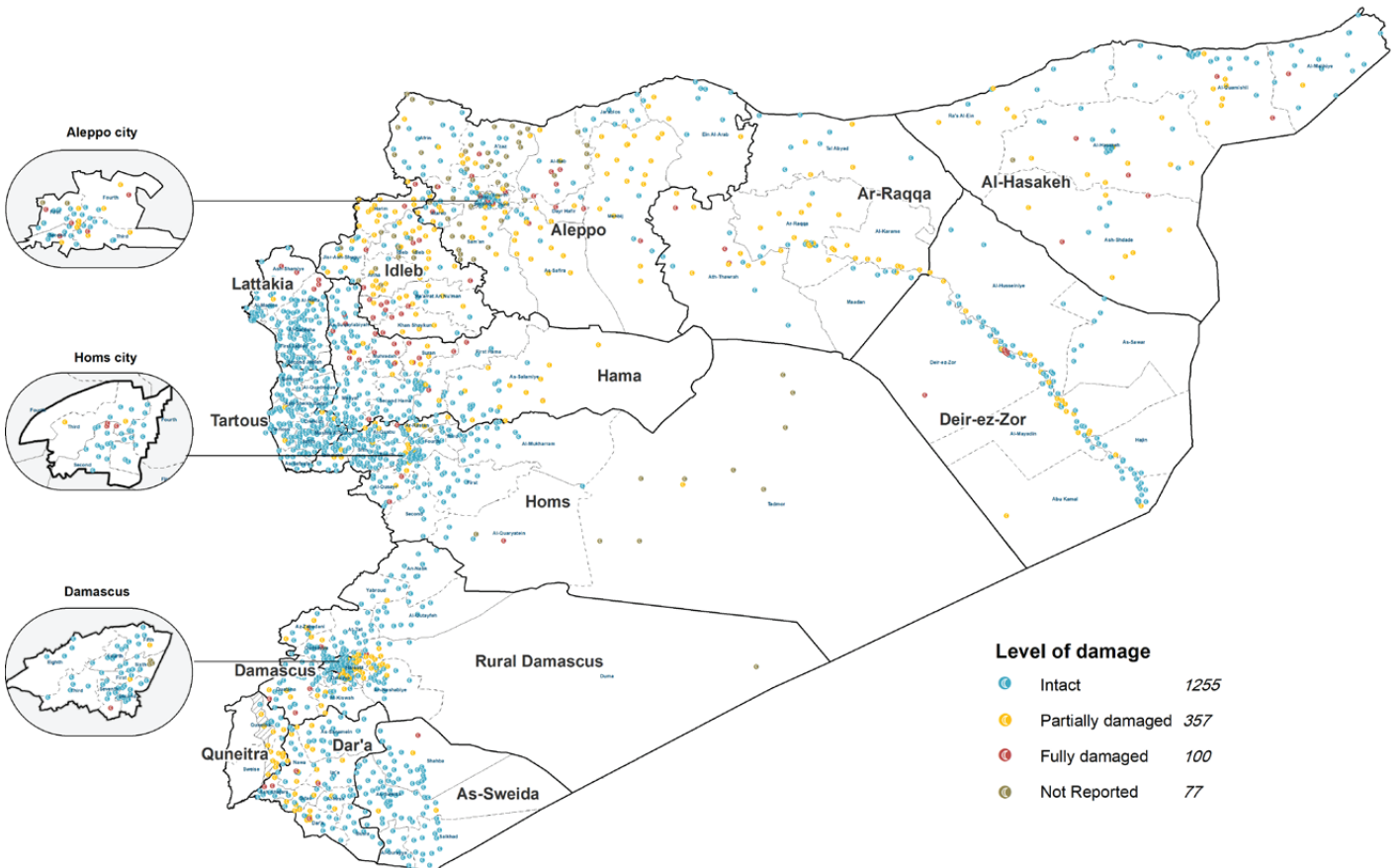




Figure 12: level damage of the health centres per governorate, 4<sup>th</sup> Quarter 2021



Map 5: Distribution and Level of damage of the public health centres, 4<sup>th</sup> Quarter 2021

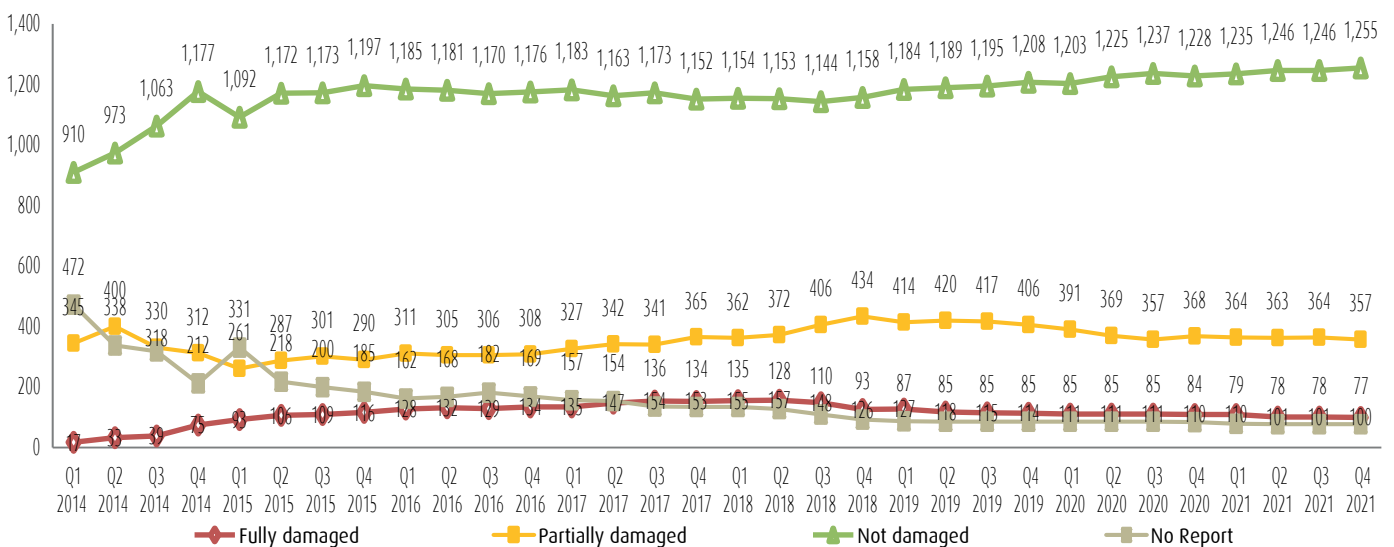


It is essential to cross-analyze the infrastructural damage of the public health centres in relation to the functionality status (i.e. provision of services). Some health centres have resiliently continued to provide services regardless of the level of damage of the building and by optimizing intact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

- Out of the 357 partially damaged health centres, 123 health centres were reported partially functioning and 208 out of service (non-functioning), while 26 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 100 fully damaged health centres, 88 were reported non-functioning, 1 health centre reported fully functioning from other nearby temporary location, and 11 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.
- Then again, health centres with intact buildings (1,255 health centres) does not directly reflect full functionality, only 824 of the 1,255 intact health centres are fully functioning, while 251 are partially functioning and 180 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 1<sup>st</sup> Quarter 2014 to 4<sup>th</sup> Quarter 2021 is presented in Figure 13.

Figure 13: Trend analysis of buildings' damage of health centres, between 1<sup>st</sup> Quarter 2014 and 4<sup>th</sup> Quarter 2021

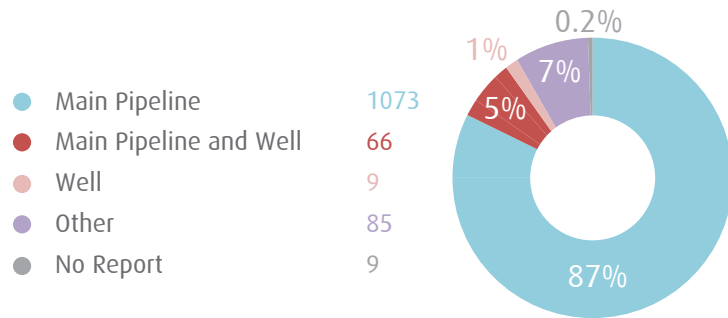


### 6.2 Water sources and functionality status

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]).

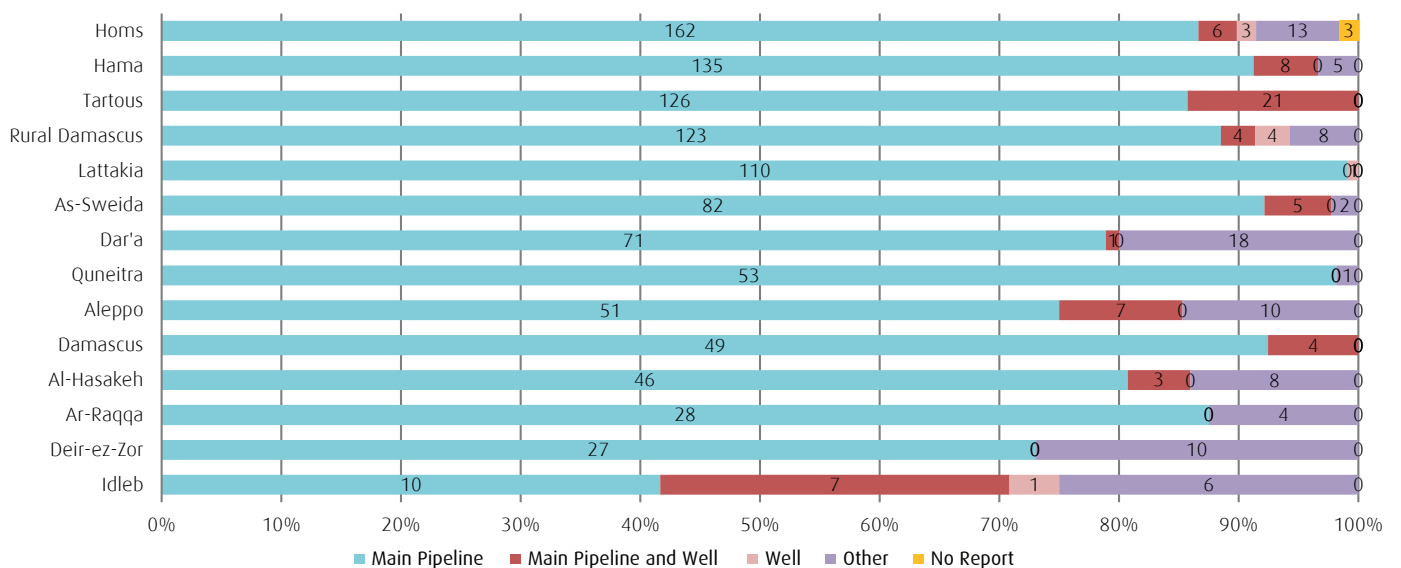
By end of the 4th Quarter 2021 and out of 1,236 functional health centres, 87% (1073) are using main pipelines, 1% (9) are mainly using wells, while 5% (66) are using both (main pipeline and well).

Figure 14: Main Sources of Water, 4<sup>th</sup> Quarter 2021



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, 4<sup>th</sup> Quarter 2021



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, (1,236 /1,789) per governorate.

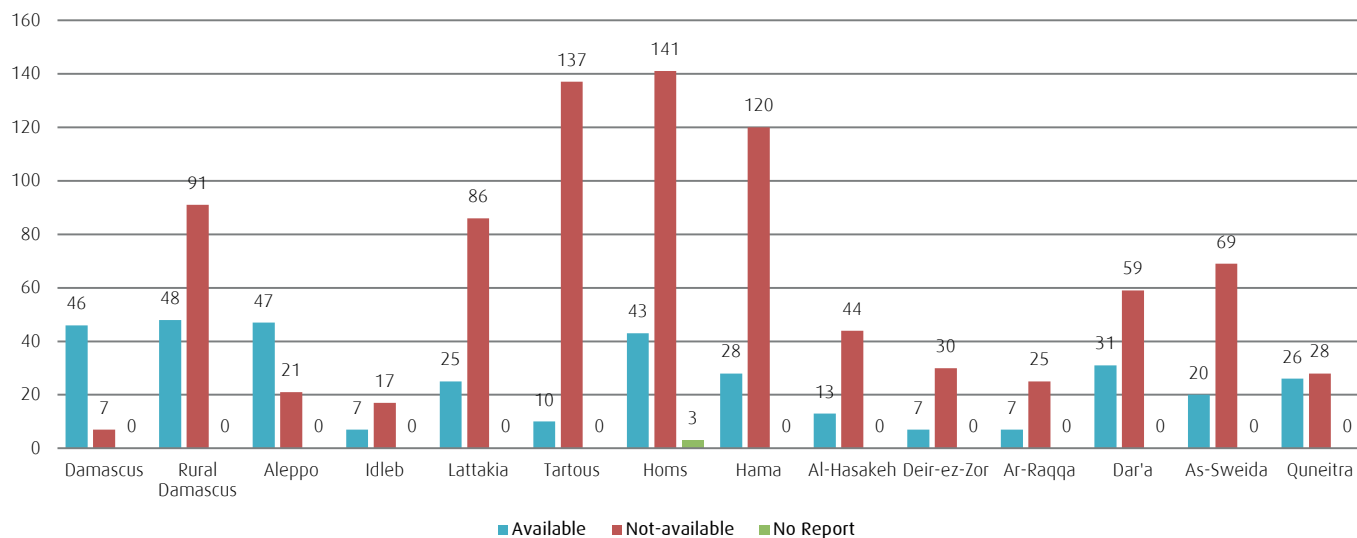
Figure 16: Functionality status of the water sources at health centres, 4<sup>th</sup> Quarter 2021



### 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, 4<sup>th</sup> Quarter 2021

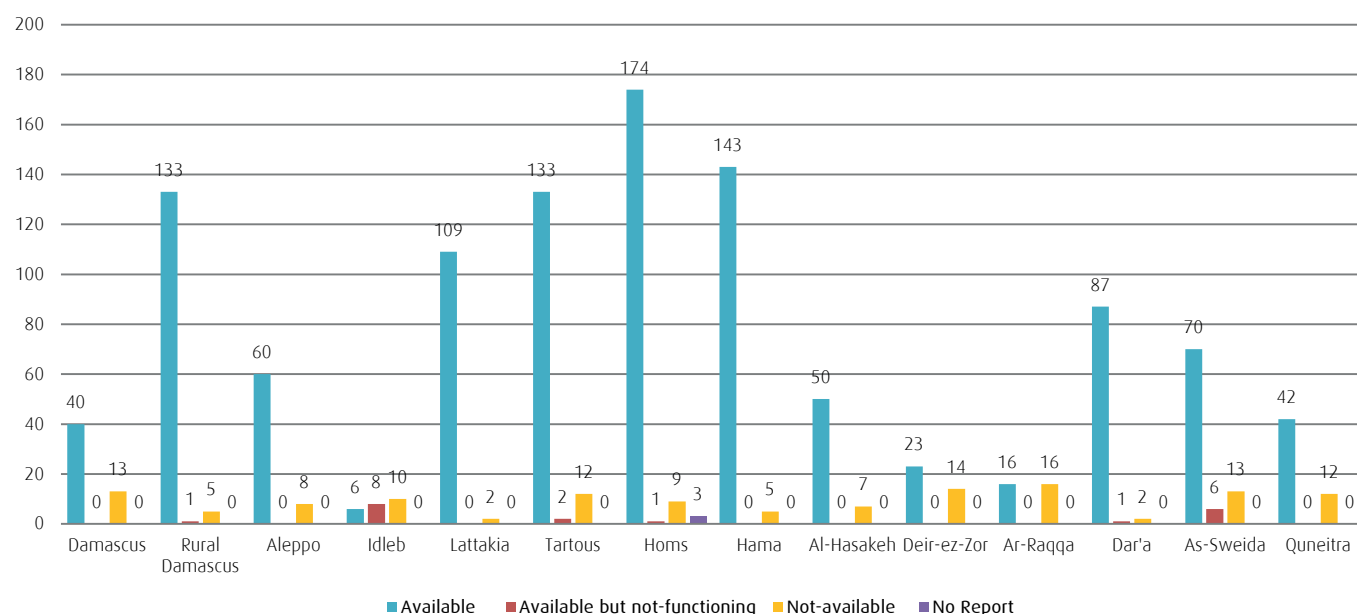


#### 6.4 Availability of refrigerator for vaccine

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, 4<sup>th</sup> Quarter 2021



## 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 4<sup>th</sup> Quarter 2021, within the functional health centres (fully and partially) is shown in [Figure 19].

The Distribution of the total health staff by end of the 4<sup>th</sup> Quarter 2021, per staff category and governorate is shown in [Figure 20].

Figure 19: Health staff, 4<sup>th</sup> Quarter 2021

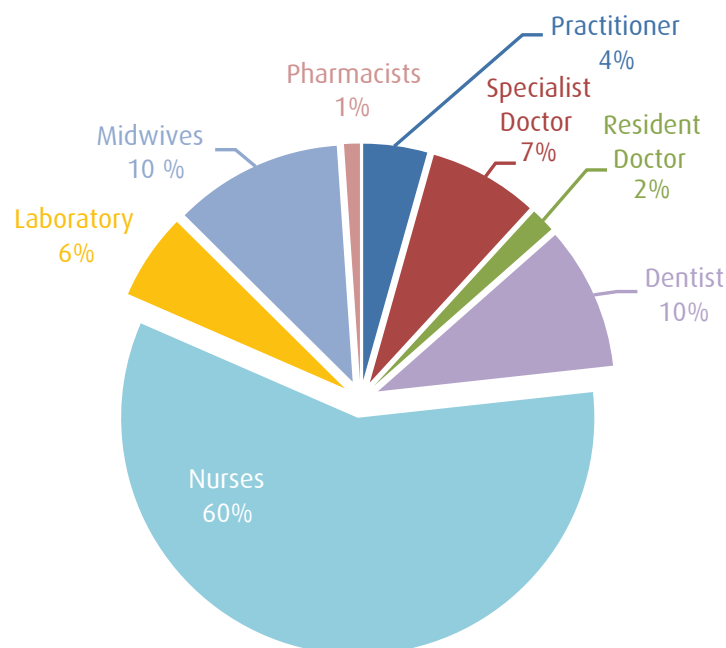


Figure 20: Distribution of total health staff at health centres per governorate, December 2021

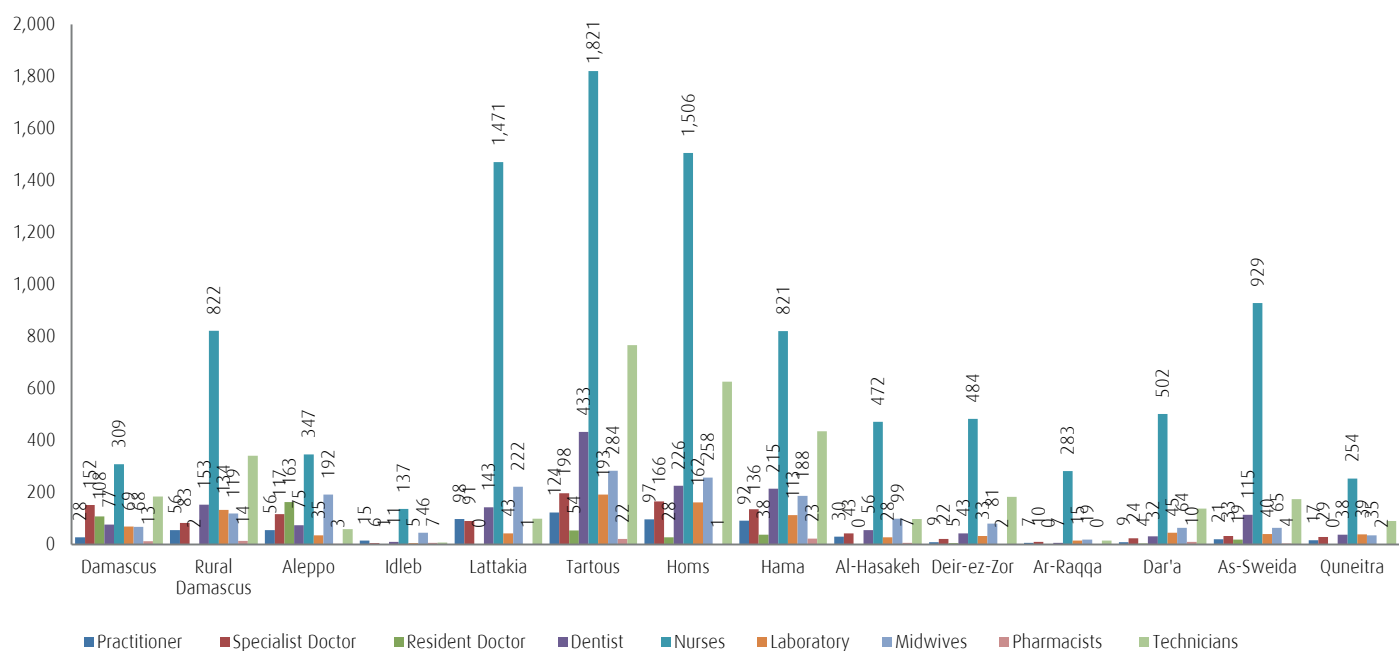
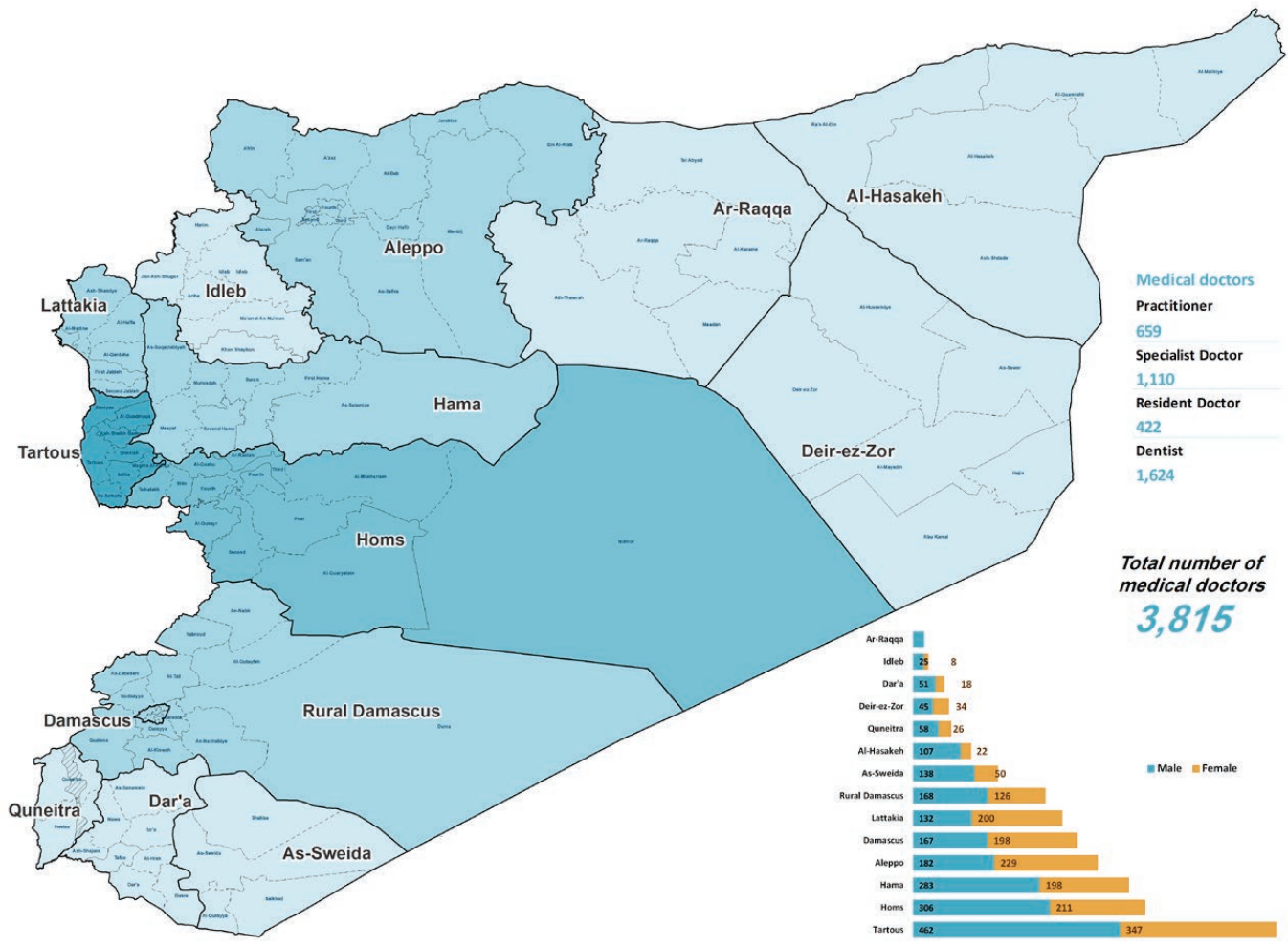


Table 1: Availability of human resources of functioning public health centres, per governorate, December 2021

Governorate	Practitioner	Specialist Doctor	Resident Doctor	Dentist	Nurses	Laboratory	Midwives	Pharmacists	University*	Technicians	Others
Damascus	28	152	108	77	309	69	68	13	11	185	346
Rural Damascus	56	83	2	153	822	134	119	14	16	342	496
Aleppo	56	117	163	75	347	35	192	3	32	59	211
Idleb	15	6	1	11	137	5	46	7	1	8	39
Lattakia	98	91	0	143	1,471	43	222	1	20	100	627
Tartous	124	198	54	433	1,821	193	284	22	42	767	2,194
Homs	97	166	28	226	1,506	162	258	1	6	626	593
Hama	92	136	38	215	821	113	188	23	41	436	479
Al-Hasakeh	30	43	0	56	472	28	99	7	20	98	185
Deir-ez-Zor	9	22	5	43	484	33	81	2	13	184	307
Ar-Raqqa	7	10	0	7	283	15	19	0	4	15	96
Dar'a	9	24	4	32	502	45	64	10	13	138	224
As-Sweida	21	33	19	115	929	40	65	4	12	175	261
Quneitra	17	29	0	38	254	39	35	2	11	91	131
<b>Grand Total</b>	<b>659</b>	<b>1,110</b>	<b>422</b>	<b>1,624</b>	<b>10,158</b>	<b>954</b>	<b>1,740</b>	<b>109</b>	<b>242</b>	<b>3,224</b>	<b>6,189</b>

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

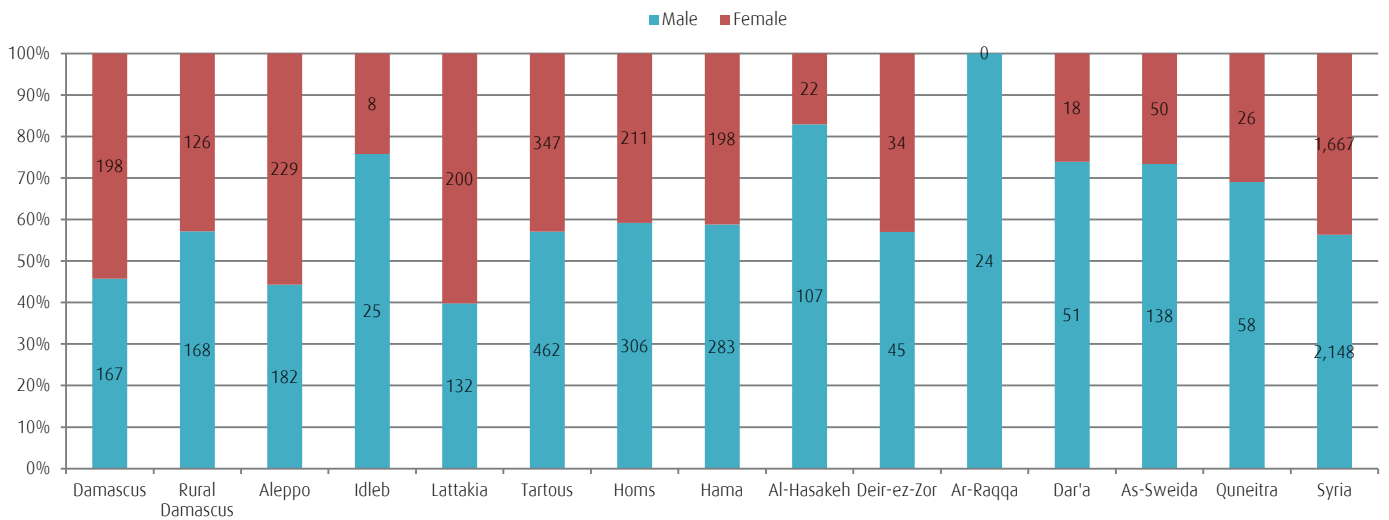
Map 5: Distribution of medical staff [a total of general practitioners, specialist, resident doctors, and dentists] per governorate, December 2021



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 Dar'a governorates [Figure 21].



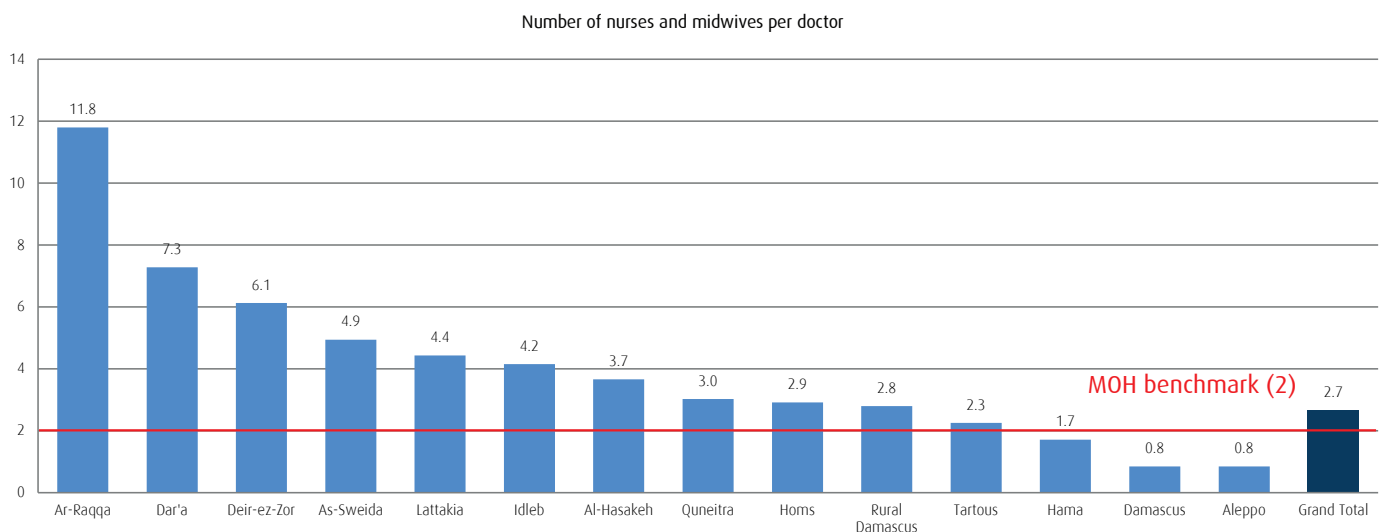
Figure 21: Proportion of Doctors by gender per governorate, December 2021



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 25].

Figure 22: Number of nurses and midwives per doctor in public health centres, December 2021



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 2021

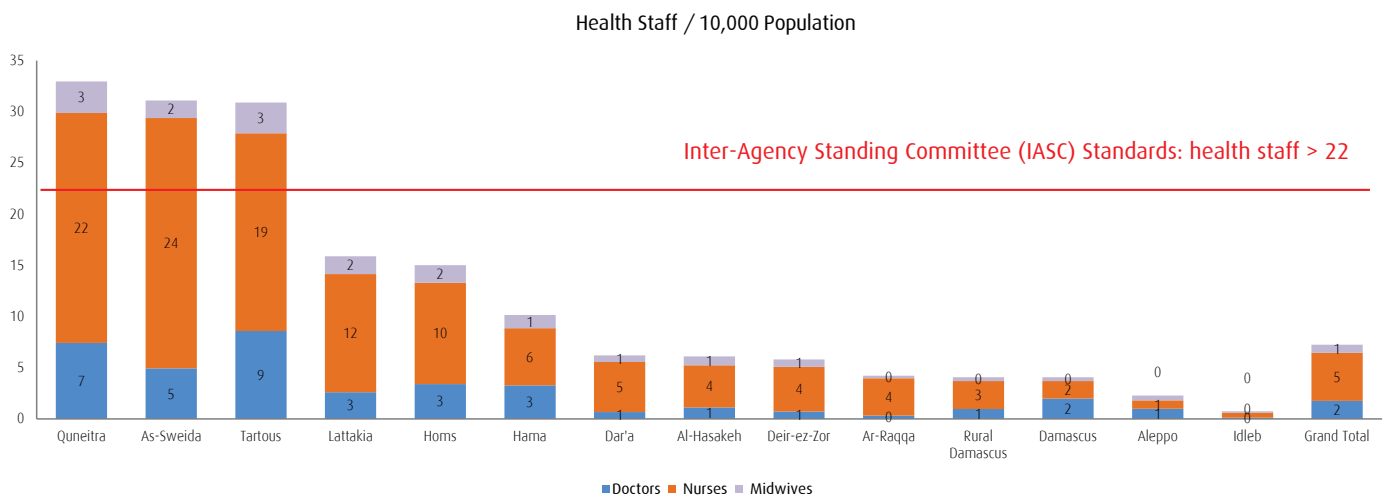
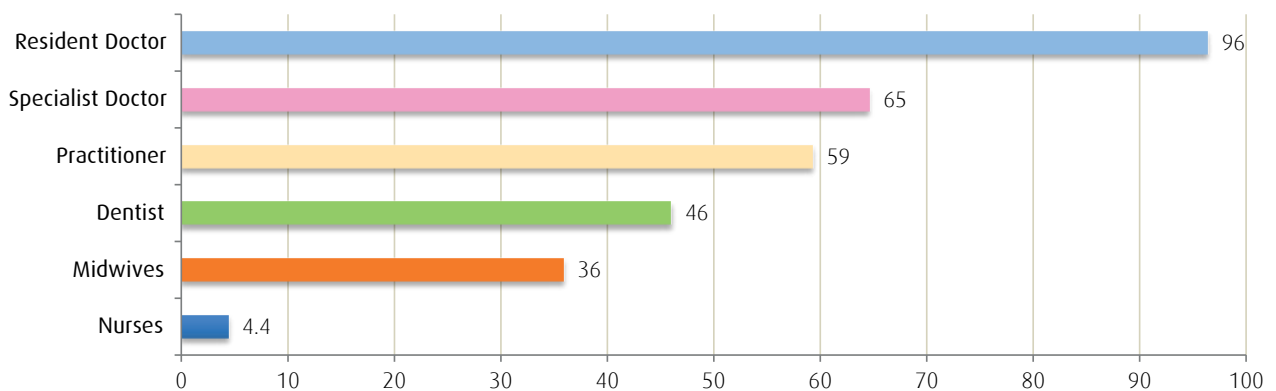


Figure 24: Percentage of functioning public health centres without medical staff (gaps), December 2021



### 7.1 Availability of medical staff by category

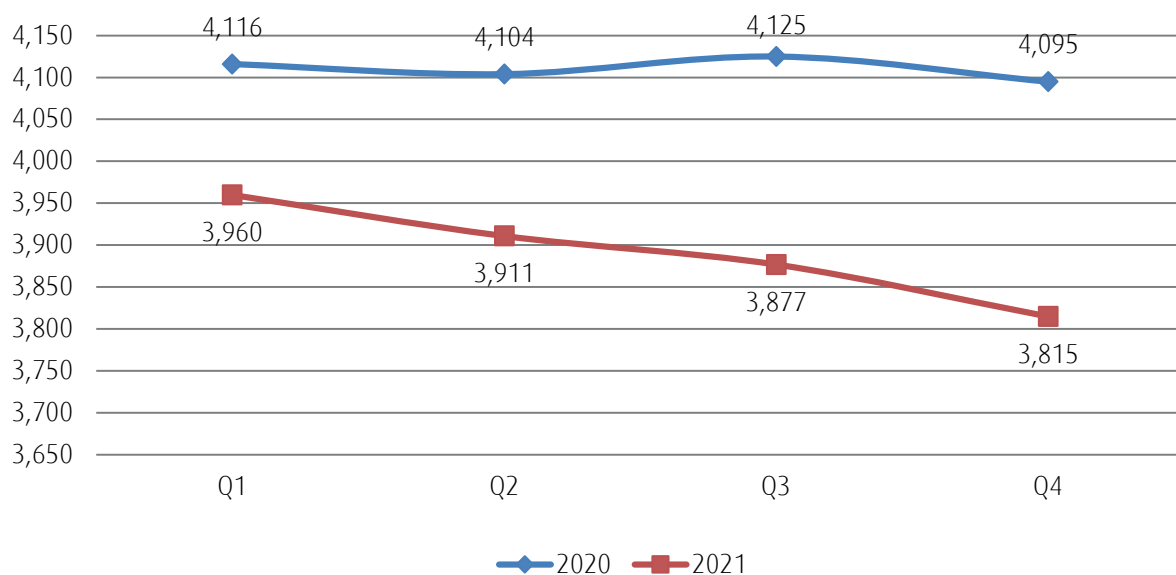
The availability medical staff in functional health centres is analyzed by category [i.e., medical doctors<sup>1</sup>, nurses, and midwives], as follows:

#### 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 3.7% by end of December 2021 (4,095) compared to end of March 2021 (4,116).

Figure [25] shows trend analysis of reported medical doctors (a total of General practitioner, Specialists, Resident Doctors, and Dentists) on quarterly basis during 2021.

Figure 25: Trend analysis of availability of medical doctors in public health centres during 2021 and 2021

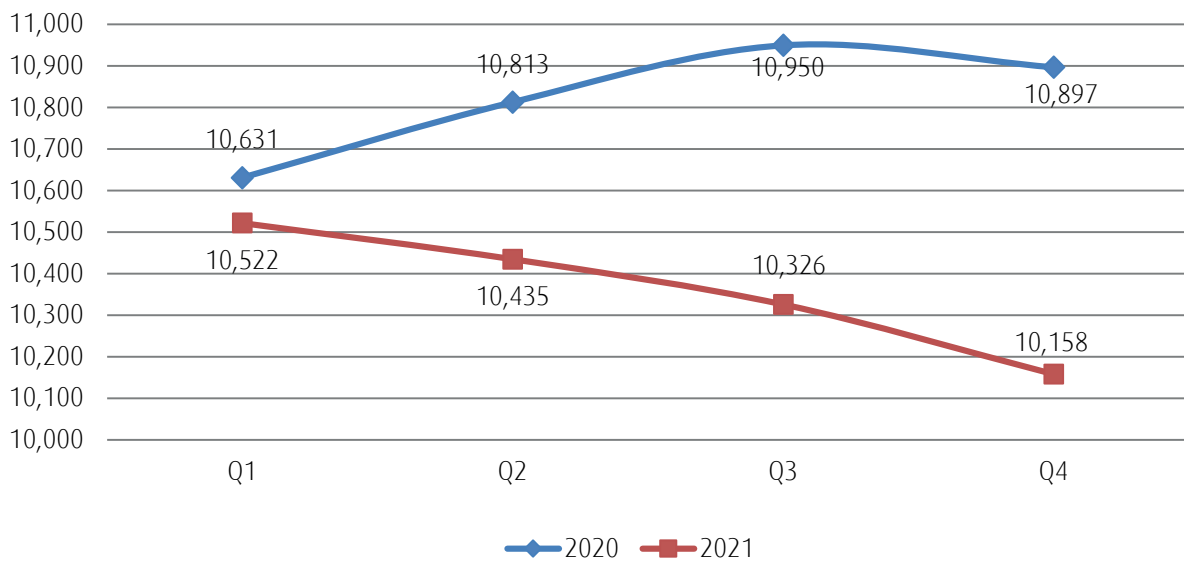


<sup>1</sup> A total of general practitioners, specialist, resident doctors, and dentists

## ii. Trend analysis of Nurses & Midwives:

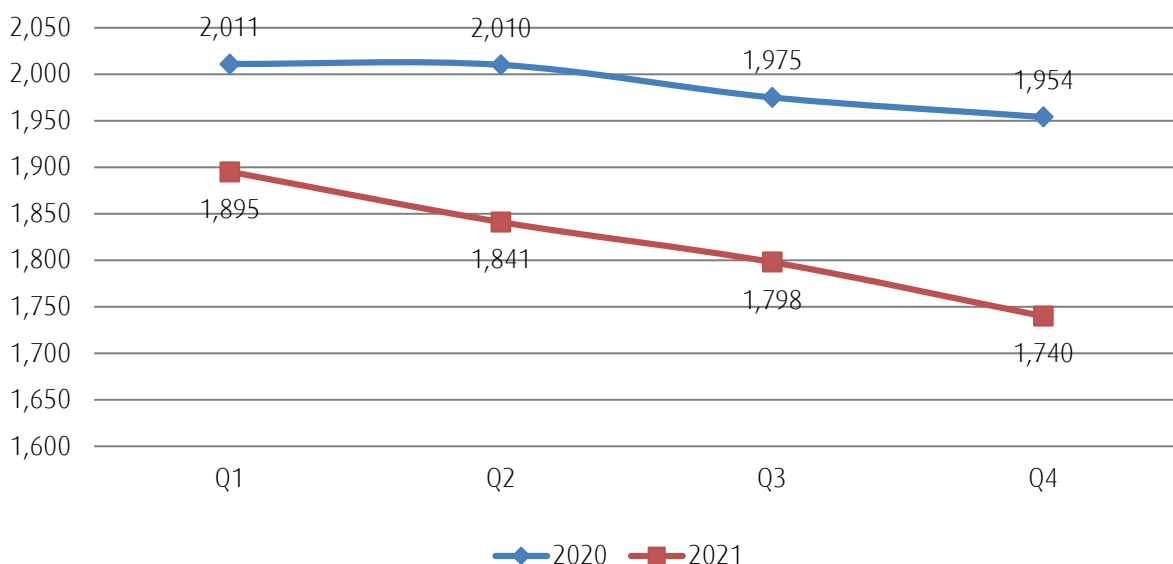
The number of nurses in public health centres has slightly increased by 3.5% by end of December 2021 (10,158) compared to end of March 2021 (10,522).

Figure 26: Trend analysis of reported number of nurses on quarterly basis during 2021 and 2021



The number of midwives in public health centres slightly increased by 8.2 % by end of December 2021 (1,740), compared to March 2021 (1,895).

Figure 27: Trend analysis of reported number of midwives on quarterly basis during 2021 and 2021



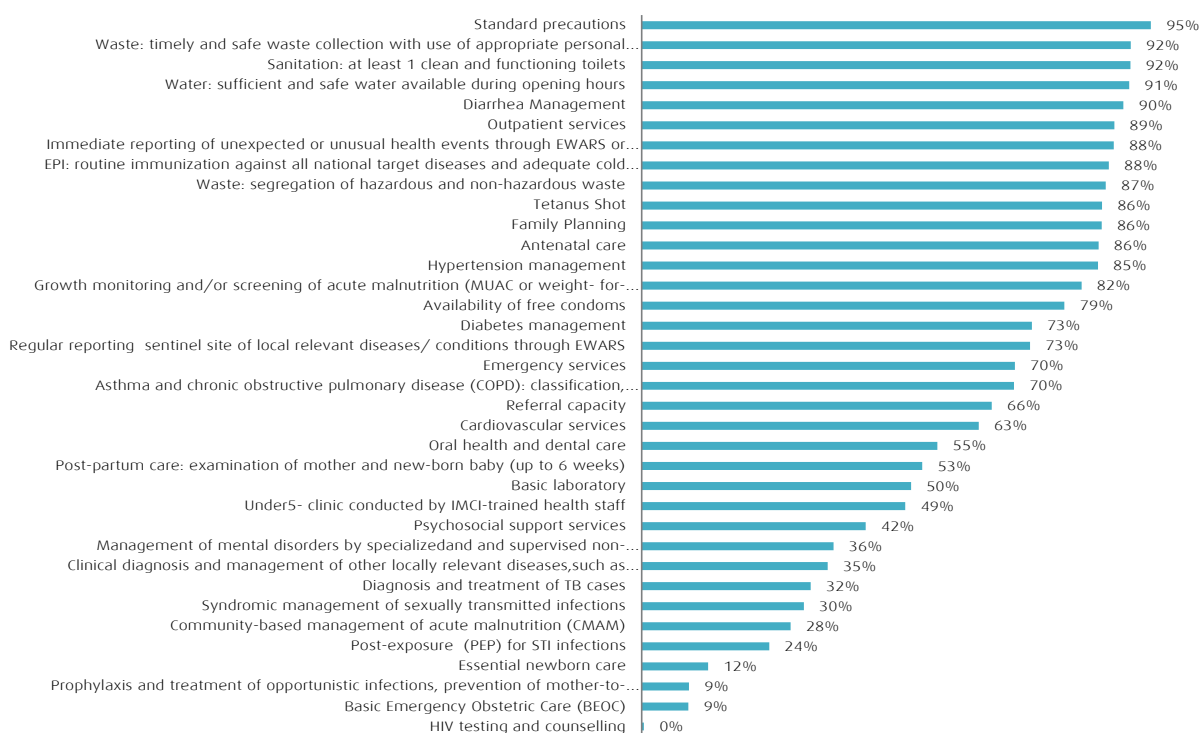
## 8. Availability of health services

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
- Only 45.8% of public health centers meet the 70% service availability threshold.
- In terms of the availability of health services, Tartous was the best, then Lattakia, and then Rural Damascus. The worst was Idlib, then Ar-Raqqa, and then Aleppo.

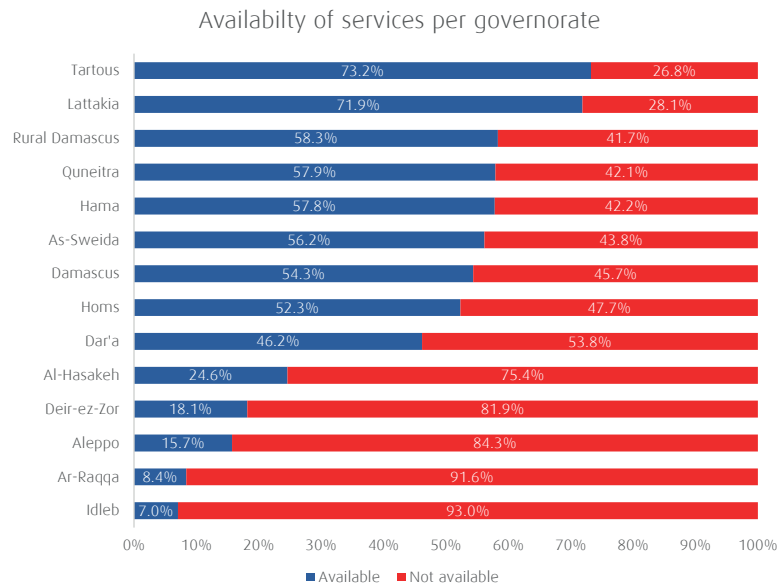
Figure 28 and 29 shows the percentage of availability of health services across all functional health centres (fully and partially), a total of 1,236.

Figure 28: Percentage of availability of health services, across all functional health centres, 4th Quarter 2021



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

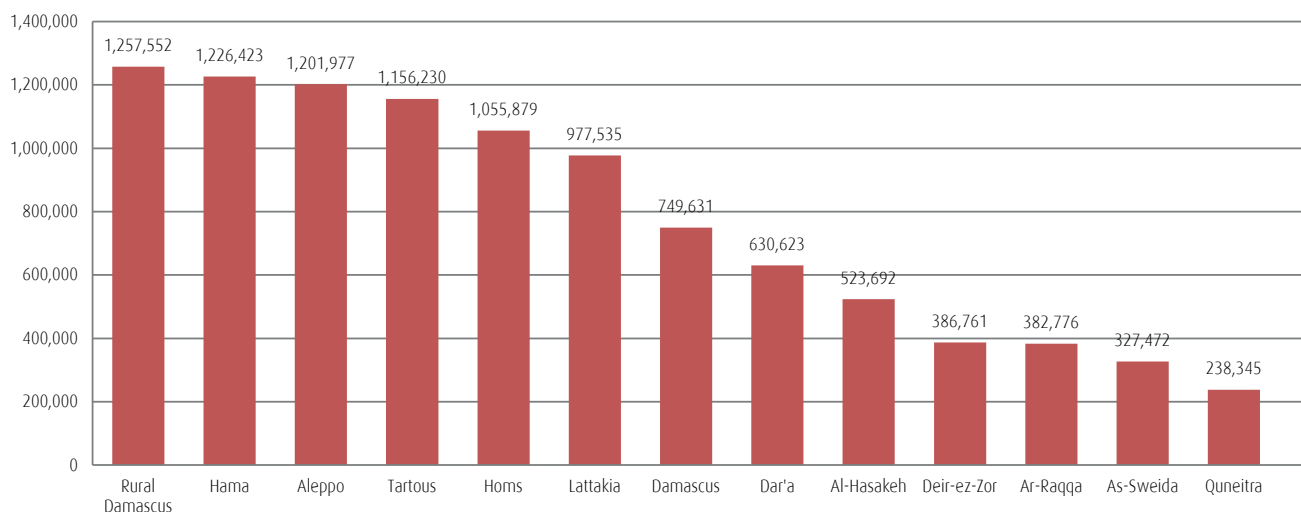
Figure 29: Percentage of availability of health services per governorate, across all functional health centres, 4th Quarter 2021



The following section provides descriptive analysis for the workload and utilization of services in functional health centres throughout 2021, per governorate.

The workload was analyzed in terms of total consultations in all functional health centres during January to December 2021 [Figure 30]. The total reported workload across all governorates is 10,890,553 in 2020 and 10,114,896 in 2021.

Figure 30: Estimated workload of functional health centres (consultations), 2021



The proportion of workload (consultations) of functional health centres per governorate is presented on Figure 31.

Detailed analysis on utilization of the core health services during the 4<sup>th</sup> Quarter 2021 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 31: Proportions of workload in health centres, January to December 2021, per governorate

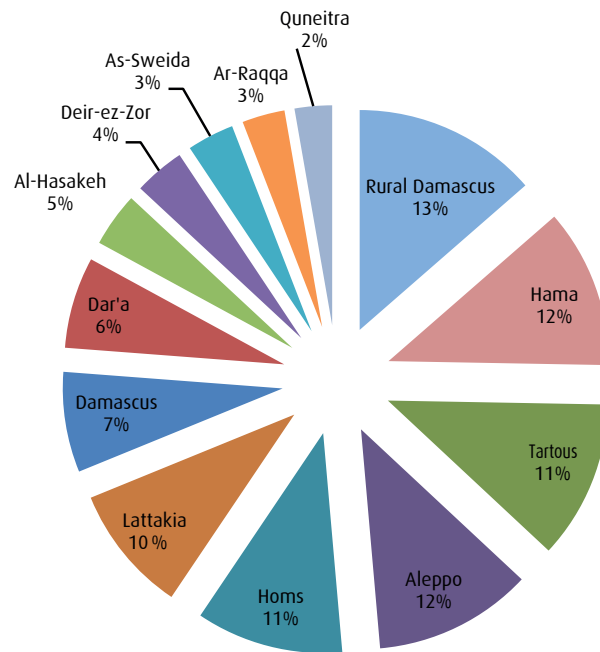
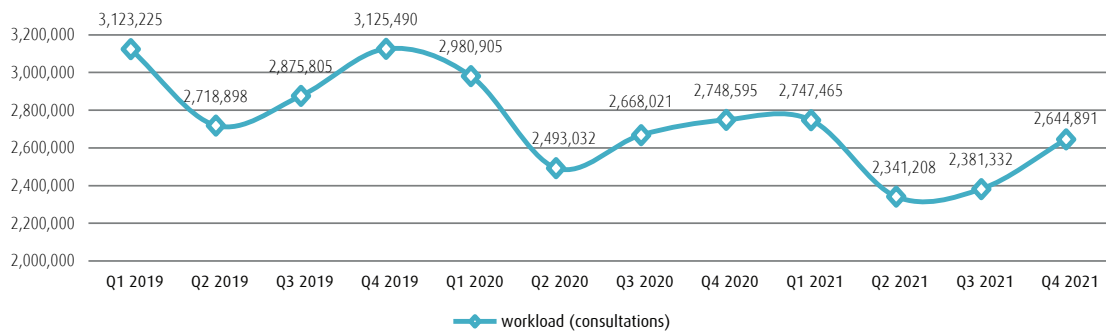


Figure 32: Trend analysis of estimated workload (consultations) in public health centres, per quarter



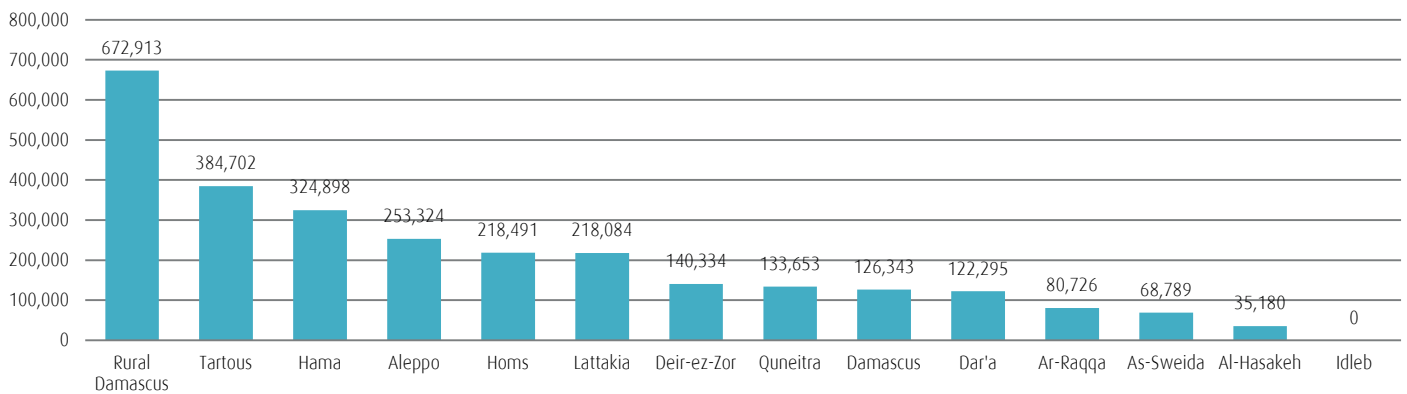
## 8.1 General clinical services

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

### i. Outpatient

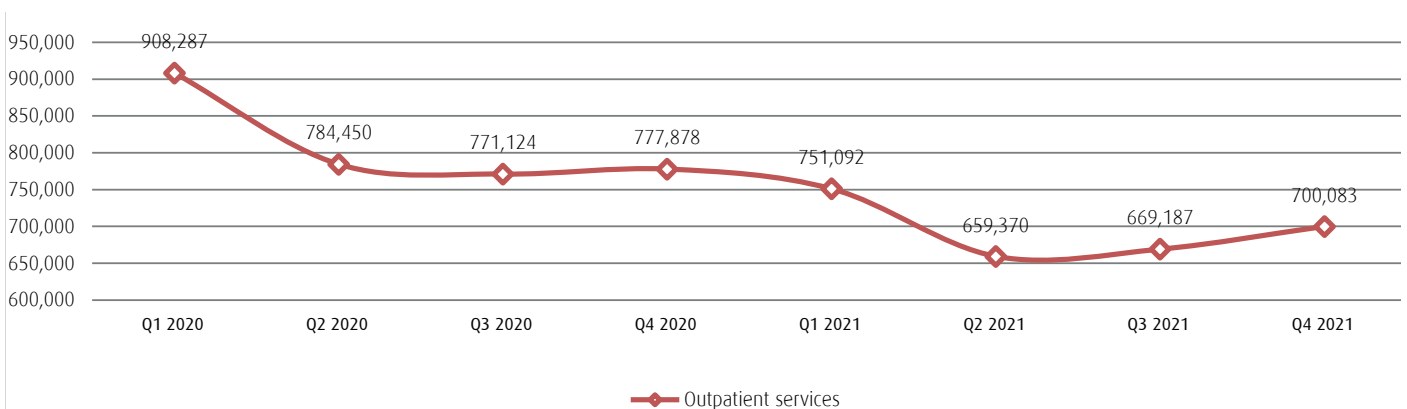
The outpatient services with availability of all essential drugs for primary care as per national guidelines were assessed at a health centre level, and the total reported number in the 4th Quarter 2021 is 700,083; disaggregated at governorate level in Figure 33.

Figure 33: The number of outpatients in health centres, 4<sup>th</sup> Quarter 2021



The total reported outpatients in health centres are 3,241,739 in 2020 and 2,779,732 in 2021. Trend analysis per quarter is presented in [Figure 34].

Figure 34: Trend analysis of outpatients in public health centres, per quarter

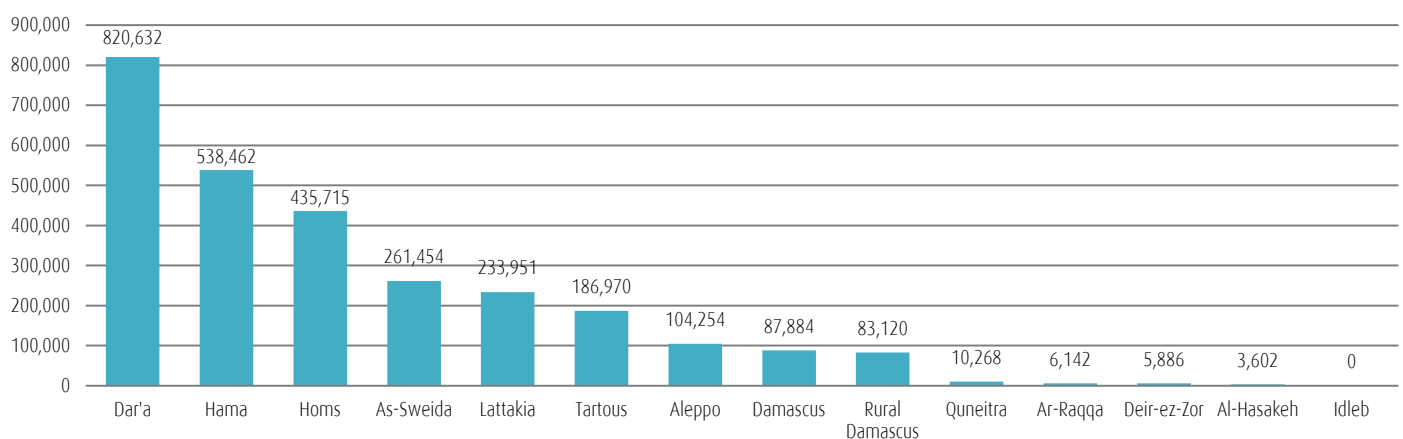




## ii. Basic laboratory services

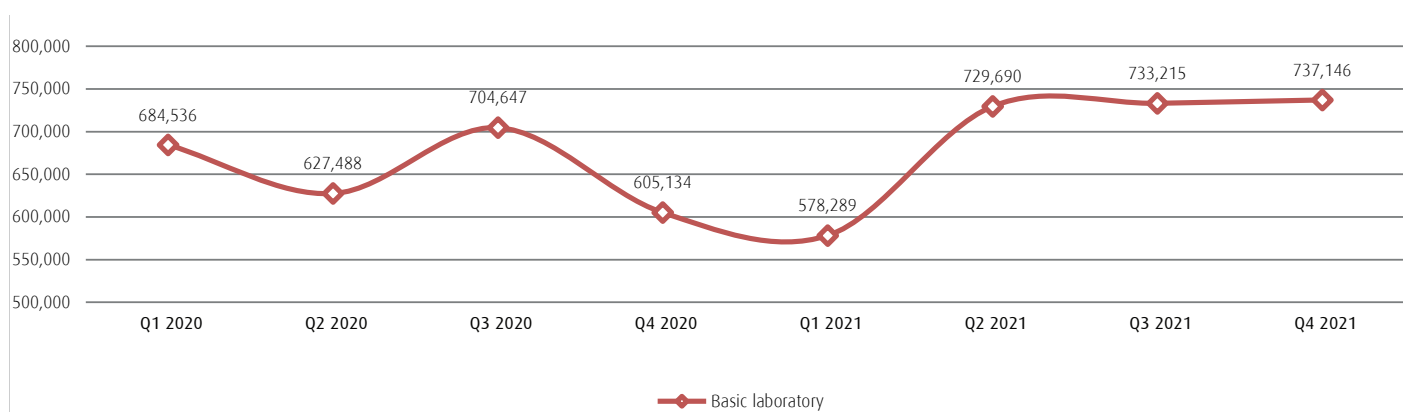
The number of patients received services in health centres' laboratories (i.e., Glycaemia, CBC, ...), was assessed at a health centre level. The total reported number in the 4th Quarter 2021 is 737,146; disaggregated at governorate level in Figure 35.

Figure 35: The number of patients received services in laboratories in health centres, 4<sup>th</sup> Quarter 2021



The total reported number of patients received services in health centres' laboratories are 2,621,805 in 2020; and 2,778,340 in 2021. Trend analysis per quarter is presented in [Figure 36].

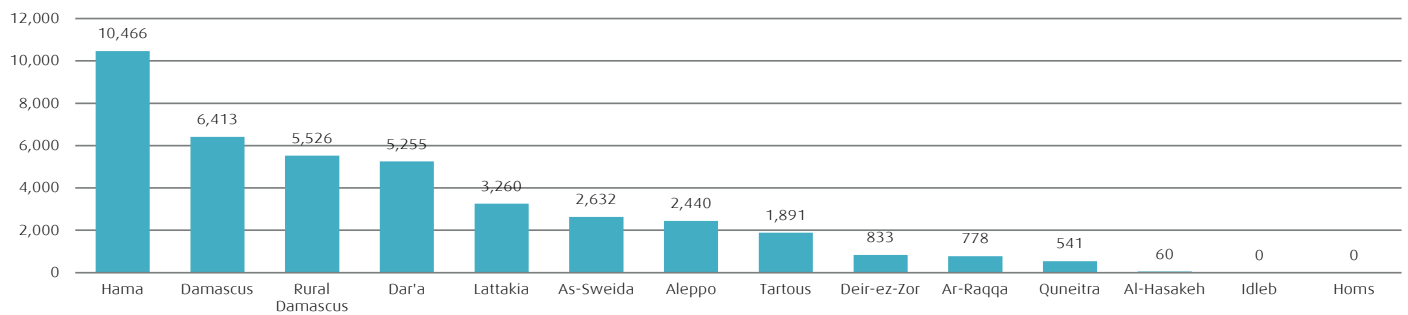
Figure 36: Trend analysis of number of patients received services in health centres' laboratories, per quarter



### iii. Referral capacity

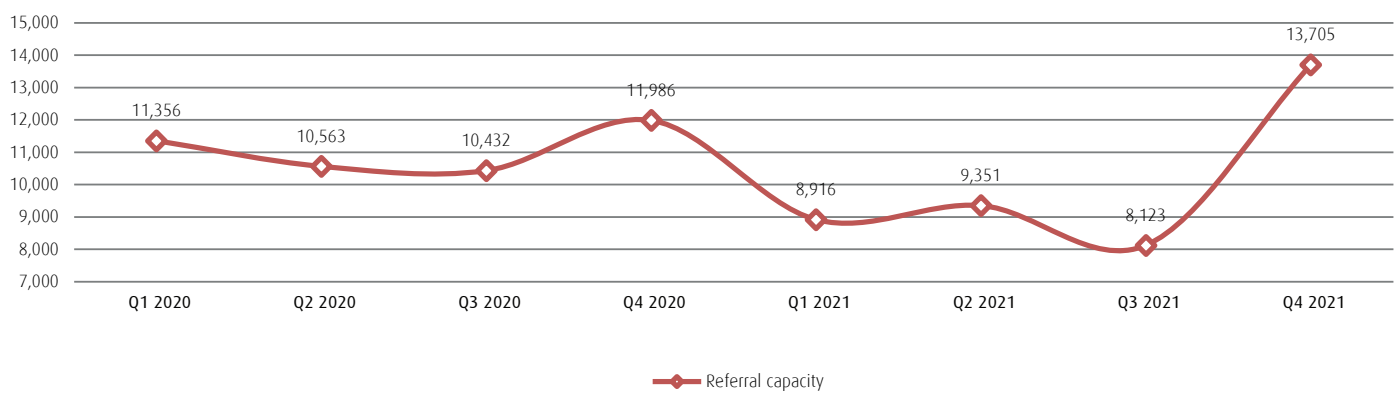
The referral capacity including: “referral procedures, means of communication, and access to transportation” was measured at a health centre level. The total reported number of referral cases in the 4th Quarter 2021 is 13,705; disaggregated at governorate level in Figure 37.

Figure 37: The number of referred cases per governorate, 4<sup>th</sup> Quarter 2021



The total number of referred cases is 44,337 in 2020; and 40,095 in 2021. Trend analysis per quarter is presented in [Figure 38].

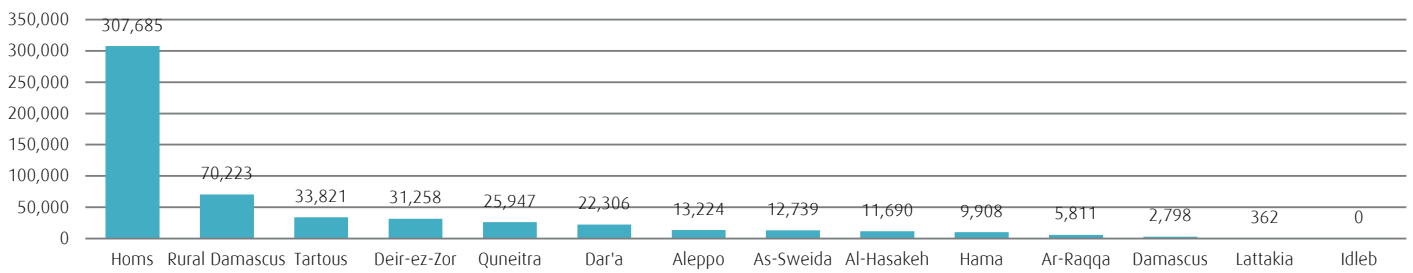
Figure 38: Trend analysis of referred cases per quarter



## 7.2 Emergency services

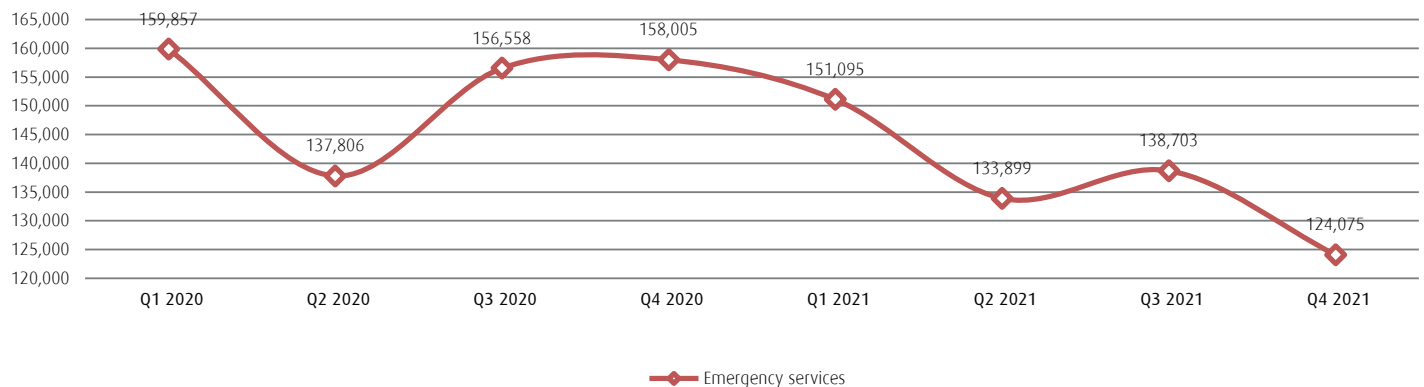
The emergency services including: “triage, assessment, first aid and life support (cardiopulmonary resuscitation (CPR) stabilization of patient with severe trauma and non-trauma emergencies before referral (IV line and saline solution for fluid resuscitation)” was assessed at a health centre level. The total reported number of cases in the 4th Quarter 2021 is 124,075; disaggregated at governorate level in Figure 39.

Figure 39: The number of emergency services cases reported in health centres, per governorate, 4<sup>th</sup> Quarter 2021



The total number of cases reported in health centres is 612,226 in 2020; and 547,772 in 2021. Trend analysis per quarter is presented in [Figure 40].

Figure 40: Trend analysis of emergency services cases in health centres, per quarter



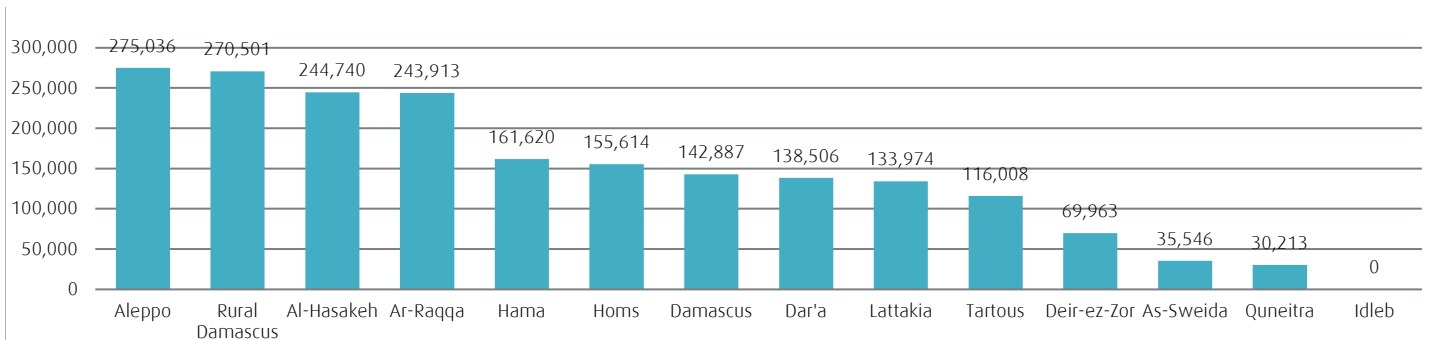
### 8.3 Child health

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:

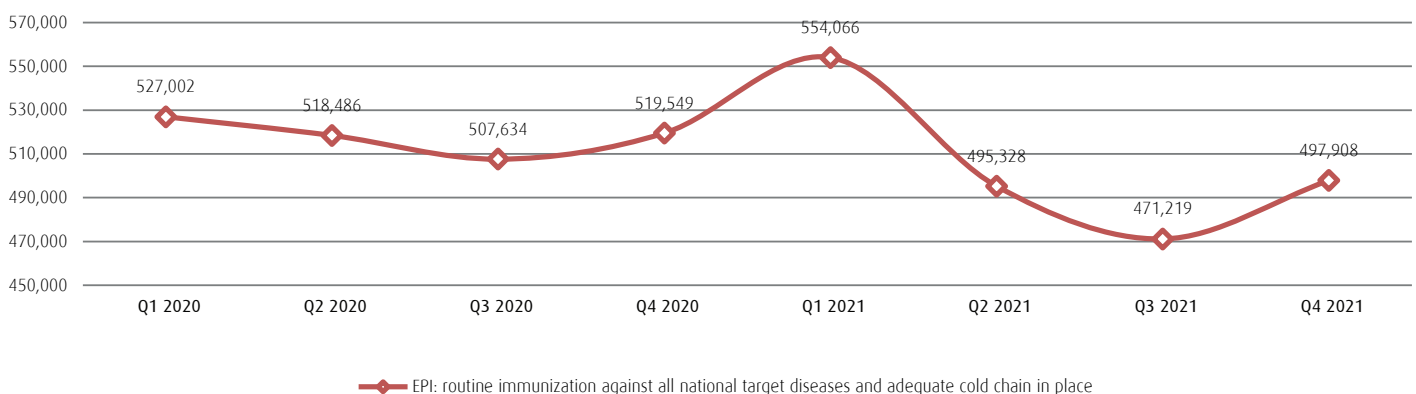
The number of children received routine immunization service through EPI was assessed at a health centre level. The total reported number in the 4th Quarter 2021 is 497,908 children; disaggregated at governorate level in Figure 41.

Figure 41: The number children received routine immunization service in health centres, 4<sup>th</sup> Quarter 2021



The total number of vaccinated children in health centres through EPI is 2,072,671 in 2020; and 2,018,521 in 2021. Trend analysis per quarter is presented in [Figure 42].

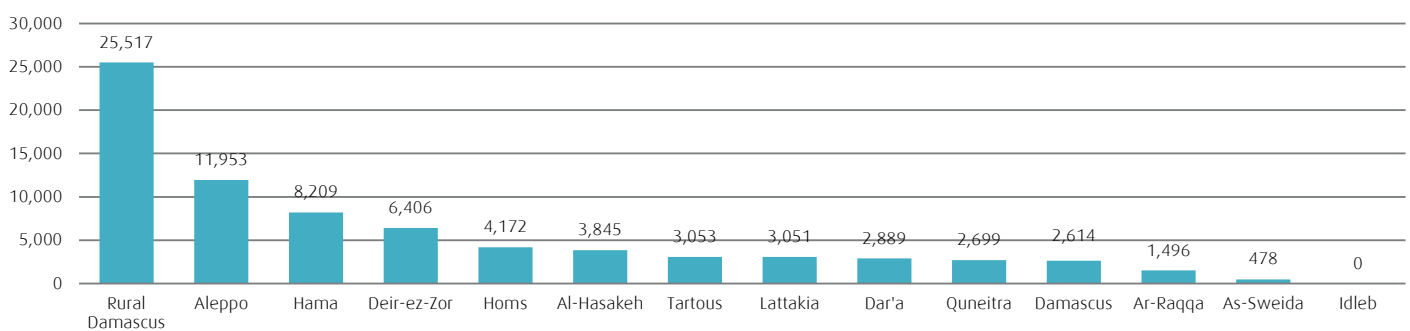
Figure 42: Trend analysis of children received routine immunization service in health centres, per quarter



## ii. Diarrhea Management:

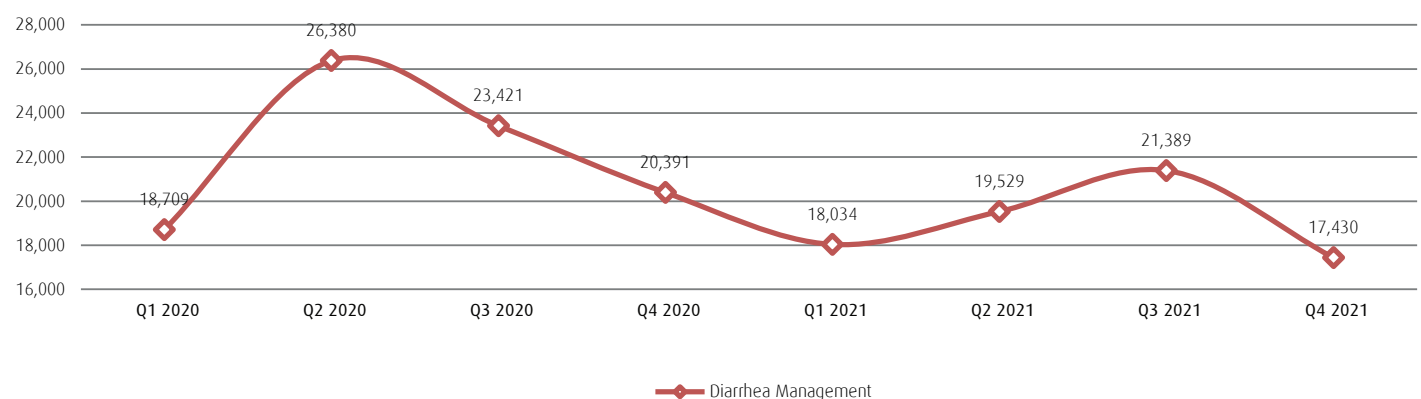
Diarrhea Management for children was assessed at a health centre level. The total reported number in the 4th Quarter 2021 is 17,430; disaggregated at governorate level in Figure 43.

Figure 43: The number of diarrhea cases (children) in health centres, 4<sup>th</sup> Quarter 2021



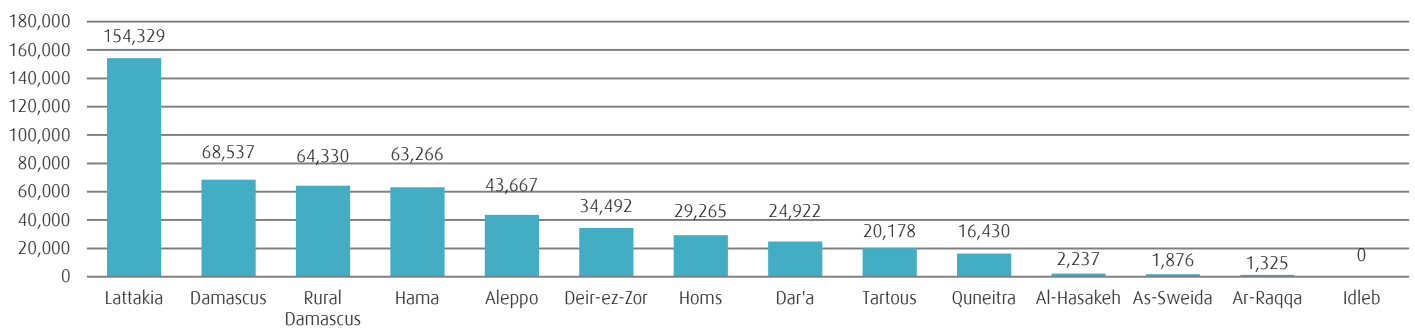
Trend analysis of diarrhea management for children in health centres per quarter is presented in [Figure 44]. The total number of children reported with diarrhea is 88,901 in 2020; and 76,382 in 2021.

Figure 44: Trend analysis of reported children with diarrhea in health centres, per quarter



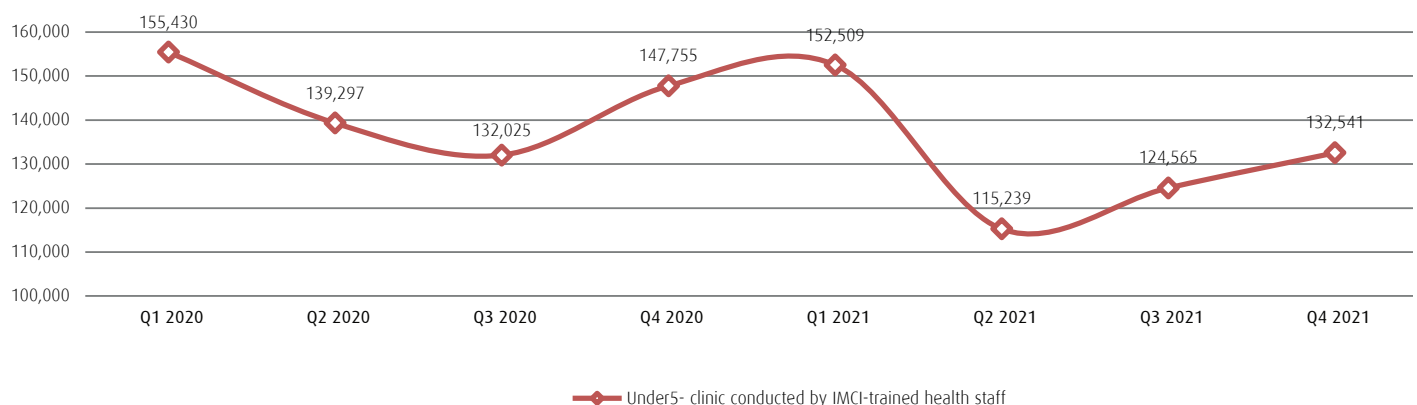
iii. **Under-5 clinic** conducted by IMCI-trained health staff with available paracetamol, first-line antibiotics, Oral rehydration salts (ORS) and zinc dispersible tablets, national IMCI guidelines and flowcharts was assessed at a health centre level. The total reported number in the 4th Quarter 2021 is 132,541; disaggregated at governorate level in Figure 45.

Figure 45: The number of Under-5 clinic cases, 4<sup>th</sup> Quarter 2021



Trend analysis of Under-5 clinic cases in health centres per quarter is presented in [Figure 46]. The total number of Under-5 clinic cases is 574,507 in 2020; and 524,854 in 2021.

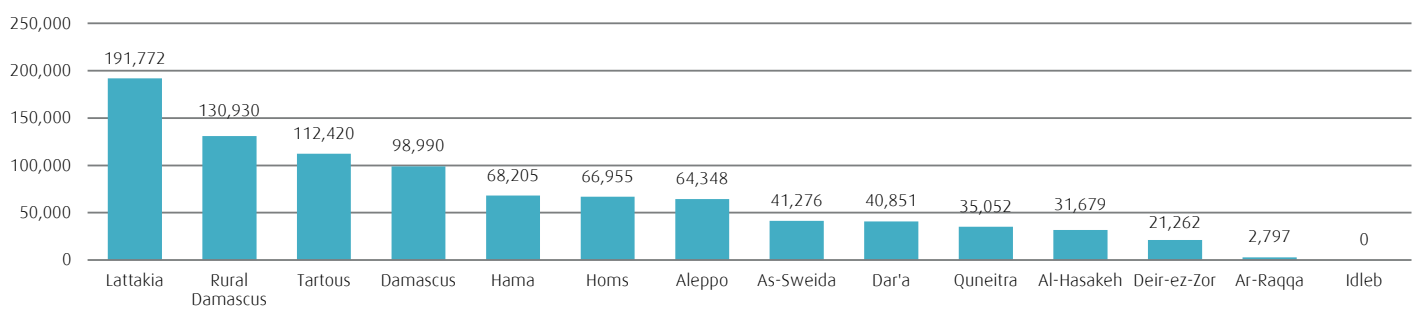
Figure 46: Trend analysis of Under-5 clinic cases in health centres in health centres, per quarter



## 8.4 Nutrition

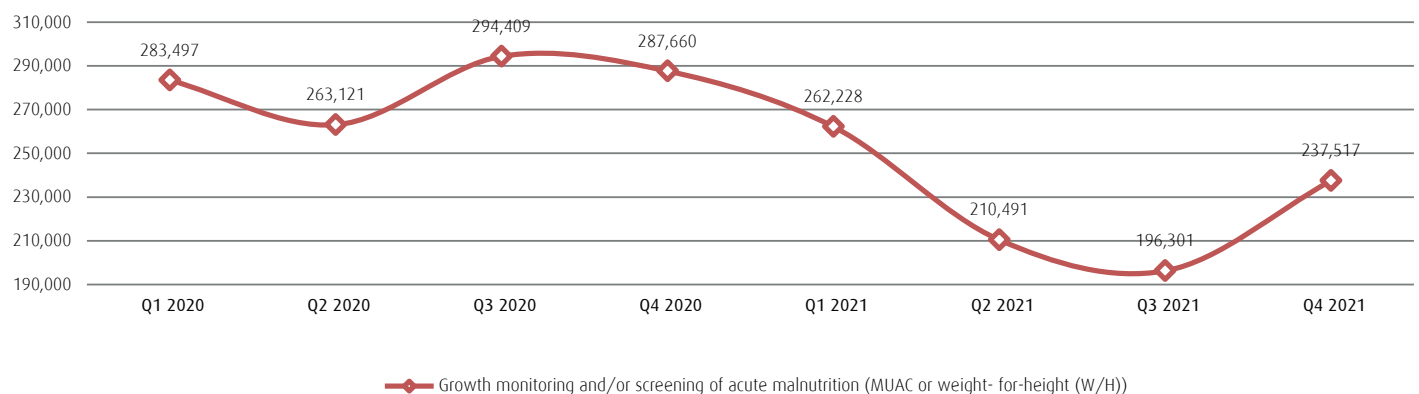
i. **Growth monitoring and/or screening of acute malnutrition (MUAC or weight- for-height (W/H))** was assessed at a health centre level. The total reported number in the 4<sup>th</sup> Quarter 2021 is 237,517; disaggregated at governorate level in Figure 47.

Figure 47: The number of growth monitoring and/or screening of acute malnutrition cases, 4<sup>th</sup> Quarter 2021



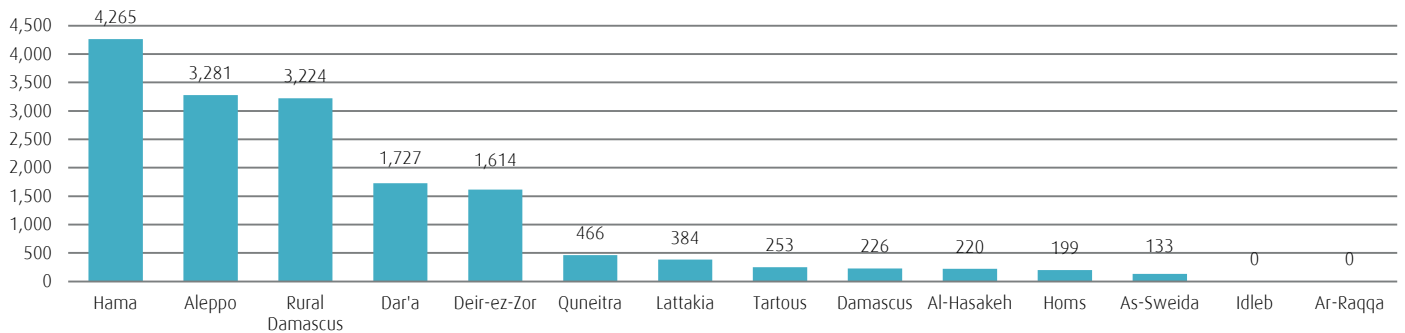
Trend analysis of growth monitoring and/or screening of acute malnutrition cases in health centres per quarter is presented in [Figure 48]. The total number of growth monitoring and/or screening of acute malnutrition cases is 1,128,687 in 2020; and 906,537 in 2021.

Figure 48: Trend analysis of growth monitoring and/or screening of acute malnutrition cases in health centres in health centres, per quarter



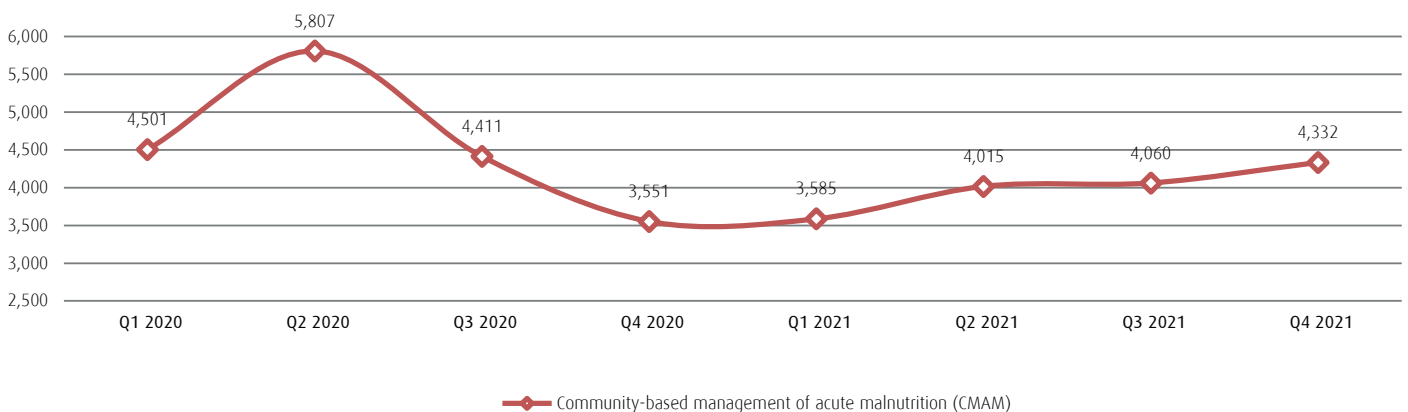
ii. Community-based **management of acute malnutrition (CMAM)** with outpatient programme for severe acute malnutrition without medical complications with ready-to-use therapeutic foods available was assessed at a health centre level. The total reported number in the 4<sup>th</sup> Quarter 2021 is 4,332; disaggregated at governorate level in Figure 49.

Figure 49: The number of management of acute malnutrition (CMAM) cases, 4<sup>th</sup> Quarter 2021



Trend analysis of management of acute malnutrition (CMAM) cases in health centres per quarter is presented in [Figure 50]. The total number of management of acute malnutrition (CMAM) is 18,270 in 2020; and 15,992 in 2021.

Figure 50: Trend analysis of management of acute malnutrition (CMAM) in health centres in health centres, per quarter

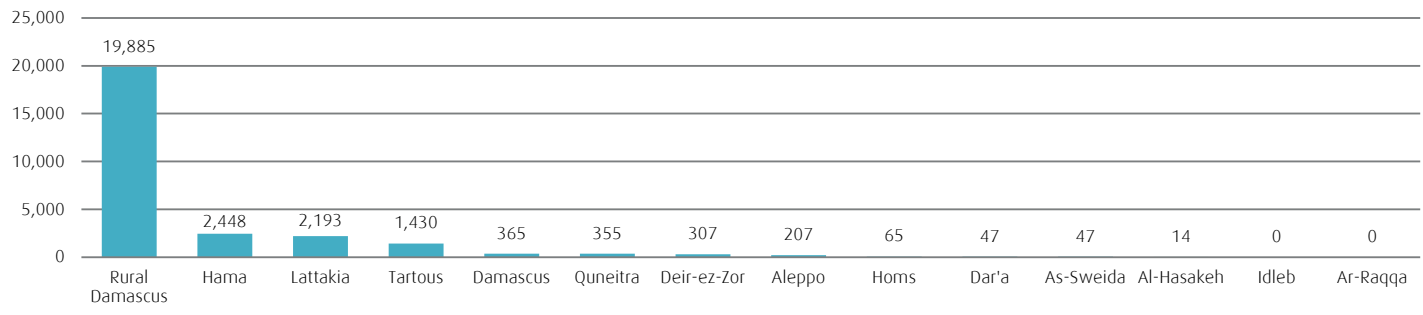




8.5 Communicable diseases

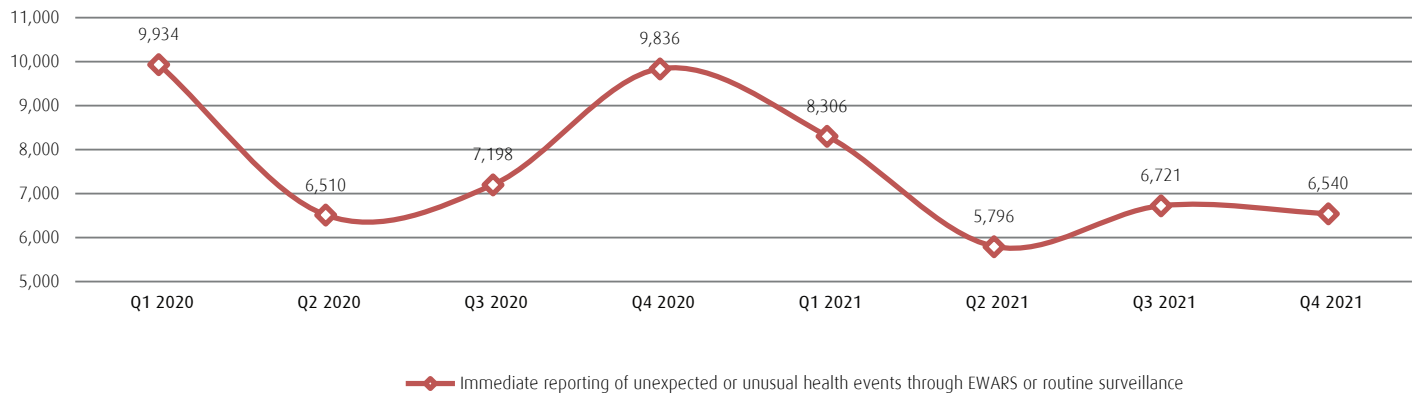
i. Immediate reporting of unexpected or unusual health events through EWARS or routine surveillance was assessed at a health centre level. The total number of reports in the 4<sup>th</sup> Quarter 2021 is 6,540; disaggregated at governorate level in Figure 51.

Figure 51: The number of immediate reporting of unexpected or unusual health events through EWARS or routine surveillance, 4<sup>th</sup> Quarter 2021



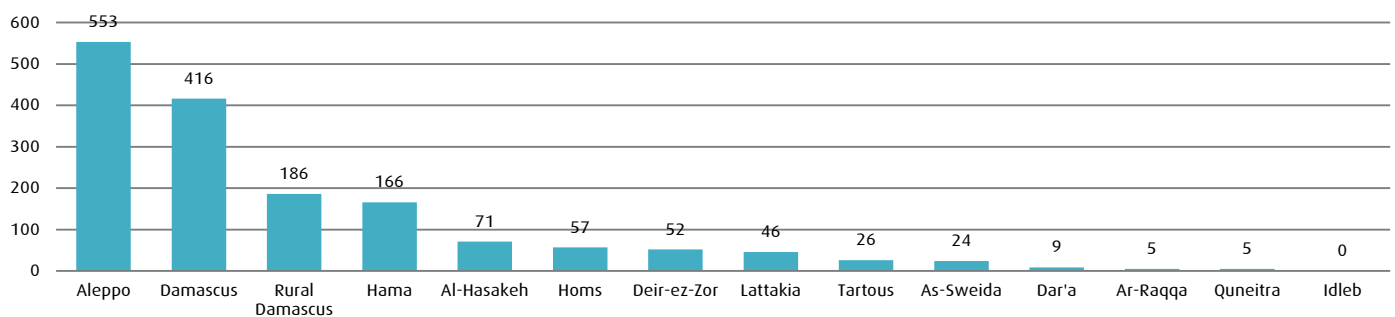
Trend analysis of immediate reporting of unexpected or unusual health events through EWARS or routine surveillance in health centres per quarter is presented in [Figure 52]. The total number of reports is 33,478 in 2020; and 27,363 in 2021.

Figure 52: Trend analysis of immediate reporting of unexpected or unusual health events through EWARS or routine surveillance in health centres in health centres, per quarter



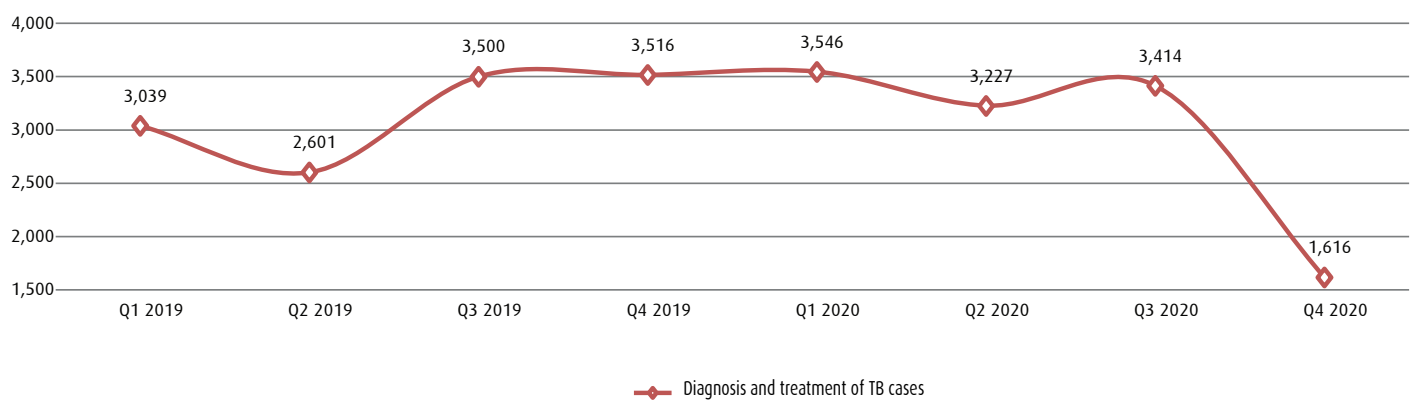
ii. Diagnosis and treatment of **TB cases**, or detection and referral of suspected cases, and follow-up was assessed at a health centre level. The total reported number in the 4<sup>th</sup> Quarter 2021 is 1,488; disaggregated at governorate level in Figure 53.

Figure 53: The number of diagnosis and treatment of TB cases, 4<sup>th</sup> Quarter 2021



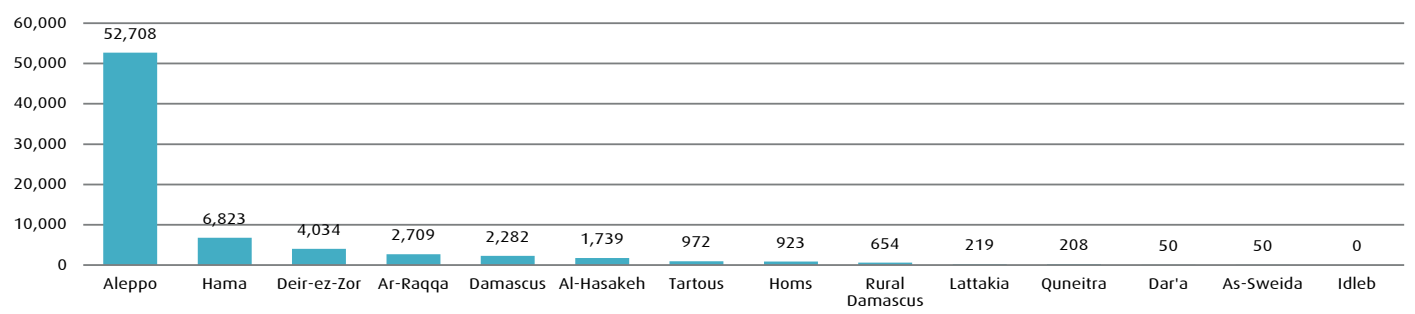
Trend analysis of diagnosis and treatment of TB cases in health centres per quarter is presented in [Figure 54]. The total number of diagnosis and treatment of TB cases is 11,803 in 2020; and 6,664 in 2021.

Figure 54: Trend analysis of diagnosis and treatment of TB cases in health centres, per quarter



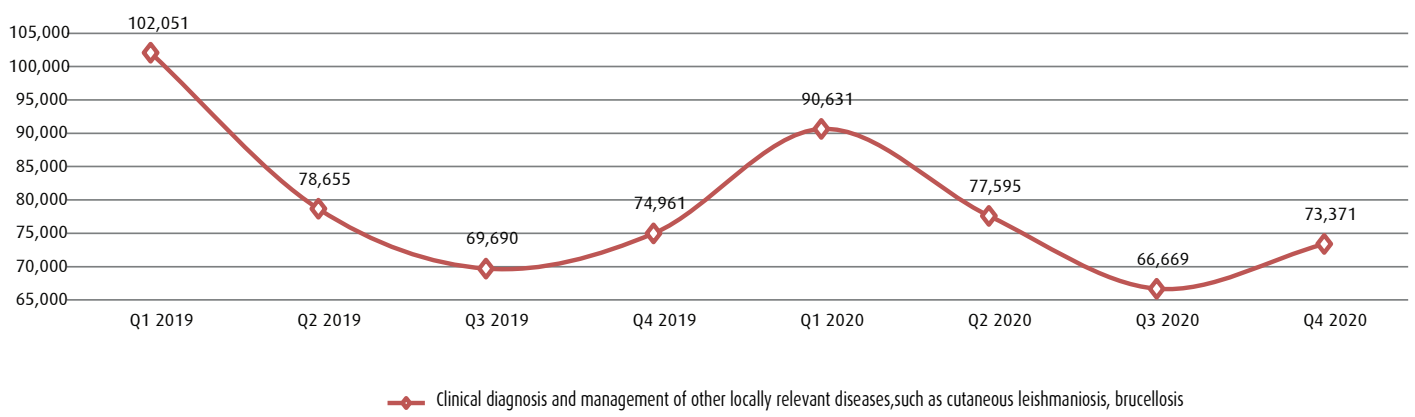
iii. Clinical diagnosis and management of **other locally relevant diseases, (such as cutaneous leishmaniosis, brucellosis)**, with protocols available for identification, classification, stabilization and referral of severe cases was assessed at a health centre level. The total reported number in the 4<sup>th</sup> Quarter 2021 is 67,444; disaggregated at governorate level in Figure 55.

Figure 55: The number of diagnosis and management of other locally relevant diseases cases, 4<sup>th</sup> Quarter 2021



Trend analysis of diagnosis and management of other locally relevant diseases cases in health centres per quarter is presented in [Figure 56]. The total number of diagnosis and management of other locally relevant diseases cases is 308,266 in 2020; and 239,265 in 2021.

Figure 56: Trend analysis of diagnosis and management of other locally relevant diseases cases in health centres, per quarter



## 8.6 Sexual and reproductive health

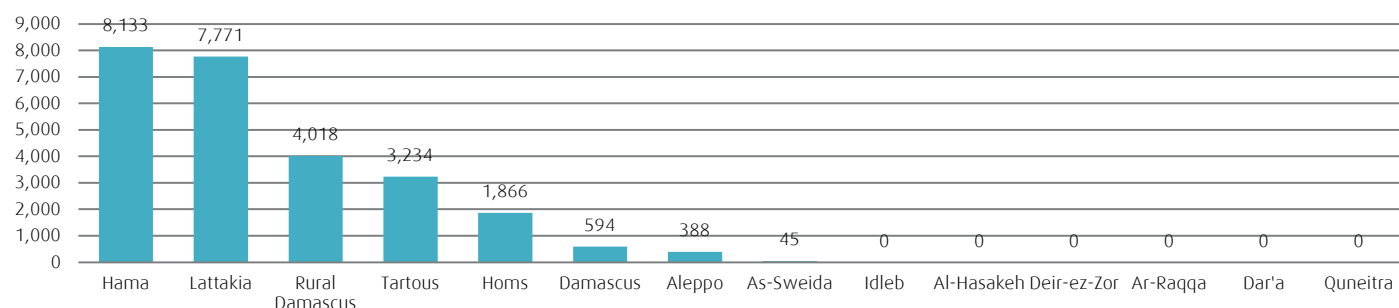
Availability and utilization of sexual & reproductive health care in health centres is assessed at a health centre level for syndromic management of sexually transmitted infections, family planning, antenatal care, normal deliveries, essential newborn care, Post-partum care, and tetanus shots.

### 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 4<sup>th</sup> Quarter 2021 is 7,409; disaggregated at governorate level in Figure 57.

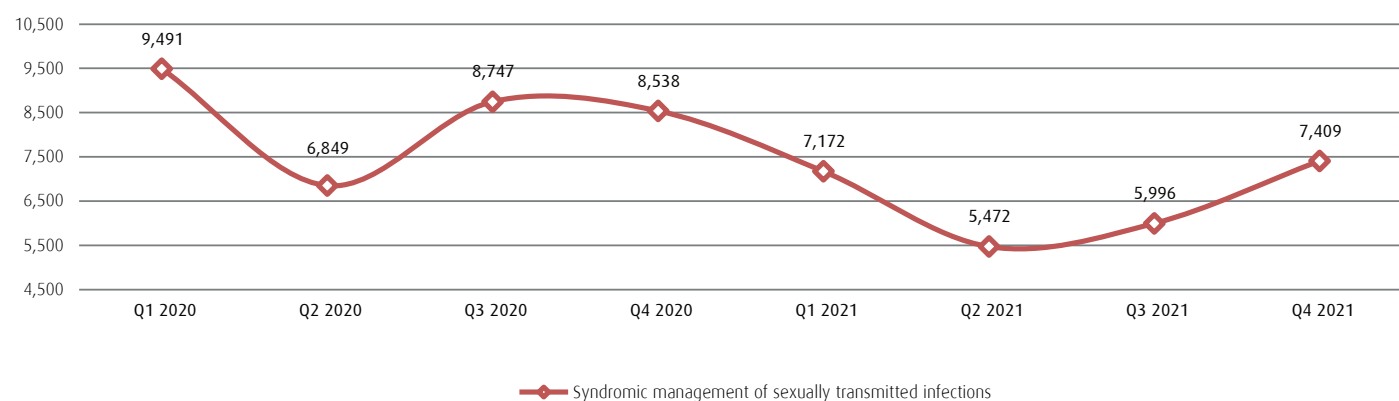
Of note: the availability of Syndromic management of STIs is reported in six governorates and mainly in comprehensive/ poly clinics. In other governorates, if any case reported to a health centre, they refer it to the health centres based on available capacity.

Figure 57: The number of cases reported with sexually transmitted infections in health centres, 4<sup>th</sup> Quarter 2021



Trend analysis of number of reported cases with sexually transmitted infections (STIs) in health centres per quarter is presented in [Figure 58]. The total number of reported STIs cases is 33,625 in 2020; and 26,049 in 2021.

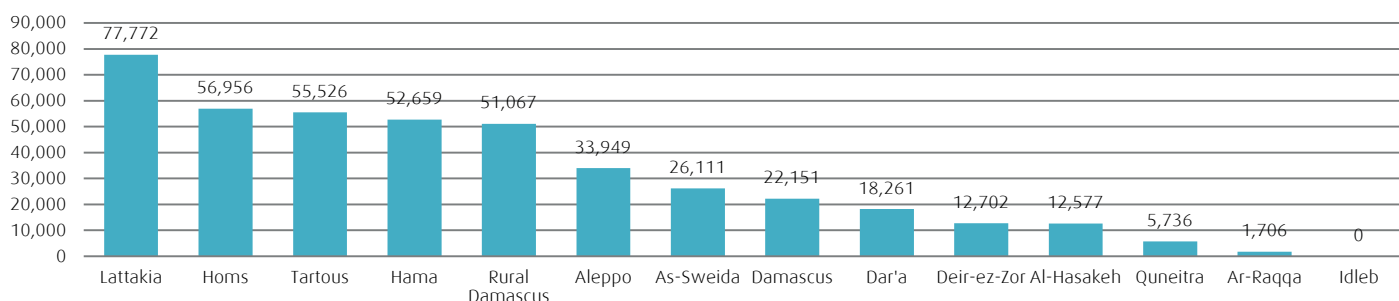
Figure 58: Trend analysis of reported cases of STIs in health centres, per quarter



## ii. Family Planning:

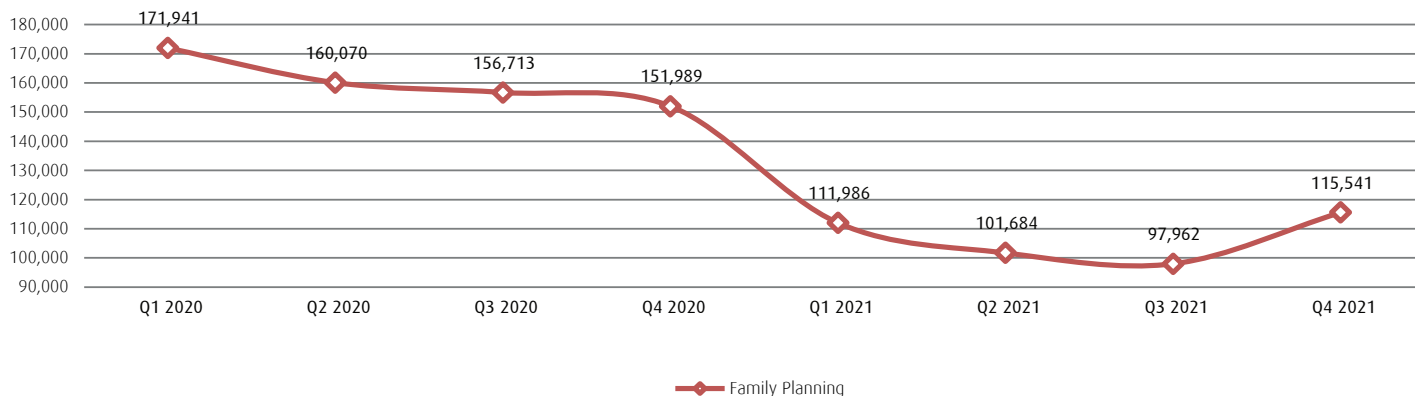
The **family planning** service was assessed at a health centre level. The total reported number of women received the service in the 4<sup>th</sup> Quarter 2021 is 115,541; disaggregated at governorate level in Figure 59.

Figure 59: The number of women received family planning services in health centres, 4<sup>th</sup> Quarter 2021



Trend analysis of number of women received family planning services in health centres per quarter is presented in [Figure 60]. The total number of women received family planning services in health centres is 640,713 in 2020; and 427,173 in 2021.

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

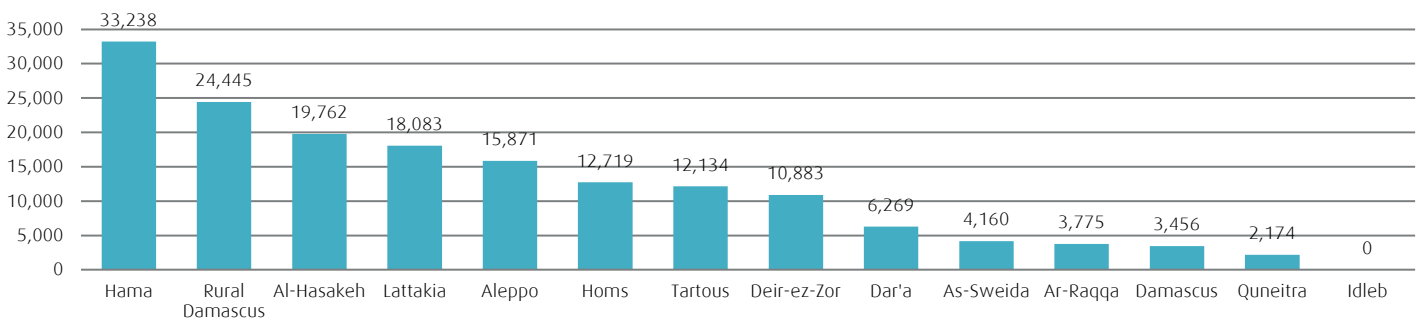


### iii. Antenatal care

#### a) Antenatal Care:

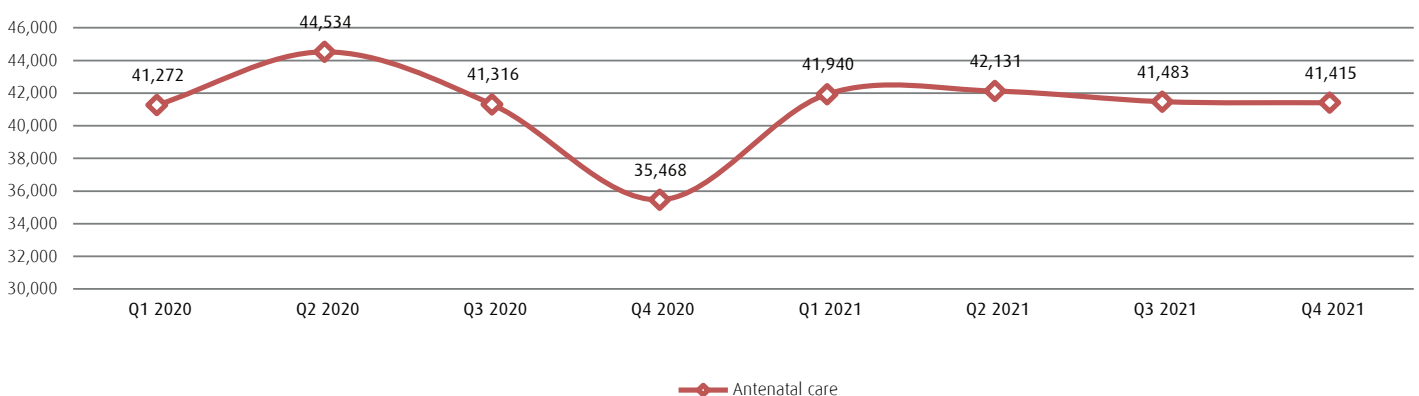
The **antenatal care** (i.e., assess pregnancy, birth and emergency plan, respond to problems (observed and/or reported), advise/counsel on nutrition & breastfeeding, self-care and family planning, preventive treatment(s) as appropriate) was assessed at a health centre level. The total reported number of pregnant women received the service in the 4<sup>th</sup> Quarter 2021 is 41,415; disaggregated at governorate level in Figure 61.

Figure 61: The number of pregnant women received antenatal services in health centres, 4<sup>th</sup> Quarter 2021



Trend analysis of number of pregnant women received antenatal services in health centres per quarter is presented in [Figure 62]. The total number of pregnant women received antenatal services in health centres is 162,590 in 2020; and 166,969 in 2021.

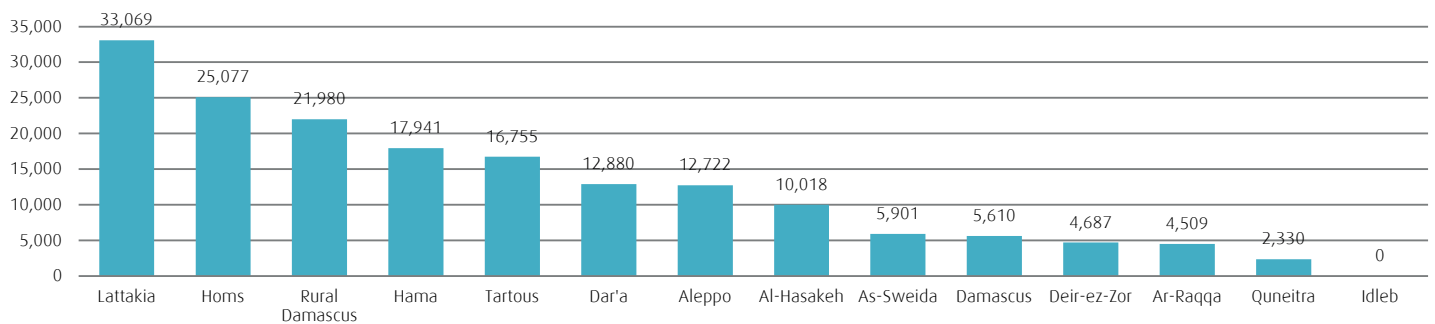
Figure 62: Trend analysis of number of pregnant women received antenatal services in health centres, per quarter



### b) Antenatal visits:

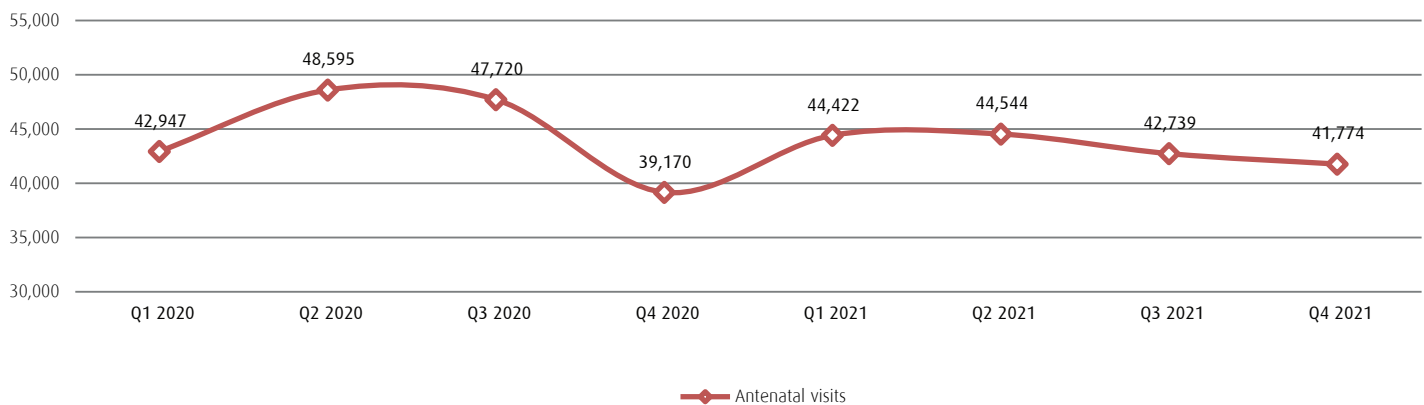
The number of **antenatal visits** was assessed at a health centre level. The total reported number of visits for pregnant women received the service in the 4<sup>th</sup> Quarter 2021 is 41,774; disaggregated at governorate level in Figure 63.

Figure 63: The number of antenatal visits in health centres, 4<sup>th</sup> Quarter 2021



Trend analysis of number of antenatal visits in health centres per quarter is presented in [Figure 64]. The total number of antenatal visits in health centres is 178,432 in 2020; and 173,479 in 2021.

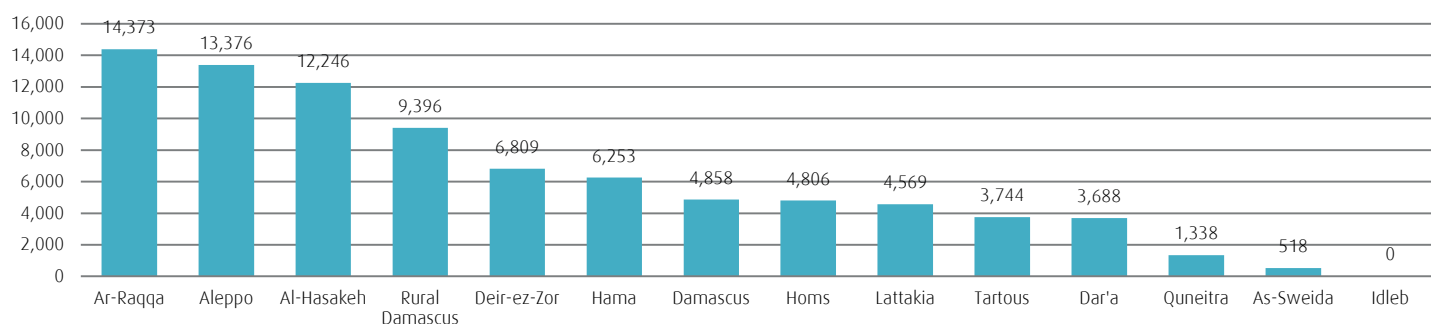
Figure 64: Trend analysis of antenatal visits in health centres, per quarter



### c) Tetanus Shots:

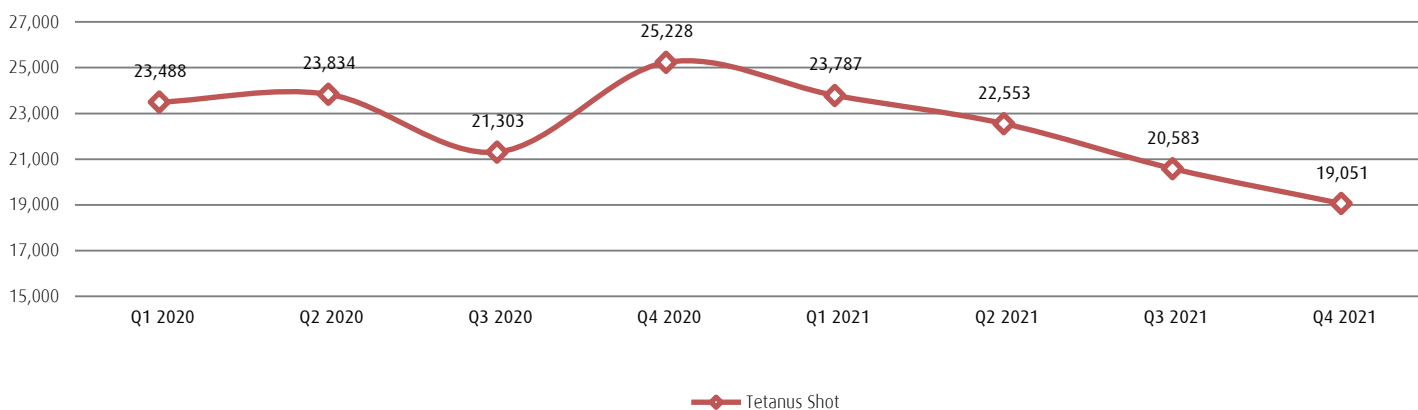
The number of pregnant women received Tetanus Shots was assessed at a health centre level. The total reported number of women received the service in the 4<sup>th</sup> Quarter 2021 is 19,051; disaggregated at governorate level in Figure 65.

Figure 65: The number of pregnant women received tetanus shot in health centres, 4<sup>th</sup> Quarter 2021



Trend analysis of number of pregnant women received tetanus shots in health centres per quarter is presented in [Figure 66]. The total number of pregnant women is 93,853 in 2020; and 85,974 in 2021.

Figure 66: Trend analysis of number of pregnant women received tetanus shots, per quarter

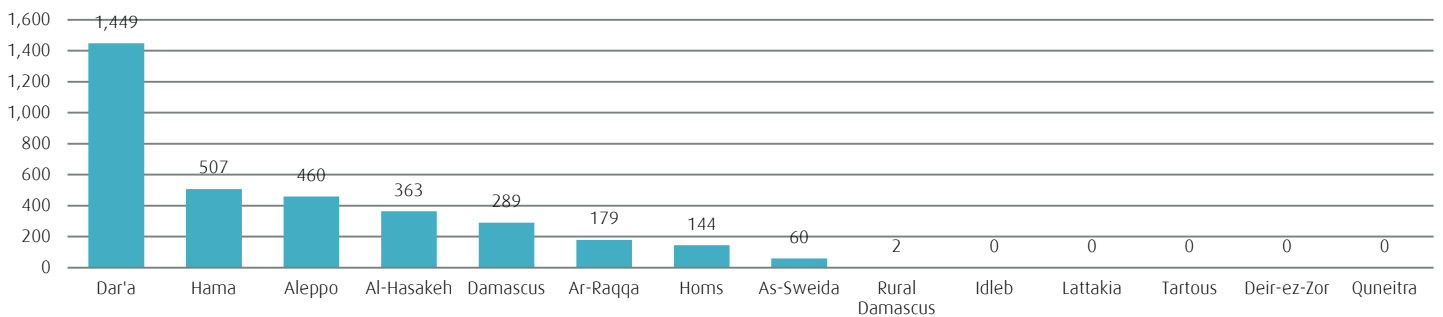




#### d) Normal deliveries:

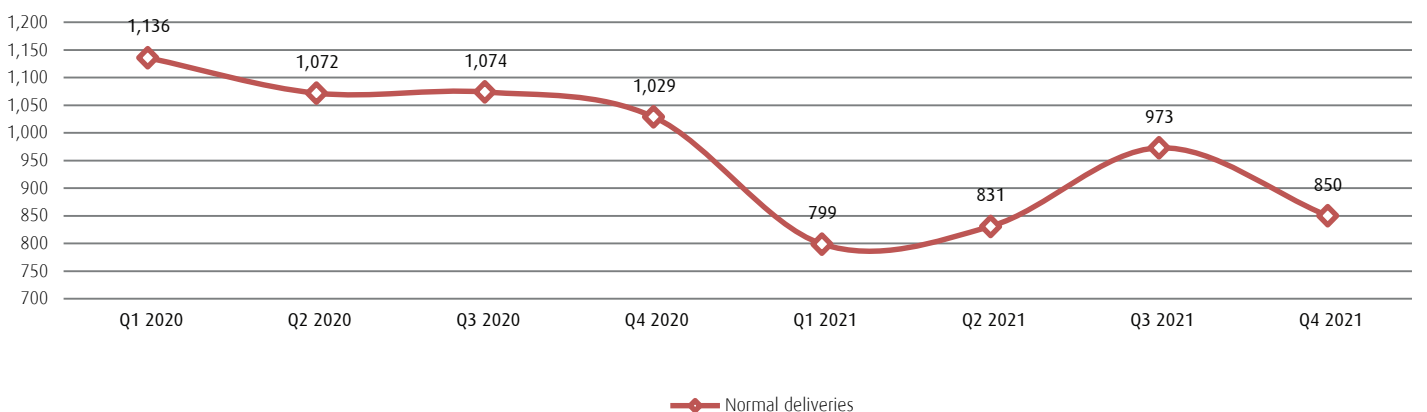
The number of Normal deliveries was assessed at a health centre level. The total reported number in the 4th Quarter 2021 is 850; disaggregated at governorate level in Figure 67.

Figure 67: The number of normal deliveries in health centres, 4<sup>th</sup> Quarter 2021



Trend analysis of number of normal deliveries in health centres per quarter is presented in [Figure 68]. The total number of normal deliveries is 4,311 in 2020; and 3,453 in 2021.

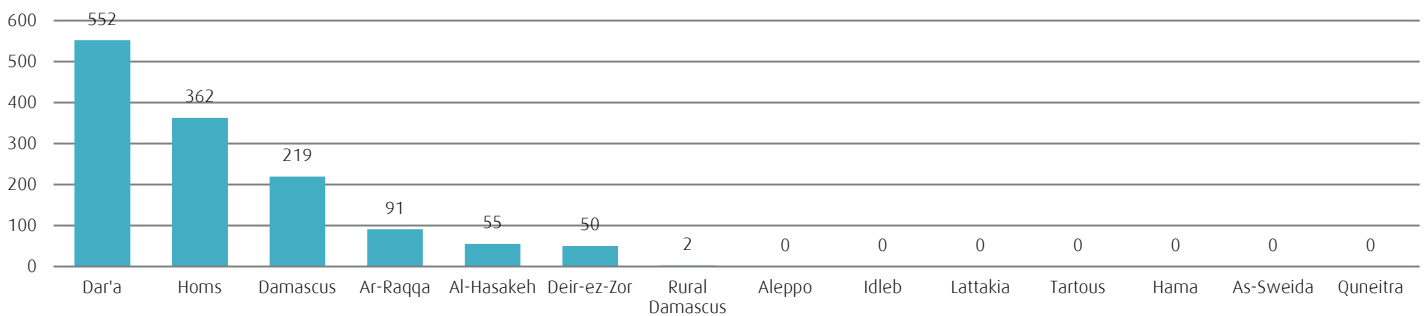
Figure 68: Trend analysis of normal deliveries in health centres, per quarter



#### e) Basic Emergency Obstetric Care (BEOC):

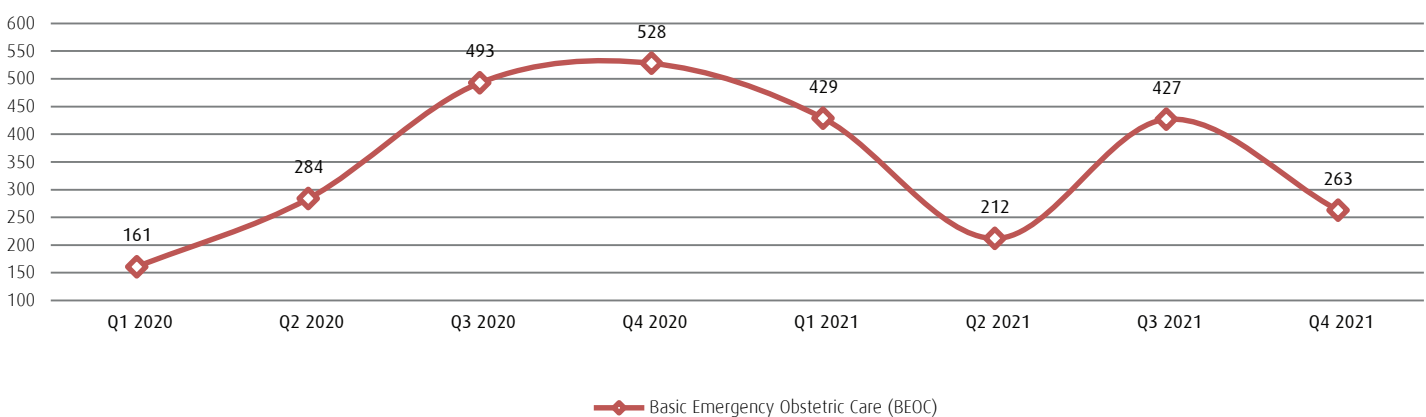
Availability and utilization of BEOC service (including: parenteral antibiotics + oxytocic/anticonvulsant drugs + manual removal of placenta + removal of retained products with manual vacuum aspiration (MVA) + assisted vaginal delivery 24/24 & 7/7<sup>\*</sup>), was assessed at a health centre level. The total reported number of women received the service in the 4<sup>th</sup> Quarter 2021 is 263; disaggregated at governorate level in Figure 69.

Figure 69: The number of women received BEOC in health centres, 4<sup>th</sup> Quarter 2021



Trend analysis of number of women received BEOC service in health centres per quarter is presented in [Figure 70]. The total number of women is 1,466 in 2020; and 1,331 in 2021.

Figure 70: Trend analysis of women received BEOC in health centres, per quarter

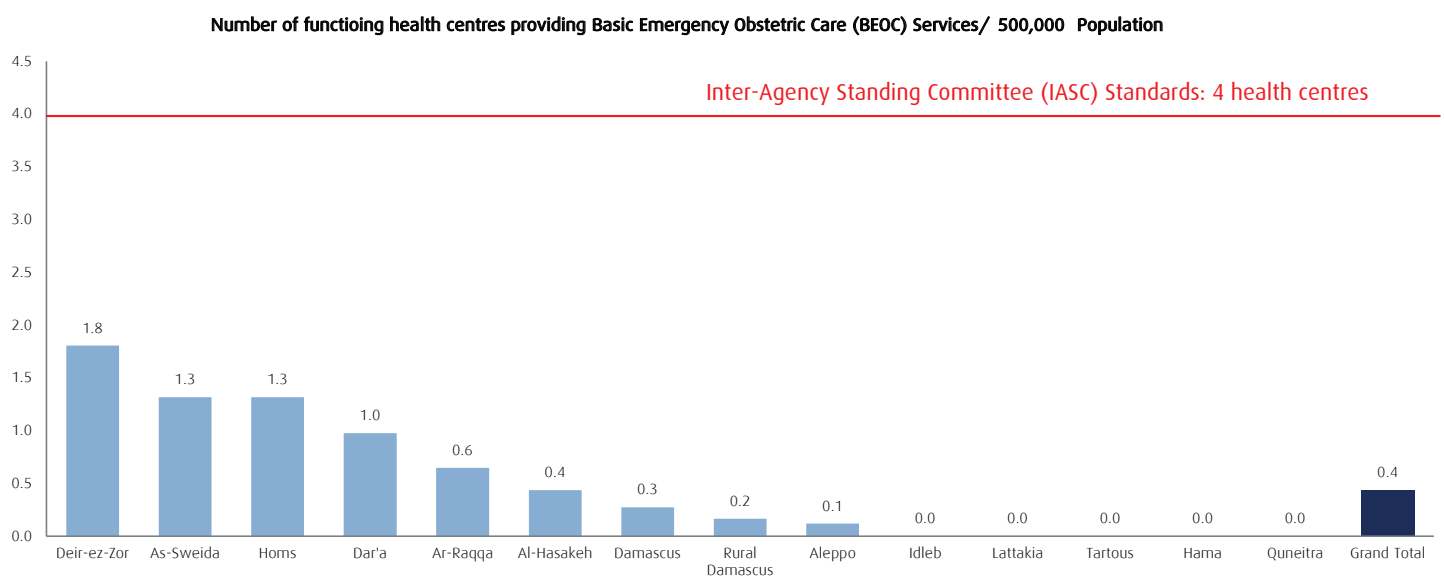


◆ Basic Emergency Obstetric Care (BEOC)

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 71].

Figure 71: Number of functioning health centres providing BEOC services/ 500,000 Population, December 2021

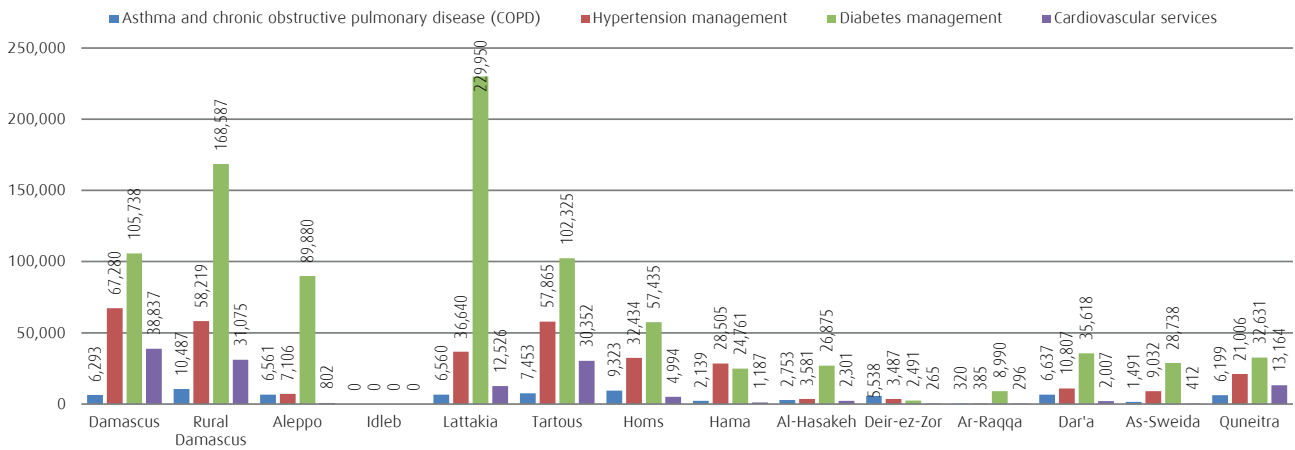


8.7 Noncommunicable diseases

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 2021 is as follows: Asthma and chronic obstructive pulmonary disease (COPD) [18,143], Cardiovascular services [33,768], Hypertension management [87,596], and Diabetes management [225,280]; disaggregated figures are provided at governorate level in [Figure 72].

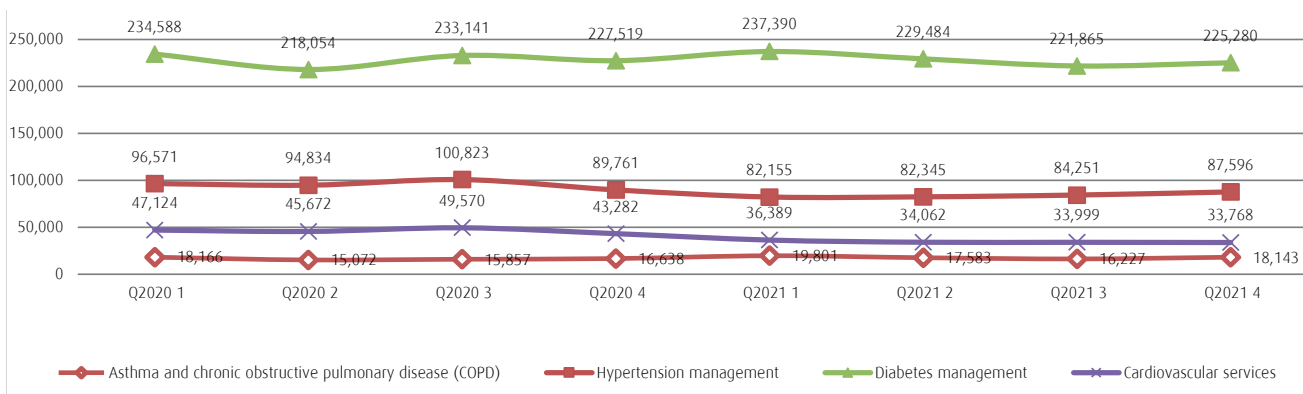
Figure 72: The number of NCDs consultations (COPD, Cardiovascular, Hypertension, and Diabetes in health centres, 4<sup>th</sup> Quarter 2021



Trend analysis of number of patients received NCDs health care services in health centres per quarter is presented in [Figure 73]. The total number of patients received NCDs' services in 2020 are 1,546,672, disaggregated as follows: 65,733 for Asthma and chronic obstructive pulmonary disease (COPD), 185,648 for cardiovascular, 381,989 for hypertension, and 913,302 for diabetes.

While the total number of patients received NCDs' services in 2021 are 1,460,338, disaggregated as follows: 71,754 for Asthma and chronic obstructive pulmonary disease (COPD), 138,218 for cardiovascular, 336,347 for hypertension, and 914,019 for diabetes.

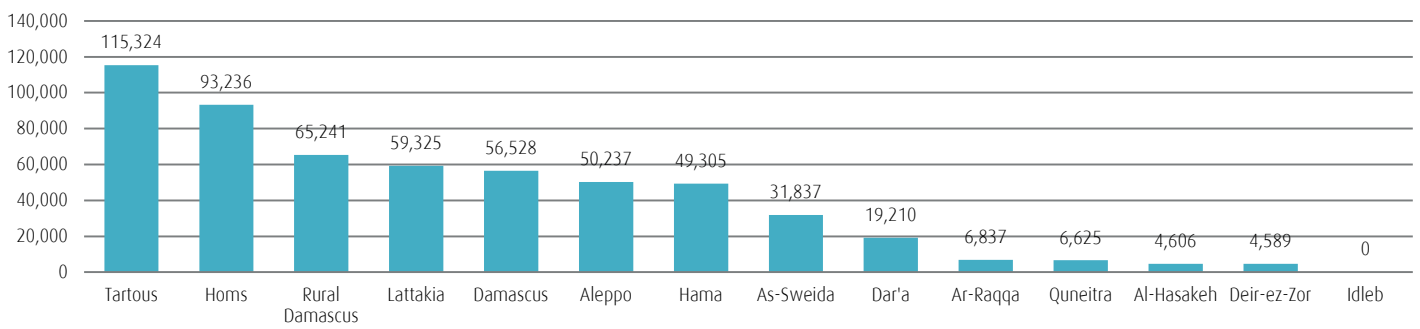
Figure 73: Trend analysis of NCDs' consultations in health centres, per quarter



## 8.8 Oral health and dental care

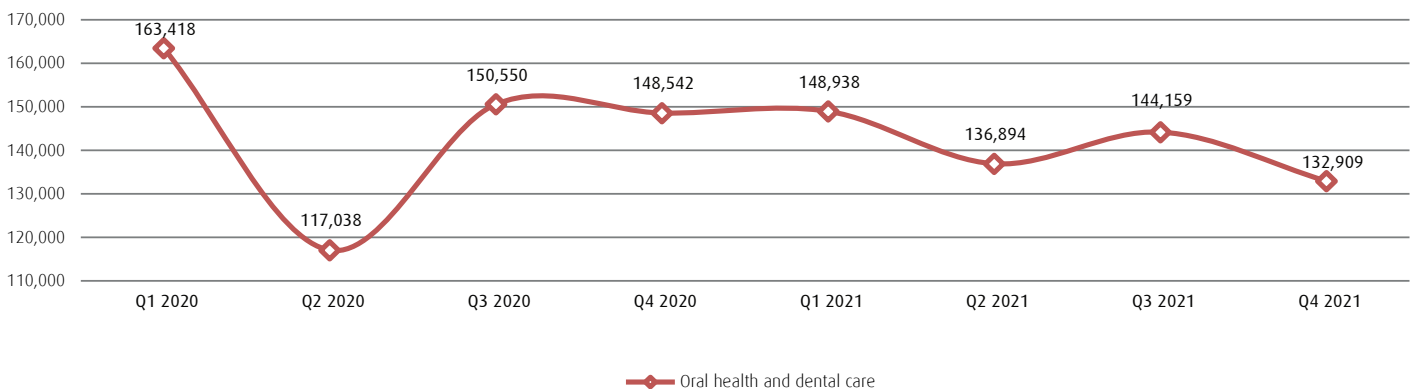
The total reported number in the 4<sup>th</sup> Quarter 2021 is 132,909; disaggregated at governorate level in [Figure 74].

Figure 74: The number of oral health and dental care cases in health centres, 4<sup>th</sup> Quarter 2021



Trend analysis of number of oral health and dental care cases in health centres per quarter is presented in [Figure 75]. The total number of patients is 579,548 in 2020; and 562,900 in 2021.

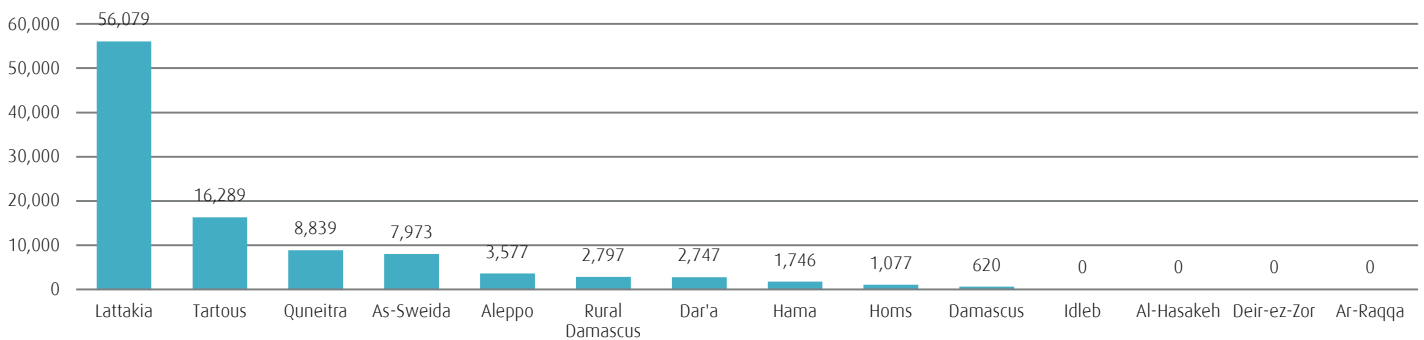
Figure 75: Trend analysis of oral health and dental care cases in health centres, per quarter



### 8.9 Mental health care

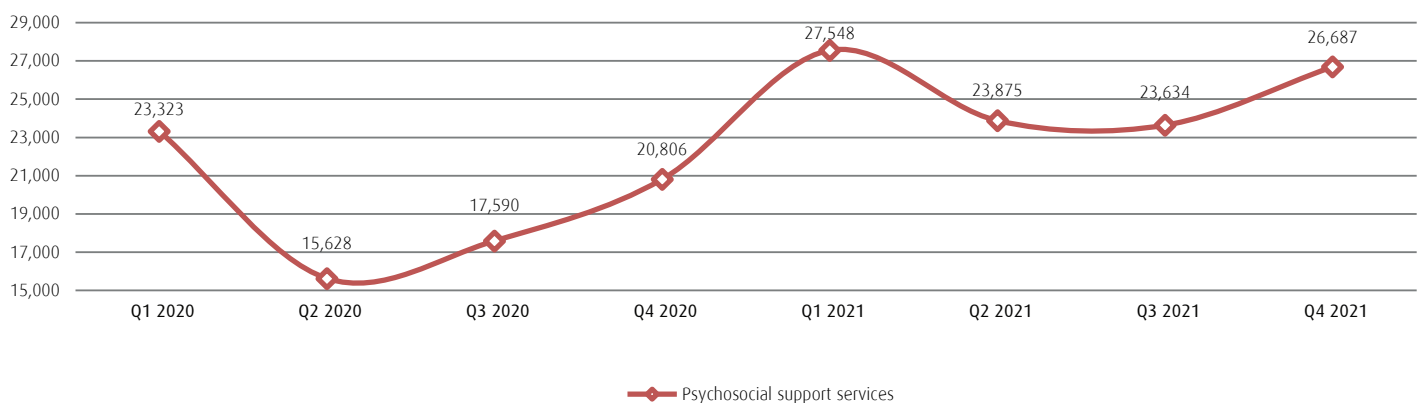
i. **Psychosocial support services** for distressed people, survivors of assault, abuse, neglect, and domestic violence, including Psychological first aid (PFA), and linking vulnerable individuals/families with resource (such as health services, livelihood assistance etc) was assessed at a health centre level. The total reported number in the 4<sup>th</sup> Quarter 2021 is 26,687; disaggregated at governorate level in [Figure 76].

Figure 76: The number of psychosocial support cases in health centres, 4<sup>th</sup> Quarter 2021



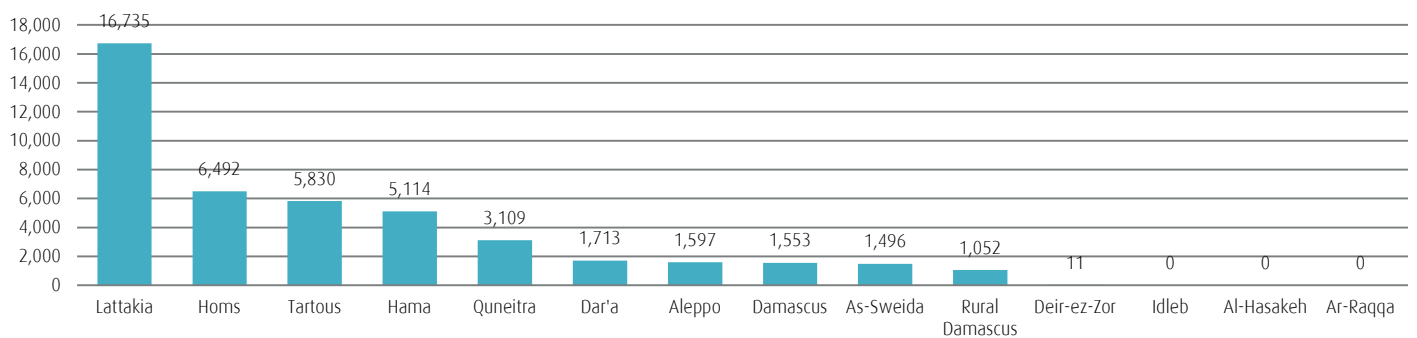
Trend analysis of number of patients received psychosocial support services in health centres per quarter is presented in [Figure 77]. The total number of patients is 77,347 in 2020; and 101,744 in 2021.

Figure 77: Trend analysis of patients received psychosocial support services in health centres, per quarter



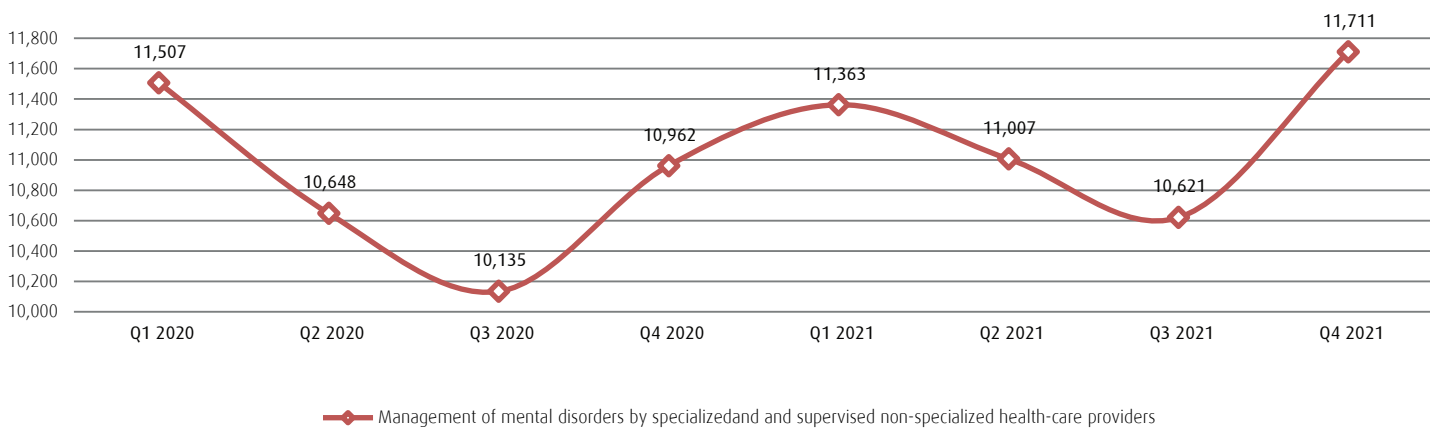
ii. **Management of mental disorders** by specialized and/or trained and supervised non-specialized health-care providers (mhGAP – Intervention Guide), and/or availability of at least one medicine from each group, antipsychotics, antidepressants, antiepileptic and anxiolytics was assessed at a health centre level. The total reported number in the 4<sup>th</sup> Quarter 2021 is 11,711 ; disaggregated at governorate level in [Figure 77].

Figure 78: The number of management of mental disorders cases in health centres, 4<sup>th</sup> Quarter 2021



Trend analysis of number of patients received management of mental disorders services in health centres per quarter is presented in [Figure 79]. The total number of patients is 43,252 in 2020; and 44,702 in 2021.

Figure 79: Trend analysis of patients received management of mental disorders services in health centres, per quarter



## 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 checklist<sup>2</sup>.

In its tenth 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 (1,236/ 1,789), 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.

- Only 51.1% of public health centers meet the 70% equipment availability threshold.
- In terms of the availability of equipment, Tartous was the best, then Lattakia, and then As-Sweida. The worst was Ar-Raqqa, then Idlib, and then Aleppo.

Gaps on essential equipment and machines were observed, even within the functional health centres. Further details are provided in [Figure 80, 81].

<sup>2</sup> A more detailed list of essential equipment is available upon request.



Figure 80: Percentage of functional essential equipment/ total available equipment in functional health centres per governorate, 4th Quarter 2021

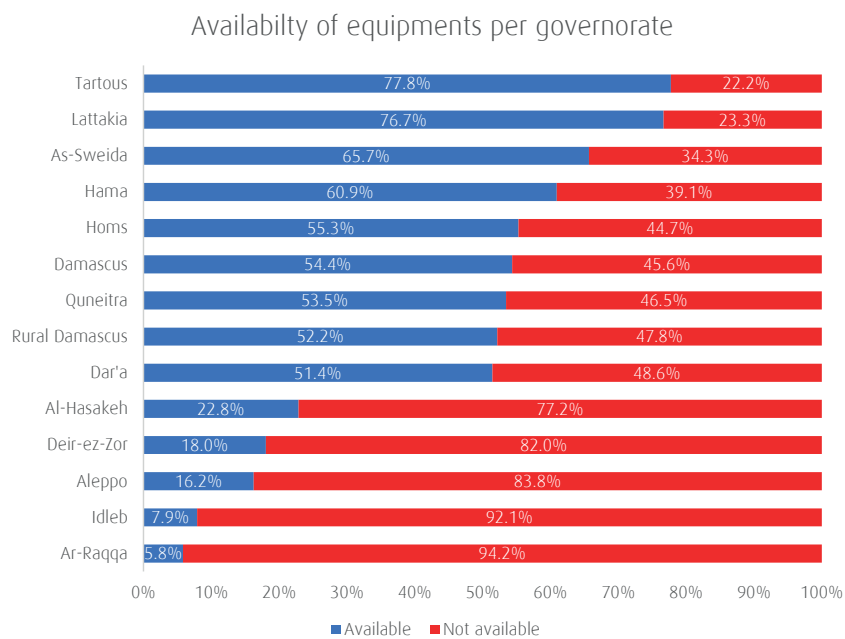
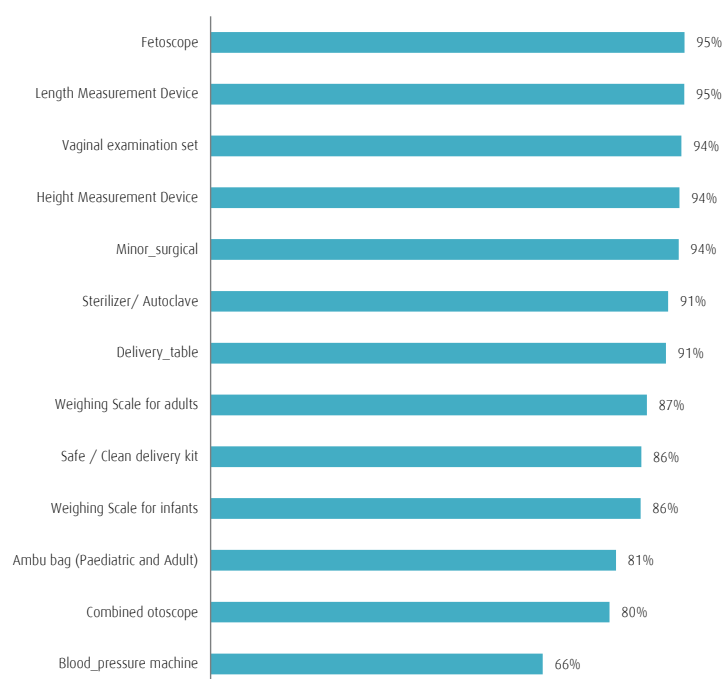


Figure 81: Percentage of functional essential equipment/ total available equipment in functional health centres, 4th Quarter 2021



## 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.

- Only 8.4% of public health centers meet the 70% medicines availability threshold.
- In terms of the availability of medicines, Quneitra was the best, then As-Sweida, and then Lattakia. The worst was Idlib, then Ar-Raqqa, and then Al-Hasakeh.

Gaps of medicines and medical supplies are identified even within the functional health centres [Figure 82,83]

Figure 82: Availability of medicines and medical consumables at functional health centres per governorate, 4th Quarter 2021

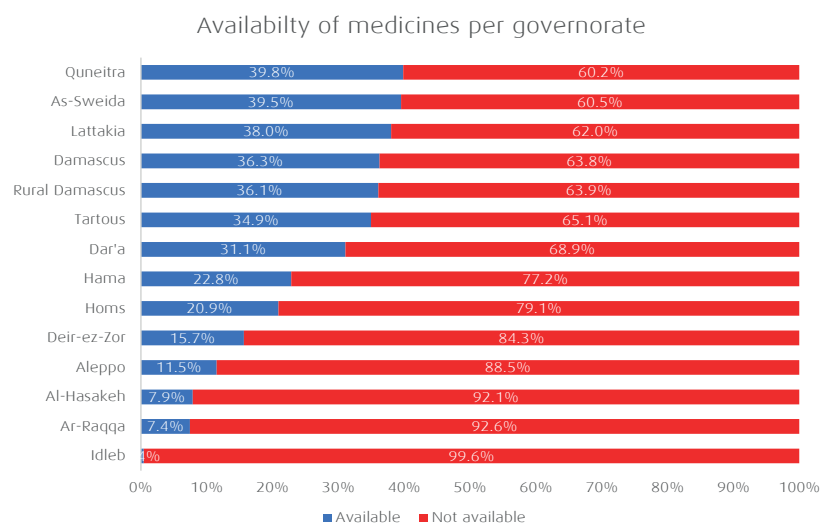
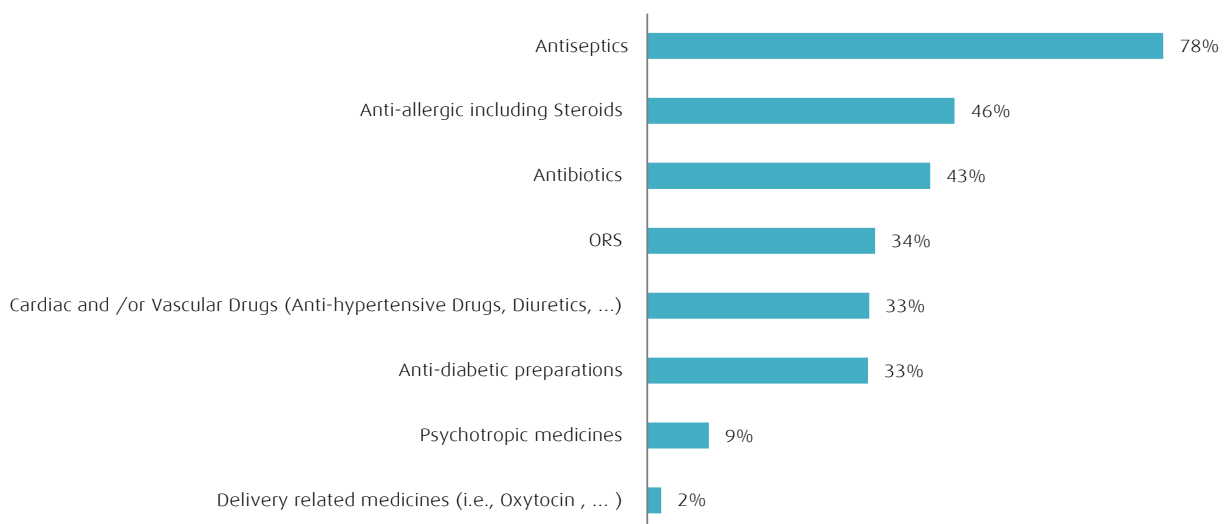


Figure 83: Availability of medicines and medical consumables at functional health centres, 4th Quarter 2021



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

## 11. Conclusions and recommendations

- Slight variation of functionality status of public health centres was observed throughout 2021; for example, the number of non-functioning health centres has increased slightly from 552 to 553 (between 1st Quarter and 4th Quarter of 2021) as a direct impact of deteriorating security situation.
- Similarly, slight variation of accessibility status to the public health centres was observed throughout 2021 with 251 health centres reportedly non-accessible in 4th quarter 2021 compared to 259 in 1st quarter of the same year. Functionality status of health centres was highly affected by the dire security situation and limited access by health staff and patients as well as critical shortages of supplies.
- Levels of damages 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.
- Slight improvement of the available number of nurses with slight decreasing of the available number of doctors and midwives throughout 2021 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.

