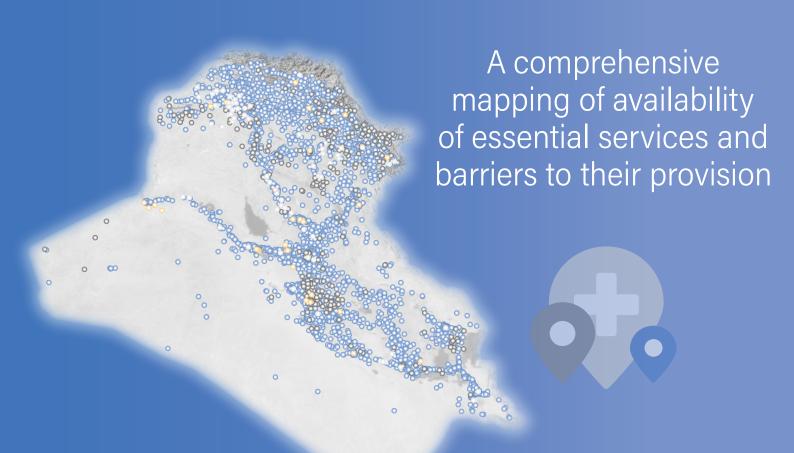
# HeRAMS Iraq Baseline Report 2023 Part 2







#### © World Health Organization 2023

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, as indicated below. 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 (<a href="http://www.wipo.int/amc/en/mediation/rules/">http://www.wipo.int/amc/en/mediation/rules/</a>).

**Suggested citation**. HeRAMS Iraq Baseline Report 2023 Part 2 - Communicable disease services: A comprehensive mapping of availability of essential services and barriers to their provision; 2023

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 WHO 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 WHO 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 WHO 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 WHO be liable for damages arising from its use.

# HeRAMS IRAQ BASELINE REPORT 2023 PART 2

## Communicable disease services

A comprehensive mapping of availability of essential services and barriers to their provision









## TABLE OF CONTENT

Acronyms	V
Disclaimer	VI
Part I: Availability of communicable disease services	1
How to read the charts	
Overview of health facilities evaluated	3
Service availability and main barriers by health facility type	4
Service availability by catchment population	66
Main barriers impeding service delivery	7
Part II: In-depth analysis by health service	8
How to read the charts and the maps	
Syndromic surveillance	11
Event-based surveillance	13
Malaria at the community level	
Malaria at the primary care level	17
Vector control	
Support mass drug administration	21
Tuberculosis	23
MDRTB	25
IEC on local priority diseases	
Local priority diseases	
Management of severe and/or complicated communicable diseases	
Isolation unit or room	33
Annex	36
Annex I: HeRAMS service definitions	37
Annex II: Population estimates	38



## **A**CRONYMS

**DoH** Directorate of Health

**HeRAMS** Health Resources and Services Availability Monitoring System

**IEC** Information, education, and communications

MDRTB Multi-drug-resistant TB

PHCC B Primary Health Care Center - Branch

PHCC F Primary Health Care Center - Family Medicine Health Care Center

PHCC M Primary Health Care Center - Main

PHCC MS Primary Health Care Center - Main Specialized

**SP Center** Specialized Center

**UN** United Nations

WHO World Health Organization

## DISCLAIMER

Disruptions to health systems can impede provision of and access to essential health services. Communities' vulnerability to increased morbidity and mortality substantially increases when a lack of reliable information prevents sound decision-making, especially in rapidly changing environments requiring continued assessment. The Health Resources and Services Availability Monitoring System (HeRAMS) aims to provide decision-makers and health stakeholders at large with vital and up-to-date information on the availability of essential health resources and services, help them identify gaps and determine priorities for intervention.

HeRAMS draws on the wealth of experience and knowledge gathered by the World Health Organization (WHO) and health sector actors, including non-governmental organizations (NGOs), donors, academic institutions and other technical bodies. It builds on a collaborative approach involving health service providers at large and integrating what is methodologically sound and feasible in highly constrained, low-resourced and rapidly changing environments such as humanitarian emergencies. Rapidly deployable and scalable to support emergency response and fragile states, HeRAMS can also be expanded to - or directly implemented as - an essential component of routine health information systems. Its modularity and scalability make it an essential component of emergency preparedness and response, health systems strengthening, universal health coverage and the humanitarian development nexus.

HeRAMS has been deployed in Iraq since July 2022 and has allowed for the assessment of 1286 health facilities across the governorates of Dahuk, Erbil, and Sulaymaniyah, against 1424 health facilities targeted. This report is complemented by a first part focusing on the governorates of Anbar, Babylon, Baghdad-Karkh, Baghdad-Resafa, Basrah, Diwaniya, Diyala, Kerbala, Kirkuk, Missan, Muthanna, Najaf, Ninewa, Salah-Al-Din, Thi-Qar, and Wassit.<sup>1</sup>

This analysis was produced based on the data collected up to 25<sup>th</sup> April 2023 and while the deployment of HeRAMS, including data verification and validation, continue. Hence, this analysis is not final and is produced solely for the purposes of informing operations.

This is the fourth report of the HeRAMS Iraq Baseline Report 2023 Part 2 series focusing on the availability of communicable disease services in the selected governorates. It is a continuation of the first report on the operational status of the health system<sup>2</sup> and should always be interpreted in conjunction with results presented in the first report. Additional reports are available covering essential clinical and trauma care services<sup>3</sup>, child health and nutrition services<sup>4</sup>, sexual and reproductive health services<sup>5</sup>, and non-communicable disease and mental health services<sup>6</sup>.

Caution must be taken when interpreting the results presented in this report. Differences between information products published by WHO, national public health authorities, and other sources using different inclusion criteria and different data cut-off times are to be expected. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change.

For additional information, please see <a href="https://www.who.int/initiatives/herams">https://www.who.int/initiatives/herams</a> or contact <a href="https://www.who.int/initiatives/herams">herams@who.int/initiatives/herams</a> <a href="https://www.who.initiatives/herams">herams@who.initiatives/herams</a> or contact <a href="ht

<sup>&</sup>lt;sup>1</sup> HeRAMS Iraq Baseline Report 2023 Part 1 - Communicable disease services: A comprehensive mapping of availability of essential services and barriers to their provision, <a href="https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part1-communicable-disease-services">https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part1-communicable-disease-services</a>.

<sup>&</sup>lt;sup>2</sup> HeRAMS Iraq Baseline Report 2023 Part 2 - Operational status of the health system: A comprehensive mapping of the operational status health facilities, <a href="https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part2-operational-status-of-the-health-system">https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part2-operational-status-of-the-health-system</a>.

<sup>&</sup>lt;sup>3</sup> HeRAMS Iraq Baseline Report 2023 Part 2 - General clinical and trauma care services: A comprehensive mapping of availability of essential services and barriers to their provision, <a href="https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part2-general-clinical-and-trauma-care-services">https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part2-general-clinical-and-trauma-care-services</a>.

<sup>&</sup>lt;sup>4</sup> HeRAMS Iraq Baseline Report 2023 Part 2 - Child health and nutrition services: A comprehensive mapping of availability of essential services barriers to their provision, <a href="https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part2-child-health-and-nutrition-services">https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part2-child-health-and-nutrition-services</a>.

<sup>&</sup>lt;sup>5</sup> HeRAMS Iraq Baseline Report 2023 Part 2 - Sexual and reproductive health services: A comprehensive mapping of availability of essential services and barriers to their provision, <a href="https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part2-sexual-and-reproductive-health-services">https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part2-sexual-and-reproductive-health-services</a>.

<sup>6</sup> HeRAMS Iraq Baseline Report 2023 Part 2 - Non-communicable disease and mental health services: A comprehensive mapping of availability of essential services and barriers to their provision, <a href="https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part2-ncd-and-mental-health-services">https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part2-ncd-and-mental-health-services</a>.

## Part I:

AVAILABILITY OF COMMUNICABLE DISEASE SERVICES



## How to read the charts

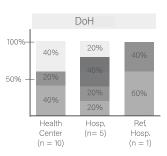
#### Service availability

The first part of the report provides an overview of availability of communicable disease services. It should be noted that the analysis was limited to operational health facilities. A summary of health facilities assessed and their operational status is available on page 3. Further details on the operational status of health facilities can be found in the first report of the **HeRAMS Iraq Baseline Report 2023** series.

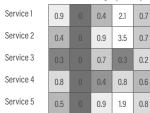
#### Bar chart

Overall availability of general clinical and trauma care services is shown disaggregated by Directorate of Health (DoH) and health facility type. The number of health facilities included is displayed below the health facility type name.

It should be noted that the number of services included was limited to health services expected based on national guidelines and depends on the type of health facility. Further details on services included for each type of health facilities is shown in annex I.



#### Service availability per population (heat map)

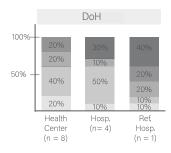


A more detailed overview of availability of individual services is shown as heat maps. Each cell indicates the number of health facilities providing a given service in relation to the catchment population. It should be noted that different catchment areas were used for referral and specialized health services (i.e. DoH vs. governorate population estimates). For more details on population estimates, see <a href="mailto:annex-ll">annex II</a>.

Doh A Doh B Doh C Doh D To account for partially available services, a weighing was applied with a weight of 1 given to services reported as fully available and 0.5 for partially available services.

#### Main barriers impeding service availability

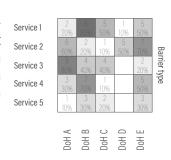
#### Bar chart



For services not or only partially available, main barriers impeding service delivery are displayed as percentage of all barriers reported. Alike for service availability, bar charts display main barriers disaggregated by health facility type and DoH. For each health facility type, the total number of barriers reported across the health service domain is indicated below the health facility typev name. Note that for each service, up to three barriers could be reported. Hence, the percentages shown in these charts should not be used to make any conclusion on the percentage of health facilities having reported a barrier. For a conclusion on the frequency of health facilities reporting a given barrier, please refer to the heat map below.

#### Heat map

Heat maps provide additional insights on main barriers for individual services by catchment area. Cell opacity levels indicate the percentage of health facilities in the catchment area reporting a given barriers. The integer inside the cell denotes the number of health facilities reporting a given barrier while the percentage indicates the percentage of health facilities reporting the barrier. Note that health facilities not reporting a barrier (i.e. health facilities where the service is fully available or not normally provided) were excluded from these charts.





## Overview of health facilities evaluated

Summary of health facilities evaluated

1423 targeted health facilities

1286 health facilities assessed



3 Fully damaged Partially damaged



19 Fully damaged 448 Partially damaged



2 Not functioning
278 Partially functioning

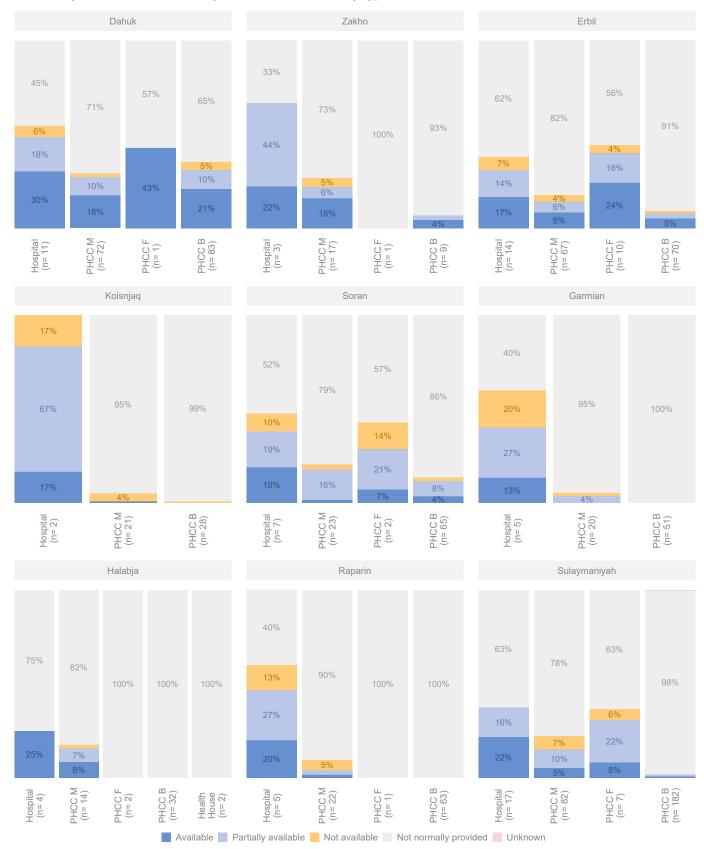


2 Not functioning
55 Partially accessible



# SERVICE AVAILABILITY AND MAIN BARRIERS BY HEALTH FACILITY TYPE

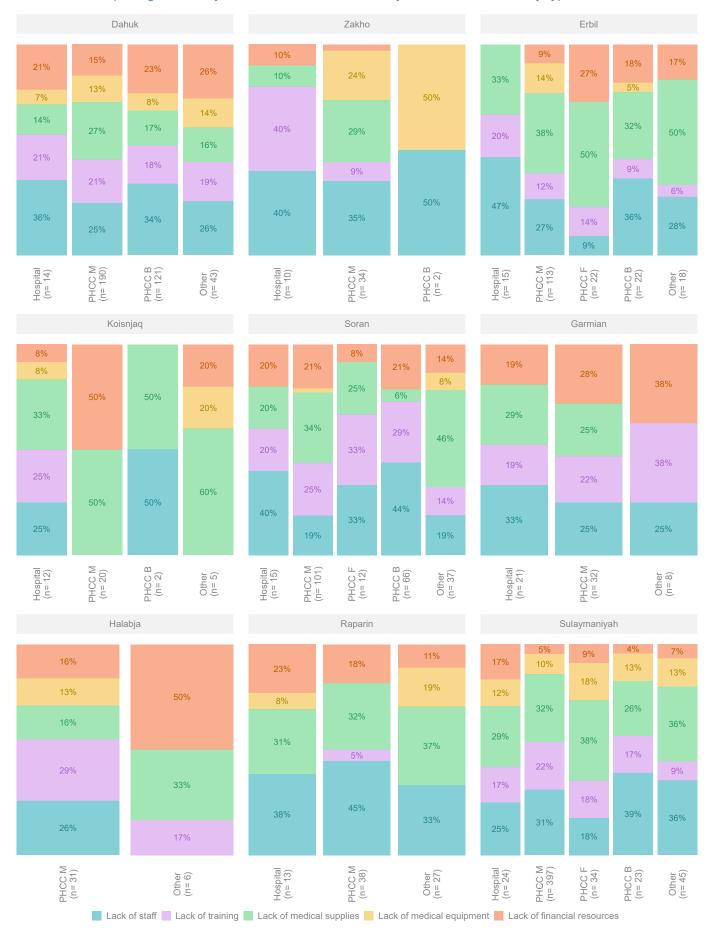
Availability of essential services by DoH and health facility type<sup>6</sup>



<sup>&</sup>lt;sup>6</sup> Number of services included may vary from one health facility type to another. The "Other" HF type has been excluded as it includes very different and specialized HFs. See Annex I for a full description of the services included for each health facility type...



#### Main barriers impeding availability of essential health services by DoH and health facility type



## SERVICE AVAILABILITY BY CATCHMENT POPULATION

Number of health facilities providing essential community and primary services per 10,000 population<sup>7</sup>

	Dahuk							
Syndromic surveillance	1.	.1	idit	0.7				
Event based surveillance		1	0.4					
Malaria at the community level	0.	.1	0.2					
Malaria at the primary care level	0.	.1		0.2				
Vector control	0.	.1		0.1				
Support mass drug administration	0.	.1	0.3					
Tuberculosis	0.	.1	0.2					
MDRTB	0.	.1		0.1				
IEC on local priority diseases	0.	.5		0.4				
Local priority diseases	0.	.2	0.2					
Management of severe and/or complicated communicable diseases	(	)		0.1				
Isolation unit or room	(	)		0.2				
,	<u></u> 2	<u> </u>		Zakho				
	Č			Zaj				
Cundramia aum cillanas	0.2	Eri 0.		1.4				
Syndromic surveillance  Event based surveillance	0.3	0.		3				
Malaria at the community level	0.1	0.		0.8				
Malaria at the primary care level	0.1	0.		1.2				
Vector control	0.1	0.		1.3				
Support mass drug administration	0	0.00		0.2				
Tuberculosis	0.1	0.		0.5				
MDRTB	0.1	0.		0.2				
IEC on local priority diseases	0.2	0.		3				
Local priority diseases	0.1	0.		1.2				
Management of severe and/or complicated	0	0.		0.4				
communicable diseases Isolation unit or room	0	C		0.5				
'	Erbii	5	2	Soran				
	Ш	   		S				
		Sulaym						
Syndromic surveillance	0.1	0.4	0.2	0.3				
Event based surveillance	0.1	0.5	0.2	0.3				
Malaria at the community level	0	0.3	0.1	0.1				
Malaria at the primary care level	0	0.1	0.1	0.1				
Vector control	0.1	0.3	0	0				
Support mass drug administration	0	0.4	0	0.1				
Tuberculosis	0	0.1	0.1	0				
MDRTB	0	0	0.1	0				
IEC on local priority diseases	0.1	0.2	0.1	0.2				
Local priority diseases	0.1	0.3	0.1	0.1				
Management of severe and/or complicated communicable diseases	0	0	0	0				
Isolation unit or room	0.1	0.4	0	0.1				
	Garmian	Halabja	Raparin	Sulaymaniyah				
	Ő	Τ.	₾	ulaym:				
		Number o	f HFs per	$\bar{\wp}$				
	10,000 population							
		0 0.25 0.	5 0.75 >=1					
7.0		0 0.20 0.	0.70 ==1					

<sup>7</sup> See annex II for population estimates...



## Main barriers impeding service delivery

Main barriers impeding availability of essential community and primary health services by governorate

			Dahuk			Erbil				Sulaymaniyah					
Syndromic surveillance	33	20	20	6	15	17	9	7	1	8	23	13	11	8	12
	82%	50%	50%	15%	38%	81%	43%	33%	5%	38%	82%	46%	39%	29%	43%
Event-based surveillance	35	19	17	14	14	32	22	14	5	13	31	17	15	7	16
	73%	40%	35%	29%	29%	70%	48%	30%	11%	28%	78%	42%	38%	17%	40%
Malaria at the community level	10	5	15	9	4	22	12	27	5	8	41	34	43	2	3
	50%	25%	75%	45%	20%	61%	33%	75%	14%	22%	89%	74%	93%	4%	7%
Malaria at the primary care level	12	7	9	6	6	30	16	47	4	20	38	33	40	3	4
	71%	41%	53%	35%	35%	56%	30%	87%	7%	37%	86%	75%	91%	7%	9%
Vector control	1	2	3	5	9	10	4	44	10	21	20	7	22	20	6
	7%	13%	20%	33%	60%	19%	8%	85%	19%	40%	71%	25%	79%	71%	21%
Support mass drug administration	4	2	5	2	4	8	2	10	2	10	30	17	36	19	5
	40%	20%	50%	20%	40%	62%	15%	77%	15%	77%	77%	44%	92%	49%	13%
Tuberculosis	16	8	17	8	4	9	4	21	6	7	6	1	11	3	4
	67%	33%	71%	33%	17%	35%	15%	81%	23%	27%	55%	9%	100%	27%	36%
MDRTB	6	1	5	5	2	7	3	18	3	5	7	1	8	1	5
	67%	11%	56%	56%	22%	32%	14%	82%	14%	23%	70%	10%	80%	10%	50%
IEC on local priority diseases	12	13	9	6	27	24	22	21	3	20	37	25	41	9	12
	27%	30%	20%	14%	61%	49%	45%	43%	6%	41%	73%	49%	80%	18%	24%
Local priority diseases	16	9	14	4	5	20	12	40	3	11	26	17	29	10	8
	73%	41%	64%	18%	23%	43%	26%	87%	7%	24%	72%	47%	81%	28%	22%
Management of severe and/or complicated communicable diseases	5 83%	4 67%	1 17%		1 17%	7 50%	4 29%	12 86%		2 14%	5 71%	2 29%	7 100%	1 14%	4 57%
Isolation unit or room	3 100%	2 67%	1 33%		2 67%	5 56%	2 22%	4 44%	3 33%	2 22%	8 62%	3 23%	9 69%	3 23%	10 77%



1% ■ 25% ■ 50% ■ 75% ■ 100%

Type of barrier

Lack of staff
Lack of training
Lack of medical supplies

Lack of medical equipment
Lack of financial resources

<sup>&</sup>lt;sup>8</sup> See annex II for population estimates.

# PART II:

IN-DEPTH ANALYSIS BY HEALTH SERVICE





## How to read the charts and the maps

#### Indicator status

#### Arc charts

For each indicator, an arc chart provides an overview of the overall status (i.e. functionality, availability, sufficiency, etc.), hereafter referred to as "availability". The total number of health facilities included in the analysis of an indicator is shown inside the arc chart. It is important to note that the total number of health facilities included in the analysis of an indicator can vary due to the exclusion of non-operational and non-reporting health facilities from subsequent analyses (see page 3 for details).



The status of an indicator is further broken down by DoH and or type of health facility.

#### Column charts

Column charts display the status of an indicator by DoH. The number of health facilities in a DoH is shown below the DoH's name.



#### Donut charts

Each donut chart represents a type of health facility. The percentage of health facilities for which the indicators was available or partially available is shown inside the donut while the total number of health facilities included is shown at the bottom of the



chart, below the health facility type name. If an indicator was not available in any health facility, the number inside the chart will display the percentage of health facilities for which the indicator was partially or not available.

#### Maps



Maps display the availability of an indicator at the DoH level. In contrast to charts and to highlight areas not reporting, respectively the impact of non-operational health facilities, maps depict all health facilities included in the HeRAMS assessment. The outermost circle corresponds to the cumulative number of health facilities in a DoH. Each circle may be divided into multiple smaller circles, with each color representing

the proportion of health facilities of a specific availability status.

For each circle, the corresponding DoH name is shown in the map label together with the total number of health facilities evaluated (excluding non-reporting health facilities and health facilities where the indicator is not applicable or not relevant). The second number displays be default the percentage of evaluated health facilities for which the indicator was fully available. Any deviation from this is clearly stated in the map legend.

#### Map label:

DoH name X / X%

#### Reasons of unavailability

If an indicator was not or only partially available, main reasons of unavailability (i.e. causes of damage, reasons for non-functionality, etc.) were collected. Similarly, indicators assessing availability and sufficiency of basic amenities may have a sub-question gathering additional information on the type of amenity available. Alike reasons of unavailability, types of amenities are only evaluated if the amenity was at least partially available. For simplicity reasons, causes of damage, non-functionality and inaccessibility, reasons of unavailability, types of basic amenities, and type of support provided by partners are hereafter commonly referred to as "reasons".

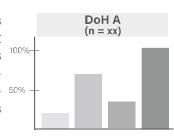
#### Donut charts



Each donut chart indicates the percentage of health facilities having reported a given reason. The total number of health facilities reporting at least one reasons is shown below the chart header.

#### Bar charts

Bar charts depicting reasons follow the same logic as donut charts and exclude health facilities where the indicator was fully available. The number of health facilities reporting at least one reason is displayed below the DoH's name.

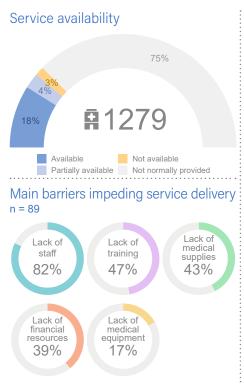


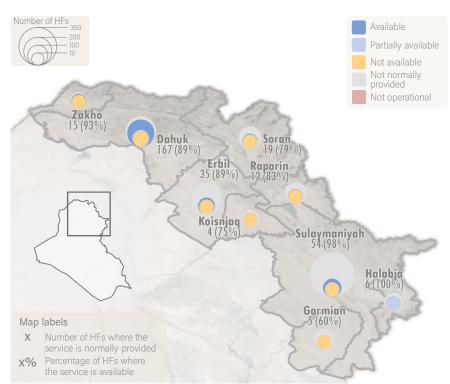
**Important:** The denominators for reasons charts exclude health facilities where the indicator was fully available or in the case of basic amenities not available. It should further be noted that health facilities could report up to three reasons for each indicator. Thus, the sum of all reasons may exceed 100%.





## Syndromic surveillance





#### Service availability by type of HF







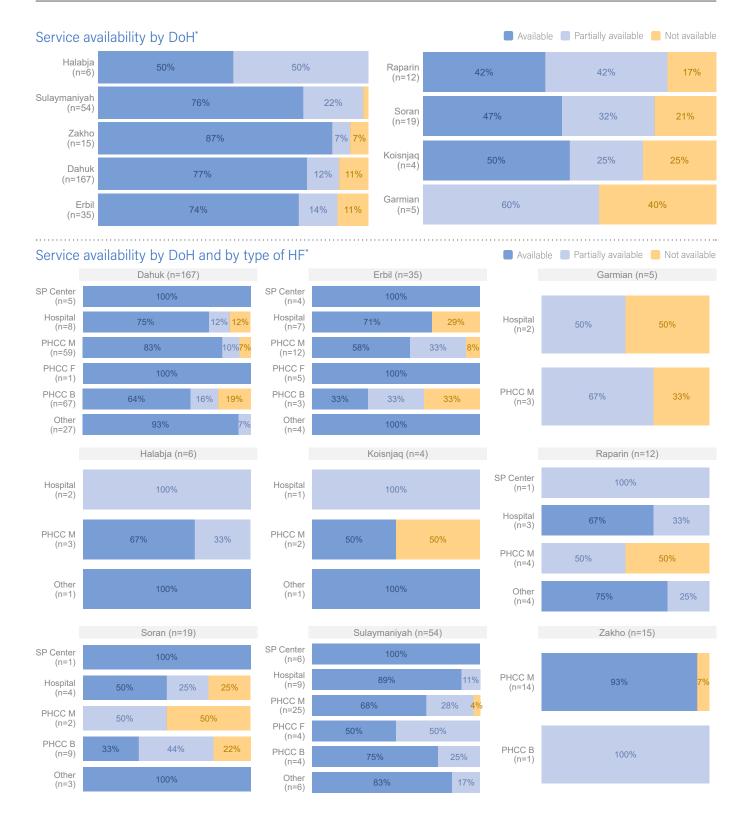






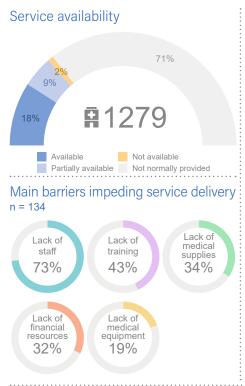


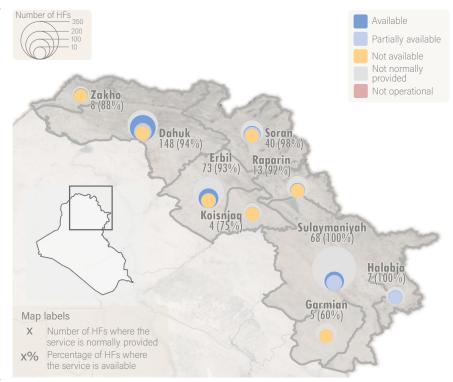




<sup>\*</sup> Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

## **EVENT-BASED SURVEILLANCE**





#### Service availability by type of HF







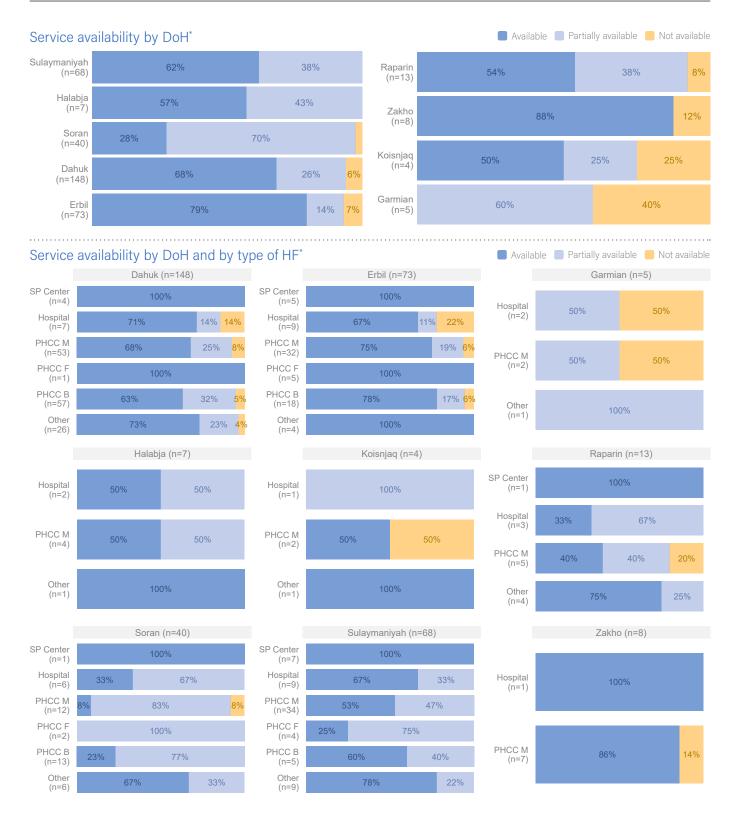






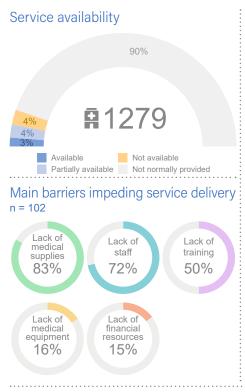


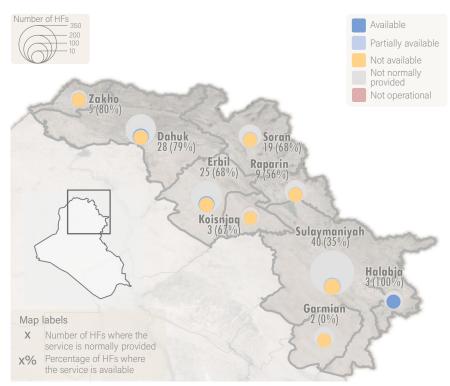




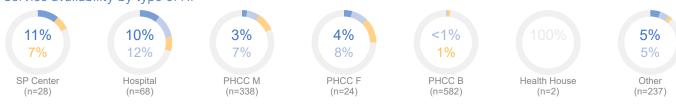
<sup>\*</sup> Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

## Malaria at the community level

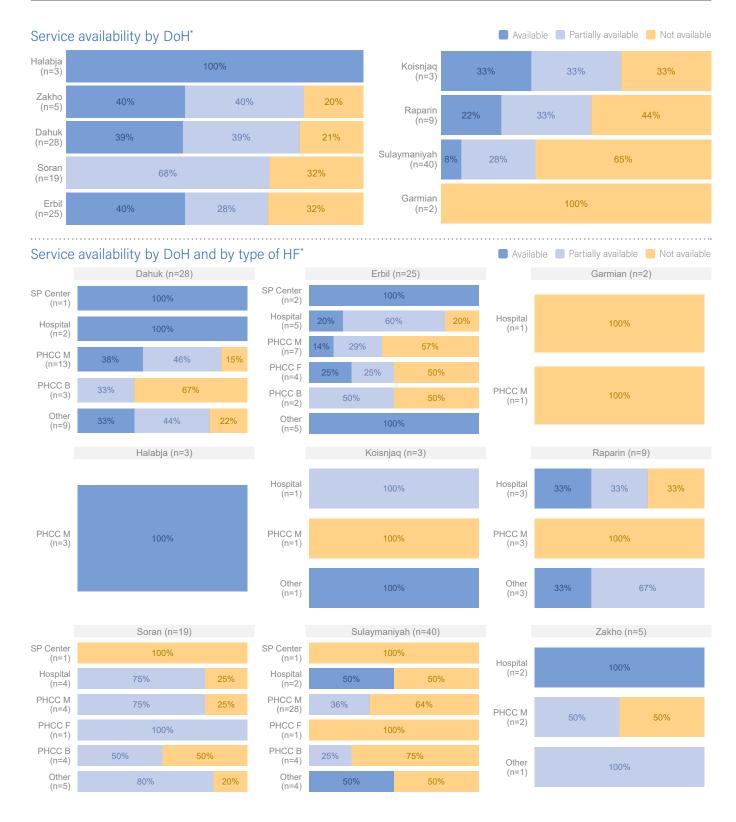




#### Service availability by type of HF

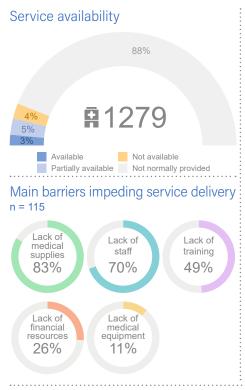


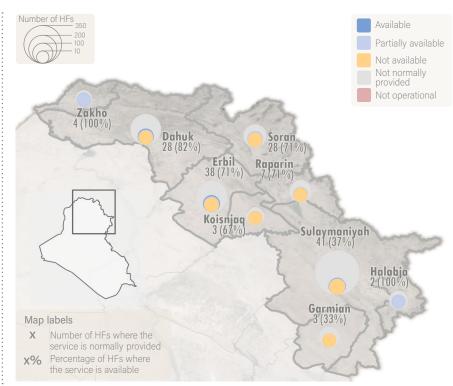




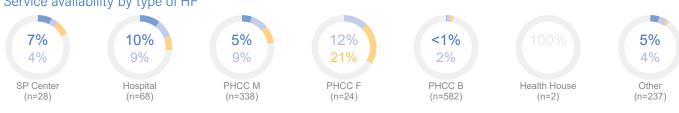
<sup>\*</sup> Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

## Malaria at the primary care level

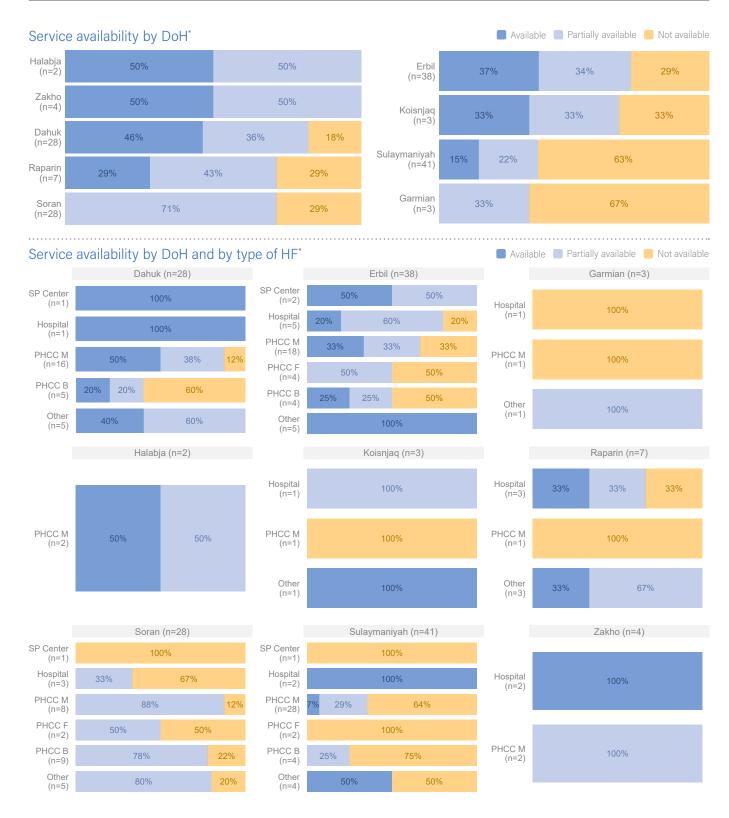




#### Service availability by type of HF



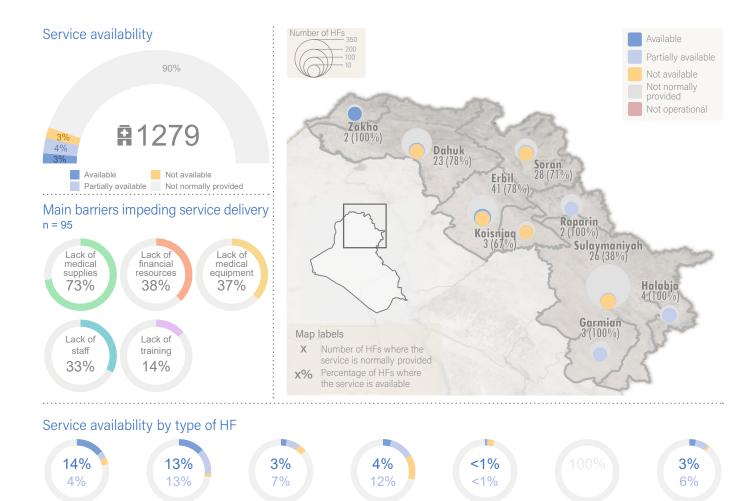




<sup>\*</sup> Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

## \*\*\*

## VECTOR CONTROL



#### Main barriers impeding service delivery by DoH

Hospital

(n=68)

SP Center

(n=28)

PHCC M

(n=338)



PHCC F

(n=24)

PHCC B

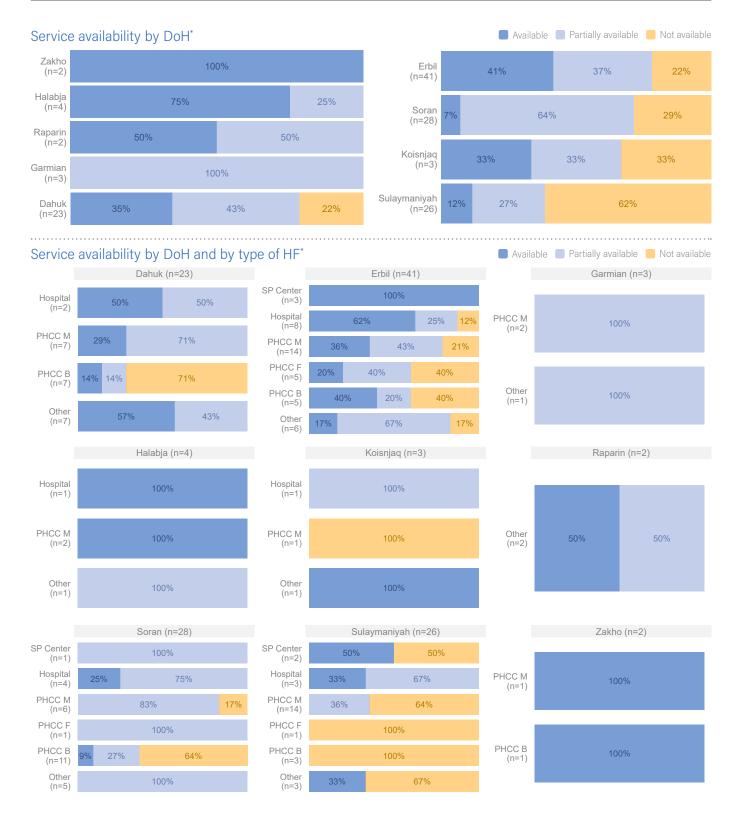
(n=582)

Health House

(n=2)

Other

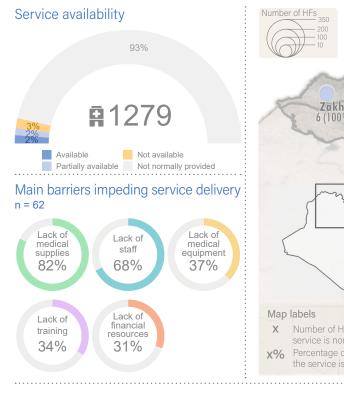
(n=237)

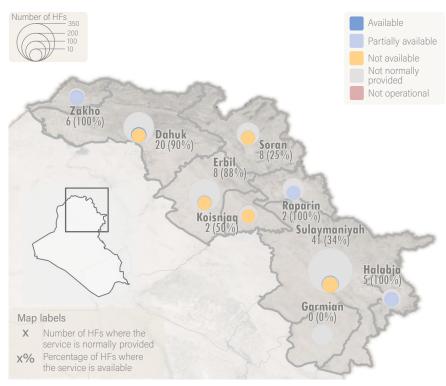


<sup>\*</sup> Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

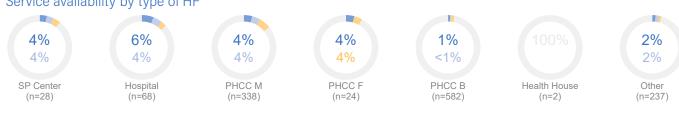


## Support mass drug administration

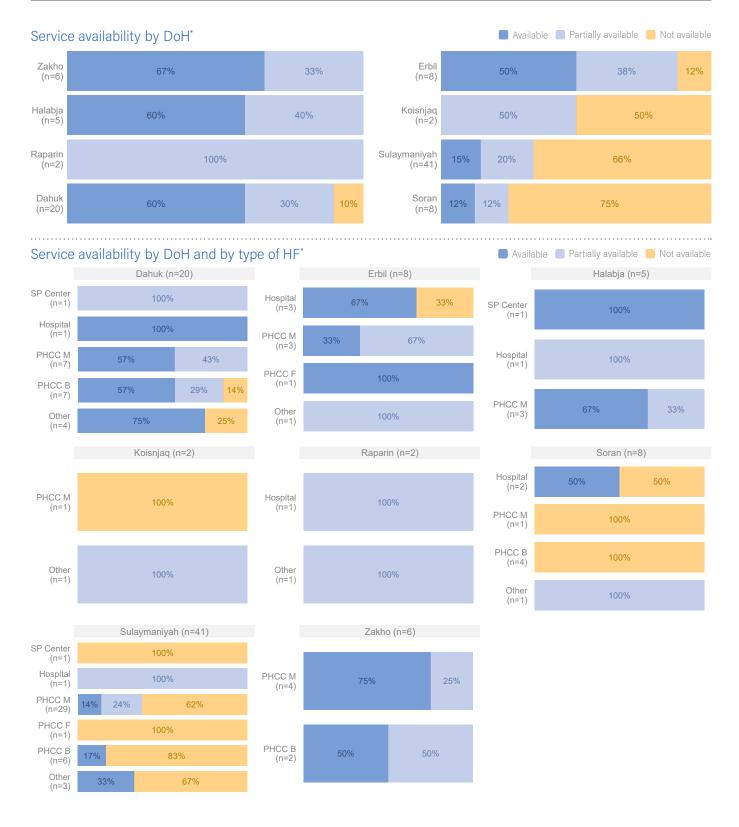




#### Service availability by type of HF



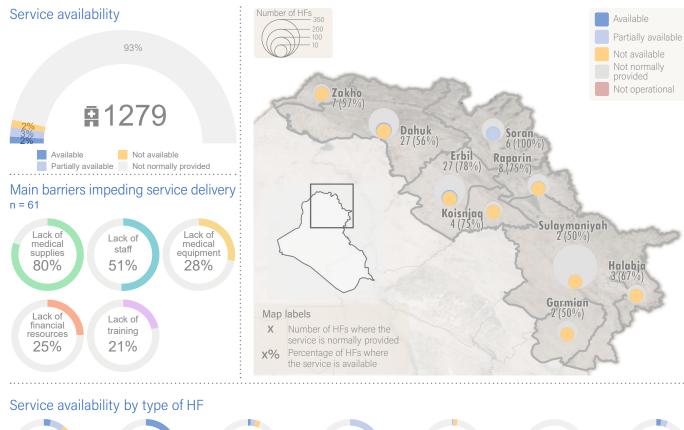


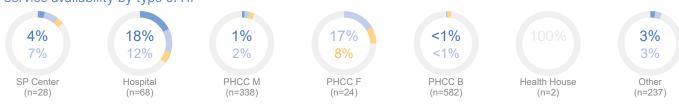


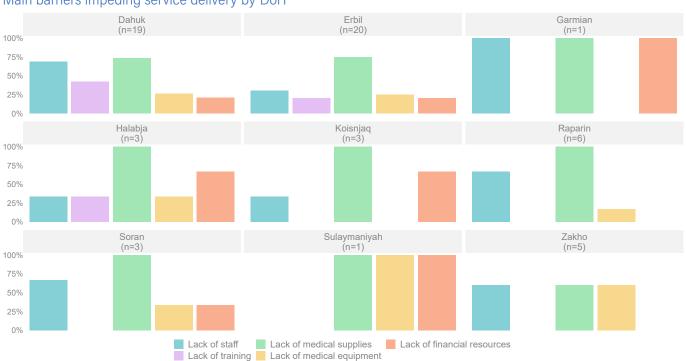
<sup>\*</sup> Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

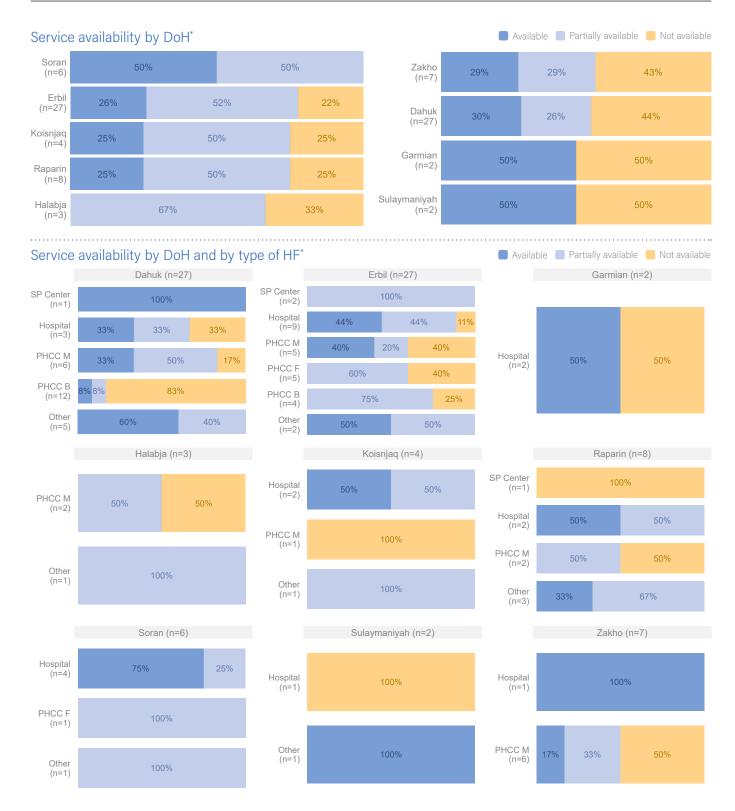
## \*\*\*

## **TUBERCULOSIS**





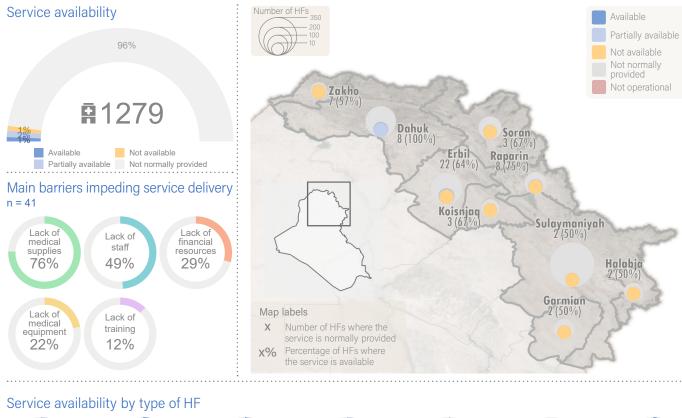


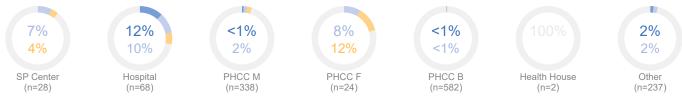


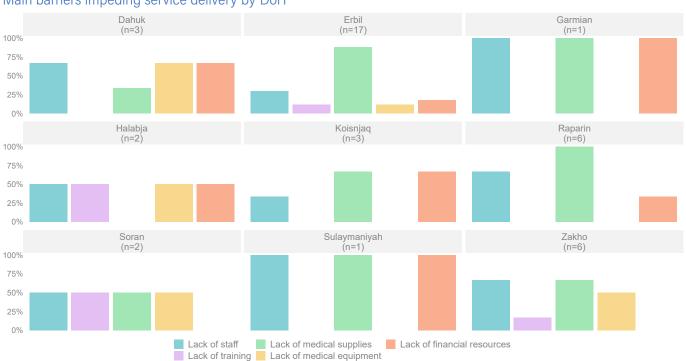
<sup>\*</sup> Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

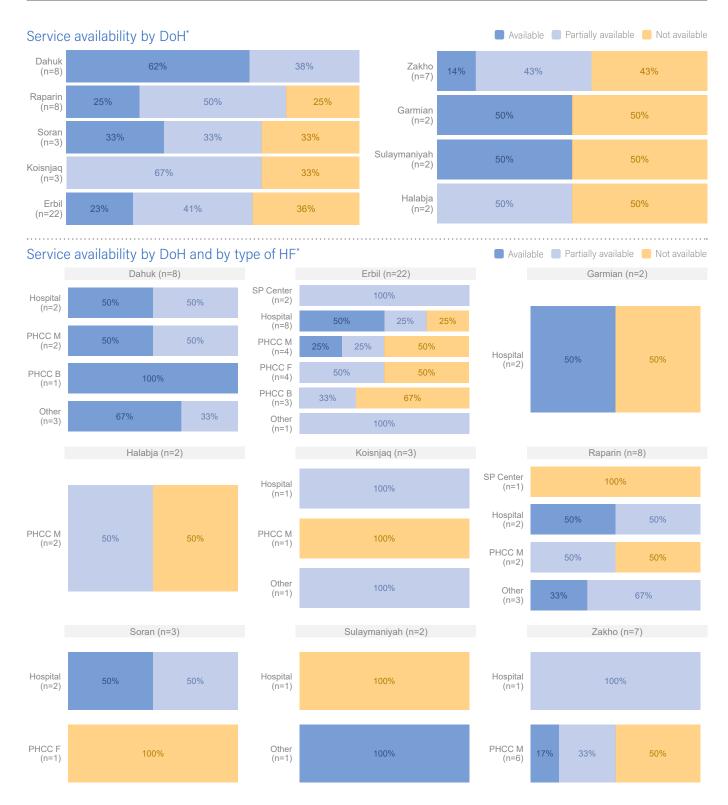
### \*\*\*

## **MDRTB**



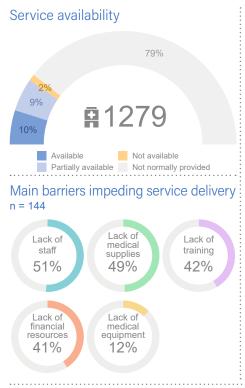


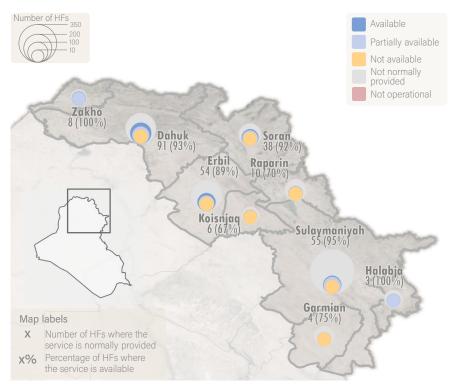




<sup>\*</sup> Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

## IEC ON LOCAL PRIORITY DISEASES





#### Service availability by type of HF







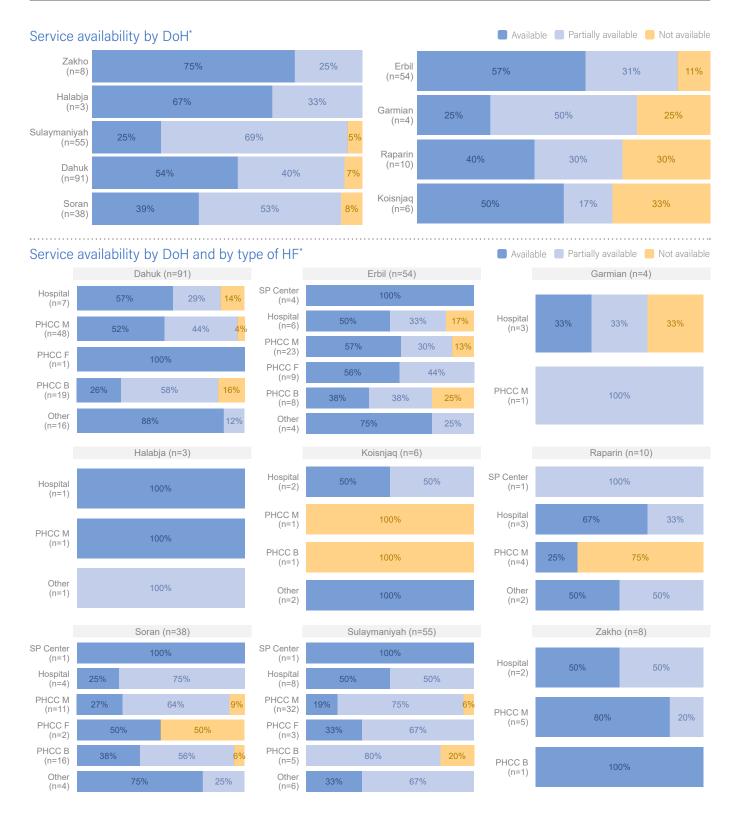






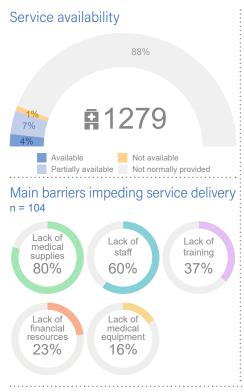


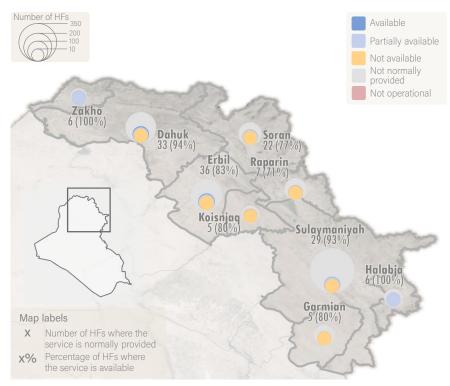




<sup>\*</sup> Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

## LOCAL PRIORITY DISEASES





#### Service availability by type of HF





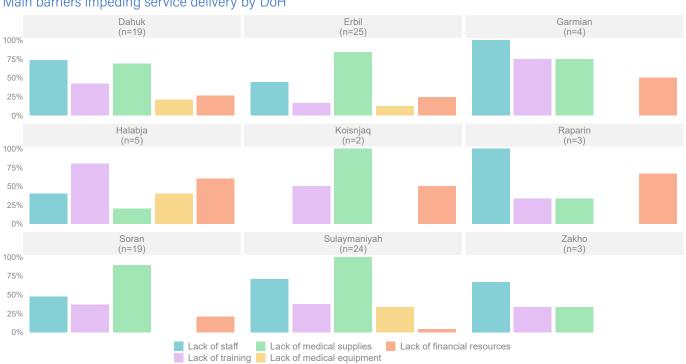


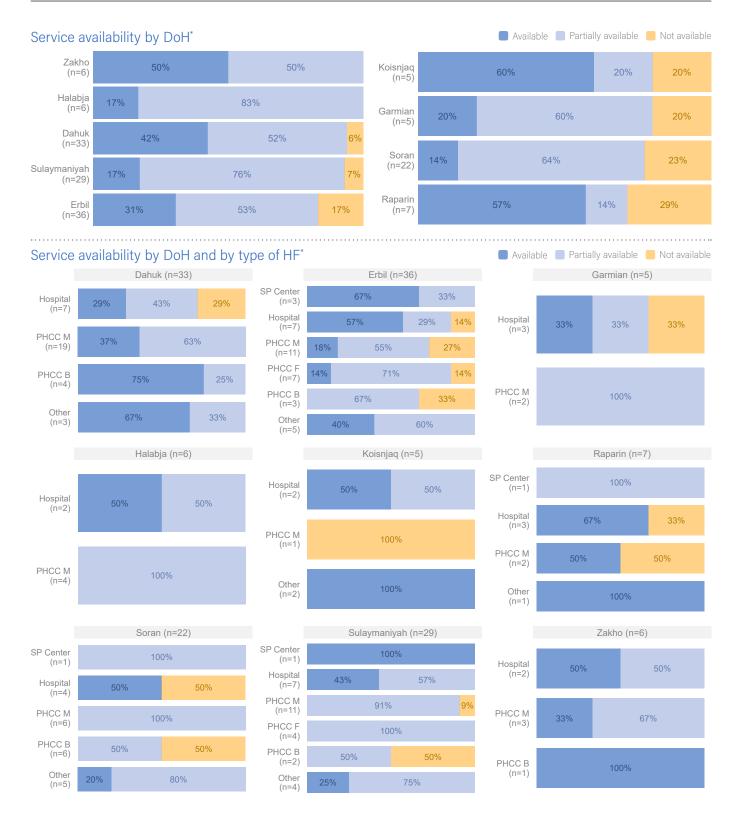








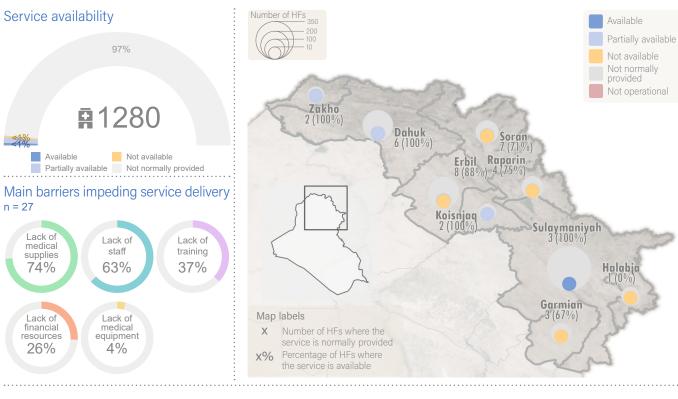




<sup>\*</sup> Health facilities where the service availability is unknown or where the service is not normally provided are excluded.



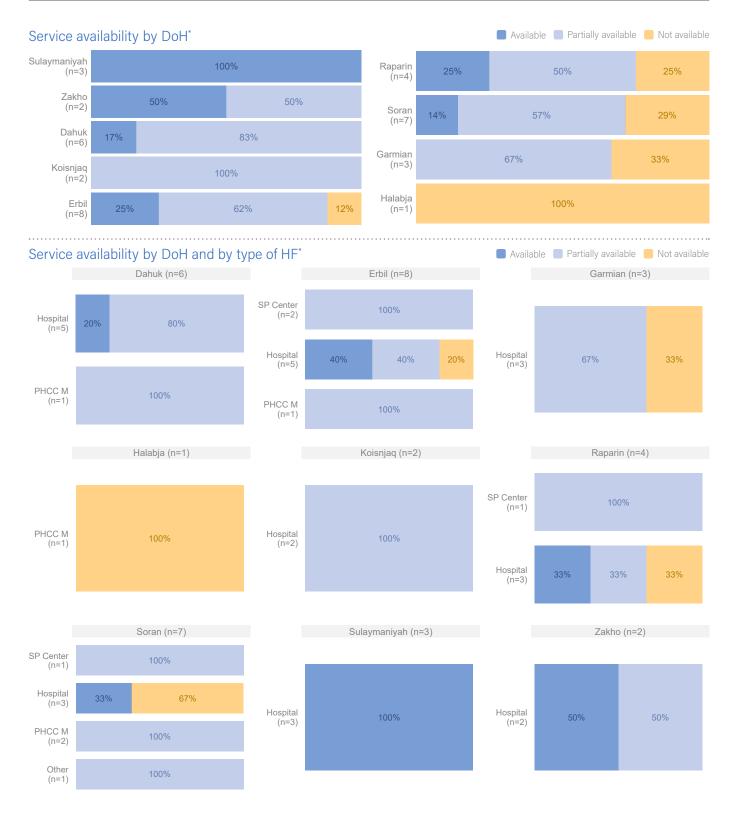
## Management of severe and/or complicated COMMUNICABLE DISEASES



#### Service availability by type of HF





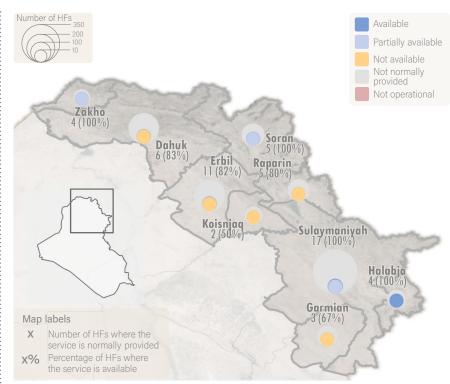


<sup>\*</sup> Health facilities where the service availability is unknown or where the service is not normally provided are excluded.



## SOLATION UNIT OR ROOM





#### Service availability by type of HF





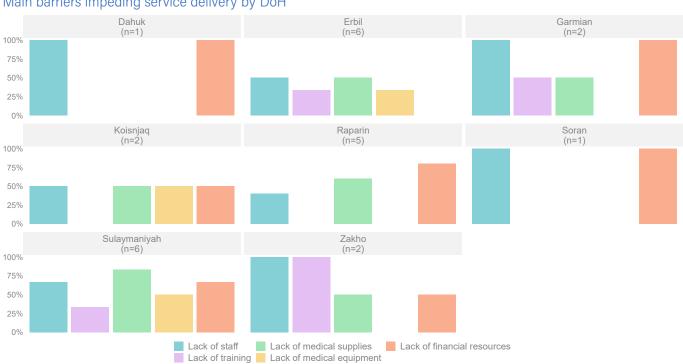














<sup>\*</sup> Health facilities where the service availability is unknown or where the service is not normally provided are excluded.



# ANNEX



## Annex I: Herams service definitions

		SERVICE EXPECTED							
SERVICE NAME	Definition	SP Center	Hospital	PHCC M	PHCC F	PHCC B	Health House	Other	
SYNDROMIC SURVEILLANCE	Syndromic surveillance: Regular reporting sentinel site for syndromic surveillance of local relevant diseases/conditions			Х	X	Х		Х	
EVENT-BASED SURVEIL- LANCE	Event-based surveillance: Immediate reporting of unexpected or unusual health events through an event-based surveillance system			Χ	Χ	Χ	Х	Χ	
Malaria at the community level	Malaria at the community level: Diagnosis of malaria suspected cases with rapid diagnostic test (RDT) and treatment of positive cases, or detection and referral of suspected cases, and follow-up			Х					
Malaria at the primary care level	Malaria at the primary care level: Diagnosis of suspected malaria cases with rapid diagnostic test (RDT) and treatment of positive cases, or detection and referral of suspected cases, and follow-up			Х	Х			X	
VECTOR CONTROL	Vector control: Support vector control interventions (distribution of impregnated bed nets, in/outdoor insecticide spraying, distribution of related IEC materials)			Χ				Х	
SUPPORT MASS DRUG ADMINISTRATION	Support mass drug administration: mobilize communities and support mass drug administration/treatment campaigns			Χ	Χ			Χ	
Tuberculosis	Tuberculosis: Diagnosis and treatment of tuberculosis (TB) cases, or detection and referral of suspected cases, and follow-up			Χ				Χ	
MDRTB	MDRTB: Diagnosis, management, and follow-up of multi- drug-resistant TB patients			Χ				Χ	
IEC ON LOCAL PRIORITY DISEASES	IEC on local priority diseases: Information, Education, and Communication on the prevention and self-care of local priority diseases, such as dengue, acute diarrhea, others		Χ	Х	Χ	Χ	Х	Х	
LOCAL PRIORITY DISEASES	Local priority diseases: Diagnosis and management of other locally relevant diseases such as dengue, with protocols available for identification, classification, stabilization and referral of severe cases			X	X	Х		X	
Management of severe and/or complicated communicable diseases	Management of severe and/or complicated communicable diseases: (such as severe dengue, measles with pneumonia, cerebral malaria, others)		Χ	X	X	Χ		Х	
ISOLATION UNIT OR ROOM	Isolation unit or room: for patients with highly infectious diseases		Χ					X	

## Annex II: Population estimates

Governorate	DIRECTORATE OF HEALTH (DOH)	DISTRICT	Population estimates
Dahuk			1,432,369
	Dahuk		1,241,819
		Dahuk	339,196
		Akre	204,464
		Amedi	76,769
		Bardarash	155,639
		Mangesh	331,261
		Shekhan	22,742
		Sumel	111,748
	Zakho		190,550
		Zakho	190,550
Erbil			2,055,448
	Erbil		1,848,396
		Dashte Hawler	382,818
		Erbil Center	922,642
		Khabat	189,082
		Shaqlawa	154,912
		Soran	198,942
	Koisanjaq	,	124,144
		Koisanjaq	124,144
	Soran		82,908
		Barzan	53,001
		Choman	29,907
Sulaymaniyah			2,396,206
	Garmian	,	299,100
		Garmian	299,100
	Halabja		108,620
		Halabja	108,620
	Raparin		410,200
		Pshdar	140,200
		Rania	270,000
	Sulaymaniyah		1,578,286
		Bazyan	75,500
		Chamchamal	228,100
		Darbandikhan	70,900
		Dokan	60,990
	_	Sharazoor	152,250
		Sharbazher	10,606
		Sulaymaniyah	901,010
		Zimnako	78,930
TOTAL			5,884,023

