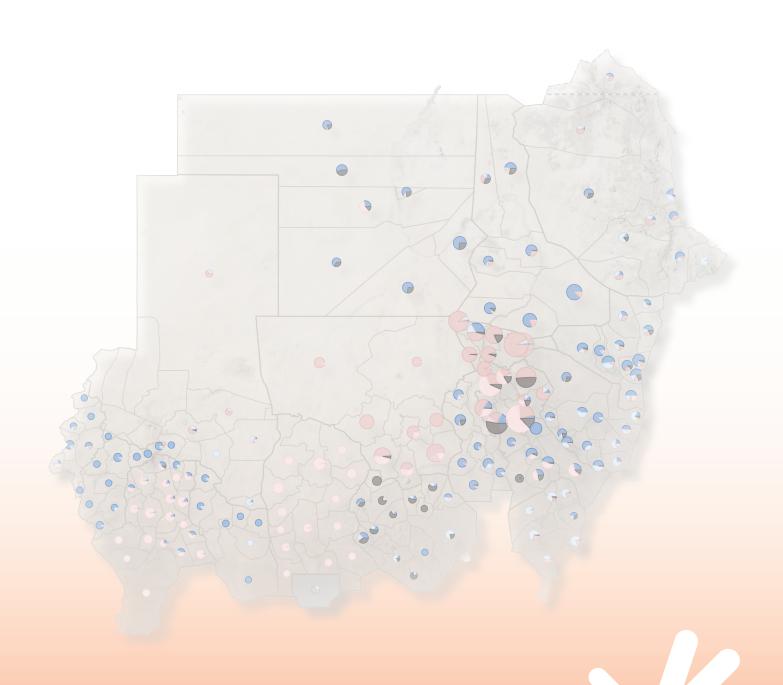


HeRAMS Sudan

Baseline report **2025**



Communicable diseases

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

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HeRAMS Sudan Baseline report 2025

Communicable diseases

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







ACRONYMS

HeRAMS Health Resources and Services Availability Monitoring System

HSDU Health Service Delivery Unit

RDT Rapid Diagnostic Test

IEC Information, Education, and Communication

MDRTB Multi-Drug-Resistant Tuberculosis

TB Tuberculosis

WHO World Health Organization

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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 that require 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 nongovernmental organizations, 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 Sudan since 2023 and has allowed for the assessment of 4363 health service delivery units (HSDUs). This analysis was produced based on the data collected up to 01 July 2025. It is important to note that the deployment of HeRAMS is ongoing, including data verification and validation. Hence, this analysis is not final and was produced solely for the purpose of informing operations.

This is the fourth report of the HeRAMS Sudan baseline report 2025 series, focusing on the availability of communicable diseases services. It is a continuation of the first report on the operational status of the health system¹ and should always be interpret in conjunction with results presented in the first report. Additional reports are available covering general clinical and trauma care service², essential child health and nutrition services³, sexual and reproductive health services⁴, and noncommunicable diseases and mental health services⁵.

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 https://www.who.int/initiatives/herams or contact herams@who.int

HeRAMS Sudan baseline report 2025 - Operational status of the health system: A comprehensive mapping of the operational status of HSDUs, https://www. who.int/publications/m/item/herams-sudan-baseline-report-2025-operational-status-of-the-health-system

HeRAMS Sudan baseline report 2025 - General clinical and trauma care: A comprehensive mapping of availability of essential services and barriers to their provision, https://www.who.int/publications/m/item/herams-sudan-baseline-report-2025-general-clinical-and-trauma-care.

HeRAMS Sudan baseline report 2025 - Child health and nutrition: A comprehensive mapping of availability of essential services and barriers to their provision, https://www.who.int/publications/m/item/herams-sudan-baseline-report-2025-child-health-and-nutritive

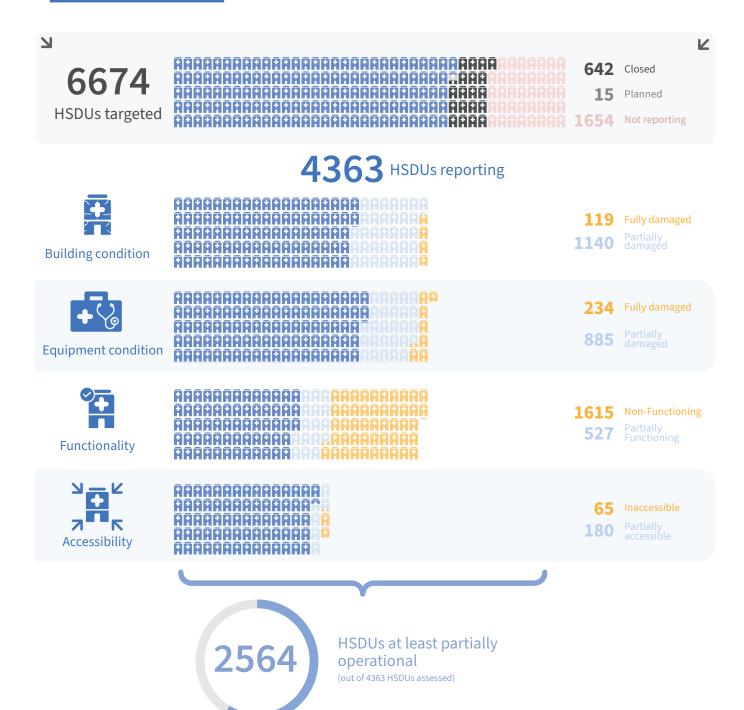
HeRAMS Sudan baseline report 2025 - Sexual and reproductive health: A comprehensive mapping of availability of essential services and barriers to their provision, https://www.who.int/publications/m/item/herams-sudan-baseline-report-2025-sexual-and-reproductive-health.

HeRAMS Sudan baseline report 2025 - Noncommunicable diseases and mental health: A comprehensive mapping of availability of essential services and barriers to their provision, https://www.who.int/publications/m/item/herams-sudan-baseline-report-2025-noncommunicable-diseases-and-mental-health.



OVERVIEW OF HSDUS EVALUATED

Data collection summary 6



⁶ HSDUs (Health Service Delivery Units) reported as destroyed, non-functioning, or inaccessible are deemed unable to provide any health services, hence categorized as non-operational. Consequently, reporting ends upon confirmation of an HSDU's non-operational status.

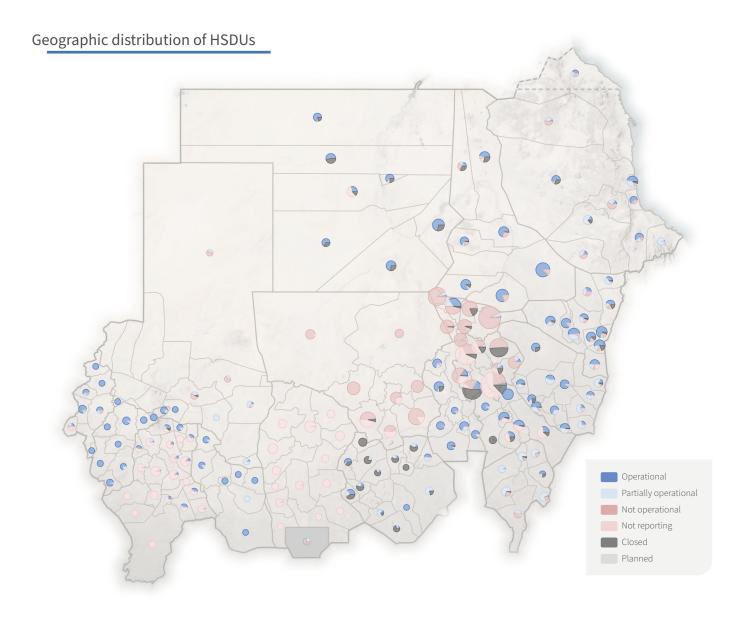


Reporting frequency and operational status by state

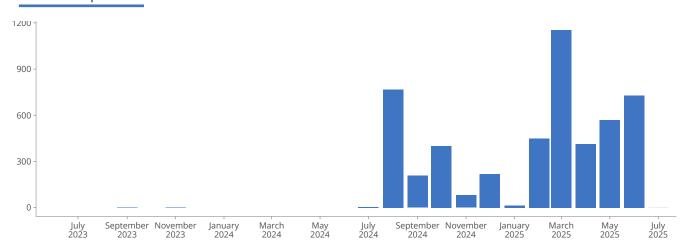
	Hospital Rural hospital				tal	Family health Family health unit center								Other				Total						
	0	N/O	N/R	P/C	0	N/O	N/R	P/C	0	N/O	N/R	P/C	0	N/O	N/R	P/C	0	N/O	N/R	P/C	0	N/O	N/R	P/C
ABYEI PCA	-	-		-	1	-		-	2	-		1	1	2		2	-	2		3	4	4		6
AJ JAZIRAH	10	3	12	9	20	12	18	16	27	169	178	97	52	177	176	109	-	-		-	109	361		231
BLUE NILE	5	-		-	8	1		-	56	24	2	2	66	12		4	3	-		-	138	37	2	6
CENTRAL DARFUR	3	-		-	1	-		-	32	-		-	42	-	1	-	6	-		-	84	-	1	-
EAST DARFUR	-	-		-	1	-		-	4	-		-	19	-		-	2	-		-	26	-		-
GEDAREF	6	-		-	30	-		-	206	6	18	18	114	-	1	3	-	-		-	356	6	19	21
KASSALA	29	-	4	-	14	2		2	148	36	13	13	202	13	9	18	-	-		1	393	51	26	34
KHARTOUM	16	66		4	11	4		-	4	160		10	74	489		18	-	-		-	105	719		32
NORTH DARFUR	3	-		-	-	-		-	16	8	1	-	15	13		-	2	-		1	36	21	1	1
NORTH KORDOFAN	1	3	1	-	5	16	6	-	2	294	72	1	3	149	58	-	-	12		4	11	474	137	5
NORTHERN	4	_		-	22	_	2	-	89	_	23	76	77	_	10	11	-	_		-	192	-		87
RED SEA	11	_	2	-	13	3		2	76	49		12	110	11	3	5	3	_		-	213	63		19
RIVER NILE	3	_		1	27	1	1	-	76	20	9	21	196	33	6	13	-	_		-	302	54	16	35
SENNAR	7	_		2	19	_		1	53	_	103	25	101	_	11	14	-	_		-	180	-	114	42
SOUTH DARFUR	1	_	1	-	4	-	10	-	15	-	200	-	48	-	144	2	-	-		-	68	-		2
SOUTH KORDOFAN	3	-		-	1	_		2	39	1	4	77	67	-		42	-	_		-	110	1	4	121
WEST DARFUR	3	_		-	4	-		-	2	_	2	-	32	3	2	1	2	_		2	43	3	4	3
WEST KORDOFAN	1	_	5	-	2	_	19	-	-	_	151	-	1	_	206	-	-	_		-	4	-	381	-
WHITE NILE	21	-	1	-	1	-		-	105	4	5	12	63	1	2	-	-	_		-	190	5		12
GRAND TOTAL	127	72	39	16	184	39	56	23	952	771	858	365	1283	903	701	242	18	14	_	11	2564	1799	1654	657

 $[\]mathbf{O}$ = At least partially operational - $\mathbf{N/O}$ = Not operational - $\mathbf{N/R}$ = Not reporting - $\mathbf{P/C}$ = Planned / closed





Date of last update





OVERVIEW OF SERVICE AVAILABILITY

Service availability and main barriers

				Bar	riers	(%)	
Service	Availabilit	y (%)	61	† □	10	+ %	5
Syndromic surveillance	21 2 6 30	41	56	68	25	20	64
Event-based surveillance	30 2 <mark>4</mark> 21	41	62	69	22	21	68
Malaria at the community level	18 8 <mark>3</mark> 29	41	23	35	82	57	36
Malaria at the primary care level	28 10 <mark>2 1</mark> 9	41	8	13	89	62	22
Vector control	7 6 7 40	41	26	13	55	55	39
Support mass drug administration	5 13 50	41	41	15	71	57	37
Tuberculosis	32 5 49	41	29	22	94	59	39
Multidrug-resistant tuberculosis	2 <mark>2</mark> 55	41	51	10	88	61	20
IEC on local priority diseases	17 4 <mark>3</mark> 36	41	26	16	61	50	43
Local priority diseases	14 4 <mark>3</mark> 38	41	31	21	81	49	19
Management of severe and/or complicated communicable diseases	42 52	41	22	40	76	49	22
Isolation unit or room	2 <mark>11</mark> 54	41	25	14	62	58	52

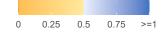




Number of HSDUs providing services per target population ⁷

	Abyei PCA	Aj Jazirah	Blue Nile	Central Darfur	East Darfur	Gedaref	Kassala	Khartoum	North Darfur	North Kordofan	Northern	Red Sea	River Nile	Sennar	South Darfur	South Kordofan	West Darfur	West Kordofan	White Nile	Target population
Syndromic surveillance	0.2	0.1	0.7	0.4	0.1	0.2	1.3	0.1	0.1	0	0.4	0.2	0.1	0.2	0.1	0.1	0.4	0	0.1	10 000
Event-based surveillance	1.5	0	0.8	0.6	0.1	1	1.3	0.1	0.1	0	0	0.9	0.4	0.2	0.2	0.2	0.5	0	0.1	10 000
Malaria at the community level	1	0	0.8	0.5	0.1	0	0.6	0	0	0	1.2	0.1	0.9	0.3	0.1	0.4	0.3	0	0.1	10 000
Malaria at the primary care level	1.7	0	0.7	0.8	0.1	0.5	1	0.1	0	0	1.3	0.7	0.9	0.2	0.2	0.4	0.5	0	0.3	10 000
Vector control	0	0	0.5	0.2	0	0.1	0.5	0	0	0	0	0.4	0.1	0.1	0	0	0.2	0	0.1	10 000
Support mass drug administration	0	0	0.3	0.1	0	0.1	0.2	0	0	0	0.3	0	0.1	0.1	0	0	0.1	0	0	10 000
Tuberculosis	0	0	0.3	0.1	0	0.1	0.1	0.1	0	0	0	0.1	0	0	0	0	0.1	0	0	10 000
Multidrug-resistant tuberculosis	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10 000
IEC on local priority diseases	1	0	0.3	0.4	0.1	0.2	0.9	0	0	0	0.7	0.7	0.1	0	0.1	0.2	0.5	0	0.1	10 000
Local priority diseases	0.7	0	0.3	0.3	0.1	0.2	0.9	0.1	0	0	0.5	0.4	0.1	0	0.1	0	0.4	0	0.1	10 000
Management of severe and/or complicated communicable diseases	12.2	0.4	5.5	4.2	1.6	0.5	2.4	0.6	0.5	0.3	2.2	1.2	0.9	0.7	1.9	0.4	6.5	0.1	1	250 000
Isolation unit or room	0	0.5	9.7	0.5	0.1	0.4	1.1	0.5	0.2	0.1	0.3	0.8	0.4	0.7	0.3	0.6	1.6	0.2	0.4	250 000

Number of HSDUs per target population



⁷ 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. As target populations may vary across services, an additional column has been included to the right of the graph to assist readers in comprehending the target populations associated with each service. See <u>Annex I</u> for population estimates per state.

IN-DEPTH ANALYSIS BY HEALTH SERVICE





INTERPRETATION GUIDE

Service status

Arc charts provide an overview of the overall availability of a health service. The total number of HSDUs included in the analysis of a service is shown inside the arc chart.





For further insights, donut charts break down service availability by HSDU type. To improve readability, labels indicating the availability level for each category are provided either beside or below the chart. Additionally, to highlight the percentage of HSDUs where an service is available up to standard, the number may also be prominently placed inside the chart. Information on the total number of HSDUs included is clearly indicated above or below the respective donut.

Column charts offer a breakdown of service availability by state. The numbers represented by the bars indicate the count of HSDUs that fall into the specified availability category. The length of each bar is determined by the total number of HSDUs in the state. The total number of HSDUs included in each state is indicated under the state name.





Column charts by HSDU type display the availability of services by state and HSDU type. Each bar represents the percentage of HSDU falling into each category for the specified HSDU type and state. The grey bar on the right shows the number of HSDU falling into the category. By default these charts exclude HSDUs where a service was not normally provided or the HSDU did not report on it.

Maps use pie charts to depict the availability of an service at the locality level. The size of each circle represents the total number of HSDUs in the locality, while each slice reflects a specific availability level.



Barriers



To gain a more comprehensive understanding of the challenges faced by HSDUs, whenever a service was not or only partially available, main barriers impeding availability were recoded.

Each **donut chart** indicates the percentage of HSDUs having reported a specific barrier. The total number of HSDUs reporting at least one barrier is shown below the chart header.

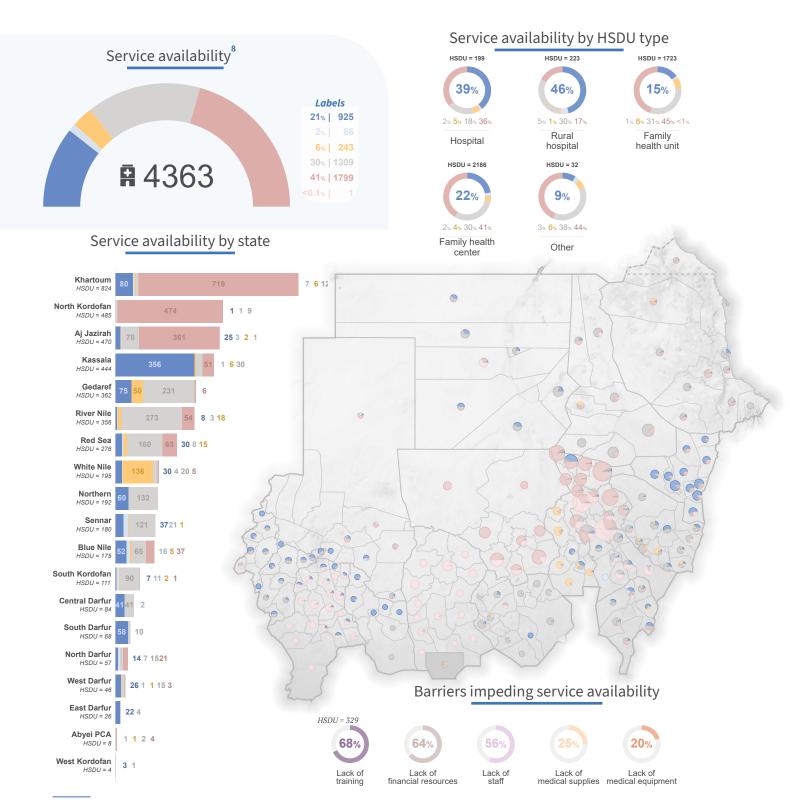
Bar charts further break down barriers by state. Each bar represents a specific barrier, with the percentage value indicating the proportion of HSDUs reporting that particular barrier. Additionally, the number of HSDUs reporting at least one barrier is displayed below the Locality's name.



Important: The denominator for barrier charts excludes HSDUs where the service is fully available or not normally provided. It should further be noted that HSDUs can report up to three barriers for each service. Thus, the sum of all barriers may exceed 100%.



SYNDROMIC SURVEILLANCE

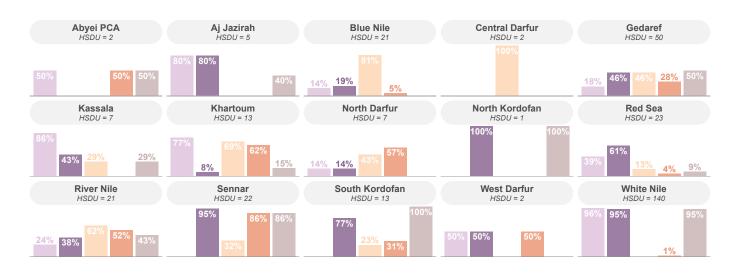


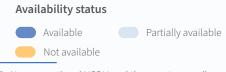
Regular reporting sentinel site for syndromic surveillance of local relevant diseases/conditions.







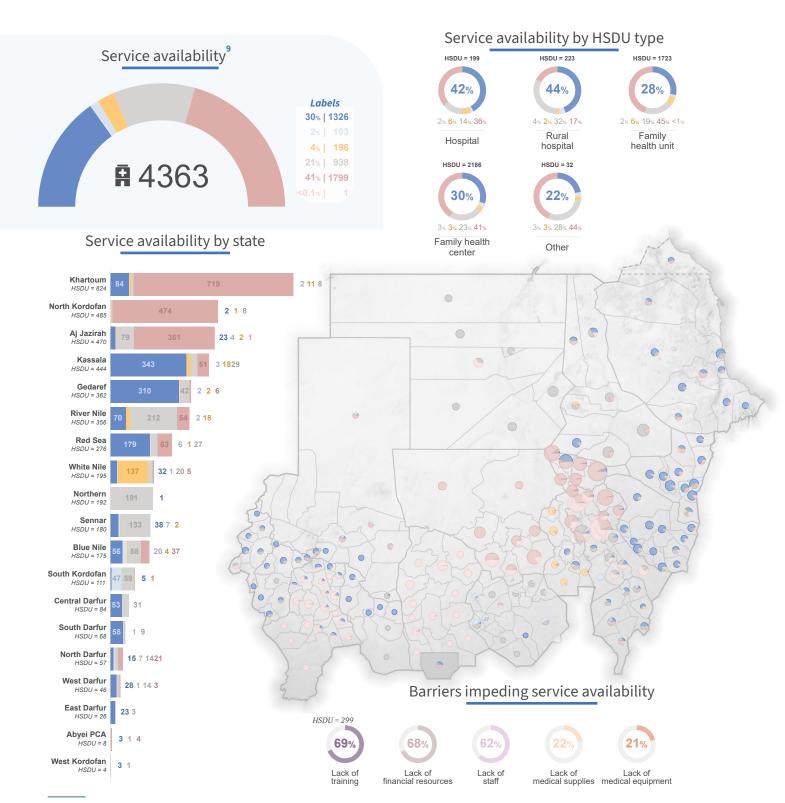








EVENT-BASED SURVEILLANCE

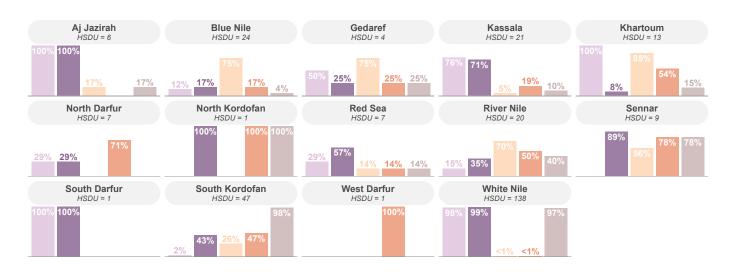


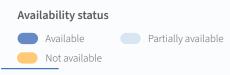
Immediate reporting of unexpected or unusual health events through an event-based surveillance system.







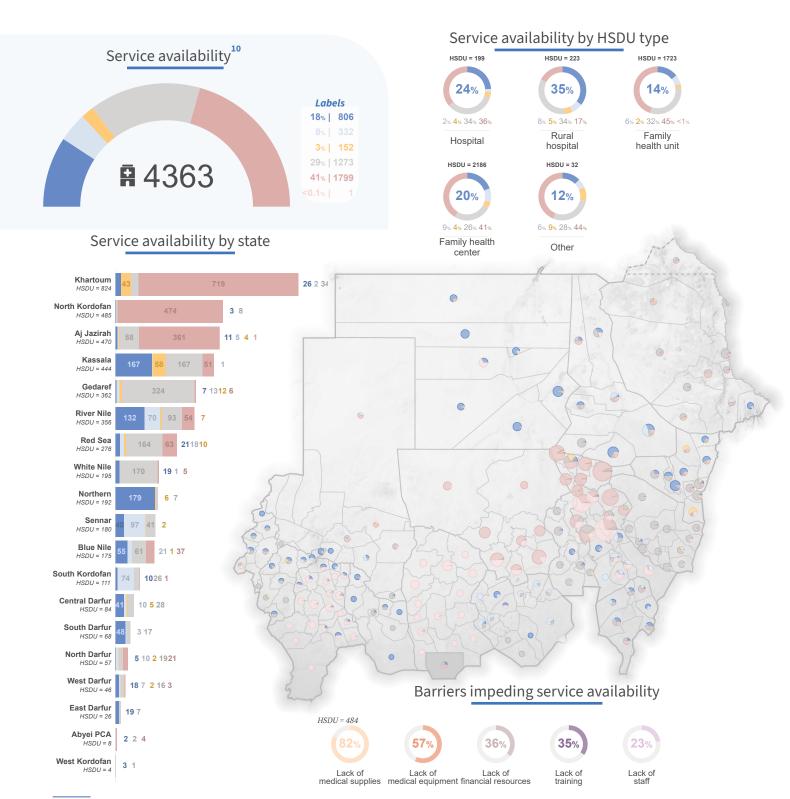




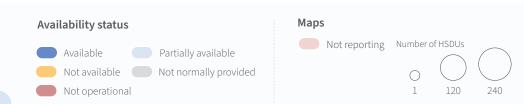




MALARIA AT THE COMMUNITY LEVEL

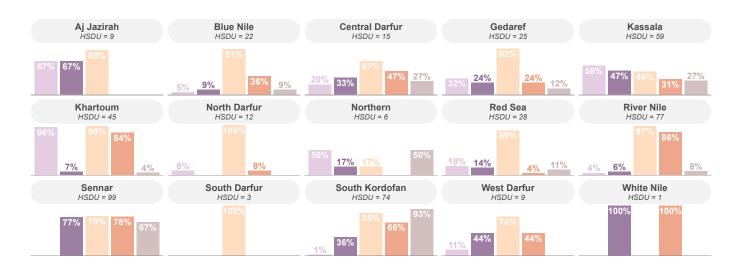


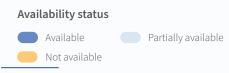
10 Diagnosis and treatment of malaria, cases or detection and referral of suspected cases, and follow-up.







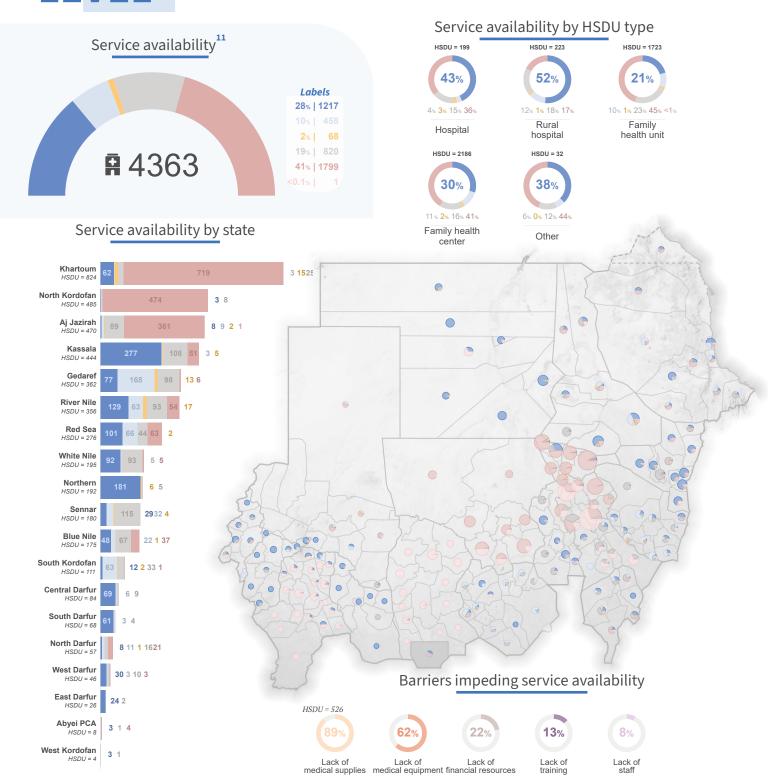




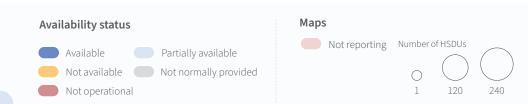




MALARIA AT THE PRIMARY CARE LEVEL

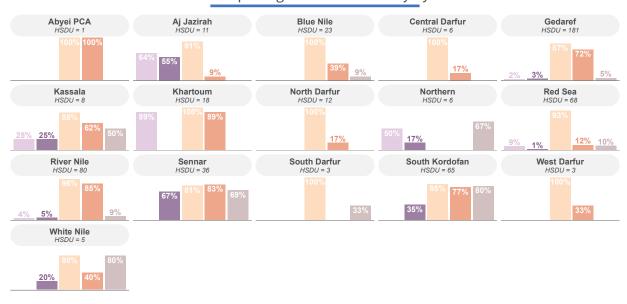


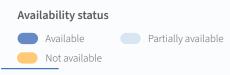
11 Diagnosis of malaria suspected cases with rapid diagnostic test and treatment of positive cases, or detection and referral of suspected cases, and follow-up.









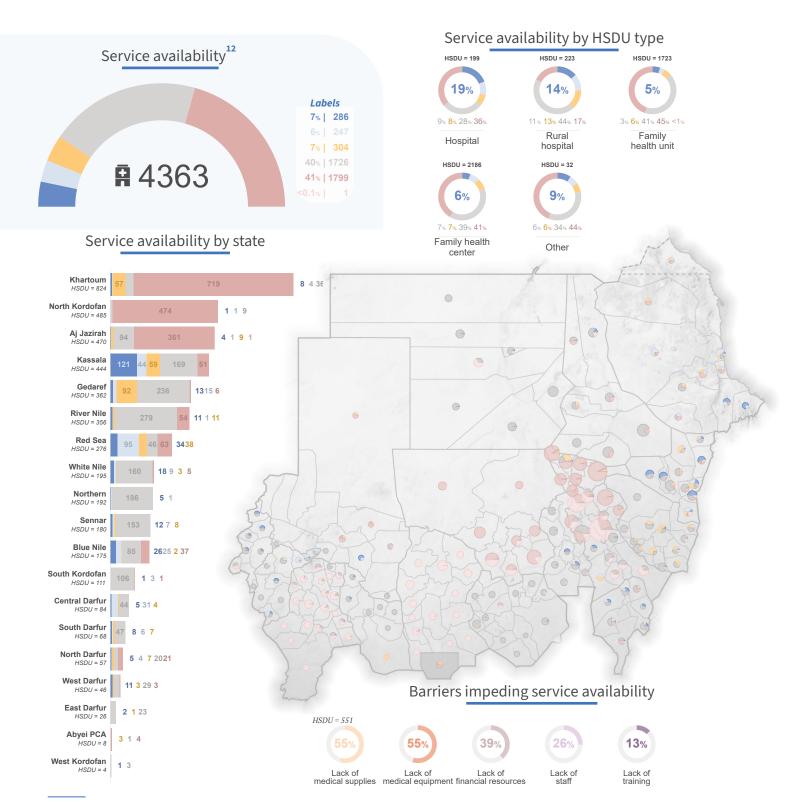




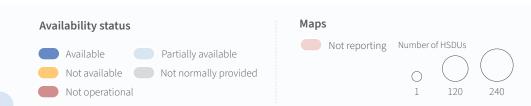




VECTOR CONTROL

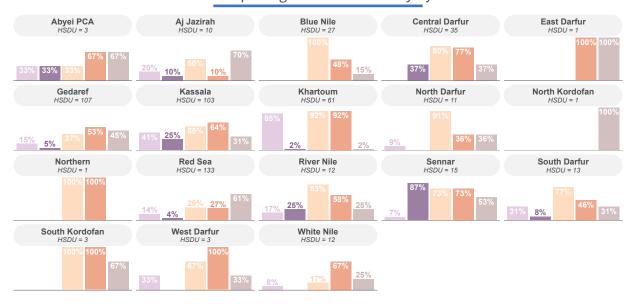


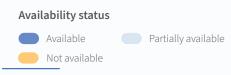
12 Distribution of impregnated bed nets, in/outdoor insecticide spraying, distribution of related information, education and communications (IEC) materials.







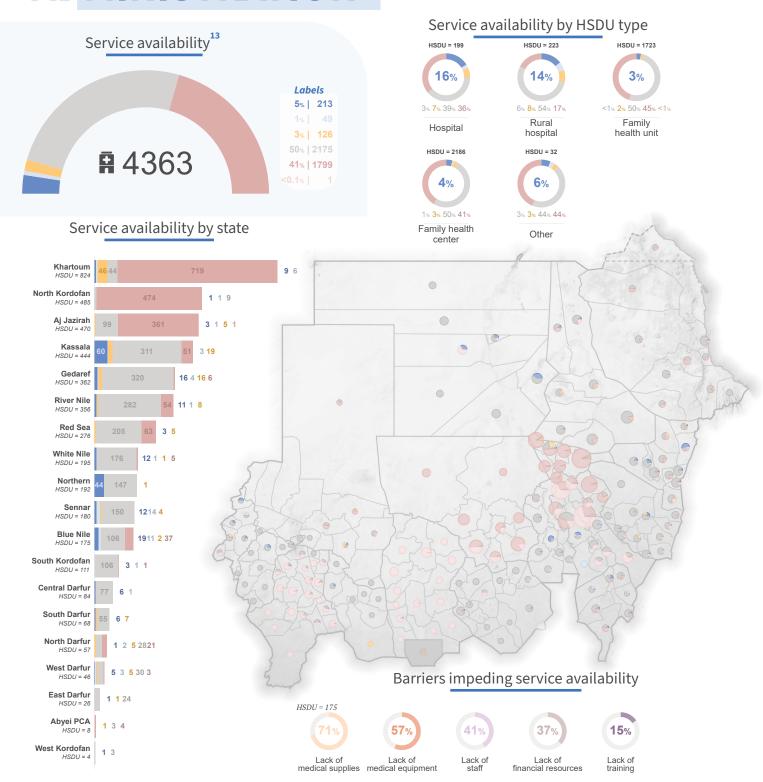








SUPPORT MASS DRUG ADMINISTRATION

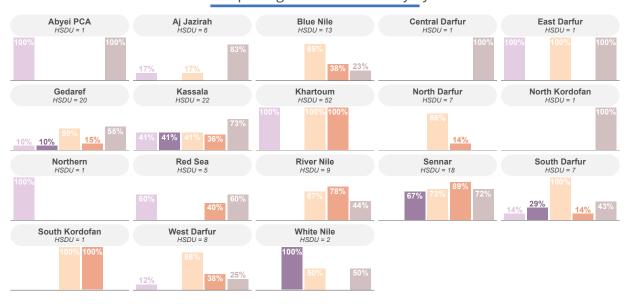


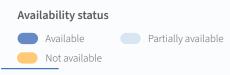
13 Mobilize communities and support mass drug administration/treatment campaigns.









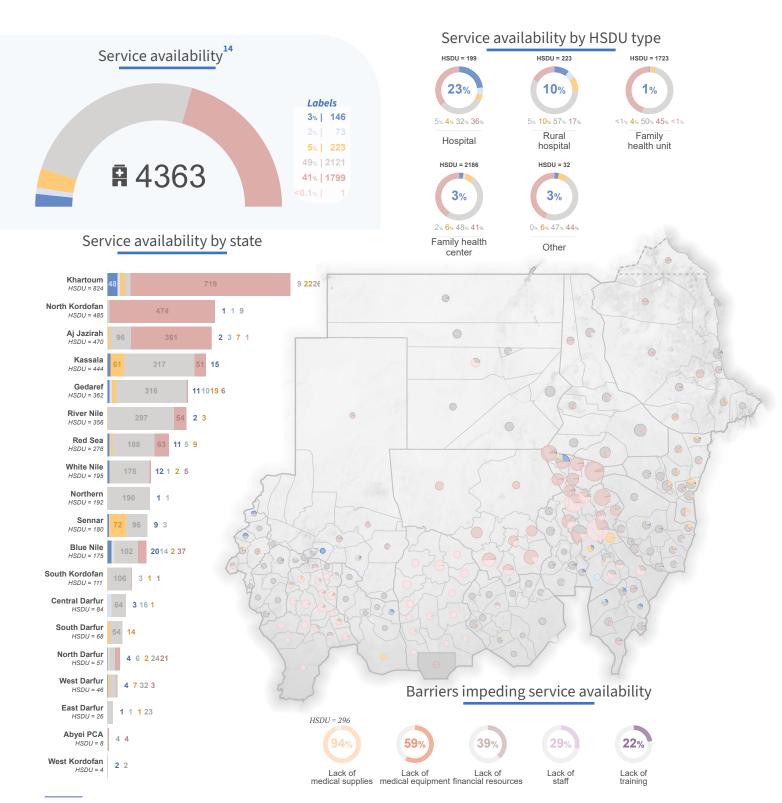








TUBERCULOSIS

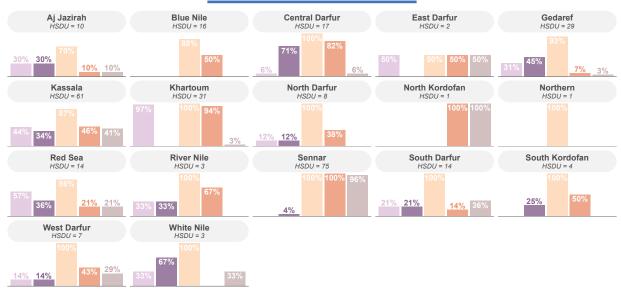


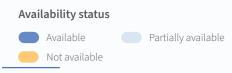
14 Diagnosis and treatment of tuberculosis cases, or detection and referral of suspected cases, and follow-up.









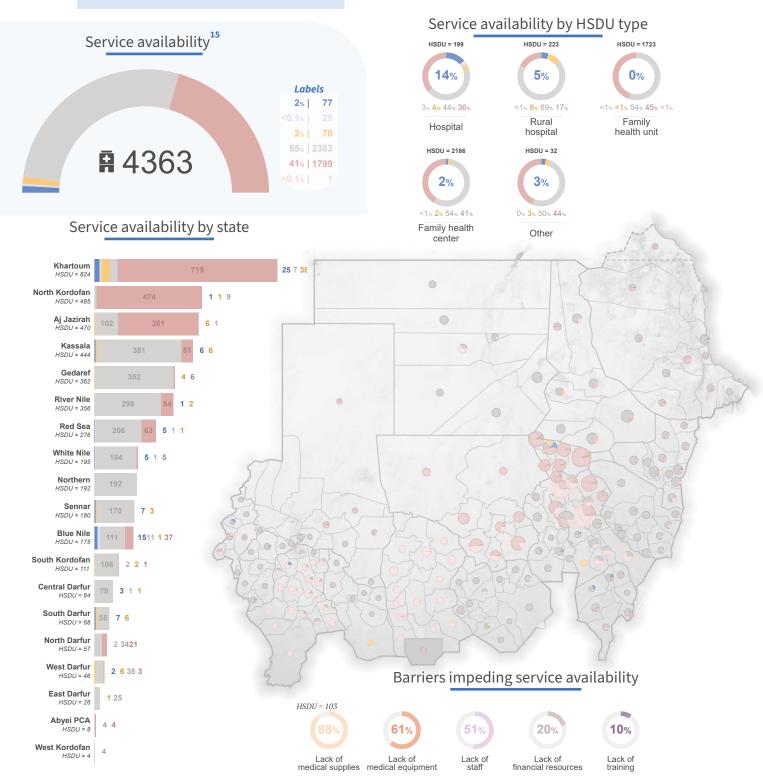








MULTIDRUG-RESISTANT TUBERCULOSIS

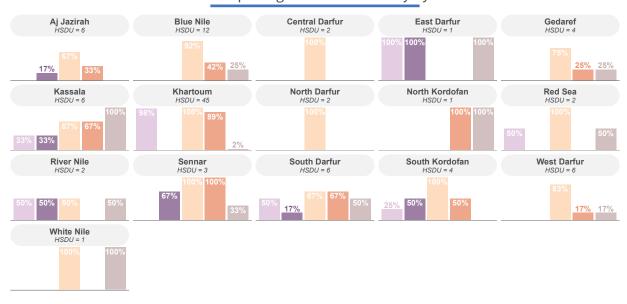


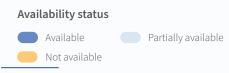
15 Diagnosis, management, and follow-up of multidrug-resistant tuberculosis patients.







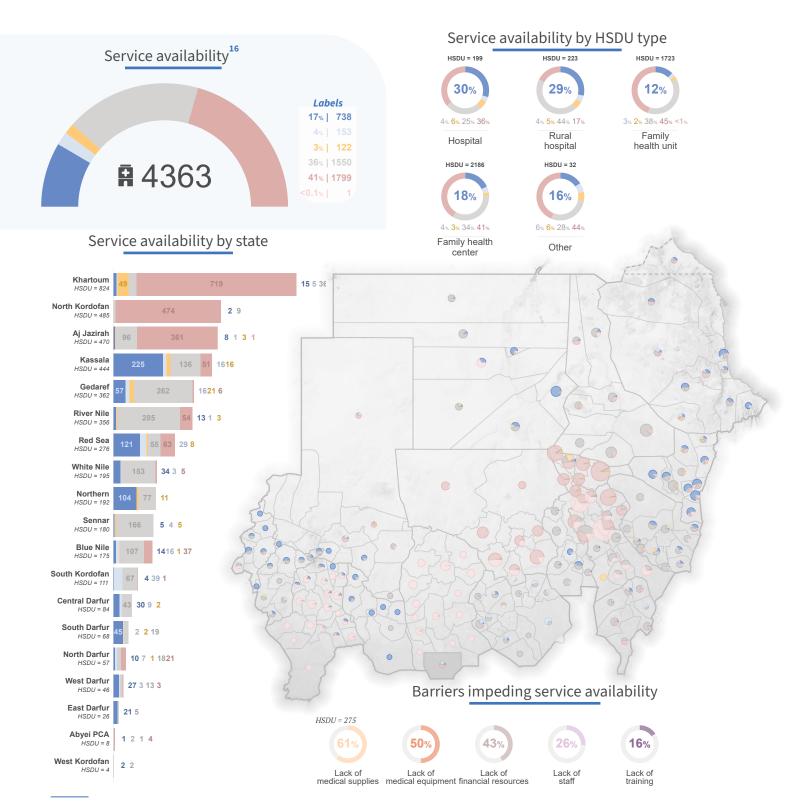




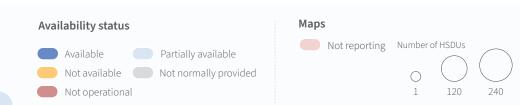




IEC ON LOCAL PRIORITY DISEASES

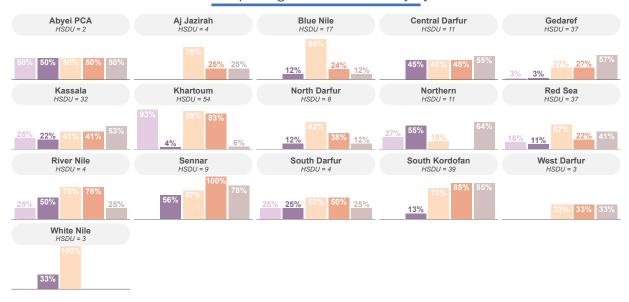


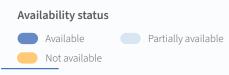
16 IEC on the prevention and self-care of local priority diseases, such as acute diarrhea and acute respiratory infections.







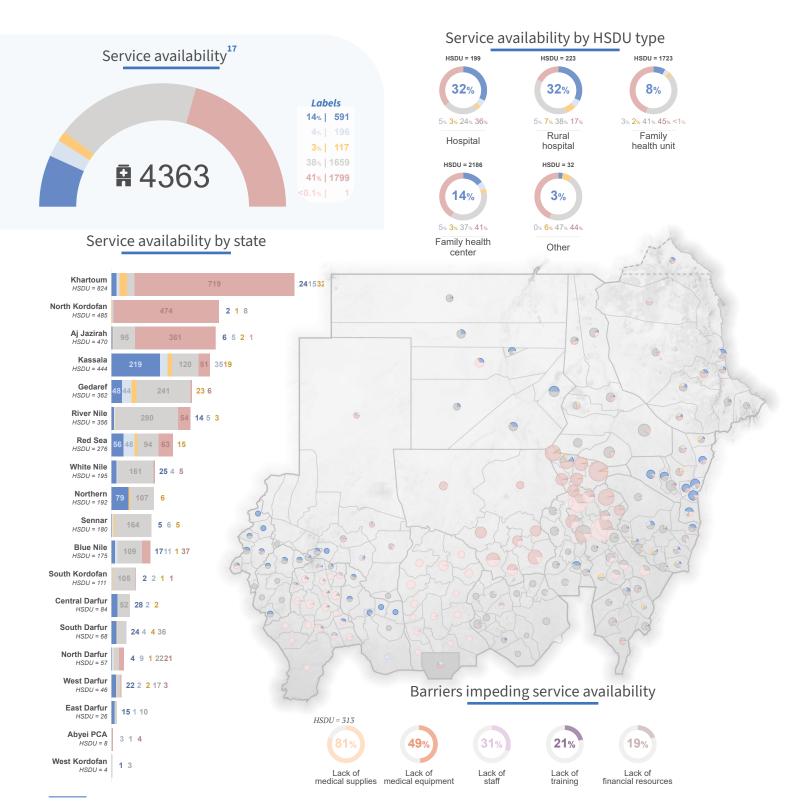




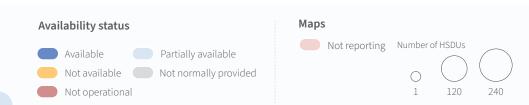




LOCAL PRIORITY DISEASES

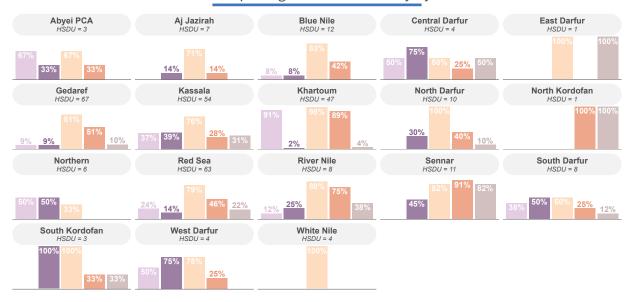


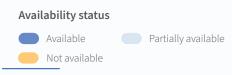
¹⁷ Diagnosis and management of other locally relevant diseases such as measles, viral hepatitis, diphtheria, pertussis, with protocols available for identification, classification, stabilization, and referral of severe cases.









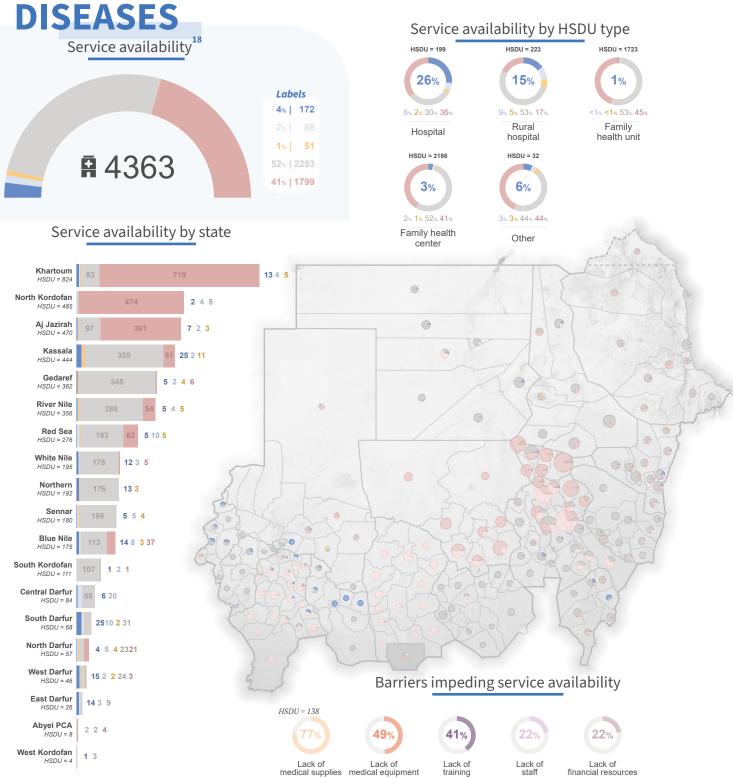








MANAGEMENT OF SEVERE AND/ OR COMPLICATED COMMUNICABLE

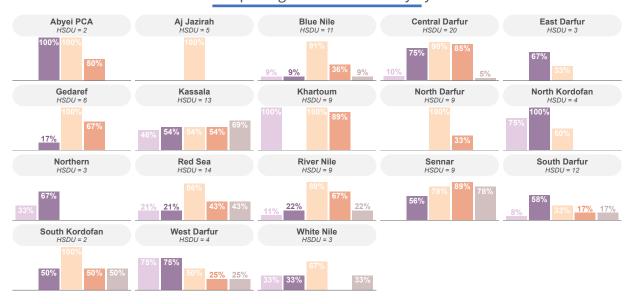


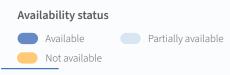
18 Management of severe and/or complicated communicable diseases such as measles with pneumonia, others.







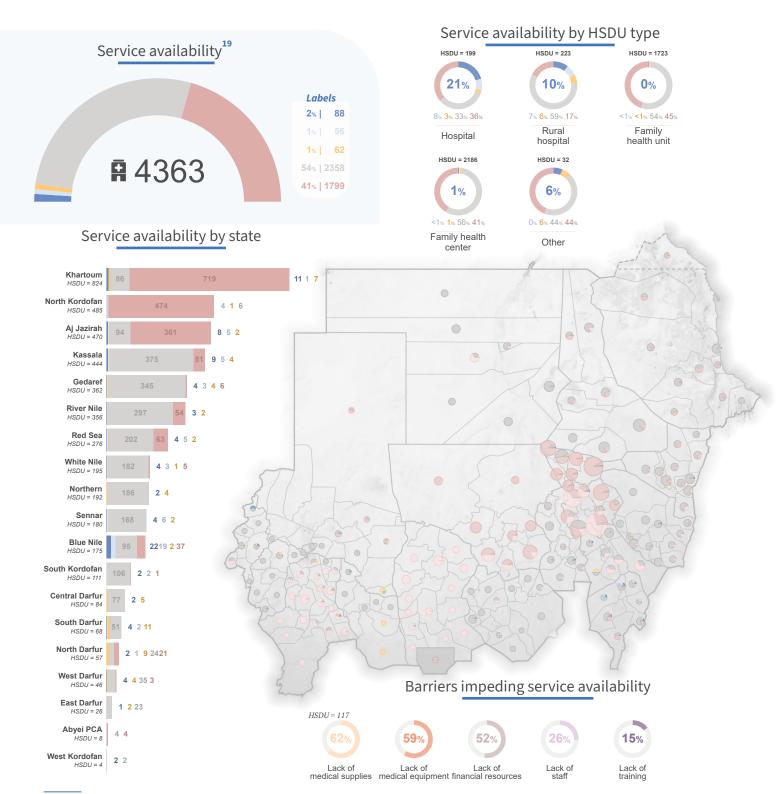








ISOLATION UNIT OR ROOM

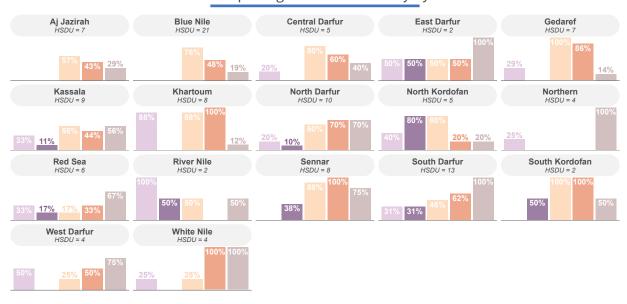


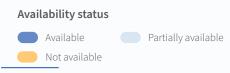
19 Isolation unit or room for patients with highly infectious diseases.

















ANNEX





ANNEX I: POPULATION ESTIMATES

State	Population estimates
KHARTOUM	5 941 286
AJ JAZIRAH	5 124 749
SOUTH DARFUR	3 895 007
NORTH DARFUR	3 461 818
NORTH KORDOFAN	3 444 769
WHITE NILE	3 392 274
GEDAREF	3 091 393
KASSALA	2 718 540
WEST KORDOFAN	2 612 654
SENNAR	2 532 326
EAST DARFUR	2 390 080
RED SEA	2 035 582
RIVER NILE	1 862 303
NORTHERN	1 446 861
SOUTH KORDOFAN	1 156 469
CENTRAL DARFUR	943 721
BLUE NILE	813 930
WEST DARFUR	618 178
ABYEI PCA	20 480
Grand total	47 502 420



ANNEX II: HeRAMS SERVICE DEFINITIONS

Service	Definition
SYNDROMIC SURVEILLANCE	Regular reporting sentinel site for syndromic surveillance of local relevant diseases/conditions.
EVENT-BASED SURVEILLANCE	Immediate reporting of unexpected or unusual health events through an event-based surveillance system.
MALARIA AT THE COMMUNITY LEVEL	Diagnosis and treatment of malaria, cases or detection and referral of suspected cases, and follow-up.
MALARIA AT THE PRIMARY CARE LEVEL	Diagnosis of malaria suspected cases with rapid diagnostic test and treatment of positive cases, or detection and referral of suspected cases, and follow-up.
VECTOR CONTROL	Distribution of impregnated bed nets, in/outdoor insecticide spraying, distribution of related information, education and communications (IEC) materials.
SUPPORT MASS DRUG ADMINISTRATION	Mobilize communities and support mass drug administration/treatment campaigns.
TUBERCULOSIS	Diagnosis and treatment of tuberculosis cases, or detection and referral of suspected cases, and follow-up.
MULTIDRUG-RESISTANT TUBERCULOSIS	Diagnosis, management, and follow-up of multidrug-resistant tuberculosis patients.
IEC ON LOCAL PRIORITY DISEASES	IEC on the prevention and self-care of local priority diseases, such as acute diarrhea and acute respiratory infections.
LOCAL PRIORITY DISEASES	Diagnosis and management of other locally relevant diseases such as measles, viral hepatitis, diphtheria, pertussis, with protocols available for identification, classification, stabilization, and referral of severe cases.
MANAGEMENT OF SEVERE AND/OR COM- PLICATED COMMUNICABLE DISEASES	Management of severe and/or complicated communicable diseases such as measles with pneumonia, others.
ISOLATION UNIT OR ROOM	Isolation unit or room for patients with highly infectious diseases.



