

Table S1- Questionnaire for Primary Healthcare Facilities

Number	Question	Response Options
SECTION 1: COVER PAGE		
INVESTIGATOR'S VISIT		
1	Health facility identification number	
2	Date of visit	
3	Interviewer's surname and first name	
4	Day	
5	Month	
6	Team No.	
IDENTIFICATION OF THE HEALTH FACILITY		
7	Name of facility	
8	Location of the Health Facility (city/village/district)	
9	Region	
10	District Name	
11	Type of health facility	Options:
		1. District Hospital
		2. Health Centre
		3. Maternity Home
		4. CHPS
		97. Other (explain, list)
12	Managing authority	Options:
		1. Government/Public
		2. NGO/Not-for-Profit
		3. Private for-Profit
		4. Mission/Faith-Based
		97. Other (explain, list)
13	Location of the structure/health facility	Options:
		1. Urban

		2. Rural
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14	Do you provide outpatient care?	Options:
		1. Yes
		2. No
15	Do you provide inpatient care?	Options:
		1. Yes
		2. No

MODULE 1: AVAILABILITY OF SERVICES

SECTION 2: STAFF

16	I have a few questions about staffing at this property. Please tell me how many people with each of the following qualifications are currently assigned, employed, or seconded to this structure. Please count each staff member only once, based on the highest technical or professional qualification. For doctors, I would also like to know how many of them work part-time in this structure.	A) Assigned/Employed/Seconded B) Part-Time
	General (nonspecialist) medical doctors	
	Specialist doctors	
	Physicians Assistant	

	Nursing professionals: Registered General Nurse, Registered Community Nurse, Registered Mental Nurse, Nurse	
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	Assistant, Public Health Nurse, Enrolled Nurse, Other (Specify)	
	Midwives: Registered Midwife, Midwifery (Post NAC/NAP Midwifery)	
	Pharmacists: Pharmacy Technician, Medical Counter Assistant	
	Laboratory Technicians (TBM): Medical Laboratory Scientist	
	Community Health Workers (ASBC), Nutrition Officers/Dieticians	

SECTION 3: INPATIENT AND OBSERVATION BEDS

17	Excluding delivery beds, how many overnight or inpatient beds does the health facility have in total, for both adults and children?	Number of inpatient/observation beds
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18	Of the overnight or hospitalization beds in this establishment, how many are beds reserved for maternity? (This does not include delivery beds.)	Number of maternity beds reserved
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MODULE 2: SERVICE READINESS

SECTION 4: INFRASTRUCTURE

COMMUNICATIONS

19	Does this facility have a functioning landline telephone that is available to call outside at all times client services are offered? (Note: If the facility offers 24-hour emergency services, it must be 24-hour availability.)	1. Yes 2. No
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20	Does this facility have a functioning cellular telephone or a private cellular phone that is supported by the facility?	1. Yes 2. No
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21	Does the health facility have a functioning shortwave radio (RAC) for radio calls?	1. Yes 2. No
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22	Does the health facility have a functioning computer (desktop or laptop)?	3. Yes 4. No
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23	Does the health facility now have email or internet access?	1. Yes 2. No
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AMBULANCE/TRANSPORT FOR EMERGENCIES

24	Does the health facility have an ambulance or other vehicle (motorcycle taxi) in working order for emergency transport of patients, stationed at or operated from the health facility?	3. Yes 4. No
25	Does the health facility have access to an ambulance or other vehicle for emergency patient transport stationed at another facility within proximity (e.g., National Emergency Ambulance Services)?	Yes: 1 No: 2

26	Is fuel for the ambulance or any other emergency vehicle available today?	Yes: 1 No: 2 Do not know: 98
27	Do patients have to pay for the use of the vehicle or fuel for using it?	Yes: 1 No: 2 Do not know: 98
POWER SUPPLY		
28	Does your health facility have a source of electricity (grid, generator, solar, or other)?	Yes: 1 No: 2
29	What is the electricity used for in the health facility? (Multiple Choice)	1. Self-contained electric medical devices (e.g., EPI cold room, refrigerator, suction device) 2. Electric lighting and communications 3. Electrical lighting, communications, and 1–2 medical devices/appliances 4. All facility electricity requirements

30	What is the primary source of electricity for the health facility?	1. Central electricity supply (e.g., ECG) 2. Generating set (fuel or battery) 3. Solar system 97. Other (specify)
31	In addition to the primary source, does the facility have a secondary or backup power source?	Yes: 1 No: 2
32	If yes: What is the secondary source of electricity?	0. No secondary source 1. Central electricity supply 2. Generating set (fuel or battery) 3. Solar system 96. Other (specify)
33	During the last 7 days, was electricity available at all times from the main or secondary source when the facility was open for services?	1. Always available without interruption 2. Available with interruptions of less than 2 hours per day 3. Frequent interruptions exceeding 2 hours per day
GENERATOR AND SOLAR SYSTEM		
34	Does the generator work?	Yes: 1 No: 2 Do not know: 98
35	Is there fuel or a charged battery available for the generator today?	Yes: 1 No: 2 Do not know: 98
36	Is the solar system working?	1. Functional 2. Partially functional (battery needs service/replacement) 3. Not functional 98. Do not know
BASIC SERVICES FOR PATIENTS		

37	On average, how many hours per day is this health facility open?	1. 4 hours or less 2. 5–8 hours 3. 9 AM to 4 PM 4. 5 to 11 PM 5. 24 hours
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MODULE 2: SERVICE READINESS

SECTION 4: INFRASTRUCTURE

WATER SUPPLY		
38	What is the most common source of water used for the property at the moment?	1. Running water in premises 2. Piped onto facility grounds 3. Public tap/standpipe 4. Tube well/borehole 5. Protected dug well
		6. Regular unprotected dug well 7. Protected spring 8. Unprotected spring 9. Rainwater collection 10. Bottled water 11. Trolley + small tanker/drum 12. Tanker 13. Surface water 16. Other (specify) 18. Do not know 19. No water source
39	Is this source of water available on the premises of the health facility?	1. Yes, inside the facility 2. Yes, within the premises of the health facility 3. No, outside the premises
ROOM PRIVACY		
40	Is there a room with privacy (auditory and visual) for patient consultations?	1. Auditory privacy only 2. Visual privacy only 3. Protection of auditory and visual privacy 4. No privacy

TOILETS (LATRINES)		
41	Do the premises have toilets (latrines) in working order and accessible to all ambulatory patients?	Yes No
42	If yes: What type of toilet?	1. Flushing toilet 2. Improved ventilated pit latrines (VIP) 3. Pit latrines with slab 4. Slabless/open pit latrines 5. Composting toilets 6. Seal 7. Toilets/suspended latrines 8. No toilet/bush/field
INFECTION CONTROL		
43	Does the health facility have guidelines on standard infection prevention precautions?	1. Yes, observed 2. Yes, declared but not observed 3. No
PROCESSING OF EQUIPMENT FOR REUSE		
44	Are the following items used for processing equipment for reuse available and functional in the facility today?	Electric autoclave (pressure & wet heat): 1. Observed 2. Reported but not observed 3. Not available Non-electric autoclave: 1. Observed 2. Reported but not observed 3. Not available
HEALTHCARE WASTE MANAGEMENT		

45	How does the healthcare facility ultimately dispose of sharps (e.g., needles or blades)?	1. Burn in an industrial 2chamber incinerator (800– 1000+°C) 2. Burn in a 1-chamber brick/drum incinerator 3. Open burn on flat ground 4. Protected ditch or ground 5. Spilled without burn 6. Covered pit or latrine 7. Open pit without protection 8. Protected soil or pit 9. Off-site removal 10. Stored in a covered container 11. Stored in unprotected environment 95. Never has sharp waste
46	How does the healthcare facility ultimately dispose of medical waste (e.g., bandages)?	Same options as I9 424
INCINERATOR STATUS		
47	Is the incinerator working today?	Yes: 1 No: 2 Do not know: 98
48	Is fuel for the incinerator available today?	Yes: 1 No: 2 Do not know: 98

SUPERVISION AND MONITORING		
49	When did the health facility last receive a supervisory visit from the next level (DHMT or other)?	1. This month 2. In the past three months 3. More than three months 98. Do not know

SUPERVISION AND MONITORING		
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50	Did the supervisor assess pharmacy-related issues (e.g., drug stock, expiration, registrations)?	1. Yes 2. No
51	Did the supervisor assess personnel (e.g., availability, training)?	1. Yes 2. No
52	Did the supervisor assess data (e.g., quality, completeness, timeliness)?	1. Yes 2. No
53	Was diabetes discussed during the supervisory visit?	1. Yes 2. No
54	Was hypertension discussed during the supervisory visit?	1. Yes 2. No
55	Was mental health discussed during the supervisory visit?	1. Yes 2. No
GENERAL OUTPATIENT SECTION		
56	Are the following basic equipment and supplies available and functional in this facility?	Observation Required
Equipment Items		
57	Is there an adult weighing scale?	1. Observed 2. Reported but not observed 3. Not available
58	Is there a child weighing scale (250 grams)?	Same as above
59	Is there an infant weighing scale (graduations 100 grams)?	Same as above
60	Is a tape measure (or measuring rod/stadiometer) available?	Same as above
61	Is a thermometer available?	Same as above
62	Is there a functioning stethoscope?	Same as above
63	Is there a blood pressure monitor (manual or digital) with a stethoscope?	Same as above
64	Is there a light source (e.g., flashlight)?	Same as above
65	Are intravenous infusion kits available?	Same as above
66	Are oxygen concentrators available?	Same as above

67	Are oxygen cylinders present?	Same as above
68	Is there a centralized oxygen supply?	Same as above
69	Is there an oxygen flow meter with a humidifier?	Same as above
70	Is there an oxygen delivery device (e.g., tubes, mask, or nose clip)?	Same as above
71	Was oxygen unavailable for any reason in the past three months?	1. Yes 2. No
INFECTION CONTROL PRECAUTIONS		
72	Are the following resources/supplies available for infection control today?	Observation Required
73	Is clean running water available (e.g., piped, bucket with tap)?	1. Observed 2. Reported but not observed 3. Not available
74	Is liquid or bar soap available for handwashing?	Same as above
75	Is alcohol-based hand cleaning solution present?	Same as above
76	Are disposable latex gloves available?	Same as above
77	Is there a waste container (pedal bin) with a lid and plastic bag?	Same as above
78	Is there a sharps container ("safety box") available?	Same as above
79	Is an environmental disinfectant (e.g., chlorine, alcohol) available?	Same as above
80	Are disposable syringes and needles available?	Same as above
81	Are auto-disable syringes available?	Same as above
SECTION 5: AVAILABLE SERVICES		
82	Does the health facility offer diagnosis or management of non-	1. Yes 2. No

	communicable diseases, such as high blood pressure, diabetes, or mental illness?	
83	Does the health facility offer screening for non-communicable diseases such as high blood pressure, diabetes, or mental illness?	1. Yes 2. No
84	Total number of outpatient (OPD) attendance for NCDs (2022).	[Numeric Value]
85	Total number of inpatient attendance for NCDs (2022).	[Numeric Value]
86	Do healthcare providers at this health facility diagnose patients with diabetes?	1. Yes 2. No
87	Do healthcare providers at this health facility manage diabetes in patients?	1. Yes 2. No
88	Are national guidelines for the diagnosis and management of diabetes available at this health facility today?	1. Yes, Observed 2. Yes, Declared but Not Observed 3. No
89	In the past two years, have any diabetes service providers at this facility received training in diabetes diagnosis and management?	1. Yes 2. No
90	Do healthcare providers at this health facility diagnose patients with high blood pressure?	1. Yes 2. No
91	Do healthcare providers at this health facility manage high blood pressure in patients?	1. Yes 2. No
92	Are national guidelines for the diagnosis and management of hypertension available at this health facility today?	1. Yes, Observed 2. Yes, Reported but Not Seen 3. No
93	In the past two years, have any hypertension service providers received training in the diagnosis and management of hypertension?	1. Yes 2. No
94	Do healthcare providers at this health facility diagnose and/or manage	1. Yes 2. No

	chronic respiratory diseases in patients?	
SECTION 6: DIAGNOSTICS		

95	Does the health facility perform diagnostic tests in general, including rapid diagnostic tests (RDTs)?	1. Yes 2. No
96	Does the health facility offer any of the following tests on-site?	Specify Tests Below
97	Urine protein dipstick analysis	1. Yes 2. No
98	Urine dipstick blood glucose test	Same as above
99	Urine dipstick test for ketonuria	Same as above
100	Are the following items for rapid diagnostic tests available today?	Observation Required
101	Dipsticks for urine protein	1. At least one not expired 2. Available but expired 3. Availability reported but not noted 4. Not available today 5. Never available
102	Dipsticks for urine glucose	Same as above
103	Dipsticks for urine ketone bodies	Same as above
104	Filter paper for dried blood spots (DBS)	Same as above
105	Blood glucose test strips	Same as above
SECTION 5: AVAILABLE SERVICES		
105	Does the health facility offer diagnosis or management of noncommunicable diseases (e.g., diabetes)?	1. Yes 2. No
106	Does the health facility offer screening of non-communicable diseases?	1. Yes 2. No

107	Total number of outpatient attendance for NCDs (2022)	[Numeric Value]
108	Total number of inpatient attendance for NCDs (2022)	[Numeric Value]
109	Do healthcare providers at this facility diagnose diabetes?	1. Yes 2. No
110	Do healthcare providers manage diabetes in patients?	1. Yes 2. No
SECTION 6: DIAGNOSTICS		
111	Does the facility perform the following tests onsite or offsite?	1. Yes, Onsite 2. Yes, Offsite 3. No

112	Blood sugar measurement using a glucometer	1. Yes 2. No
113	Hemoglobin measurement	1. Yes 2. No
114	Availability of a glucometer	1. Observed 2. Declared but Not Observed 3. Not Available
115	Availability of glucometer test strips	Same as above
SECTION 7: MEDICINES AND COMMODITIES		
116	Does the health facility stock medicines and consumables?	1. Yes 2. No
117	Are the following drugs for NCD management available?	1. At Least One Not Expired 2. Available but Expired 3. Availability Reported but Not Noted 4. Not Available Today 5. Never Available

118	Metformin cap/tab Insulin injection Glucose 50% injection ACE inhibitor (e.g., enalapril, lisinopril, ramipril, perindopril) Thiazide (e.g., hydrochlorothiazide) Beta-blocker (e.g., bisoprolol, metoprolol, carvedilol, atenolol) Calcium channel blocker (e.g., amlodipine) Aspirin cap/tablet Beclomethasone inhaler Prednisolone cap/tab Hydrocortisone injection Epinephrine injection Furosemide cap/tablet Glibenclamide cap/tab Gliclazide or glipizide tablet Glyceryl Trinitrate Sublingual Tablet Ibuprofen tablet Isosorbide Dinitrate Tablet Omeprazole tablet or alternative such as pantoprazole, rabeprazole	Same as above
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	Paracetamol cap/tab (oral formulation for adults) Inhaled Salbutamol Simvastatin tablet or another statin (e.g., atorvastatin, pravastatin) Spironolactone tablets Normal saline solution IV Ringer's Lactate IV Solution 5 Dextrose IV Solution IV treatment for fungal infections Amitriptyline tablet Carbamazepine tablet Chlorpromazine injection Diazepam tablet Diazepam injection or rectal tubes Fluoxetine tablet Fluphenazine injection Haloperidol tablet Lithium tablet Phenobarbital tablet Phenytoin tablet Sodium valproate tablet Injection Lorazepam Levodopa + Carbidopa tablet Triptatepine tablet Fluphenazine injection Risperidone tablet	
SECTION 8: NCD PREVENTION ACTIVITIES		
119	Does the facility carry out prevention activities for NCDs?	1. Yes 2. No
120	If Yes, types of activities carried out	1. Awareness Campaigns in Public Spaces 2. Awareness Campaigns in Households 3. Screening Tests 4. Advice on Eating Habits 5. Other (Specify)

121	Frequency of activities	1. Not Regular 2. Monthly 3. Quarterly 4. Bi-Annually 5. Annually 6. Other (Specify)
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SECTION 9: DATA MANAGEMENT SYSTEMS

122	Type of data management system in use	1. Paper-Based 2. Electronic Health Records 3. Health Information System 96. Other (Specify)
123	Is the system integrated with other platforms?	1. Yes 2. No
124	Data backup frequency	1. Daily 2. Weekly 3. Monthly 4. Not Regularly 96. Other (Specify)
125	Measures for data security and confidentiality	1. Encryption 2. Password Protection 3. Secure Storage 4. Regular Security Audits 96. Other (Specify)
126	Primary method for capturing patient data	1. Manual Entry 2. Scanning Paper Records 3. Direct Digital Input (e.g., tablets) 96. Other (Specify)
127	Mechanisms for ensuring data accuracy and completeness	1. Regular Data Quality Checks 2. Automated Error Detection 3. Staff Training on Data Entry 96. Other (Specify)

Note: This questionnaire was adapted from the Service Availability and Readiness Assessment (SARA) tool developed by the World Health Organization (WHO) for assessing the capacity of health facilities to provide non-communicable disease (NCD) care in Ghana. The tool evaluates key dimensions, including service availability, readiness, staffing, infrastructure, diagnostics, medicines, commodities, data management systems, and NCD prevention activities.