

Health facility emergency referral readiness data collection tool

Interviewer Name _____

Date (dd/mm/yyyy): __/__/__

INSTRUCTIONS: Ask these questions of the transport officer, hospital administrator or person in charge who would know about referral (this person could be the head of a department, a midwife or public health nurse in charge).

Please note that a list of commonly used terms and their definitions can be found at the end of this document under 'Glossary.'

NOTE: Questions with * beside them indicate they are needed to assess **essential emergency referral readiness**.

Section 0. General questions

No.	Item	Response	Skip
Dist	Select the district where you are conducting this survey.	District 1.....1 District 2.....2 Etc.	
hf	Select the health facility where you are conducting this survey.	Health facility 1.....1 Health facility 2.....2 Etc.	
hft	Select the health facility type.	Health center I.....1 Health center II.....2 Health center III.....3 Health center IV...4 District hospital....5 Regional hospital...6 Other.....77	
001	Does this facility provide obstetric care 24 hours a day, 7 days a week?	Yes.....1 No.....0	
002	Does this facility provide neonatal care 24 hours a day, 7 days a week?	Yes.....1 No.....0	
003	Can the staff on call providing obstetric and newborn care always reach the facility within 30 minutes?	Yes.....1 No.....0	
004	How far is the nearest facility that provides obstetric surgery? <i>(If this facility provides surgery, enter 0000; enter 9999 if distance is unknown)</i>	_ _ _ _ km	If '0000', skip to q006
005	How long does it take to get to that facility that provides obstetric surgery? <i>(record time in minutes under ideal circumstances; enter 9999 if time unknown)</i>	_ _ _ _ minutes	
006	How far is the nearest facility with a special newborn care unit? <i>(If this facility has a special newborn care unit, enter 0000; Enter 9999 if distance unknown)</i>	_ _ _ _ km	If '0000', skip to q008

007	How long does it take to get to that facility with a special newborn care unit? <i>(record time in minutes under ideal circumstances; enter 9999 if time unknown)</i>	_ _ _ _ minutes	
008	Has this facility referred a woman or newborn to another facility for emergency care in the last 12 months?	Yes.....1 No0	
009	Approximately how many patients a month does this facility refer out for emergency care? <i>(if possible, consult the referral out logbooks)</i> a. obstetric b. newborn <i>(88 = don't know)</i>	a. _ _ b. _ _	

Section 1. Transportation readiness

Section 1.1 Offsite vehicles

No.	Item	Response		Skip
101 *	Does this health facility use any vehicles for emergency transport that are located offsite? <i>By "offsite" we mean stationed somewhere other than the health facility. This includes cars, ambulances, taxis or other vehicles located at another health facility, the district, or within the community.</i>	Yes.....1 No.....0		☒ S1.2
102 *	Which of the following offsite vehicles does the health facility use for emergency transport? <i>(read each item)</i> <i>When we say "ambulance" we mean a vehicle that permits monitoring and intervention by a provider during transport. This can include a helicopter or boat if they are set up for continued clinical care.</i>	Yes	No	
	a) Motorized ambulance(s) located offsite (e.g., at another health facility or central location)	1	0	
	b) Non-ambulance motor vehicle(s) located offsite (e.g., vehicles from the District Health Office or local council)	1	0	
	c) A centrally coordinated ambulance system (an ambulance system that is managed by a dedicated agency or department at a central location, e.g., through a dispatch center)	1	0	
	d) Agreements with private taxis, cars, trucks or motorcycles	1	0	

	e) Other offsite vehicle, specify: _____			
<p>You said your health facility accesses ambulances or other motor-vehicles located offsite. If your facility uses more than one type of offsite vehicle, think about your most reliable option when answering these next questions.</p>				
103 *	Are these vehicles available 24 hours a day, 7 days a week?	Yes..... 1 No..... 0		
104	Are these vehicles reserved exclusively for emergency medical transport?	Yes..... 1 No..... 0		
105 *	When requested by facility staff, how reliably does the vehicle come to your health facility?	Always.....4 Most of the time...3 Sometimes.....2 Rarely.....1 Never..... 0		
106 *	Generally, how long does it take for the vehicle to arrive at your facility from the time you request it? Think about the last 5 calls you made to give an estimate. Include the full amount of time from the moment you call to request the vehicle until it is parked at your health facility. <i>(record time in minutes under typical circumstances; 9999 = does not know)</i>	_ _ _ _ minutes		
107 *	When the vehicle reaches your facility, does it typically have sufficient fuel for referral transport?	Yes.....1 Sometimes..... 2 No.....0 Don't know.....8		
108 *	Which of the following are typically available in the offsite emergency vehicle(s)? <i>(read each item)</i>	Yes	N o	DK
	a) IV fluids	1	0	8
	b) Oxytocin or other intravenous uterotonic	1	0	8
	c) Incubator, radiant warmer, plastic covering, or embrace warmer	1	0	8
	d) Oxygen	1	0	8
	e) Newborn pulse oximeter	1	0	8
	f) Bag and mask, for newborns	1	0	8
	g) Bag and mask, for adults	1	0	8
	h) Intravenous magnesium sulfate	1	0	8
	i) Anti-hypertensive medication	1	0	8
	j) Blood pressure monitoring equipment	1	0	8
	k) Personal protective equipment	1	0	8
	l) Stretcher	1	0	8
	m) Locally available pain control agents	1	0	8

	n) Continuous positive airway pressure driver system with accessories		0		
109	Are the offsite emergency vehicles equipped with the following communication methods? <i>(read each item)</i>	Yes	N	DK	
	a) Two-way radio	1	0	8	
	b) Cellphone or airtime paid for by coordinating service or health system	1	0	8	
	c) Other, specify: _____	1	0	8	

Section 1.2 Onsite vehicles

No.	Item	Response	Skip
110 *	Does this health facility use any motor vehicles for emergency transport located onsite at the facility?	Yes.....1 No.....0	? S1.3
111 *	Do you have at least one ambulance or motor vehicle for emergency transport that is available and functional today?	Yes.....1 No.....0	
112	Are the onsite ambulances/motor vehicles reserved exclusively for emergency medical transport?	Yes, all.....1 Some of them.....2 No, none.....0	
113 *	Does this facility have a driver(s) on-staff to transport patients?	Yes.....1 No.....0	? 119
114 *	When the health facility is open , how often is a driver available to transport a patient with an emergency? Would you say always, most of the time, sometimes, rarely or never?	Always.....4 Most of the time...3 Sometimes.....2 Rarely.....1 Never.....0	? 116
115 *	When the health facility is open and the driver is contacted, how long does it typically take them to be onsite and ready? <i>(record time in minutes under typical circumstances; 9999 = does not know)</i>	_ _ _ minutes	
116 *	When the facility is closed , how often is a driver available to transport a patient with an emergency? Would you say always, most of the time, sometimes, rarely or never?	Always.....4 Most of the time...3 Sometimes.....2 Rarely.....1 Never.....0 Facility does not offer emergency transport when closed.....7	? 119 ? 119
117 *	When the health facility is closed and the driver is contacted, how long does it typically take them to be onsite and ready? <i>(record time in minutes under typical circumstances; 9999 = does not know)</i>	_ _ _ minutes	
118	Are the drivers at this facility given a facility-supported cell phone or airtime to use during patient transport?	Yes1 No0	

		Don't know.....8		
119*	Is sufficient fuel available today for referral transport if needed?	Yes1 No0 Don't know.....8		
120	Does the facility have a fuel management plan? <i>By fuel management plan, we mean a plan to handle fuel-related issues (such as shortages or gas station closures) with an adequate budget.</i>	Yes1 No0 Don't know.....8		
121	Does the facility have a fuel reserve or buffer stock available today?	Yes1 No0 Don't know.....8		
122	Is there a routine preventive maintenance schedule for onsite emergency vehicles?	Yes1 No0 Don't know.....8		
123	How often does routine preventive maintenance for onsite emergency vehicles take place?	Never.....0 Irregularly.....1 Every 5000 km2 Every 1000 km.....3 Don't know.....8		
124	Are there funds available today for maintenance and repairs if they were needed?	Yes1 No0 Don't know.....8		
125	Is there a policy at this facility to disinfect surfaces contacted by patients in the emergency transport vehicles after each use?	Yes, observed1 Yes, not observed .2 No0 Don't know.....8		
126	Are surfaces contacted by patients in the emergency transport vehicles disinfected after each use?	Always.....2 Sometimes.....1 Never.....0		
127	Are emergency transport vehicles disinfected on a routine schedule?	Yes, daily 1 Yes, at least weekly 2 Yes, monthly or less frequently 3 Irregularly..... 4 No routine disinfecting schedule 0 Don't know..... 8		
128*	Which of the following are available in the onsite emergency vehicle(s) today? <i>If possible, go and observe what is available in the vehicle.</i>	Yes, observed	Yes, not observed	No
	a) IV fluids	1	2	0
	b) Oxytocin or other intravenous uterotonic	1	2	0
	c) Incubator, radiant warmer, plastic covering, or embrace warmer	1	2	0

	d) Oxygen e) Newborn pulse oximeter f) Bag and mask, for newborns g) Bag and mask, for adults h) Intravenous magnesium sulfate i) Anti-hypertensive medication j) Blood pressure monitoring equipment k) Personal protective equipment l) Stretcher m) Locally available pain control agents n) Continuous positive airway pressure driver system with accessories	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
129*	Which of the following onsite motor vehicles does the health facility use for emergency transport? (<i>read each item</i>) When we say "ambulance" we mean a vehicle that permits monitoring and intervention by a provider during transport. This can include a helicopter or boat if they are set up for continued clinical care. a) Motorized ambulance(s) located onsite b) Non-ambulance motor vehicle(s) located onsite (e.g., car, pick up, minibus, motorcycle, motorboat, etc.) c) Other, specify: _____	Yes 1 1 1	No 0 0 0		If (a)=1 ? q130, otherwise go to S1.3
130	Is there a routine preventive maintenance schedule for medical equipment onboard your onsite ambulance(s)?	Yes1 No0 Don't know.....8			? q132 ? q132
131	How often does routine preventive maintenance of medical equipment onboard your onsite ambulance(s) take place?	Never.....0 Irregularly.....1 Annually.....2 Quarterly.....3 Don't know.....8			
132	Is your onsite ambulance equipped with a two-way radio?	Yes1 No0 Don't know.....8			

Section 1.3 Other transportation options and issues

No.	Item	Response		Skip
133*	Does this health facility use any of the following other strategies for emergency transportation? (<i>read each item</i>) a) Non-motorized transportation options located onsite (e.g., bicycle, bicycle	Yes 1	No 0	

	<p>ambulance, paddle boat, canoe, animal drawn cart, stretcher (not part of ambulance))</p> <p>b) Non-motorized transportation options located offsite (e.g., bicycle, bicycle ambulance, paddle boat, canoe, animal drawn cart, stretcher (not part of ambulance))</p> <p>c) Assist patients and families to organize private transport (ad hoc, no formal agreements)</p> <p>d) Patients and families are responsible for arranging their own transportation</p> <p>e) Other, specify: _____</p>	1	0	
		1	0	
		1	0	
134	<p>What barriers disrupt the route(s) to the nearest health facility where you refer emergency obstetric and newborn patients? <i>Read each item</i></p> <p>a) Significant traffic</p> <p>b) Poor or narrow roads</p> <p>c) Roadblocks or closures (may be due to livestock, construction, demonstrations, etc.)</p> <p>d) Seasonal weather conditions (rainy season, winter conditions, dust storms, etc.)</p> <p>e) Mountainous terrain (including potential for rocks falling and avalanches)</p> <p>f) Extreme weather events (e.g., cyclones, typhoons, hurricanes, fires, etc.)</p> <p>g) Other, specify: _____</p>	Yes	No	If no to all, skip to next section
		1	0	
		1	0	
		1	0	
		1	0	
		1	0	
		1	0	
		1	0	
135	<p>Are the emergency transportation options available at your facility equipped to handle these barriers?</p> <p><i>For example, having a siren to navigate traffic, four-wheel drive for difficult terrain, winter tires and deicing fluid for winter weather, an emergency raft, reinforced windows, a bulbar, etc.</i></p>	<p>Yes, completely...1</p> <p>Yes, somewhat...2</p> <p>No, not at all.....3</p> <p>Not applicable, no transport available4</p> <p>Don't know.....8</p>		

Section 2. Referral efficiency and coordination of care

No.	Item	Response	Skip
201*	Does this health facility have explicit written criteria to determine when obstetric and newborn cases should be referred (referral criteria)? <i>Verify by observation.</i>	<p>Yes, observed1</p> <p>Yes, not observed....2</p> <p>No0</p>	☐ 203

	<p><i>When we say referral criteria, we mean a set of evidence-based guidelines for clinicians to determine when a patient needs to be referred to a higher level of care, typically based on facility level capacity, the severity of a patient's condition and likelihood of the condition worsening.</i></p>		
202	Have all staff been trained on the referral criteria?	Yes1 No0 Don't know.....8	
203*	Does this health facility have a predefined set of steps to carry out an emergency referral (referral protocols, or procedures)? For example, the WHO Acute Transfer Checklist. ¹ <i>Verify by observation.</i>	Yes, observed1 Yes, not observed..2 No0	208
204	Do the steps of referral (referral procedures or protocols) clearly indicate who is responsible for coordinating a referral?	Yes1 No0 Don't know.....8	
205	Do the steps of referral (protocols/ procedures) describe how to communicate with and counsel families on referral?	Yes1 No0 Don't know.....8	
206	Have all relevant staff been trained on the steps of referral (protocols/ procedures)?	Yes1 No0 Don't know.....8	
207	How often are the steps of referral (protocols/ procedures) followed when referring a maternal or newborn patient out for emergency care?	Never 0 Usually 1 Sometimes 2 Rarely 3 Don't know.....8	
208*	Does this facility have explicit written guidelines or protocols for the management and stabilization of clients with major obstetric and newborn complications before they are referred (pre-referral management guidelines)? <i>Verify by observation.</i> <i>When we say pre-referral management guidelines we mean the clinical guidelines to manage emergency conditions and stabilize patients prior to referral.</i>	Yes, observed1 Yes, not observed....2 No0	210
209	Have all relevant staff been trained on the pre-referral management and stabilization guidelines or protocols?	Yes1 No0 Don't know.....8	
210	When patients are referred out for emergency care, how often do they leave accompanied with a referral form ? Would you say usually, sometimes, rarely or never?	Never 0 Usually 1 Sometimes 2 Rarely 3 Don't know.....8	212

211	Is the form standardized (used at other facilities too) or is it a form used only in this facility?	Standardized 1 Used only by this facility2 Both types are used 3 Don't know 8	
212*	Is there a policy at this facility to call ahead to inform a receiving facility that a patient is coming, when referring a patient for emergency care? <i>Verify by observation.</i>	Yes, observed1 Yes, not observed....2 No0	
213	When referring a patient for emergency care, how often does staff call ahead to inform the receiving facility or a centrally coordinated ambulance system that the patient is coming? Would you say usually, sometimes, rarely or never?	Never 0 Usually 1 Sometimes 2 Rarely 3 Don't know.....8	
214	Does this health facility have clear guidance on what information should be communicated when contacting a receiving facility about a referral? (For example, a communication protocol or job aid) <i>Verify by observation</i>	Yes, observed1 Yes, not observed....2 No0	
215	Does this health facility have a register that is dedicated to documenting patients being referred out? <i>Verify by observation</i>	Yes, observed1 Yes, not observed..2 No0	217
216	Is the register routinely used to document outbound referrals? (<i>check if it has been filled out in the last week</i>) <i>Verify by observation</i>	Yes, observed1 Yes, not observed..2 No0	

The next few questions I'd like to ask you are related to communication to enable emergency referral of patients from your facility.

Communication to enable referral

No.	Item	Is at least one available & functional?	
		Yes	No
217*	Landline/Wireless telephone in the maternity or neonatal areas	1	0
218*	Landline/Wireless telephone elsewhere in facility	1	0
219a*	Basic cell phone (owned by facility, cannot access internet)	1	0
219b*	Smart phone (owned by facility, can access internet)	1	0
220a*	Basic cell phone (owned by individual staff, cannot access internet)	1	0
220b*	Smart phone (owned by individual staff, can access internet)	1	0
221*	Public telephone in the vicinity	1	0
222*	Two-way radio	1	0
223*	Internet connection/signal in the maternity or neonatal areas	1	0

224*	Internet connection/signal elsewhere in the facility	1	0
225*	Computer (owned by facility)	1	0

No.	Item	Response	Skip
226	Is there a closed user group (e.g., a WhatsApp group) that is used to coordinate emergency referrals between facilities in your area?	Yes1 No0 Don't know.....8	
227*	Is there a toll-free number to reach a centrally coordinated emergency services unit that serves this area?	Yes1 No0 Don't know.....8	?229 ?229
228*	Is the toll-free number available 24 hours a day, 7 days a week?	Yes1 No0 Don't know.....8	
229*	How is the cell phone signal at this facility? Would you say it is very dependable, somewhat dependable or not very dependable? Or does it not exist?	No cell phone signal 0 Not very dependable 1 Somewhat dependable 2 Very dependable 3	
230*	How is the internet network at this facility? Would you say it is very dependable, somewhat dependable or not very dependable? Or does it not exist?	No internet network.....0 Not very dependable 1 Somewhat dependable 2 Very dependable 3	

Section 3. Care during transport

No.	Item	Response	Skip
301*	Is there a policy at this health facility for a service provider to accompany a patient being referred?	Yes, observed1 Yes, not observed....2 No0	
302*	How often does a service provider accompany the patient being referred? Would you say usually, sometimes, rarely or never?	Never 0 Usually 1 Sometimes 2 Rarely 3 Don't know.....8	? 310
303	When a service provider accompanies a patient being referred, where do they typically ride in the vehicle?	In front with driver.....0 In back with patient.....1 In a separate vehicle.....2 Don't know.....8	
304	How often does the provider accompanying the patient have real-time access to medical expertise to help guide care during transport	Never 0 Usually 1 Sometimes 2 Rarely 3	

	(e.g., calling the receiving facility to discuss care with an obstetrician or pediatrician)?	Don't know.....8				
305*	<p>Would you say that all the service providers who accompany maternal and newborn referrals have the training and skills to perform the following functions: (read each item)</p> <p>a) Provide IV fluids</p> <p>b) Control bleeding with external maneuvers (uterine massage, compression, aortic compression, NSAG)</p> <p>c) Administer uterotonics</p> <p>d) Maintain newborn body temperature through ongoing kangaroo care and covering</p> <p>e) Ensure airway patency through positioning or head tilt/chin lift and monitored by observation</p> <p>f) Maintain newborn respiratory support via O2 and bag mask ventilation,</p> <p>g) Monitor newborns thorough observation and vital signs with pulse oximetry;</p> <p>h) Perform neonatal CPR for heart rates < 60 beats per minute</p> <p>i) Provide obstetric and neonatal pain control in accordance with local guidelines</p>	All	Some	None	DK	
		1	2	0	8	
		1	2	0	8	
		1	2	0	8	
		1	2	0	8	
		1	2	0	8	
		1	2	0	8	
		1	2	0	8	
		1	2	0	8	
		1	2	0	8	
		1	2	0	8	
		1	2	0	8	
306*	Have the service providers who accompany newborn referral patients from this health facility been trained on how to transfer small and sick newborns?	Yes, all.....1 Yes, some.....2 No, none.....3 Not applicable, do not send providers.....5 Don't know.....8				
307	Do service providers who accompany maternal and newborn referral patients participate in regular emergency services refresher trainings? (This may include pre-referral management, first aid, emergency assessment, using KMC during transfer, etc.)	Yes.....1 No.....0 Not applicable, do not send providers.....2 Don't know.....8				?310 ?310 ?310
308	How often do providers participate in the regular refresher trainings?	Monthly.....1 Quarterly.....2 Biannually (twice/year)3 Annually.....4 Less than annually.....5 Don't know.....8				

309	How long is the refresher training?	Less than 1 hour.....1 1-2 hours.....2 4 hours/half day.....3 8 hours/one day.....4 2 days.....5 3 days or more.....6 Don't know.....8	
310*	How are newborns with complications typically transferred out of this facility to another facility?	By skin-to-skin/Kangaroo care (KMC)1 By incubator/radiant warmer.....2 By hand.....3 In a cot.....4	
311	Are referral patients from this health facility accompanied by emergency providers who are entirely dedicated to providing emergency transport ? (for example, an emergency medical technician)	Yes, always.....1 Yes, sometimes.....2 Never.....3	

Section 4. Financial accessibility of emergency referral

No.	Item	Response	Skip
401	Are the costs related to emergency referral clearly indicated in the health facility for clients to see? Even if referral is free, is it indicated?	Yes, observed1 Yes, not observed.....2 No0	
402*	When a maternal or newborn client is referred for emergency care, do expenses at this facility need to be cleared before they are referred?	Yes.....1 No.....0 Not applicable, services are free.....2	
403*	When a maternal or newborn client is referred for emergency care, do transport expenses (vehicle or fuel) have to be paid before they are transferred or admitted to the next facility?	Yes, for ambulance/vehicle1 Yes, for fuel2 Yes, for both3 No.....0 Not applicable, transport is free.....4	
404	At this health facility, are there financial options to cover the costs of emergency services for patients who cannot pay?	Yes.....1 No.....0 Not applicable.....2	
405	At this health facility, are there financial options to cover the costs of emergency transportation for patients who cannot pay?	Yes.....1 No.....0 Not applicable.....2	
406	Does this facility have a mechanism to cover the costs for a service provider to accompany a patient being referred (such as return transport, per diem, lodging, etc.)?	Yes.....1 No.....0 Don't know.....8	

407	Can this facility recuperate costs of referral through a health insurance scheme or other mechanism?	Yes.....1 No.....0 Not applicable.....2	
408	Does this facility have a line item in its annual budget for referral-related expenses?	Yes.....1 No.....0 Not applicable.....2 Don't know.....8	?S5 ?S5 ?S5
409	Is the budgeted amount for referral-related expenses typically sufficient to cover all annual costs?	Yes.....1 No.....0 Don't know.....8	

Section 5. Family-centered referral

No.	Item	Response	Skip
501 *	Is there a policy at this facility to minimize separation between a parent/caregiver and newborn, including during referral?	Yes, observed1 Yes, not observed.....2 No0	
502 *	Is there a policy at this facility to allow a birth companion to accompany a client being referred for an obstetric emergency in a facility-supported emergency vehicle?	Yes, observed1 Yes, not observed.....2 No0	
503	In cases of emergency obstetric and newborn referrals, how often does staff explain to families where and why their family member is being referred?	Never 0 Usually 1 Sometimes 2 Rarely 3 Don't know.....8	
504	In cases of emergency obstetric and newborn referrals, how often does staff ask the patient or their proxy (parent, caregiver or chosen birth companion) for consent to refer?	Never 0 Usually 1 Sometimes 2 Rarely 3 Don't know.....8	
505	In cases of emergency newborn referrals, how often is the newborn accompanied by a parent or caregiver during transfer?	Never 0 Usually 1 Sometimes 2 Rarely 3 Don't know.....8	?508
506	When a parent/caregiver accompanies a newborn during an emergency referral, where do they typically ride in the vehicle?	In front with driver....0 In back with patient...1 In a separate vehicle.2 Don't know.....8	
507	When a parent/caregiver accompanies a newborn during an emergency referral, how often are they given assistance to safely transfer their newborn in the kangaroo care (KMC) position?	Never 0 Usually 1 Sometimes 2 Rarely 3 Don't know.....8	
508	In cases of emergency obstetric referrals, how often is the client accompanied by their chosen birth companion during transfer?	Never 0 Usually 1 Sometimes 2	?510

		Rarely 3 Don't know.....8	
509	When a birth companion accompanies a client being referred for an obstetric complication, where do they typically ride in the vehicle?	In front with driver.....0 In back with patient....1 In a separate vehicle...2 Don't know.....8	
510	Does this health facility actively seek community feedback on the referral process?	Yes.....1 No.....0 Don't know.....8	
511	During antenatal care, how common is it for providers to counsel clients on the possibility of emergency referral and its cost?	Never 0 Usually 1 Sometimes 2 Rarely 3 Not applicable, do not offer ANC.....4 Don't know.....8	
512	Have all staff providing obstetric and newborn care at this facility been trained on family-centered, patient-centered or respectful maternity care?	Yes, all.....1 Some of them.....2 No, none.....0 Don't know.....8	

Section 6. Inter-facility relational dynamics

No.	Item	Response	Skip
601 *	Is there a list of organizations or facilities that provide obstetric and newborn care, and other related services, in the area (directory)?	Yes, observed1 Yes, not observed.....2 No0	
602	Does the health facility have the contact information for all services at receiving health facilities?	Yes, observed1 Yes, not observed.....2 No0	
603	Does the health facility have information on the location and hours of operations for each receiving facility or organization?	Yes, observed1 Yes, not observed.....2 No0	
604	Is the contact information, hours of operation, and list of available services kept up-to-date?	Yes.....1 No.....0 Don't know.....8	
605	Is there a written agreement between this health facility and at least one facility that can receive referrals or a central coordinating body for emergency services? <i>We are not referring to a national health policy that describes how referral works. Here we mean an agreement specifically at this local level.</i>	Yes, observed1 Yes, not observed.....2 No0	608
606	Does the written agreement describe how referrals are to be carried out?	Yes, observed1 Yes, not observed.....2 No0	

607	Does the written agreement describe what information must be communicated during a referral?	Yes, observed1 Yes, not observed.....2 No0	
608	Is there a mechanism in place for collaborative problem-solving related to referral with this facility's receiving facility(ies)? For example, a district-level referral meeting or consortium.	Yes.....1 No.....0 Don't know.....8	
609*	Is there a policy at this facility to confirm a receiving facility's capacity to handle an incoming referral when making contact? (e.g., available beds, blood supply, electricity, staffing, etc.)	Yes, observed1 Yes, not observed.....2 No0 Not applicable, central coordinating unit does this.....7	
610	How often does staff confirm a receiving facility's capacity to handle an incoming patient when making referrals?	Never 0 Usually 1 Sometimes 2 Rarely 3 Not applicable, central coordinating unit does this.....7 Don't know.....8	
611	Does this facility have a mechanism for staff to receive remote clinical support in the event of a referral? (e.g., to assist with pre-referral management and stabilization)	Yes.....1 No.....0 Don't know.....8	
612	<i>(Ask nurse in-charge of maternal and newborn health care)</i> Have you personally met providers at this facility's receiving facility(ies)? Would you say you have met many, some, few or none?	Many.....3 Some.....2 Few.....1 None.....0	
613	<i>(Ask nurse in-charge of maternal and newborn health care)</i> When providers from your facility accompany a client for an emergency referral, do they often get scolded or treated with a negative attitude by the providers at the receiving facility? Would you say usually, sometimes, rarely or never?	Usually.....0 Sometimes1 Rarely2 Never.....3	
614	<i>(Ask nurse in-charge of maternal and newborn health care)</i> How confident are you that when you refer a patient, they will get the care they need at the receiving facility? Would you say you are very confident, somewhat confident, a little confident or not at all confident?	Very confident.....3 Somewhat confident....2 A little confident.....1 Not at all confident.....0	

Glossary

Ambulance	A vehicle that permits monitoring and intervention by a provider during transport. This can be any type of motorized vehicle including a helicopter or boat if they are set up for continued clinical care.
Centrally coordinated ambulance system	An ambulance system that is managed by a dedicated agency or department at a central location, e.g., through a dispatch center.
Closed user group	A service provided by mobile operators that allow subscribers to make and receive calls and SMS from any member associated within the group (e.g., a Whatsapp group).
Directory	A list of organizations or facilities that provide obstetric and newborn care, and other related services, in the area. It should typically include contact information for all services at the facilities as well as their location and hours of operation.
Facility-supported	Either owned by, provided by, or paid for by, the health facility.
Fuel management plan	A plan to handle fuel-related issues (such as shortages or gas station closures) with an adequate budget.
Guidelines or protocols for the pre-referral management and stabilization	The clinical guidelines or protocols to manage emergency conditions and stabilize patients prior to referral.
Inter-facility referral	Referral that occurs between any two health facilities.
Locally available pain control agents	Medications used to manage pain that are typically available in the context where the assessment is taking place.
Motor vehicles	A vehicle propelled by internal-combustion engine or electricity.
Offsite vehicle	Any vehicle (including cars, ambulances and taxis) stationed somewhere other than the health facility. They may be located at another health facility, the district office, or within the community.
Onsite vehicle	Any vehicle (including cars, ambulances and taxis) stationed on the premises of the health facility being surveyed.
Referral	When a patient is directed to another provider or health facility for further health care. This indicates a request from one health worker to another to assume responsibility for the management of one or more of a patient's specific health needs.
Referral criteria	A set of evidence-based guidelines for clinicians to determine when a patient needs to be referred to a higher level of care, typically based on facility level capacity, the severity of a patient's condition and likelihood of the condition worsening.
Referral protocols or procedures	A predefined set of steps defining how to carry out an emergency referral.
Special newborn care unit	A neonatal unit that provides care for sick newborns but does not perform major surgery or assisted ventilation. It is an intermediate unit between the postnatal care and neonatal intensive care units. Newborns may be admitted to the special newborn care unit if they were born prematurely, have low birthweight, have breathing problems, low blood sugar or jaundice.
Transport	Also termed, <i>transfer</i> , in the emergency care field, involves the movement of patients between different health care locations or stages of care.