



NEST360 | UNICEF Health Facility Assessment (HFA)

Pharmacy and Laboratory Module

Version: October 20, 2021

Date (yyyy/mm/dd): / /

Data Collector 1 (first and last name):

Data Collector 2 (first and last name):

Facility Name:

Facility Code:

Module Overview for Pharmacy and Laboratory

Section 1: Pharmacy (direct these questions to the pharmacist)

Section 2: Laboratory Equipment, Supplies, and Testing (direct these questions to the head laboratory technician)

Section 3: Laboratory Capacity for Microbiology (direct these questions to the head laboratory technician)

Section 4: Laboratory Linkage to Neonatal Unit (direct these questions to the head laboratory technician)

Section 5: Blood Bank (direct these questions to the head laboratory technician)

Section 6: Laboratory Linkage to Neonatal Unit (direct these questions to the neonatal nurse in charge)

Section 7: Neonatal Unit Medicines (direct these questions to the neonatal nurse in charge)

Facility Name:

Facility Code:

Section 1. Pharmacy

Instructions: Please have all participants fill in their names and positions below, before completing the following forms in *Section 1. Pharmacy*.

Respondents	
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position

Facility Name:

Facility Code:

Section 1. Pharmacy

Instructions: The data collection team should direct these questions to the pharmacist. For some questions, you will need to ask and observe the staff or specific items/spaces at the facility. An item is not functional if it is in need of repair. Please do not leave any variable blank. If a response is unknown, write “unknown” or select “unknown” from the multiple-choice answers.

Prompt: “I’d like to ask you a few questions and make some observations about the pharmacy and pharmacy supplies.”

1A. General System

No.	Item	Response	Skip To
1.01	Does this facility have a pharmacy/drugstore?	<input type="radio"/> Yes <input type="radio"/> No	—
1.02	Is the pharmacy accessible 24 hours a day 7 days per week?	<input type="radio"/> Yes <input type="radio"/> No	—
1.03	What is the major source of medicines for this health facility? <i>(Select one response. If there are two or more sources of equal importance, write them in “Other”.)</i>	<input type="radio"/> Government supplier <input type="radio"/> Private pharmacy <input type="radio"/> NGO / bilateral / multilateral <input type="radio"/> Mission <input type="radio"/> Other (specify below)	—
1.04	Do you have any other minor sources of medicines for this health facility? <i>(Select one response. If there are two or more sources of equal importance, write them in “Other”.)</i>	<input type="radio"/> No other sources <input type="radio"/> Government supplier <input type="radio"/> Private pharmacy <input type="radio"/> NGO / bilateral / multilateral <input type="radio"/> Mission <input type="radio"/> Other (specify below)	—
1.05	Is there a drug inventory register/system? <i>(This could be computerized)</i>	<input type="radio"/> Yes <input type="radio"/> No	—
1.06	How often do you carry out inventory of drug stock? <i>(Observe most recent report)</i>	<input type="radio"/> Daily <input type="radio"/> At least once per week <input type="radio"/> At least once per month <input type="radio"/> Less than once per month (e.g., quarterly) <input type="radio"/> Irregularly	—
1.07	<i>For observation only: (Observe the drug inventory register/system or bin cards to determine if up to date. Randomly select five cards. All must be up to date to select “Yes”. Bin cards are defined as a card that records the status of materials in storage to maintain “stock on hand” and help track incoming and outgoing drugs.)</i>	<input type="radio"/> Yes <input type="radio"/> No	—

Facility Name:

Facility Code:

No.	Item	Response	Skip To
1.08	When are drugs ordered? (<i>Select all that apply</i>)	<input type="checkbox"/> Order same time each week/month/quarter <input type="checkbox"/> Order every 6 or 12 months <input type="checkbox"/> Order whenever stocks reach reorder level <input type="checkbox"/> Reorder when we run out <input type="checkbox"/> Shipments come automatically <input type="checkbox"/> Never order drugs <input type="checkbox"/> Other (<i>specify below</i>)	—
			—
1.09	What is the primary source for gloves, syringes, and other medical supplies? (<i>Select one</i>)	<input type="radio"/> Government supplier <input type="radio"/> Private pharmacy <input type="radio"/> NGO / bilateral / multilateral <input type="radio"/> Mission <input type="radio"/> Other (<i>specify below</i>)	—
			—
1.10	Is there a secondary source for gloves, syringes, and other medical supplies? (<i>Select one</i>)	<input type="radio"/> No other sources <input type="radio"/> Government supplier <input type="radio"/> Private pharmacy <input type="radio"/> NGO / bilateral / multilateral <input type="radio"/> Mission <input type="radio"/> Other (<i>specify below</i>)	—
			—
1.11	What is the most common cause of delay in the delivery of supplies? (<i>Select one</i>)	<input type="radio"/> No delays <input type="radio"/> Transport <input type="radio"/> Administrative <input type="radio"/> Financial <input type="radio"/> Stockout at the central store <input type="radio"/> Other (<i>specify below</i>)	—
			—

Facility Name:

Facility Code:

No.	Item	Response	Skip To
1.12	What is the second most common cause of delay in the delivery of supplies? (Select one)	<input type="radio"/> No other causes of delays <input type="radio"/> Transport <input type="radio"/> Administrative <input type="radio"/> Financial <input type="radio"/> Stockout at the central store <input type="radio"/> Other (specify below)	—
			—
1.13	Is a “First-expired-First-out” system for supply management used? (Ask to see the gentamicin stock and observe if it is arranged by expiration date. Must be arranged in order to select Yes.)	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> No gentamicin in stock <input type="radio"/> Did not observe	—
1.14	Is there a regularly used mechanism to ensure that expired drugs are not distributed? (Ask for description of process. This can include a system to keep track of inventory and expiration dates (ideally electronic), or a system to dispose of expired drugs before they can accidentally be distributed.)	<input type="radio"/> Yes <input type="radio"/> No	—
1.15	For observation only: Are all drugs stored away from the ground?	<input type="radio"/> Yes <input type="radio"/> No	—
1.16	Is there a functioning thermometer indicating the room temperature in at least one room in the pharmacy?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/>	—
1.17	Does the pharmacy have at least one functioning electric/gas (liquid or compressed) refrigerator?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/>	—
1.18	Does the pharmacy have at least one functioning solar refrigerator?	<input type="radio"/> Yes <input type="radio"/> No	—
1.19	Which of the following drugs are available free of charge to neonates? (Select all that apply)	<input type="checkbox"/> None <input type="checkbox"/> Gentamicin (injection) <input type="checkbox"/> Benzylpenicillin <input type="checkbox"/> Amoxicillin <input type="checkbox"/> Ampicillin <input type="checkbox"/> Phenobarbitone <input type="checkbox"/> Caffeine or Aminophylline <input type="checkbox"/> Vitamin K	—
1.20	Are prices of drugs publicly displayed anywhere in the hospital?	<input type="radio"/> Yes <input type="radio"/> No	—

Facility Name:

Facility Code:

Section 1B. Essential Drugs

Instructions: The following questions will ask about the availability of various pharmaceutical drugs. For the following questions you should first assess if the item is available today. If no item is available, select “**not available today**”. If the item is available today and has not been out of stock in the last four weeks, select “**available and no stockout in last 4 weeks**”. If the item is available today, but there has been a stock out at any point in the last four weeks, select “**available today, but stockout in last 4 weeks**”.

No.	Item	Response	Skip
Prevention of mother-to-child transmission (PMTCT)			
1.21	Does the facility have any antiretrovirals?	<input type="radio"/> Yes <input type="radio"/> No	If “No”, skip to 1.22
1.21a	Azidothymidine/Zidovudine (AZT) (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.21b	Nevirapine (NVP) (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
Hypoglycaemia and IV fluids			
1.22	Does the facility have any IV fluids?	<input type="radio"/> Yes <input type="radio"/> No	If “No”, skip to 1.23
1.22a	Dextrose 10% with normal saline	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.22b	Dextrose 5% with normal saline	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.22c	Dextrose/glucose 10%	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.22d	Potassium chloride (KCL) 7.5%, 10%, 15%	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.22e	Sodium chloride 0.9%	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.22f	Ringer’s lactate	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.22g	Water for injection	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
Infection			
1.23	Does the facility have any antibiotics?	<input type="radio"/> Yes <input type="radio"/> No	If “No”, skip to 1.24

Facility Name:

Facility Code:

No.	Item	Response	Skip
1.23a	Amoxicillin (oral suspension)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23b	Amoxicillin (injection)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23c	Amikacin	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23d	Ampicillin (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23e	Ampicillin (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23f	Benzathine benzylpenicillin (IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23g	Benzylpenicillin (Penicillin G) (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23h	Cefotaxime (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23i	Ceftriaxone (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23j	Flucloxacillin / cloxacillin (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23k	Flucloxacillin (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23l	Gentamicin (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23m	Isoniazid (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23n	Meropenem	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—

Facility Name:

Facility Code:

No.	Item	Response	Skip
1.23o	Metronidazole (IV)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23p	Metronidazole (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23q	Piperazine	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23r	Penicillin G Procaine (IM only)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23s	Procaine benzylpenicillin (IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23t	Tetracycline 1% eye ointment	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23u	Vancomycin	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.23v	Antibiotic drops (moxifloxacin/betadine)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
Seizure Management			
1.24	Does the facility have any anticonvulsants?	<input type="radio"/> Yes <input type="radio"/> No	If "No", skip to 1.25
1.24a	Paraldehyde (rectal)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.24b	Phenobarbital (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.24c	Phenobarbital (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.24d	Phenytoin (IV)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
Vaccination			
1.25	Does the facility have any vaccinations?	<input type="radio"/> Yes <input type="radio"/> No	If "No", skip to 1.26

Facility Name:

Facility Code:

No.	Item	Response	Skip
1.25a	BCG vaccine	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.25b	Hepatitis B vaccine	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.25c	Oral poliomyelitis vaccine	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.25d	Tetanus immunoglobulin (HTIG) (IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
Analgesics			
1.26	Does the facility have any analgesics?	<input type="radio"/> Yes <input type="radio"/> No	If "No", skip to 1.27
1.26a	Morphine (IV)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.26b	Morphine (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.26c	Paracetamol (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.26d	Paracetamol (suppository)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
1.26e	Paracetamol (injection)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
Corticosteroids			
1.27	Does the facility have any corticosteroids?	<input type="radio"/> Yes <input type="radio"/> No	If "No", skip to 1.28
1.27a	Does the facility have any Dexamethasone (IM)?	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
Emergency Drugs			
1.28	Does the facility have any emergency drugs?	<input type="radio"/> Yes <input type="radio"/> No	If "No", skip to 1.29
1.28a	Adrenaline/epinephrine (IV)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—

Facility Name:

Facility Code:

No.	Item	Response	Skip
1.28b	Calcium gluconate 10% (injection)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.28c	Hydrocortisone (injection)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.28d	Naloxone (IV)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
Other Drugs			
1.29	Please check the availability of these other drugs in the pharmacy.		
1.29a	Acyclovir (IV)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29b	Acyclovir 3% topical eye ointment	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29c	Aminophylline	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29d	Anti-Rho (D) immune globulin (injection)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29e	Artificial tear drops	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29f	Caffeine citrate (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29g	Caffeine citrate (IV)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29h	Chlorhexidine digluconate 7.1% gel (delivering 4% chlorhexidine)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29i	Dilating eye drops (tropicamide 0.5% + phenylephrine 2.5%)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29j	Ethambutol	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—

Facility Name:

Facility Code:

No.	Item	Response	Skip
1.29k	Ferrous fumarate (oral syrup)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29l	Folic acid	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29m	Fluconazole (IV)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29n	Fluconazole (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29o	Furosemide (IV)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29p	Furosemide (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29q	Glycerin chip	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29r	Hepatitis B immune globulin (HBIG)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29s	Human milk fortifier	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29t	Lidocaine solution	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29u	Local anesthetic eye drops (proparacaine 0.5%)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29v	Miconazole cream (or equivalent e.g., gentian violet)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29w	Multivitamin	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29x	Nystatin (oral solution)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—

Facility Name:

Facility Code:

No.	Item	Response	Skip
1.29y	Nystatin (cream)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29z	Oral rehydration solution	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29aa	Phosphate solution	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29bb	Sucrose 30% (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29cc	Surfactant	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29dd	Vitamin K1 (Phytomenadione) (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29ee	Water based lubricant	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—
1.29ff	Zinc oxide cream	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Not available today	—

Section 1C. Stockouts

No.	Item	Response
1.30	Have you had a stock out of any of the following items in the last 3 months? (Read all options out loud.)	
1.30a	Gentamicin (injection)	<input type="radio"/> Yes <input type="radio"/> No
1.30b	Benzympenicillin	<input type="radio"/> Yes <input type="radio"/> No
1.30c	Phenobarbitone	<input type="radio"/> Yes <input type="radio"/> No
1.30d	Caffeine or Aminophylline	<input type="radio"/> Yes <input type="radio"/> No
1.30e	Vitamin K	<input type="radio"/> Yes <input type="radio"/> No
1.30f	Amoxicillin	<input type="radio"/> Yes <input type="radio"/> No
1.30g	Ampicillin	<input type="radio"/> Yes <input type="radio"/> No

Facility Name:

Facility Code:

No.	Item	Response
1.31	Stockout Action	
1.31a	If you have had a stockout, what do you most commonly do? (<i>Select one</i>)	<p><input type="radio"/> No stockout in last 3 months</p> <p><input type="radio"/> No action taken/wait</p> <p><input type="radio"/> Buy from somewhere else</p> <p><input type="radio"/> Borrow from a different facility</p> <p><input type="radio"/> Ask patients to buy their own medicine</p> <p><input type="radio"/> Other (specify below)</p>

Facility Name:

Facility Code:

Section 2. Laboratory Equipment, Supplies, and Testing

Instructions: Please have all participants fill in their names and positions below, before completing the following forms in *Section 2. Laboratory Equipment, Supplies, and Testing*.

Respondents	
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position

Facility Name:

Facility Code:

Section 2. Laboratory Equipment, Supplies, and Testing

Instructions: The data collection team should direct these questions to the head lab technician. For some questions, you will need to ask and observe the staff or specific items/spaces at the facility. An item is not functional if it is in need of repair. Please do not leave any variable blank. If a response is unknown, write “unknown” or select "unknown" from the multiple-choice answers.

Prompt: “I’d like to ask you a few questions and make some observations about the laboratory equipment, supplies, and testing.”

2A. General

No.	Item	Response	Skip to
2.01	Does this facility have a laboratory?	<input type="radio"/> Yes <input type="radio"/> No	—
2.02	Is the laboratory accessible 24 hours a day 7 days per week?	<input type="radio"/> Yes <input type="radio"/> No	—
2.03	Does the laboratory have backup power?	<input type="radio"/> Yes <input type="radio"/> No	If “No”, skip to 2.07
2.04	What type of backup power does the lab have? (Select all that apply)	<input type="checkbox"/> Fuel Generator <input type="checkbox"/> Battery Inverter <input type="checkbox"/> Solar Power	—
2.05	Is the laboratory lighting covered by the backup power? (Select one)	<input type="radio"/> All Lighting <input type="radio"/> Some Lighting <input type="radio"/> No Lighting	—
2.06	Is the laboratory equipment covered by the backup power? (Select one)	<input type="radio"/> All equipment <input type="radio"/> Some equipment <input type="radio"/> No equipment	—
2.07	Is there a set of biosafety guidelines?	<input type="radio"/> Yes <input type="radio"/> No	—
2.08	Is there a set of internal quality control guidelines?	<input type="radio"/> Yes <input type="radio"/> No	—
2.09	Is there a set of standard operating procedures (SOPs)?	<input type="radio"/> Yes <input type="radio"/> No	—
Lab Management Team			
2.10	Does the health facility have a lab management team?	<input type="radio"/> Yes <input type="radio"/> No	If “No”, skip to 2.14
2.11	Does the health facility conduct lab management meetings at least every 3 months?	<input type="radio"/> Yes <input type="radio"/> No	—
2.12	When did team last meet? (Enter dates in yyyy/mm/dd format. If a date is unknown, enter 1999/01/01.)	___/___/___	—
2.13	<i>For observation only:</i> Are meeting minutes available for the most recent meeting?	<input type="radio"/> Yes <input type="radio"/> Yes, but not observed <input type="radio"/> No	—
Inventory and Forecasting			
2.14	Is an inventory of laboratory supplies kept?	<input type="radio"/> Yes <input type="radio"/> No	—

Facility Name:

Facility Code:

No.	Item	Response	Skip to
2.15	How often is this inventory of laboratory supplies carried out?	<input type="radio"/> Daily <input type="radio"/> At least once per week <input type="radio"/> At least once per month <input type="radio"/> Less than once per month (e.g., quarterly) <input type="radio"/> Irregularly	—
2.16	When are lab supplies ordered? (Select all that apply)	<input type="checkbox"/> When we run out of stock <input type="checkbox"/> At set intervals before running out of stock (e.g., 2 weeks before running out of stock) <input type="checkbox"/> Order at regular intervals throughout the year (e.g., same time each month, every 6 months, etc.) <input type="checkbox"/> Shipments come automatically <input type="checkbox"/> Other (specify below)	—
			—

2B. Equipment and Supplies

Instructions: The following questions will ask about the availability of various lab supplies. For the following questions you should first assess if the item is available today. If no item is available, select “**not available today**”. If the item is available today and has not been out of stock in the last four weeks, select “**available and no stockout in last 4 weeks**”. If the item is available today, but there has been a stock out at any point in the last four weeks, select “**available today, but stockout in last 4 weeks**”.

For items with an asterisk (*) next to them, also write the total number of items available followed by the number of functional items. Determining functionality will vary by item. For some, simply turn on the item to see if it works. An item is not functional if it is broken or in need of repair.

No.	Item	Response
Provision of Donor Blood for Transfusion		
2.17	Does the facility have the following?	
2.17a	Refrigerator for blood bank*	<input type="radio"/> Available today and functional <input type="radio"/> Available today, but not functional How many are available? <input type="text"/> How many are functional? <input type="text"/> <input type="radio"/> Not available today
2.17b	Test tubes	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today

Facility Name:

Facility Code:

No.	Item	Response
2.17c	Microscope slides	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.17d	Blood lancets	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.17e	Cotton wool	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.17f	Test tube rack	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.17g	0.9% sodium chloride solution	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.17h	20% bovine albumin	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.17i	Centrifuge, electric*	<input type="radio"/> Available today and functional <input type="radio"/> Available today, but not functional
		How many are available?
		How many are functional?
		<input type="radio"/> Not available today
2.17j	37° C water bath (or incubator)*	<input type="radio"/> Available today and functional <input type="radio"/> Available today, but not functional
		How many are available?
		How many are functional?
		<input type="radio"/> Not available today
2.17k	Pipettes volumetric	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.17l	Blood typing reagents	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.17m	Cross-matching reagents	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today

Facility Name:

Facility Code:

No.	Item	Response
Blood Collection		
2.18	Does the facility have the following?	
2.18a	Bags for collecting blood and airway needle for giving blood	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.18b	Artery forceps	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.18c	Anticoagulant bottles, small	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.18d	Anticoagulant bottles, large	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.18e	Scale for blood collection*	<input type="radio"/> Available today and functional <input type="radio"/> Available today, but not functional
		How many are available?
		How many are functional?
		<input type="radio"/> Not available today
Laboratory Supplies		
2.19	Does the facility have the following?	
2.19a	Compound Microscope*	<input type="radio"/> Available today and functional <input type="radio"/> Available today, but not functional
		How many are available?
		How many are functional?
		<input type="radio"/> Not available today
2.19b	Immersion oil	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.19c	Glass rods	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.19d	Sink or staining tank*	<input type="radio"/> Available today and functional <input type="radio"/> Available today, but not functional
		How many are available?
		How many are functional?
		<input type="radio"/> Not available today
2.19e	Measuring cylinder, polypropylene	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.19f	Wash bottle	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today

Facility Name:

Facility Code:

No.	Item	Response	
2.19g	Bottle with buffered water	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
2.19h	Blood culture bottle (adult)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
2.19i	Blood culture bottle (pediatric)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
2.19j	Timer clock with alarm*	<input type="radio"/> Available today and functional <input type="radio"/> Available today, but not functional	
		How many are available?	
		How many are functional?	
		<input type="radio"/> Not available today	
2.19k	Rack for drying slides	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
2.19l	Giemsa stain	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
2.19m	Wright stain/Eosin	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
2.19n	Funnel and filter paper	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
2.19o	Methanol	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
2.19p	Refrigerator for laboratory supplies* <i>(A dirty refrigerator would include items that contain bacteria, used agar plates, anything that would be fine to contaminate with bacteria, etc. A clean refrigerator would include prepared media, agar plates, reagents, etc.)</i>	<input type="radio"/> Available today and functional <input type="radio"/> Available today, but not functional	
		How many are available?	
		How many are functional?	
		Which type of refrigerators are available? <i>(Select all that apply)</i>	<input type="checkbox"/> Clean <input type="checkbox"/> Dirty <input type="checkbox"/> Clean and dirty combined <input type="checkbox"/> Unknown
		<input type="radio"/> Not available today	

Facility Name:

Facility Code:

No.	Item	Response	
2.19q	Freezer* (Write the lowest temperature for the freezer(s) in Celsius. If unknown, write unknown in that space.)	<input type="radio"/> Available today and functional <input type="radio"/> Available today, but not functional	
		How many are available?	
		How many are functional?	
		Temperature? (Write the lowest temperature for each freezer in Celsius.)	
		Freezer 1:	°C
		Freezer 2:	°C
		Freezer 3:	°C
		Freezer :4	°C
		Freezer 5:	°C
		Freezer 6:	°C
		Freezer 7:	°C
		Freezer 8:	°C
		Freezer 9:	°C
Freezer 10:	°C		
		<input type="radio"/> Not available today	
2.19r	Glass containers with lids	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
2.19s	Counting chamber (differential counter)*	<input type="radio"/> Available today and functional <input type="radio"/> Available today, but not functional	
		How many are available?	
		How many are functional?	
		<input type="radio"/> Not available today	
2.19t	Pipette, 5ml	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
2.19u	Pipette, graduated 1.0ml	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
2.19v	Dropping pipette	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
2.19w	Cover slips	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
2.19x	Petri dishes	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
2.19y	Culture media	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	

Facility Name:

Facility Code:

No.	Item	Response
2.19z	Kidney dishes	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.19aa	Tally counter*	<input type="radio"/> Available today and functional <input type="radio"/> Available today, but not functional
		How many are available?
		How many are functional?
		<input type="radio"/> Not available today
2.19bb	Hemoglobinometer* (Specify the manufacturer)	<input type="radio"/> Available today and functional <input type="radio"/> Available today, but not functional
		How many are available?
		How many are functional?
		What is the device manufacturer?
		<input type="radio"/> Not available today
2.19cc	Hydrochloric acid solution	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.19dd	Spectrophotometer* (e.g., symex, screenplus)	<input type="radio"/> Available today and functional <input type="radio"/> Available today, but not functional
		How many are available?
		How many are functional?
		<input type="radio"/> Not available today
2.19ee	Microhematocrit centrifuge (manual or electric)*	<input type="radio"/> Available today and functional <input type="radio"/> Available today, but not functional
		How many are available?
		How many are functional?
		Manual or electric?
		<input type="radio"/> Not available today
2.19ff	Balance for weighing reagents*	<input type="radio"/> Available today and functional <input type="radio"/> Available today, but not functional
		How many are available?
		How many are functional?
		<input type="radio"/> Not available today
2.19gg	Heparinized capillary tubes, 75mm x 1.5mm	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.19hh	Ethanol	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.19ii	Beakers	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today
2.19jj	Lugol's iodine solution	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks

Facility Name:

Facility Code:

No.	Item	Response
		<input type="radio"/> Not available today
2.19kk	CD4 machine*	<input type="radio"/> Available today and functional
		<input type="radio"/> Available today, but not functional
		How many are available?
		How many are functional?
		<input type="radio"/> Not available today
2.19ll	Sterile picks/loops	<input type="radio"/> Available today and no stockout in last 4 weeks
		<input type="radio"/> Available but stockout in last 4 weeks
		<input type="radio"/> Not available today

2C. Laboratory Testing

Instructions: The following questions will ask about the availability of various lab supplies. For the following questions you should first assess if the test can be performed today. If it cannot be performed at all, select “**not available today**”. If the test is not available, but usually available, select “**usually available, but not today**”. If the test cannot be performed at the facility, but can be outsourced, select “**not available, but can be outsourced**”.

Prompt: “Now I’m going to ask you some questions about the laboratory testing capabilities”.

Note: Outsourcing needs to be a formal arrangement between the facility and another lab. The facility should be responsible for transporting patient samples and receiving results.

No.	Item	Response
	Biochemistry	
2.20	Which of the following tests can biochemistry perform?	
2.20a	Blood glucose (e.g., glucometer and test strips)	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.20b	C-reactive protein (CRP)	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.20c	Electrolytes	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.20d	Urea	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.20e	Calcium	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today

Facility Name:

Facility Code:

No.	Item	Response
2.20f	Magnesium	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.20g	Creatinine	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.20h	Serum bilirubin (conjugated)	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.20i	Serum bilirubin (unconjugated)	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.20j	Cerebrospinal fluid analysis (glucose and protein)	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.20k	Liver function testing	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.20l	Blood gas analysis	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.20m	Urine dipstick for urinalysis that measures: pH, proteins, glucose, ketones, blood nitrates, leucocytes	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.20n	Glucose 6-phosphate dehydrogenase deficiency (G6PD) screening	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.20o	Albumin	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
Hematology		
2.21	Which of the following tests is hematology able to perform?	
2.21a	Coagulation profile	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced

Facility Name:

Facility Code:

No.	Item	Response
		<input type="radio"/> Not available today
2.21b	Full blood count (FBC)/Full blood examination (FBE)	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
		If available, what method of FBC/FBE? <input type="radio"/> Differential Microscopy <input type="radio"/> Hemolyzer <input type="radio"/> Other (specify below):
2.21c	Hemoglobin (hemocue) or hematocrit testing (erythrocyte volume fraction)	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
Microbiology		
2.22	Which of the following tests is microbiology able to perform?	
2.22a	Culture on samples of blood	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.22b	Sensitivity on samples of blood	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.22c	Culture on samples of pus	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.22d	Sensitivity on samples of pus	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.22e	Culture on samples of cerebrospinal fluid	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.22f	Sensitivity on samples of cerebrospinal fluid	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.22g	Culture on samples of urine	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.22h	Sensitivity on samples of urine	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today

Facility Name:

Facility Code:

No.	Item	Response
2.22i	If sensitivity testing is available today or usually available in 2.22a–h, is there a protocol for reporting antibiogram/antibiotic susceptibility testing?	<input type="radio"/> Yes <input type="radio"/> No
2.22j	Cerebrospinal cell count	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.22k	Gram staining	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.22l	Stool analysis	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.22m	Group B Strep (GBS) screening	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.22n	If a GBS screening is available today or usually available in 2.22m, is there a GBS protocol?	<input type="radio"/> Yes <input type="radio"/> No
Other Important Lab Tests		
2.23	Which of the following tests are able to be performed?	
2.23a	TB testing (Tuberculin skin testing)	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.23b	TB testing (Ziehl-Neilsen staining)	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.23c	TB testing (GeneXpert)	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
2.23d	Malaria testing (blood film microscopy or rapid diagnostic tests for neonatal malaria)	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today

Facility Name:

Facility Code:

Section 3. Laboratory Capacity for Microbiology

Instructions: Please have all participants fill in their names and positions below, before completing the following forms in *Section 3. Laboratory Capacity for Microbiology*.

Respondents	
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position

Facility Name:

Facility Code:

Section 3. Laboratory Capacity for Microbiology

Instructions: The data collection team should direct these questions to the laboratory manager. If blood and CSF culture are not available at this facility, please skip to Section 4. For some questions, you will need to ask and observe the staff or specific items/spaces at the facility. If a response is unknown, write “unknown” or select "unknown" from the multiple-choice answers.

Prompt: “I’d like to ask you a few questions and make some observations about the laboratory capacity for microbiology.”

3A. Blood Culture

No.	Item	Response	Skip To
Blood Culture			
3.01	What laboratory method is used to conduct blood culture? (<i>Select one</i>)	<input type="radio"/> Manual Methods - In-Laboratory/In-House Produced Blood Culture Bottles	—
		<input type="radio"/> Manual Methods - Locally Produced Blood Culture Bottles	—
		<input type="radio"/> Manual Methods – Pre-prepared/Procured International Blood Culture Bottles	3.07
		<input type="radio"/> Automated Continuous Systems/Machines	3.09
		<input type="radio"/> Molecular/Genomic Methods	3.15
		<input type="radio"/> Other (<i>specify below</i>)	—
			—
Manual Methods–In-Laboratory/In-House or Locally Produced Blood Culture Bottles			
3.02	Are plastic or glass blood culture bottles used? (<i>Select one</i>)	<input type="radio"/> Plastic <input type="radio"/> Glass	—
3.03	What is the make of the blood culture bottles?	Make:	—
3.04	What culture media are used to make blood culture bottles? (<i>Select all that apply</i>)	<input type="checkbox"/> Thioglycolate Broth	—
		<input type="checkbox"/> Tryptic Soy Broth	
		<input type="checkbox"/> Thiol Broth	
		<input type="checkbox"/> Brain-Heart Infusion (BHI)	
		<input type="checkbox"/> Columbia Broth	
		<input type="checkbox"/> Supplemented Peptone Broth	
		<input type="checkbox"/> Hypertonic Medium (Brucella Broth)	
		<input type="checkbox"/> Unknown	
		<input type="checkbox"/> Other (<i>specify below</i>)	
			—

Facility Name:

Facility Code:

No.	Item	Response	Skip To
3.05	What culture additives are used to make blood culture bottles? (Select all that apply)	<input type="checkbox"/> Sodium-Polyanethole Sulfate (SPS) <input type="checkbox"/> Gelatin <input type="checkbox"/> Yeast Extract <input type="checkbox"/> Saponin <input type="checkbox"/> Hemin (X-Factor) <input type="checkbox"/> NAD (V-Factor) <input type="checkbox"/> Pyridoxine <input type="checkbox"/> Para-amino Benzoic Acid <input type="checkbox"/> Cysteine <input type="checkbox"/> Resins / Charcoal <input type="checkbox"/> Unknown <input type="checkbox"/> Other (specify below)	—
3.06	Are quality controls for the reagents used in the production of the blood culture bottles?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	Any response skip to 3.17
Manual Methods–Pre-prepared/Procured International Blood Culture Bottles			
3.07	What is the make of the Pre-prepared/Procured International Blood Culture Bottles?	<input type="radio"/> Thermo Scientific Signal Blood Culture System <input type="radio"/> BD BBL™ SEPTI-CHEK™ Blood Culture System <input type="radio"/> BioMerieux Hemoline Performance Manual Methods Bottle <input type="radio"/> Other (specify below)	—
3.08	Are quality controls used for the pre-prepared/procured blood culture bottles?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	Any response skip to 3.17
Automated Continuous Systems/Machines			
3.09	What is the make of the Automated Continuous Systems/Machines used?	<input type="radio"/> BD Bactec <input type="radio"/> BioMerieux BacT/Alert <input type="radio"/> ThermoFisher VersaTREK <input type="radio"/> Other (specify below)	3.10 3.11 3.12 —
3.10	Which BD Bactec Bottles are used for blood culture? (Select all that apply)	<input type="checkbox"/> Plus Aerobic F bottle <input type="checkbox"/> Lytic 10 Anaerobic F bottle <input type="checkbox"/> PEDS Plus F bottle <input type="checkbox"/> Other (specify below)	Any response skip to 3.13

Facility Name:

Facility Code:

No.	Item	Response	Skip To
3.11	Which BioMerieux BacT/Alert Bottles are used for blood culture? (Select all that apply)	<input type="checkbox"/> FA Plus (Aerobic) <input type="checkbox"/> FN Plus (Anaerobic) <input type="checkbox"/> PF Plus (Paediatric) <input type="checkbox"/> Other (specify below)	Any response, skip to 3.13
			—
3.12	Which ThermoFisher VersaTREK Bottles are used for blood culture? (Select all that apply)	<input type="checkbox"/> REDOX 1 (Aerobic) <input type="checkbox"/> REDOX 2 (Anaerobic) <input type="checkbox"/> Other (specify below)	—
			—
3.13	What is the model name of the machine used?	Model name:	—
3.14	What is the model number of the machine used?	Model number:	Any response, skip to 3.17
Molecular/Genomic Methods			
3.15	What is the make of the molecular/genomic machine used?	Make:	—
3.16	What is the model of the molecular/genomic machine used?	Model:	—

3B. CSF Culture

No.	Item	Response	Skip To
CSF Culture			
3.17	What method, if any, is used to concentrate the sample before the CSF culture? (Select one)	<input type="radio"/> None <input type="radio"/> Centrifugation <input type="radio"/> Membrane Filtration <input type="radio"/> Other (specify below)	—
			—
3.18	What laboratory method is used to conduct CSF culture? (Select one)	<input type="radio"/> Manual Methods - Direct Agar Culture or In-Laboratory/In-House Produced Culture Bottles <input type="radio"/> Manual Methods - Locally Produced Culture Bottles <input type="radio"/> Manual Methods – Pre-prepared/Procured International Culture Bottles <input type="radio"/> Automated Continuous Systems/Machines <input type="radio"/> Molecular/Genomic Methods <input type="radio"/> Other (specify below)	3.19 3.23 3.28 3.30 3.35 — —

Facility Name:

Facility Code:

No.	Item	Response	Skip To
Manual Methods – Direct Agar Culture or In-Laboratory/In-House Produced Culture Bottles			
3.19	Are cultures inoculated directly to an agar plate or into a plastic or glass culture bottle? (Select one)	<input type="radio"/> Agar Plate <input type="radio"/> Plastic Bottle <input type="radio"/> Glass Bottle	—
3.20	What culture media are used to conduct CSF primary culture? (Select all that apply)	<input type="checkbox"/> 5% Sheep Blood Agar <input type="checkbox"/> Enriched Chocolate Agar <input type="checkbox"/> MacConkey Agar <input type="checkbox"/> Thioglycolate Broth <input type="checkbox"/> Columbia Broth <input type="checkbox"/> Supplemental Peptone Broth <input type="checkbox"/> Hypertonic Medium (Brucella Broth) <input type="checkbox"/> Eurgonic Broth <input type="checkbox"/> Tryptic Soy Broth <input type="checkbox"/> Thiol Broth <input type="checkbox"/> Brain-Heart Infusion (BHI) <input type="checkbox"/> Other (specify below)	—
3.21	What culture additives are used to produce the primary agar plates/culture bottles? (Select all that apply)	<input type="checkbox"/> Sodium-Polyanethole Sulfate (SPS) <input type="checkbox"/> Gelatin <input type="checkbox"/> Yeast Extract <input type="checkbox"/> Saponin <input type="checkbox"/> Hemin (X-Factor) <input type="checkbox"/> NAD (V-Factor) <input type="checkbox"/> Pyridoxine <input type="checkbox"/> Para-amino Benzoic Acid <input type="checkbox"/> Cysteine <input type="checkbox"/> Resins / Charcoal <input type="checkbox"/> Unknown <input type="checkbox"/> Other (specify below)	—
3.22	Are quality controls for the reagents used in the production of the CSF cultures?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	Any response skip to 3.37
Manual Methods – Locally Produced Culture Bottles			
3.23	What is the make of the culture bottles? (Select one)	<input type="radio"/> Plastic <input type="radio"/> Glass	—
3.24	What is the make of the blood culture bottles?	Make:	—

Facility Name:

Facility Code:

No.	Item	Response	Skip To
3.25	What culture media are used to make CSF culture bottles? (Select all that apply)	<input type="checkbox"/> Thioglycolate Broth <input type="checkbox"/> Columbia Broth <input type="checkbox"/> Supplemental Peptone Broth <input type="checkbox"/> Hypertonic Medium (Brucella Broth) <input type="checkbox"/> Eurgonic Broth <input type="checkbox"/> Tryptic Soy Broth <input type="checkbox"/> Thiol Broth <input type="checkbox"/> Brain-Heart Infusion (BHI) <input type="checkbox"/> Unknown <input type="checkbox"/> Other (specify below)	—
			—
3.26	What culture additives are used to make CSF culture bottles? (Select all that apply)	<input type="checkbox"/> Sodium-Polyanethole Sulfate (SPS) <input type="checkbox"/> Gelatin <input type="checkbox"/> Yeast Extract <input type="checkbox"/> Saponin <input type="checkbox"/> Hemin (X-Factor) <input type="checkbox"/> NAD (V-Factor) <input type="checkbox"/> Pyridoxine <input type="checkbox"/> Para-amino Benzoic Acid <input type="checkbox"/> Cysteine <input type="checkbox"/> Resins / Charcoal <input type="checkbox"/> Unknown <input type="checkbox"/> Other (specify below)	—
			—
3.27	Are quality controls conducted for the locally produced CSF culture bottles?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	Any response skip to 3.37
Manual Methods – Pre-pared/Procured International Culture Bases			
3.28	What pre-prepared/procured international CSF culture system are used? (Select one)	<input type="radio"/> Thermo Scientific Signal Blood Culture System <input type="radio"/> BD BBL™ SEPTI-CHEK™ Blood Culture System <input type="radio"/> BioMerieux Hemoline Performance Manual Methods Bottle <input type="radio"/> Other (specify below)	—
			—
3.29	Are quality controls conducted for the pre-prepared/procured CSF culture bottles?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	Any response skip to 3.37

Facility Name:

Facility Code:

No.	Item	Response	Skip To
Automated Continuous Systems/Machines			
3.30	What automated continuous systems/machines are used?	<input type="radio"/> BD Bactec <input type="radio"/> BioMerieux BacT/Alert <input type="radio"/> ThermoFisher Versa TREK <input type="radio"/> Other (specify below)	3.31
			3.32
3.31	What BD Bactec bottles are used for CSF culture? (Select all that apply)	<input type="checkbox"/> Plus Aerobic F bottle <input type="checkbox"/> Lytic 10 Anaerobic F bottle <input type="checkbox"/> PEDS Plus F bottle <input type="checkbox"/> Other (specify below)	Any response skip to 3.35
			—
3.32	What BioMerieux BacT/Alert Bottles are used for CSF culture? (Select all that apply)	<input type="checkbox"/> FA Plus (Aerobic) <input type="checkbox"/> FN Plus (Anaerobic) <input type="checkbox"/> PF Plus (Paediatric) <input type="checkbox"/> Other (specify below)	Any response skip to 3.35
			—
3.33	What ThermoFisher VersaTREK Bottles are used for CSF culture? (Select all that apply)	<input type="checkbox"/> REDOX 1 (Aerobic) <input type="checkbox"/> REDOX 2 (Anaerobic) <input type="checkbox"/> Other (specify below)	—
3.34	What is the model number of the machine used?	Model number:	Any response skip to 3.37
Molecular/Genomic Methods			
3.35	What make of molecular/genomic machine is used?	Make:	—
3.36	What model of molecular/genomic machine is used?	Model:	—

Facility Name:

Facility Code:

3C. Identification of Blood Isolates

No.	Item	Response	Skip To
3.37	Is the specific microorganism detected from the blood culture bottle identified?	<input type="radio"/> Yes <input type="radio"/> No	—
3.38	What methods are used for identification of the microorganism cultured from blood culture bottles? <i>(Select all that apply)</i>	<input type="checkbox"/> Subculture (including agar plates)	3.39
		<input type="checkbox"/> Microscopy (including staining)	3.40
		<input type="checkbox"/> Manual Biochemical Tests (e.g., IMViC test, etc.)	3.41
		<input type="checkbox"/> Commercially Available Assays/Minisystems (e.g., API BioMerieux Test Strips etc.)	3.44
		<input type="checkbox"/> Other <i>(specify below)</i>	—
Subculture			
3.39	What media are used to subculture blood isolates? <i>(Select all that apply)</i>	<input type="checkbox"/> MacConkey Agar	—
		<input type="checkbox"/> Kligler Iron Agar	—
		<input type="checkbox"/> Blood Agar (TSA + 5% Sheep Blood)	—
		<input type="checkbox"/> Mannitol Salt Agar	—
		<input type="checkbox"/> CLED Agar	—
		<input type="checkbox"/> Chromogenic Agar	—
		<input type="checkbox"/> Fastidious Anaerobe Agar (FAA)	—
		<input type="checkbox"/> Enriched Chocolate Agar	—
		<input type="checkbox"/> Other <i>(specify below)</i>	—
Microscopy			
3.40	What stains are conducted on blood isolates? <i>(Select all that apply)</i>	<input type="checkbox"/> Gram Stain	—
		<input type="checkbox"/> Acridine Orange Stain	—
		<input type="checkbox"/> Other <i>(specify below)</i>	—
			—

Facility Name:

Facility Code:

No.	Item	Response	Skip To
Manual Biochemical Tests			
3.41	Which of these tests are used for manual biochemical identification of isolates from blood culture? (Select all that apply)	<input type="checkbox"/> Motility Test <input type="checkbox"/> Catalase Test <input type="checkbox"/> Oxidase Test <input type="checkbox"/> Oxidative Fermentation (OF) Test <input type="checkbox"/> Carbohydrate Fermentation Test (e.g., glucose, fructose, maltose, lactose, sucrose) <input type="checkbox"/> IMViC Test - Indole Production Test <input type="checkbox"/> IMViC Test - Methyl-Red Test <input type="checkbox"/> IMViC Test - Voges-Proskauer Test <input type="checkbox"/> IMViC Test - Citrate Utilisation Test <input type="checkbox"/> Gelatin Hydrolysis <input type="checkbox"/> Starch Hydrolysis <input type="checkbox"/> Urease Test <input type="checkbox"/> Hydrogen Sulphide Production Test <input type="checkbox"/> Nitrate Production Test <input type="checkbox"/> Other (specify below)	— —
3.42	Did stockouts occur for the reagents used in any of these methods in the last 4 weeks?	<input type="radio"/> Yes <input type="radio"/> No	—
3.43	Please provide any comments about stockouts:		
Commercially Available Assays/Minisystems			
3.44	What make of commercially available assays/minisystems (e.g., API BioMerieux Test Strip, etc.) is used for blood culture?	Make:	—
3.45	What model of commercially available assays/minisystems (e.g., API BioMerieux Test Strip, etc.) is used for blood culture?	Model:	—
3.46	Did stockouts occur for the reagents used in any of these methods in the last 4 weeks?	<input type="radio"/> Yes <input type="radio"/> No	—
3.47	Please provide any comments about stockouts:		

Facility Name:

Facility Code:

3D. Identification of CSF Isolates

No.	Item	Response	Skip To
3.48	Is the specified microorganism detected from the CSF culture identified?	<input type="radio"/> Yes <input type="radio"/> No	—
3.49	What methods are used for identification of the microorganism cultured from CSF culture? (Select all that apply)	<input type="checkbox"/> Subculture (including agar plates)	3.50
		<input type="checkbox"/> Microscopy (including staining)	3.51
		<input type="checkbox"/> Manual Biochemical Tests (e.g., IMViC Test etc.)	3.52
		<input type="checkbox"/> Commercially Available Assays/Minisystems (e.g., API BioMerieux Test Strips etc.)	3.55
		<input type="checkbox"/> Other (specify below)	—
			—
Subculture			
3.50	What media are used to subculture CSF isolates? (Select all that apply)	<input type="checkbox"/> MacConkey Agar	—
		<input type="checkbox"/> Kligler Iron Agar	—
		<input type="checkbox"/> Blood Agar (TSA + 5% Sheep Blood)	—
		<input type="checkbox"/> Mannitol Salt Agar	—
		<input type="checkbox"/> CLED Agar	—
		<input type="checkbox"/> Chromogenic Agar	—
		<input type="checkbox"/> Fastidious Anaerobe Agar (FAA)	—
		<input type="checkbox"/> Enriched Chocolate Agar	—
		<input type="checkbox"/> Other (specify below)	—
			—
Microscopy			
3.51	What stains are conducted on CSF isolates? (Select all that apply)	<input type="checkbox"/> Gram Stain	—
		<input type="checkbox"/> Acridine Orange Stain	—
		<input type="checkbox"/> Other (specify below)	—
			—

Facility Name:

Facility Code:

No.	Item	Response	Skip To
Manual Biotechnical Tests			
3.52	Which of these tests are used for manual biochemical identification of isolates from CSF culture? (Select all that apply)	<input type="checkbox"/> Motility Test <input type="checkbox"/> Catalase Test <input type="checkbox"/> Oxidase Test <input type="checkbox"/> Oxidative Fermentation (OF) Test <input type="checkbox"/> Carbohydrate Fermentation Test (e.g. glucose, fructose, maltose, lactose, sucrose) <input type="checkbox"/> IMViC Test - Indole Production Test <input type="checkbox"/> IMViC Test - Methyl-Red Test <input type="checkbox"/> IMViC Test - Voges-Proskauer Test <input type="checkbox"/> IMViC Test - Citrate Utilisation Test <input type="checkbox"/> Gelatin Hydrolysis <input type="checkbox"/> Starch Hydrolysis <input type="checkbox"/> Urease Test <input type="checkbox"/> Hydrogen Sulphide Production Test <input type="checkbox"/> Nitrate Production Test <input type="checkbox"/> Other (specify below)	—
3.53	Did stockouts occur for the reagents used in any of these methods in the last 4 weeks?	<input type="radio"/> Yes <input type="radio"/> No	—
3.54	Please provide any comments about stockouts:		—
Commercially Available Assays/Minisystems			
3.55	What make of commercially available assays/minisystems (e.g., API BioMerieux Test Strip, etc.) is used for blood culture?	Make:	—
3.56	What model of commercially available assays/minisystems (e.g., API BioMerieux Test Strip, etc.) is used for blood culture?	Model:	—
3.57	Did stockouts occur for the reagents used in any of these methods in the last 4 weeks?	<input type="radio"/> Yes <input type="radio"/> No	—
3.58	Please provide any comments about stockouts:		

Facility Name:

Facility Code:

3E. Antibiotic Sensitivity Testing

Antibiotic Sensitivity Testing			
3.59	What method, if any, of antibiotic sensitivity/resistance is used at your facility? (Select all that apply)	<input type="checkbox"/> None	—
		<input type="checkbox"/> Disc Diffusion	—
		<input type="checkbox"/> Broth Dilution	—
		<input type="checkbox"/> Etest (Antibiotic Gradient Method)	3.60
		<input type="checkbox"/> MALDI-TOF MS	3.62
		<input type="checkbox"/> qPCR	3.64
		<input type="checkbox"/> DNA Microarray/Chips	3.66
		<input type="checkbox"/> Loop-mediated Isothermal Amplification (LAMP)	3.68
		<input type="checkbox"/> Unknown	—
		<input type="checkbox"/> Other (specify below)	—
3.60	Etest (Antibiotic Gradient Method): What is the make of the equipment?	Make:	—
3.61	Etest (Antibiotic Gradient Method): What is the model of the equipment?	Model:	—
3.62	MALDI-TOF MS: What is the make of the equipment?	Make:	—
3.63	MALDI-TOF MS: What is the models of the equipment?	Model:	—
3.64	qPCR: What is the make of the equipment?	Make:	—
3.65	qPCR: What is the model of the equipment?	Model:	—
3.66	DNA Microarray/Chips: What is the make of the equipment?	Make:	—
3.67	DNA Microarray/Chips: What is the models of the equipment?	Model:	—
3.68	Loop-mediated Isothermal Amplification (LAMP): What is the make of the equipment?	Make:	—
3.69	Loop-mediated Isothermal Amplification (LAMP): What is the model of the equipment?	Model:	—
3.70	Did stockouts occur for the reagents used in any of these methods in the last 4 weeks?	<input type="radio"/> Yes <input type="radio"/> No	—
3.71	Please provide any comments about stockouts:		

Facility Name:

Facility Code:

3.72	Are any of these antibiotic sensitivity testing machines used? (Select all that apply)	<input type="checkbox"/> MicroScan WalkAway (Beckman Coulter) <input type="checkbox"/> Micronaut (Merlin) <input type="checkbox"/> Avantage test (Abbott Laboratories) <input type="checkbox"/> Vitek 2 (BioMerieux) <input type="checkbox"/> Phoenix (BD Diagnostics) <input type="checkbox"/> Sensititre ARIS 2X (Trek Diagnostic Systems) <input type="checkbox"/> None <input type="checkbox"/> Other (specify below)	—
3.73	Did stockouts occur for the reagents used in any of these methods in the last 4 weeks?	<input type="radio"/> Yes <input type="radio"/> No	—
3.74	Please provide any comments about stockouts:		
Onsite/Research Studies			
3.75	What, if any, current research studies involving laboratory culture, antimicrobial resistance (AMR), or neonatal infections are there? (Select all that apply)	<input type="checkbox"/> Laboratory culture <input type="checkbox"/> Antimicrobial resistance (AMR) <input type="checkbox"/> Neonatal infection <input type="checkbox"/> None	—

3F. Protocols

No.	Item	Response
3.76	Please attach a copy of the GBS screening laboratory protocol used at this facility.	<input type="radio"/> Attached <input type="radio"/> None to attach
3.77	Please attach a copy of the blood culture laboratory protocols (including subculture and isolate identification) used at this facility.	<input type="radio"/> Attached <input type="radio"/> None to attach
3.78	Please attach a copy of the laboratory protocol used for CSF culture isolate antibiotic sensitivity testing.	<input type="radio"/> Attached <input type="radio"/> None to attach
3.79	Please attach a copy of the laboratory protocol used for blood culture isolate antibiotic sensitivity testing.	<input type="radio"/> Attached <input type="radio"/> None to attach

Facility Name:

Facility Code:

Section 4. Laboratory Linkage to Neonatal Unit (Lab)

Instructions: Please have all participants fill in their names and positions below, before completing the following forms in *Section 4. Laboratory Linkage to Neonatal Unit (Lab)*.

Respondents	
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position

Facility Name:

Facility Code:

Section 4. Laboratory Linkage to Neonatal Unit (Lab)

Instructions: The data collection team should direct these questions to the laboratory manager. For some questions, you will need to ask and observe the staff or specific items/spaces at the facility. Please do not leave any variable blank. If a response is unknown, write “unknown” or select “unknown” from the multiple-choice answers.

Prompt: “I’d like to ask you a few questions and make some observations about the laboratory and how it coordinates with the neonatal unit.”

4A. Cultures for the neonatal unit

No.	Item	Response
4.01	In the last 7 days, how many blood cultures were requested by the neonatal unit?	Number:
4.02	In the last 7 days, how many blood cultures were completed for the neonatal unit?	Number:
4.03	What, if any, were the challenges to performing all blood cultures requested by the neonatal unit? (<i>Select all that apply</i>)	<input type="checkbox"/> None <input type="checkbox"/> Inappropriate or incomplete labelling <input type="checkbox"/> Lack of lab supplies <input type="checkbox"/> Lack of staff <input type="checkbox"/> Training needed <input type="checkbox"/> Power outage <input type="checkbox"/> Other (<i>specify below</i>)
4.04	In the last 7 days, how many CSF cultures were requested by the neonatal unit?	Number:
4.05	In the last 7 days, how many CSF cultures were completed for the neonatal unit?	Number:
4.06	What, if any, were the challenges to performing all neonatal unit CSF cultures requested? (<i>Select all that apply</i>)	<input type="checkbox"/> None <input type="checkbox"/> Inappropriate or incomplete labelling <input type="checkbox"/> Lack of lab supplies <input type="checkbox"/> Lack of staff <input type="checkbox"/> Training needed <input type="checkbox"/> Power outage <input type="checkbox"/> Other (<i>specify below</i>)
4.07	In the last 7 days, how many bilirubin tests were requested by the neonatal unit?	Number:
4.08	In the last 7 days, how many bilirubin tests were completed for the neonatal unit?	Number:

Facility Name:

Facility Code:

No.	Item	Response
4.09	What, if any, were the challenges to performing all neonatal unit bilirubin tests requested? (Select all that apply)	<input type="checkbox"/> None <input type="checkbox"/> Inappropriate or incomplete labelling <input type="checkbox"/> Lack of lab supplies <input type="checkbox"/> Lack of staff <input type="checkbox"/> Training needed <input type="checkbox"/> Power outage <input type="checkbox"/> Other (specify below)
4.10	What record keeping system is used for the lab? (Select one)	<input type="radio"/> Paper <input type="radio"/> Electronic <input type="radio"/> Other (specify below)
4.11	How are blood cultures labeled? (Select one)	<input type="radio"/> Written labels <input type="radio"/> Bar code labels <input type="radio"/> Other (specify below)
4.12	Do you have a protocol for reporting culture results back to the neonatal unit?	<input type="radio"/> Yes <input type="radio"/> No
4.13	If yes, please describe the protocol for reporting culture results to the neonatal unit:	
4.14	How long does it usually take to receive results for a suspected sepsis test? (Select one)	<input type="radio"/> Within an hour <input type="radio"/> Same day <input type="radio"/> Within a week <input type="radio"/> Within a month <input type="radio"/> Irregularly <input type="radio"/> Other (specify below)
4.15	Is the laboratory manager onsite or offsite? (Select one)	<input type="radio"/> Onsite <input type="radio"/> Offsite <input type="radio"/> Not applicable (no lab manager)

Facility Name:

Facility Code:

4B. Laboratory Staffing

Instructions: Direct these questions to the laboratory manager about the staffing of the laboratory. Someone is considered on-call if they can be called and reach the hospital within 30 minutes or if they are able to provide support needed by telephone. On-call excludes the staff that are physically present at the time, and only includes additional staff that have set times during which they could be called to the hospital if they are needed.

Laboratory Technician Currently Employed

No.	Item	Response
4.16	How many laboratory technicians are currently employed by this facility?	Number:

Laboratory Staffing Schedule

No.	Which of the following times is the laboratory staffed by laboratory technicians?	Response		
	Regular Schedule (not on-call staff)	Are the laboratory staff physically present?		If yes, how many?
4.17	Monday-Friday during the day	<input type="radio"/> Yes	<input type="radio"/> No	Number:
4.18	Monday-Friday during the night	<input type="radio"/> Yes	<input type="radio"/> No	Number:
4.19	Saturday during the day	<input type="radio"/> Yes	<input type="radio"/> No	Number:
4.20	Saturday during the night	<input type="radio"/> Yes	<input type="radio"/> No	Number:
4.21	Sunday during the day	<input type="radio"/> Yes	<input type="radio"/> No	Number:
4.22	Sunday during the night	<input type="radio"/> Yes	<input type="radio"/> No	Number:
4.23	Last night	<input type="radio"/> Yes	<input type="radio"/> No	Number:
4.24	Today	<input type="radio"/> Yes	<input type="radio"/> No	Number:
	On-Call Schedule	Is laboratory staff on-call?		If yes, how many?
4.26	Monday-Friday during the night	<input type="radio"/> Yes	<input type="radio"/> No	Number:
4.28	Saturday during the night	<input type="radio"/> Yes	<input type="radio"/> No	Number:
4.30	Sunday during the night	<input type="radio"/> Yes	<input type="radio"/> No	Number:
4.31	Last night	<input type="radio"/> Yes	<input type="radio"/> No	Number:

Facility Name:

Facility Code:

Section 5. Blood Bank

Instructions: Please have all participants fill in their names and positions below, before completing the following forms in *Section 5. Blood Bank*.

Respondents	
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position

Facility Name:

Facility Code:

Section 5. Blood Bank

Instructions: The following questions will ask about the availability of the blood bank. For the following questions you should first assess if the test can be performed today. If it cannot be performed at all, select “**not available today**”. If the test is not available, but usually available, select “**usually available, but not today**”. If the test cannot be performed at the facility, but can be outsourced, select “**not available, but can be outsourced**”.

Prompt: “Now I’m going to ask you some questions about the blood bank capabilities”.

Note: Outsourcing needs to be a formal arrangement between the facility and another lab. The facility should be responsible for transporting patient samples and receiving results.

5A. Blood Bank Testing

No.	Item	Response
Blood Bank		
5.01	Which of the following is the blood bank able to perform?	
5.01a	Blood typing and cross matching	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
		If available or usually available, do you have a blood typing and cross matching protocol? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown
5.01b	Coombs test	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
5.01c	Storage of fresh whole blood, including type O	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
5.01d	Storage of Rh-negative blood	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
5.01e	Storage of packed cells	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
5.01f	Storage of fresh frozen plasma	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
5.01g	Storage of fresh frozen platelets	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today

Facility Name:

Facility Code:

No.	Item	Response
5.01h	Blood screening for HIV	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
		If available or usually available, do you have a blood screening for HIV protocol? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown
5.01i	Blood screening for Hepatitis B	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
5.01j	Blood screening for Hepatitis C	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
5.01k	Blood screening for syphilis	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
5.01l	Blood screening for malaria	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today
5.01m	Blood screening for sickle cell	<input type="radio"/> Available today <input type="radio"/> Usually available, but not today <input type="radio"/> Not available, but can be outsourced <input type="radio"/> Not available today

5B. Blood Transfusion and Supply

No.	Item	Types	How many units?
5.02	How many units of blood are in stock and ready for transfusion? (Write the number of available units for each type)	A+	
		A-	
		B+	
		B-	
		AB+	
		AB-	
		O+	
		O-	

Facility Name:

Facility Code:

Section 6. Lab Linkage to Neonatal Unit (Neonatal Nurse)

Instructions: Please have all participants fill in their names and positions below, before completing the following forms in *Section 6. Lab Linkage to Neonatal Unit (Neonatal Nurse)*.

Respondents	
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position

Facility Name:

Facility Code:

Section 6. Lab Linkage to Neonatal Unit (Neonatal Nurse in charge)

Instructions: The data collection team should direct these questions to the neonatal nurse in charge. For some questions, you will need to ask and observe the staff or specific items/spaces at the facility. Please do not leave any variable blank. If a response is unknown, write "unknown" or select "unknown" from the multiple-choice answers.

Prompt: "I'd like to ask you a few questions and make some observations about the neonatal unit and how it coordinates with the laboratory."

No.	Item	Response
6.01	In the last 7 days, how many blood cultures were requested by the neonatal unit?	Number:
6.02	In the last 7 days, how many blood culture results were received by the neonatal unit?	Number:
6.03	In the last 7 days, how many CSF cultures were requested by the neonatal unit?	Number:
6.04	In the last 7 days, how many CSF culture results were received by the neonatal unit?	Number:
6.05	In the last 7 days, how many bilirubin tests were requested by the neonatal unit?	Number:
6.06	In the last 7 days, how many bilirubin results were received by the neonatal unit?	Number:
6.07	Do you have a protocol for receiving results from the laboratory and adding them to patient files?	<input type="radio"/> Yes <input type="radio"/> No
6.08	If yes, please describe the protocol?	
6.09	How long does it usually take to receive results for a suspected sepsis test? (Select one)	<input type="radio"/> Within an hour <input type="radio"/> Same day <input type="radio"/> Within a week <input type="radio"/> Within a month <input type="radio"/> Irregularly <input type="radio"/> Other (specify below)

Facility Name:

Facility Code:

Section 7. Neonatal Unit Medicines

Instructions: Please have all participants fill in their names and positions below, before completing the following forms in *Section 7. Neonatal Unit Medicines*.

Respondents	
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position
Respondent Name (first and last name)	Respondent Position

Facility Name:

Facility Code:

Section 7. Neonatal Unit Medicines

Instructions: The following questions will ask about the availability of various pharmaceutical drugs. For the following questions you should first assess if the item is available today. If no item is available, select “**not available today**”. If the item is available today and has not been out of stock in the last four weeks, select “**available and no stockout in last 4 weeks**”. If the item is available today, but there has been a stock out at any point in the last four weeks, select “**available today, but stockout in last 4 weeks**”.

No.	Item	Response	Skip
Prevention of mother-to-child transmission (PMTCT)			
7.01	Does the neonatal unit have any antiretrovirals?	<input type="radio"/> Yes <input type="radio"/> No	If “No”, skip to 7.02
7.01a	Azidothymidine/Zidovudine (AZT) (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.01b	Nevirapine (NVP) (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
Hypoglycaemia and IV fluids			
7.02	Does the neonatal unit have any IV fluids?	<input type="radio"/> Yes <input type="radio"/> No	If “No”, skip to 7.03
7.02a	Dextrose/glucose 10%	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.02b	Sodium chloride 0.9%	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.02c	Ringer’s lactate	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.02d	Water for injection	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
Infection			
7.03	Does the neonatal unit have any antibiotics?	<input type="radio"/> Yes <input type="radio"/> No	If “No”, skip to 7.04
7.03a	Amoxicillin (oral suspension)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
7.03b	Amoxicillin (injection)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
7.03c	Amikacin (injection)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	

Facility Name:

Facility Code:

No.	Item	Response	Skip
7.03d	Ampicillin (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
7.03e	Benzathine benzylpenicillin (IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
7.03f	Benzylpenicillin (Penicillin G) (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
7.03g	Cefotaxime (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
7.03h	Ceftriaxone (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
7.03i	Flucloxacillin/cloxacillin (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
7.03i	Gentamicin (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
7.03j	Meropenem	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
7.03k	Tetracycline 1% eye ointment	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	
Seizure Management			
7.04	Does the neonatal unit have any anticonvulsants?	<input type="radio"/> Yes <input type="radio"/> No	If "No", skip to 7.05
7.04a	Paraldehyde (rectal)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.04b	Phenobarbital (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
Analgesics			
7.05	Does the neonatal unit have any analgesics?	<input type="radio"/> Yes <input type="radio"/> No	If "No", skip to 7.06
7.05a	Paracetamol (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—

Facility Name:

Facility Code:

No.	Item	Response	Skip
7.05b	Paracetamol (injection)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
Emergency Drugs			
7.06	Does the neonatal unit have any emergency drugs?	<input type="radio"/> Yes <input type="radio"/> No	If "No", skip to 7.07
7.06a	Adrenaline/epinephrine (IV)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.06b	Calcium gluconate 10% (injection)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.06c	Hydrocortisone (injection)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.06d	Naloxone (IV)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
Other Drugs			
7.07	Please check the availability of these other drugs in the neonatal unit.		
7.07a	Acyclovir (IV)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.07b	Aminophylline	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.07c	Caffeine citrate (oral)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.07d	Chlorhexidine digluconate 7.1% gel (delivering 4% chlorhexidine)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.07e	Furosemide (IV)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.07f	Miconazole cream (or equivalent e.g. gentian violet)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.07g	Multivitamin	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—

Facility Name:

Facility Code:

No.	Item	Response	Skip
7.07h	Nystatin (oral solution)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.07i	Vitamin K1 (Phytomenadione) (IV or IM)	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—
7.07j	Water based lubricant	<input type="radio"/> Available today and no stockout in last 4 weeks <input type="radio"/> Available today, but stockout in last 4 weeks <input type="radio"/> Not available today	—