## Questionnaire to assess laboratory capacity for AMR testing.

Laboratory infrastructure and equipment			Additional Information	
<b>Q</b> 1	Does your lab have capacity to carry out basic bacteriology (process stool, urine,		Yes	
	urethral/ cervical swabs, and blood)? (Perform bacterial culture, identification, and susceptibility testing)?		Partial	
	buseepholicy costing).		No	
Q2	Does your lab have resources for basic aerobic bacterial culture?		Yes	
			Partial	
			No	
)3	Does your lab possess CO <sub>2</sub> incubators and CO <sub>2</sub> tank?		Yes	
			Partial	
			No	
<b>)</b> 4	Does your lab perform susceptibility testing by disc diffusion?		Yes	
			Partial	
			No	
Q5	Please indicate the presence and status of the following in your lab	Present (Tick)	Functional (Tick)	
	<ul> <li>Petri dishes</li> <li>Swabs for surface application of cultures</li> <li>Standardized susceptibility testing discs</li> <li>control strains of known susceptibility patterns</li> <li>Incubators</li> <li>Refrigerator</li> <li>Autostart backup for refrigerator/incubator</li> <li>Media preparation room</li> <li>Autoclave</li> <li>Compound microscope</li> <li>Weighing scale</li> <li>Biosafety cabinet Class 2</li> <li>Candle jar</li> <li>pH meter</li> <li>water distiller</li> </ul>			
)6	Does your lab have automated system (Vitek) to conduct Antimicrobia. Testing?	l Susceptibility	Yes Partial No	

Does your laboratory use Clinical Laboratory Standards Institute (CLSI)   Partial   No   No   Partial   No   No   Partial   No   Partial   No   Partial   No   Partial   No   Partial   No   No   Partial   No   Parti	USE OF STANDARDIZED METHODS				
guidelines?    Partial   No				Additional Information	
Second	Q7				
Does your laboratory use CLSI interpretation breakpoints?   Partial   No		guidelines?			
Partial   No   No   No   No   No   No   No   N					
Partial   Partial	Q8	Does your laboratory use CLSI interpretation breakpoints?	Yes		
Q9   Does your laboratory select individual antibiotics following CLSI guidelines?   Partial   No			Partial		
Partial   No   No   No   No   No   No   No   N					
Are zone sizes of tests measured and used for recording sensitivity resistance?    Are zone sizes of tests measured and used for recording sensitivity resistance?    Does your lab use commercially prepared dehydrated AST media?   Yes Partial	Q9	Does your laboratory select individual antibiotics following CLSI guidelines?	Yes		
Q10   Susceptibility testing?   Partial					
susceptibility testing?    Partial   No			No		
susceptibility testing?    Partial   No	Q10	Are single isolates or pure cultures only used for final performance of antimicrobial	Yes		
Step in the inoculum size standardized using a turbidity standard (0.5 McFarland) or other acceptable method?    Obes your lab have provision of standard microorganisms (ATCC) for internal quality control (useful in determining the potency of drugs or checking the quality of media)?    Obesign		susceptibility testing?	Partial		
other acceptable method?  Other acceptable pethods acceptable pethod of accept			No		
other acceptable method?  Other acceptable pertial  Other acceptable pertial  No	Q11	Is the inoculum size standardized using a turbidity standard (0.5 McFarland) or	Yes		
No   No   Partial   Partial   No   Partial   Partial   Partial   Partial   Partial   Partial   Partial   No   Partial   Partial   Partial   Partial   Partial   Partial   No   Partial   Partial   Partial   Partial   Partial   No   Partial   Partial   Partial   No   Partial   Partial   Partial   No   Partial   Partial   Partial   No   Partial   Partial   No   Partial   Partial   No   Partial   Partial   Partial   No   Partial   Partial   Partial   Partial   Partial   Partial   Partial   No   Partial   No   Partial   Part		• • • • • • • • • • • • • • • • • • • •	Partial		
Q13   For disk susceptibility tests, are zone sizes of controls measured and recorded?   Yes   Partial   No		other acceptable method:	No		
Q13   For disk susceptibility tests, are zone sizes of controls measured and recorded?   Yes   Partial   No	012	Does your lab have provision of standard microorganisms (ATCC) for internal	Yes		
Of media)?  No Partial No  Other and is susceptibility tests, are zone sizes of controls measured and recorded?  Partial No  Other and is susceptibility tests, are zone sizes of controls measured and recorded?  Partial No  Other and is susceptibility tests, are zone sizes of controls measured and recorded?  Partial No  Other and is susceptibility tests measured and used for recording sensitivity resistance?  Partial No  Other and is susceptibility tests measured and used for recording sensitivity resistance?  Partial No  Other and is susceptibility testing directly from specimen based on clinical information?  Other and is susceptibility testing directly from specimen based on clinical information?  Other and is susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  Other and is susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  Other and is susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  Other and is susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  Other and is susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  Other and is susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?	Q12				
Q13 For disk susceptibility tests, are zone sizes of controls measured and recorded?  Partial No  Q14 Are zone sizes of tests measured and used for recording sensitivity resistance?  Q15 Does your lab use commercially prepared dehydrated AST media?  Q16 Does your lab perform Susceptibility Testing directly from specimen based on clinical information?  Q17 If direct susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  Q18 If direct susceptibility testing with isolated organisms?  Q19 Ves Partial No  Q10 Ves Partial No  Q10 Ves Partial No  Q11 Ves Partial No  Q12 Ves Partial No  Q13 Ves Partial No  Q14 Ves Partial No  Q15 Ves Partial No  Q16 Ves Partial No  Q17 Ves Partial No  Q18 Ves Partial No  Q19 Ves Partial No  Q19 Ves Partial No  Q10 Ves Partial No  Q10 Ves Partial No  Q11 Ves Partial No  Q12 Ves Partial No  Q13 Ves Partial No  Q14 Ves Partial No  Q15 Ves Partial No  Q16 Ves Partial No  Q17 Ves Partial No  Q17 Ves Partial No  Q18 Ves Partial No  Q19 Ves Partial No  Q19 Ves Partial No  Q10 Ves					
Partial No  Q14 Are zone sizes of tests measured and used for recording sensitivity resistance?  Q15 Does your lab use commercially prepared dehydrated AST media?  Q16 Does your lab perform Susceptibility Testing directly from specimen based on clinical information?  Q17 If direct susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  Q18 Ves Partial No  Q19 Partial No  Yes Partial No  Q19 If direct susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  Q19 Ves Partial No  Q10 Ves Partial No  Q10 Ves Partial No  Q10 Ves Ves Partial No  Q10 Ves		of media)?	INO		
Partial No  Q14 Are zone sizes of tests measured and used for recording sensitivity resistance?  Q15 Does your lab use commercially prepared dehydrated AST media?  Q16 Does your lab perform Susceptibility Testing directly from specimen based on clinical information?  Q17 If direct susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  Q18 Ves Partial No  Q19 Partial No  Yes Partial No  Q19 If direct susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  Q19 Ves Partial No  Q10 Ves Partial No  Q10 Ves Partial No  Q10 Ves Ves Partial No  Q10 Ves	012	For disk suspentibility tests, are zone sizes of centrals massured and recorded?	Vos		
No         No	Q13	For disk susceptionity tests, are zone sizes of controls measured and recorded?			
Are zone sizes of tests measured and used for recording sensitivity resistance?   Yes   Partial   No					
Partial No  Q15 Does your lab use commercially prepared dehydrated AST media?  Partial No  Partial No  Q16 Does your lab perform Susceptibility Testing directly from specimen based on clinical information?  Q17 If direct susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  Q18 If direct susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  Q19 If direct susceptibility testing with isolated organisms?  Q19 If direct susceptibility testing with isolated organisms?  Q10 If direct susceptibility testing with isolated organisms?  Q10 If direct susceptibility testing with isolated organisms?  Q11 If direct susceptibility testing with isolated organisms?  Q12 If direct susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?					
No   Partial   Partial   No   Partial   Partial   No   Partial   Part	Q14	Are zone sizes of tests measured and used for recording sensitivity resistance?			
Does your lab use commercially prepared dehydrated AST media?   Yes   Partial					
Q16 Does your lab perform Susceptibility Testing directly from specimen based on clinical information?  Q17 If direct susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  Q18 Partial No					
Q16 Does your lab perform Susceptibility Testing directly from specimen based on clinical information?  Q17 If direct susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  Q18 Partial No Partial Partial No  USE OF STANDARDIZED OPERATING PROCEDURES (SOPs)	Q15	Does your lab use commercially prepared dehydrated AST media?			
Does your lab perform Susceptibility Testing directly from specimen based on clinical information?   Yes   Partial   No					
clinical information?  Partial No  No  If direct susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  Partial Partial No  Ves Partial No  Partial No					
Q17 If direct susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?  USE OF STANDARDIZED OPERATING PROCEDURES (SOPs)	Q16		Yes		
Old   If direct susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?   Yes   Partial   No		clinical information?	Partial		
repeat susceptibility testing with isolated organisms?  Partial No  USE OF STANDARDIZED OPERATING PROCEDURES (SOPs)			No		
repeat susceptibility testing with isolated organisms?  Partial No  USE OF STANDARDIZED OPERATING PROCEDURES (SOPs)	Q17	If direct susceptibility testing from specimen show mixed cultures, does your lab			
USE OF STANDARDIZED OPERATING PROCEDURES (SOPs)	_		Partial		
	USE OF STANDARDIZED OPERATING PROCEDURES (SOPs)				
	Q18	For antimicrobial susceptibility testing systems, are there do cumented criteria in	Yes		

	your institutions' SOPs for interpretation of the endpoint or zone size?	Partial	
		No	
Q19	Are guidelines established for the number and type of antibiotics reported for	Yes	
	organisms isolated from different sites of infection?	Partial	
		No	
Q20	Do you report Antimicrobial Susceptibility Testing results based on Hospital policy	Yes	
	(in consultation with Pharmacy, Infection control and Infectious diseases	Partial	
	physicians.	No	
OUAI	LITY ASSURANCE		
Q21	Is each new lot of susceptibility disks checked for activity before use?	Yes	
`		Partial	
		No	
Q22	Does your lab use QC (quality control) strains to assess new lot of susceptibility	Yes	
	discs?	Partial	
		No	
Q23	Are tolerance limits for potency of antimicrobials established (criteria for "out of	Yes	
	control")?	Partial	
		No	
Q24	Does your laboratory procedure manual address unusual or inconsistent	Yes	
	antimicrobial testing results?	Partial	
		No	
Q25	Does your lab participate in any Antimicrobial Susceptibility Testing related	Yes	
	internal quality assurance program?	Partial	
		No	
Q26	Does your lab participate in any Antimicrobial Susceptibility Testing	Yes	
<b>\_</b> -0	related external quality assurance program?	Partial	
	related external quarty assurance program.	No	
Q27	Are out of control results reported to supervisory personnel?	Yes	
	The car of commentation is personally personally	Partial	
		NT	
		No	

READ	INESS FOR AMR SURVEILLANCE		
Q28	Does your lab participate in antimicrobial resistance surveillance?	Yes	
		Partial	
		No	
Q29	Does your lab generate on routine basis antibiogram for purpose of monitoring the resistant and sensitivity patterns in your institution?	Yes	
		Partial	
		No	
Q30	Does your lab conduct all Antimicrobial Susceptibility Testing or forwards it to other labs?	Yes	
		Partial	
		No	
Q31	Doggyraya lah magaiya gammlag fan Antimianahial Cygagartihility Tagting from athan	Yes	
Q31	Does your lab receive samples for Antimicrobial Susceptibility Testing from other labs?		
	laus:	Partial No	
022		Yes	
Q32	Is Antimicrobial Susceptibility Testing cumulative data collected manually?		
		Partial	
0.22		No	
Q33	Is Antimicrobial Susceptibility Testing cumulative data collected automatically	Yes	
	using lab information system (LIS)?	Partial	
P. 17.17		No	
	CTION OF SPECIFIC ORGANISMS	T *7 T	
Q34	Does your laboratory have the capacity of identifying resistance genotypes or	Yes	
	resistant bacterial clones?	Partial	
		No	
EQUI	PMENT MAINTENANCE	1	
Q35	Are Antimicrobial Susceptibility Testing equipment maintained appropriately and	Yes	
450	calibrated?	Partial	
		No	
Q36	Does your lab monitor incubator temperatures on a daily basis?	Yes	
		Partial	
		No	
CONT	TINUING MEDICAL EDUCATION	1.0	
Q37	How often do you receive training in Bacteriology?	Yes	
-		Partial	
		No	
Q38	How often are you trained in conducting Antimicrobial Susceptibility Testing?		
		•	

STAFI	ING		
Q39	How many laboratory technologists are in the station?		
Q40	How many microbiologists are in the station?		
Q41	Does your laboratory have staff with Bachelor's degree qualification or higher?	Yes	
		Partial	
		No	
Q42	Do you engage a Consultant clinical microbiologist(s)?	Yes	
		Partial	
		No	
	UMABLES		
Q43	How often do you experience unavailability of consumables in Microbiology	Yes	
	section? Eg Lack of biochemical reagents and media	Partial	
		No	
Q44	Does your lab experience delays in Antimicrobial Susceptibility Testing	Yes	
	due to lack of reagents?	Partial	
		No	
Q45	Do frequent stock outs lead to low demand of cultures by clinicians?	Yes	
		Partial	
		No	
BIOSA	FETY		
Q46	Does your lab autoclave/incinerate cultures prior to discard?	Yes	
		Partial	
		No	
Q47	Do you have handwashing facility in the laboratory?	Yes	
		Partial	
		No	
Q48	Does your lab get continuous supply of running water?	Yes	
		Partial	
		No	
Q49	Does your lab have soap supply in the handwash facility?	Yes	
_		Partial	
		No	