Questionnaire to assess laboratory capacity for AMR testing.

Objective: To assess capacity for Study sites laboratories to perform antimicrobial susceptibility testing and contribute to AMR surveillance				
Laboratory infrastructure and equipment				**Additional Information**
Q1	Does your lab have capacity to carry out basic bacteriology (process stool, urine, urethral/ cervical swabs, and blood)? (Perform bacterial culture, identification, and susceptibility testing)?		Yes	
			Partial	
			No	
Q2	Does your lab have resources for basic aerobic bacterial culture?		Yes	
			Partial	
			No	
Q3	Does your lab possess CO_2 incubators and CO_2 tank?		Yes	
			Partial	
			No	
Q4	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)	
	❖ Petri dishes			
	❖ Swabs for surface application of cultures			
	❖ Standardized susceptibility testing discs			
	❖ control strains of known susceptibility patterns			
	❖ Incubators			
	❖ Refrigerator			
	❖ Autostart backup for refrigerator/incubator			
	❖ Media preparation room			
	❖ Autoclave			
	❖ Compound microscope			
	❖ Weighing scale			
	❖ Biosafety cabinet Class 2			
	❖ Candle jar			
	❖ pH meter			
	❖ water distiller			
Q6	Does your lab have automated system (Vitek) to conduct Antimicrobial Susceptibility Testing?		Yes	
			Partial	
			No	

USE OF STANDARDIZED METHODS			
			Additional Information
Q7	Does your laboratory use Clinical Laboratory Standards Institute (CLSI) guidelines?	Yes	
		Partial	
		No	
Q8	Does your laboratory use CLSI interpretation breakpoints?	Yes	
		Partial	
		No	
Q9	Does your laboratory select individual antibiotics following CLSI guidelines?	Yes	
		Partial	
		No	
Q10	Are single isolates or pure cultures only used for final performance of antimicrobial susceptibility testing?	Yes	
		Partial	
		No	
Q11	Is the inoculum size standardized using a turbidity standard (0.5 McFarland) or other acceptable method?	Yes	
		Partial	
		No	
Q12	Does 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)?	Yes	
		Partial	
		No	
Q13	For disk susceptibility tests, are zone sizes of controls measured and recorded?	Yes	
		Partial	
		No	
Q14	Are zone sizes of tests measured and used for recording sensitivity resistance?	Yes	
		Partial	
		No	
Q15	Does your lab use commercially prepared dehydrated AST media?	Yes	
		Partial	
		No	
Q16	Does your lab perform Susceptibility Testing directly from specimen based on clinical information?	Yes	
		Partial	
		No	
Q17	If direct susceptibility testing from specimen show mixed cultures, does your lab repeat susceptibility testing with isolated organisms?	Yes	
		Partial	
		No	
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 organisms isolated from different sites of infection?	Yes	
		Partial	
		No	
Q20	Do you report Antimicrobial Susceptibility Testing results based on Hospital policy (in consultation with Pharmacy, Infection control and Infectious diseases physicians.	Yes	
		Partial	
		No	
QUALITY 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 discs?	Yes	
		Partial	
		No	
Q23	Are tolerance limits for potency of antimicrobials established (criteria for "out of control")?	Yes	
		Partial	
		No	
Q24	Does your laboratory procedure manual address unusual or inconsistent antimicrobial testing results?	Yes	
		Partial	
		No	
Q25	Does your lab participate in any Antimicrobial Susceptibility Testing related internal quality assurance program?	Yes	
		Partial	
		No	
Q26	Does your lab participate in any Antimicrobial Susceptibility Testing related external quality assurance program?	Yes	
		Partial	
		No	
Q27	Are out of control results reported to supervisory personnel?	Yes	
		Partial	
		No	

READINESS 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	Does your lab receive samples for Antimicrobial Susceptibility Testing from other labs?	Yes	
		Partial	
		No	
Q32	Is Antimicrobial Susceptibility Testing cumulative data collected manually?	Yes	
		Partial	
		No	
Q33	Is Antimicrobial Susceptibility Testing cumulative data collected automatically using lab information system (LIS)?	Yes	
		Partial	
		No	
DETECTION OF SPECIFIC ORGANISMS			
Q34	Does your laboratory have the capacity of identifying resistance genotypes or resistant bacterial clones?	Yes	
		Partial	
		No	
EQUIPMENT MAINTENANCE			
Q35	Are Antimicrobial Susceptibility Testing equipment maintained appropriately and calibrated?	Yes	
		Partial	
		No	
Q36	Does your lab monitor incubator temperatures on a daily basis?	Yes	
		Partial	
		No	
CONTINUING MEDICAL EDUCATION			
Q37	**How often do you receive training in Bacteriology?**	Yes	
		Partial	
		No	
Q38	How often are you trained in conducting Antimicrobial Susceptibility Testing?		

STAFFING			
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	
CONSUMABLES			
Q43	How often do you experience unavailability of consumables in Microbiology section? Eg Lack of biochemical reagents and media	Yes	
		Partial	
		No	
Q44	Does your lab experience delays in Antimicrobial Susceptibility Testing due to lack of reagents?	Yes	
		Partial	
		No	
Q45	Do frequent stock outs lead to low demand of cultures by clinicians?	Yes	
		Partial	
		No	
BIOSAFETY			
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	