

LABORATORY MANAGEMENT FRAMEWORK



JOB TASK LIST

LEVEL I

Distinguishing Characteristics: These people manage themselves at their sites, even though they may not have “supervisor” in their title. Often there is no supervisor on site watching over them on a daily basis.

Key Areas of Work / Job Responsibilities	Desired Outcome	Tasks (What do they do?)
1. Productivity Management	<ul style="list-style-type: none"> ▪ Efficient workflow ▪ Evenly distributed workload ▪ Uninterrupted service delivery 	1.1 Organize work area to allow for smooth, efficient service operations 1.2 Prioritize & organize own tasks to achieve optimal service delivery to patients 1.3 Coordinate work schedules with each other 1.4 Coordinate task assignments with each other 1.5 Attend new-hire orientation/training; or cross-train each other to ensure all staff members are properly trained 1.6 Discuss with peers and clients (i.e., patients and clinicians) on ways to improve productivity, quality, turnaround time, and client satisfaction 1.7 Obtain SOPs from supervisor or create them yourself if they are not available 1.8 Develop and implement lab improvement plans based on best practices and feedback from staff, patients, customers, quality indicators, and external assessment 1.9 Create/review/forward reports on lab operations to upper management
2. Work Area Management	Clean, adequate, safe, and functional equipment, work space, and storage area	2.1 Inspect work area for any abnormalities (leakage, breakdown, spill, etc.) 2.2 Monitor work and storage area (temperature, power, ventilation) and record results 2.3 Clean/disinfect work area 2.4 Create repair orders as needed 2.5 Adhere to personal health and safety practices 2.6 Participate in lab safety training 2.7 Ensure proper disposal of waste 2.8 Ensure SOPs for work area monitoring are current and read by all staff
3. Inventory Management	<ul style="list-style-type: none"> ▪ No over-stocking ▪ No under-stocking ▪ No stock-out 	3.1 Inventory all equipment and parts 3.2 Inventory all supplies and reagent 3.3 Maintain proper inventory records 3.4 Ensure proper storage and cycling of stock 3.5 Check quality of stored supplies 3.6 Determine when and how much to re-order (consumption & quantification) 3.7 Inspect incoming orders

JOB TASK LIST

LEVEL I

Key Areas of Work / Job Responsibilities	Desired Outcome	Tasks (What do they do?)
4. Procurement Management	Fresh supplies are always available for continuous service	4.1 Forecast needs for laboratory equipment, supplies and reagent based on testing demand 4.2 Place orders properly or submit list of needs to management 4.3 Track orders placed
5. Routine/Preventive Maintenance of Equipment	Equipment functioning all the time to ensure uninterrupted and quality service	5.1 Consolidate and post equipment service information (contact, service frequency & dates, etc.) at site 5.2 Conduct routine maintenance, including inspection and function checks, according to written operational procedures 5.3 Perform simple troubleshooting on malfunctioning equipment 5.4 Create logs to record all maintenance activities 5.5 Record all maintenance activities in the log 5.6 Review and sign all maintenance logs to ensure all maintenance activities are recorded 5.7 Take corrective actions or issue repair orders 5.8 Maintain a stock of expendable parts (light bulb, fuses, filters, etc.) at site 5.9 Ensure SOPs for equipment maintenance are current and read by all staff
6. Specimen Collection & Processing	Proper specimen collection, labeling, packaging, storage, tracking, and disposal	6.1 Collect and label specimens properly 6.2 Log specimens properly 6.3 Inspect quality of all specimens and record rejected samples 6.4 Assign test according to test request 6.5 Process and aliquot specimens 6.6 Store specimens in proper place and temperature (if needed) 6.7 Package specimens for shipment to referral site (if needed) 6.8 Track specimen referral status 6.9 Dispose of specimens according to SOP 6.10 Ensure that SOP for specimen collection and processing are current and read by staff

JOB TASK LIST

LEVEL I

Key Areas of Work / Job Responsibilities	Desired Outcome	Tasks (What do they do?)
7. Laboratory Testing and Validation	All laboratory tests are performed promptly and accurately	7.1 Ensure that SOP for testing including quality controls are current and read by staff 7.2 Test QC samples according to SOP and record results 7.3 Test specimens according to SOPs 7.4 Validate and interpret test results 7.5 Record any failed test runs and take corrective action 7.6 Periodically observe each other during testing and provide feedback 7.7 Test EQA samples as needed 7.8 Monitor performance of new lots 7.9 Track discordant rates
8. Test Result Recording	Test results are recorded in a timely fashion	8.1 Record individual test results in site logbook and patient report form immediately 8.2 Check accuracy of one's own work 8.3 Check each other for transcription errors and sample mix-up 8.4 Check against test orders to confirm all tests are completed
9. Test Result Reporting	Reporting of accurate test results and findings within established turn around time; satisfied clients	9.1 Report/return test results in a timely fashion <ul style="list-style-type: none"> ▪ (If individual test) Report result to test requestor, patient, or client ▪ (If multiple tests) Consolidate and return all test findings for a patient to test requestor/ patient records – write, sign off, send to proper people 9.2 Document test results have been properly reported 9.3 Consult with clients regarding test results and findings in a professional manner and ensure each issue is resolved promptly and documented appropriately
10. Documents & Records Management	Permanent, secure, and traceable records and approved, up-to-date, and easily accessible documents	10.1 Designate a clean and easily accessible area to display policies, guidelines and procedures documents 10.2 Secure client records in locked cabinets or drawers to ensure confidentiality 10.3 Establish an index system and space to archive all records to allow easy retrieval and to minimize deterioration <ul style="list-style-type: none"> ▪ Rotate records to storage area/facilities monthly ▪ Retain records for specified time according to protocols ▪ Dispose of client records in a confidential manner

JOB TASK LIST

LEVEL II

Distinguishing Characteristics:

These people are generalists. They manage labs within their own institutions. They may provide consultation to Level I audience but have no authority over them.

Key Areas of Work / Job Responsibilities	Desired Outcome	Tasks (What do they do?)
1. Productivity Management	<ul style="list-style-type: none"> ▪ Efficient workflow ▪ Evenly distributed workload ▪ Uninterrupted service delivery 	<ul style="list-style-type: none"> 1.1 Organize the laboratory and coordinate work space to allow for smooth, efficient service operations 1.2 Design workflow for optimal productivity 1.3 Prioritize and assign work according to personnel skill level, workloads, and completion timeframe 1.4 Assess personnel competency against standards and determine corrective action and training needs 1.5 Conduct weekly staff meetings to coordinate activities, review lab operations, reward success, celebrate accomplishments, and resolve issues 1.6 Meet with staff individually to communicate expectations, provide feedback, coaching, or on-the-job training to ensure competency and productivity 1.7 Provide/coordinate new-hire orientation and training to staff 1.8 Maintain and update personnel records (training, certification, competency assessment) 1.9 Create a work plan and budget based on personnel, test, facility, and equipment needs 1.10 Create/review/forward reports on lab operations to upper management 1.11 Implement measures to motivate staff to improve quality of work and productivity (e.g., training, job rotation, employee of the month, thank-you letter, etc.) 1.12 Develop and implement lab improvement plans based on best practices and feedback from staff, patients, customers, quality indicators, and external assessment 1.13 Communicate to upper management regarding personnel, facility, and operational needs
2. Work Area Management	Clean, adequate, safe, and functional equipment, work space, and storage area	<ul style="list-style-type: none"> 2.1 Assess any reported incidence or abnormalities 2.2 Authorize and follow up on repairs 2.3 Monitor staff adherence to safety rules & practices 2.4 Ensure appropriate physical work environment for testing 2.5 Ensure that safety equipment is accessible and readily available (e.g., place safety equipment such as sharp box and PPE close to work station to encourage use) 2.6 Ensure Safety Manual with safety procedures for laboratory functions and possible emergencies is accessible to and reviewed by all staff 2.7 Ensure reagents and chemicals are stored properly 2.8 Ensure that waste is properly disposed

JOB TASK LIST

LEVEL II

Key Areas of Work / Job Responsibilities	Desired Outcome	Tasks (What do they do?)
3. Inventory Management	<ul style="list-style-type: none"> ▪ No over-stocking ▪ No under-stocking ▪ No stock-out 	3.1 Review inventory log of all equipment and parts 3.2 Review inventory log of all supplies and reagents 3.3 Monitor consumption rate and inventory level to determine when and how much to re-order 3.4 Enforce good stock management practices (proper storage, stock cycling, inspection of incoming orders, etc.) 3.5 Inspect quality of existing inventory and dispose of expired test kits, reagents, supplies and equipment according to policy
4. Procurement Management	Fresh supplies are always available for continuous service	4.1 Accurately evaluate needs for equipment, supplies and reagents taking into consideration past patterns, present trends, and future plans 4.2 Place orders as necessary in accordance with needs and budgetary constraints 4.3 Monitor procurement orders 4.4 Appropriately document and maintain accurate records of all purchase orders and requisitions
5. Routine/Preventive Maintenance of Equipment	Equipment functioning all the time to ensure uninterrupted and quality service	5.1 Consolidate and post equipment service information (contact, service frequency & dates, etc.) at site 5.2 Ensure proper preventive maintenance (i.e., cleaning, proper shutdown) on instruments when used 5.3 Perform and record troubleshooting on malfunctioning equipment 5.4 Review and sign maintenance logs to ensure regular preventive maintenance and timely repairs 5.5 Take corrective actions or issue repair orders and record all issues 5.6 Follow up on all corrective action – see if equipment is properly functioning, observe for trends or determine training needs 5.7 Communicate to upper management equipment specifications and maintenance needs
6. Quality Assurance	Consistently accurate and reliable test processes (pre-analytical, analytical, post-analytical)	6.1 Ensure that the Quality Manual with quality assurance policies and procedures is accessible to and reviewed by all staff 6.2 Ensure that QC material is tested according to SOP 6.3 Establish acceptable ranges for control material 6.4 Validate new equipment, reagents, and supplies 6.5 Track test performance (e.g., Levy-Jennings chart) for trends 6.6 Review discordant rates and determine appropriate action 6.7 Review records of environmental checks & QC trends to assess impact on testing and take

JOB TASK LIST

LEVEL II

Key Areas of Work / Job Responsibilities	Desired Outcome	Tasks (What do they do?)
		corrective action 6.8 Review occurrence log for patterns/trends and take corrective action 6.9 Monitor reagent performance 6.10 Customize site-specific SOPs as needed 6.11 Ensure that SOP are read and understood by staff 6.12 Enroll in EQA program, monitor results, and take corrective actions 6.13 Periodically observe/assess accuracy of staff performance and take corrective action
7. Specimen Collection & Processing	Proper specimen collection, labeling, packaging, storage, tracking, and disposal	7.1 Determine appropriate tests based on test request and assign test responsibility 7.2 Review specimen log for completeness 7.3 Enforce good specimen handling and processing practices 7.4 Ensure adherence to specimen referral requirements 7.5 Track specimen referral status and review referral reports to ensure timely return of test results
8. Laboratory Testing	All laboratory tests are performed promptly and accurately; test results are validated and recorded before release	8.1 Monitor testing to ensure SOPs are followed and tests are performed and reported properly and promptly 8.2 Cross-check test reports against test request to ensure completion of all tests 8.3 Review test records and findings promptly to ensure accuracy and timely release of test results 8.4 Validate assigned tests and specific abnormal results
9. Test Result Reporting	Reporting of accurate test results and findings within established turn around time; satisfied clients	9.1 Aggregate and report all test findings for each patient 9.2 Ensure test results reach referral sites or test requestors 9.3 Consult with clients regarding specimen quality, test results and findings in a professional manner and ensure each issue is resolved promptly and documented appropriately 9.4 Conduct customer satisfaction survey to identify areas for improvement
10. Documents & Records Management	Permanent, secure, and traceable records and approved, up-to-date, and easily accessible documents	10.1 Maintain a library of documents (policies, guidelines, SOPs, references, etc.); review and update annually 10.2 Maintain integrity, organization, and confidentiality of records (client test results, specimen transfer logs, maintenance logs, inventory logs, etc.) 10.3 Assure proper record retention, rotation to storage, and disposal according to protocol

JOB TASK LIST

LEVEL III

Distinguishing Characteristics:

These people manage specialized labs/departments and perform specialized testing. They provide oversight to remote facilities (satellite labs) within their regions. To avoid duplication, please refer to Level II for job tasks that these people do to manage their own labs. The list below focuses primarily on providing oversight to satellite labs.

Key Areas of Work / Job Responsibilities	Desired Outcome	Tasks (What do they do?)
1. Program Management	Lab services are aligned to program needs	1.1 Project service needs based on program data 1.2 Assess whether service provision is meeting program needs 1.3 Create an operational plan (personnel, test, facility, and equipment) and a budget based on service needs 1.4 Establish proper turn-around time for each test 1.5 Conduct customer satisfaction survey to identify areas for improvement 1.6 Review discordant rates to assess effectiveness of test algorithms 1.7 Consolidate case reporting and look for trends (e.g., outbreaks, prevalence, etc.) 1.8 Determine public health implications of consolidated test results 1.9 Create/review/forward reports on lab operations to upper management
2. Workforce Planning	Adequate and competent staff at each lab capable of meeting service needs	2.1 Determine staffing needs at different service levels 2.2 Write job descriptions for satellite labs (or provide template for development) 2.3 Develop selection process, assure that interviews are conducted properly, evaluate applicants and recommend applicants to fill vacant positions 2.4 Establish competency standards for personnel (create assessment criteria, policy, & procedures) 2.5 Assess personnel competency during supervisory visits (by observation, PT panels, etc.) 2.6 Coordinate/provide new-hire orientation and training to satellite labs 2.7 Establish personnel files (training, certification, competency assessment) 2.8 Balance staffing level among sites according to test demands
3. Inventory Management	<ul style="list-style-type: none"> ▪ No over-stocking ▪ No under-stocking ▪ No stock-out 	3.1 Ensure standardized inventory forms and processes are in place for all satellite labs 3.2 Investigate issues related to inventory management and take necessary action
4. Procurement Management	Fresh supplies are always available for continuous service	4.1 Ensure standardized procurement forms and processes are in place for all satellite labs 4.2 Establish and review specifications for supplies and reagents 4.3 Review, consolidate, submit and monitor procurement requests
5. Routine/Preventive Maintenance of Equipment	Equipment functioning all the time to ensure uninterrupted and quality service	5.1 Establish/review service contract as needed for all satellite labs 5.2 Review maintenance logs to ensure maintenance schedule is followed and equipment failure is documented

JOB TASK LIST

LEVEL III

Key Areas of Work / Job Responsibilities	Desired Outcome	Tasks (What do they do?)
6. Quality Assurance	Consistently accurate and reliable test processes (pre-analytical, analytical, post-analytical)	6.1 Develop and distribute SOPs; review SOPs annually and update as necessary for all satellite labs 6.2 Establish a QA program (Quality Manual, forms, processes, roles & responsibilities, training, budgets) for all satellite labs 6.3 Establish/enforce safety practices based on policies & procedures (compiled in Safety Manual) for all satellite labs 6.4 Monitor all QA parameters routinely for trends and issues (e.g., reagent performance, occurrences) and ensure completion of corrective action for all satellite labs 6.5 Conduct off-site supervisory visits using an assessment checklist for all satellite labs 6.6 Monitor PT and retesting programs for all satellite labs 6.7 Establish a process for approving, implementing, and monitoring necessary improvements
7. Referral System Management	A functioning local referral network for proper specimen transfer and timely result delivery	7.1 Establish a local specimen referral system for all satellite labs 7.2 Develop a laboratory guide for referring clinicians outlining laboratory operating hours, cut-off times for specimen receipt, turn-around time, specimen requirements for specific tests, criteria for specimen rejection, etc. 7.3 Establish a system for assigning a unique identifier (accession number) for each patient specimen 7.4 Review referral reports to ensure timely return of test results and resolution of issues
Laboratory Testing	NOTE: Level III focuses on supervising satellite labs. Supervisions of the lab testing and lab result reporting are already covered in Quality Assurance (see Tasks 6.4, 6.5, 6.6)	
Test Result Reporting		
8. Documents & Records Management	Permanent, secure, and traceable records and approved, up-to-date, and easily accessible documents	8.1 Establish record keeping guidelines (what records to keep, frequency of recording, retention time, review process, procedures for making changes, etc.) for all satellite labs 8.2 Ensure standardized forms for test requests, referrals, and reports are used at all satellite labs 8.3 Review logs and worksheets to ensure test information is documented according to standards for all satellite labs 8.4 Establish measures to protect patient information and confidentiality for all satellite labs 8.5 Develop a system for appropriately storing test records for all satellite labs 8.6 Establish reporting requirements (what to report, frequency, format, backup plan, etc.) per national or program guidelines

JOB TASK LIST

LEVEL IV

Distinguishing Characteristics:

These people are responsible for the entire country’s laboratory policy, infrastructure, and operations. They provide oversight to specialized reference labs either within or outside their own institutions. Their key responsibility is to create/execute a 5-year laboratory strategic plan for the country. On a daily basis, they monitor implementation of the plan and troubleshoot issues.

Key Areas of Work / Job Responsibilities	Desired Outcome	Tasks (What do they do?)
1. Policy, Planning, & Coordination	Laboratory strategy and plan aligned to program needs	1.1 Work with key stakeholders to identify roles & responsibilities of the national reference lab 1.2 Perform gap analysis and needs assessment 1.3 Establish policy guidelines and national standards for all aspects of the medical laboratory services at each level (structure, facilities, tests, techniques, equipment, and staffing) 1.4 Develop a 5-year strategic plan & an annual operations plan and budget 1.5 Establish test strategies and algorithms 1.6 Conduct regular meetings with programs to facilitate information exchange (e.g., weekly meetings with program heads, quarterly meetings with zonal heads) 1.7 Advocate for a national laboratory recognition program (i.e. National Laboratory Week, media campaigns)
2. Workforce Development	Sufficient human capacity and capability that meet program needs	2.1 Determine optimal laboratory structure and staffing level based on projected program needs 2.2 Develop (or provide input to) job description and certification (who works where, with what credentials) for all lab positions 2.3 Propose/create a career ladder and criteria for advancement 2.4 Advocate additional resources for staffing, facilities, salary, etc. 2.5 Advocate/ensure implementation of lab personnel retention program 2.6 Advocate for intensified pre-service education provision country-wide 2.7 Provide input for in-service/pre-service training and continuing education standards 2.8 Create a training program for new personnel and ongoing training for all personnel as needed 2.9 Monitor personnel performance on a on-going basis (weekly, as needed, annual assessment/review cycle) 2.10 Conduct staff meetings regularly to review lab operations, staff performance, and issues 2.11 Establish grievance and termination procedures consistent with applicable laws and regulations

JOB TASK LIST

LEVEL IV

Key Areas of Work / Job Responsibilities	Desired Outcome	Tasks (What do they do?)
3. Quality Assurance Program Development	Improvement of lab service, quality testing, and maintenance of operational standards	3.1 Establish national policy for QA and develop a plan for implementation 3.2 Define minimal standards for accreditation at each level of lab (staffing level/certifications, equipment, supplies, building, etc.) 3.3 Create quality management tools - inventory log, PT log, quality parameters, retesting log, referral log, etc. 3.4 Inspect labs to assess needs and compliance to standards 3.5 Establish/monitor a national EQA program, including: <ul style="list-style-type: none"> ▪ PT program – establish/review a tracking log that documents PT participation frequencies for different tests (e.g., 3X for rapid test, 6 times for viral load), PT results, and follow-up actions ▪ Supervisory visits – establish and conduct monthly review of quality parameters ▪ Retesting program – supervise implementation of by tracking frequency and turn-around time 3.6 Send quarterly feedback to labs on EQA performance and follow up on corrective action 3.7 Identify & enroll in international PT programs 3.8 Establish SOP templates for different tests and instruments for customization at each level
4. Referral System Development	A functioning national referral network for proper specimen transfer and timely result delivery; efficient use of lab resources for patient care	4.1 Establish referral policy and guidelines (e.g., what can be referred?) 4.2 Create and coordinate referral network for specimen transfer and result delivery, including feedback mechanism (on specimen quality for example) 4.3 Review referral tracking logs and ensure issues are resolved in a timely manner
5. Procurement Management	Timely acquisition and distribution of fresh reagents and appropriate, functioning equipment to points of service	5.1 Establish (or provide input for) policy for equipment and reagents to be procured (incl. specifications) 5.2 Forecast national need for equipment and reagents 5.3 Manage the equipment, reagents, and supplies ordering process (incl. establishing service contracts) 5.4 Manage the distribution system to ensure disbursement of equipment, reagents, and supplies to service points 5.5 Establish & review inventory log that tracks location, custodians, delivery, and quantity of equipment and reagents 5.6 Establish a policy and process to manage recalls of materials, equipment, or software 5.7 Identify and report procurement issues to MOH, including feedback to vendors

JOB TASK LIST

LEVEL IV

Key Areas of Work / Job Responsibilities	Desired Outcome	Tasks (What do they do?)
6. Information management	Data are captured and reported to enable timely resolution of issues and to meet program reporting requirements	6.1 Define information needs (patient monitoring, policies, practices, etc.) and establish information management system (reporting forms, processes, LIS) 6.2 Assess and select methods/modes for communications and information system (telephone, computer, letter, courier, etc.)
7. Financial Management	Sufficient funds to support current and future service needs	7.1 Forecast needs based on current and anticipated service provision 7.2 Develop a budget based on projected needs for personnel, facilities, equipment, programs, and testing. 7.3 Identify sources for fundings 7.4 Prepare proposals or work plans to solicit funding 7.5 Manage budget by creating and reviewing quarterly reports on budget breakdown and spending on every activity 7.6 Advise regional lab managers on proper use of budgets (e.g., allocation to reagents, maintenance, etc.)
8. Monitoring and Evaluation	Program impact assessed and process improved	8.1 Determine appropriate process and outcome indicators 8.2 Track key indicators to determine policy change and program improvement 8.3 Assess program coverage based on tests reported 8.4 Review program impact and make necessary changes
9. Operational Research	Service evaluation and improvement	9.1 Evaluate operational research requests from programs to assess suitability (e.g., are we capable, is it ethical and scientifically sound, etc.). 9.2 Conduct operational research to support program needs (e.g., evaluation of new technologies, drug surveys, support for clinical trials)

JOB ROUTINES LEVEL I

TASKS PERFORMED DAILY	Job Aids/ Management Tools
<p>In the beginning of the day:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Prioritize & organize your tasks to achieve optimal service delivery to patients <input type="checkbox"/> Inspect work area for any abnormalities (leakage, breakdown, spill, etc.) <input type="checkbox"/> Monitor work and storage area (temperature, power, ventilation) and record results 	
<p>When you check out test kits or lab supplies:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Maintain proper inventory records 	
<p>When performing lab procedures/tests:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Adhere to personal health and safety practices <input type="checkbox"/> Assign test according to test request <input type="checkbox"/> Collect and label specimens properly <input type="checkbox"/> Log specimens properly <input type="checkbox"/> Inspect quality of all specimens and record rejected samples <input type="checkbox"/> Process and aliquot specimens <input type="checkbox"/> Test specimens according to SOPs <input type="checkbox"/> Validate and interpret results <input type="checkbox"/> Record any failed test runs and take corrective action 	
<p>After the lab procedures/tests</p> <ul style="list-style-type: none"> <input type="checkbox"/> Record individual test results in site logbook and patient report form immediately <input type="checkbox"/> Check accuracy of your own work <input type="checkbox"/> Check each other for transcription errors and sample mix-up <input type="checkbox"/> Check against test orders to confirm all tests are completed <input type="checkbox"/> Report/return test results in a timely fashion <ul style="list-style-type: none"> ○ (If individual test) Report result to test requestor, patient, or client ○ (If multiple tests) Consolidate and return all test findings for a patient to test requestor/ patient records – write, sign off, send to proper people <input type="checkbox"/> Document test results have been properly reported 	
<p>At the end of the day:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Store specimens in proper place and temperature (if needed) <input type="checkbox"/> Package specimens for shipment to referral site (if needed) <input type="checkbox"/> Dispose of specimens according to SOP <input type="checkbox"/> Secure client records in locked cabinets or drawers to ensure confidentiality <input type="checkbox"/> Clean/disinfect work area <input type="checkbox"/> Ensure proper disposal of waste <input type="checkbox"/> Track discordant rates 	

JOB ROUTINES LEVEL I

TASKS PERFORMED WEEKLY	Job Aids/ Management Tools
Conduct a staff meeting to: <ul style="list-style-type: none"> <input type="checkbox"/> Coordinate work schedules with each other <input type="checkbox"/> Coordinate task assignments with each other <input type="checkbox"/> Discuss ways to improve productivity, quality, turnaround time, and client satisfaction <input type="checkbox"/> Cross-train each other 	
Specimen tracking <ul style="list-style-type: none"> <input type="checkbox"/> Track specimen referral status 	
Inventory <ul style="list-style-type: none"> <input type="checkbox"/> Ensure proper storage and cycling of stock <input type="checkbox"/> Check quality of stored supplies 	
Maintenance: <ul style="list-style-type: none"> <input type="checkbox"/> Conduct routine maintenance, including inspection and function checks, according to written operational procedures <input type="checkbox"/> Record all maintenance activities in the log <input type="checkbox"/> Review and sign all maintenance logs to ensure all maintenance activities are recorded 	
TASKS PERFORMED MONTHLY	Job Aids/ Management Tools
Assuring quality of work <ul style="list-style-type: none"> <input type="checkbox"/> Periodically observe each other during testing and provide feedback 	
Procurement <ul style="list-style-type: none"> <input type="checkbox"/> Determine when and how much to re-order (consumption & quantification) <input type="checkbox"/> Forecast needs for laboratory equipment, supplies and reagent based on testing demand <input type="checkbox"/> Maintain a stock of expendable parts (light bulb, fuses, filters, etc.) at site <input type="checkbox"/> Place orders properly or submit list of needs to management <input type="checkbox"/> Track orders placed 	
Reporting <ul style="list-style-type: none"> <input type="checkbox"/> Create/review/forward reports on lab operations to upper management 	
TASKS PERFORMED AS NEEDED	Job Aids/ Management Tools
Work Area <ul style="list-style-type: none"> <input type="checkbox"/> Organize work area to allow for smooth, efficient service operations <input type="checkbox"/> Ensure SOPs for work area monitoring are current and read by all staff 	
Inventory <ul style="list-style-type: none"> <input type="checkbox"/> Inventory all equipment and parts <input type="checkbox"/> Inventory all supplies and reagent <input type="checkbox"/> Inspect incoming orders 	

JOB ROUTINES

LEVEL I

<p>Ensuring Quality:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Obtain SOPs from supervisor or create them yourself if they are not available <input type="checkbox"/> Ensure that SOP for testing including quality controls are current and read by staff <input type="checkbox"/> Test QC samples according to SOP and record results <input type="checkbox"/> Test EQA samples as needed <input type="checkbox"/> Monitor performance of new lots <input type="checkbox"/> Develop and implement lab improvement plans based on best practices and feedback from staff, patients, customers, quality indicators, and external assessment 	
<p>Maintenance</p> <ul style="list-style-type: none"> <input type="checkbox"/> Consolidate and post equipment service information (contact, service frequency & dates, etc.) at site <input type="checkbox"/> Create logs to record all maintenance activities <input type="checkbox"/> Perform simple troubleshooting on malfunctioning equipment <input type="checkbox"/> Take corrective actions or issue repair orders for facilities or equipment <input type="checkbox"/> Ensure SOPs for equipment maintenance are current and read by all staff 	
<p>Training</p> <ul style="list-style-type: none"> <input type="checkbox"/> Attend new-hire orientation/training; or cross-train each other to ensure all staff members are properly trained 	
<p>Managing Documents & Records:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Designate a clean and easily accessible area to display policies, guidelines and procedures documents <input type="checkbox"/> Establish an index system and space to archive all records to allow easy retrieval and to minimize deterioration <ul style="list-style-type: none"> ○ Rotate records to storage area/facilities monthly ○ Retain records for specified time according to protocols ○ Dispose of client records in a confidential manner 	
<p>Maintaining Client Satisfaction:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Consult with clients regarding test results and findings in a professional manner and ensure each issue is resolved promptly and documented appropriately <input type="checkbox"/> Discuss with clients (patients and clinicians) on ways to improve productivity, quality, turnaround time, and client satisfaction 	

MANAGEMENT ROUTINES

LEVEL II

TASKS PERFORMED DAILY	Job Aids/ Management Tools
<p>In the beginning of the day:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Prioritize and assign work according to personnel skill level, workloads, and completion timeframe <input type="checkbox"/> Ensure appropriate physical work environment for testing <input type="checkbox"/> Ensure that safety equipment is accessible and readily available (e.g., place safety equipment such as sharp box and PPE close to work station to encourage use) 	
<p>When staff are performing lab procedures/tests:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Ensure that QC material is tested according to SOP <input type="checkbox"/> Monitor staff adherence to safety rules & practices <input type="checkbox"/> Determine appropriate tests based on test request and assign test responsibility <input type="checkbox"/> Review specimen log for completeness <input type="checkbox"/> Enforce good specimen handling and processing practices <input type="checkbox"/> Ensure adherence to specimen referral requirements <input type="checkbox"/> Monitor testing to ensure SOPs are followed and tests are performed and reported properly and promptly <input type="checkbox"/> Ensure proper preventive maintenance (i.e., cleaning, proper shutdown) on instruments when used 	
<p>After the lab procedures/tests:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Cross-check test reports against test request to ensure completion of all tests <input type="checkbox"/> Review test records and findings promptly to ensure accuracy and timely release of test results <input type="checkbox"/> Validate assigned tests and specific abnormal results <input type="checkbox"/> Aggregate and report all test findings for each patient <input type="checkbox"/> Ensure reagents and chemicals are stored properly <input type="checkbox"/> Ensure that waste is properly disposed 	
TASKS PERFORMED WEEKLY	Job Aids/ Management Tools
<p>Managing Staff Performance:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Conduct weekly staff meetings to coordinate activities, review lab operations, reward success, celebrate accomplishments, and resolve issues <input type="checkbox"/> Periodically observe/assess accuracy of staff performance and take corrective action <input type="checkbox"/> Meet with staff individually to communicate expectations, provide feedback, coaching, or on-the-job training to ensure competency and productivity 	

MANAGEMENT ROUTINES

LEVEL II

<p>Weekly Review and Monitoring:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Track specimen referral status and review referral reports to ensure timely return of test results <input type="checkbox"/> Ensure test results reach referral sites or test requestors <input type="checkbox"/> Review occurrence log for patterns/trends and take corrective action <input type="checkbox"/> Review discordant rates and determine appropriate action <input type="checkbox"/> Track test performance (e.g., Levy-Jennings chart) for trends <input type="checkbox"/> Enforce good stock management practices (proper storage, stock cycling, inspection of incoming orders, etc.) 	
<p>TASKS PERFORMED MONTHLY</p>	<p>Job Aids/ Management Tools</p>
<p>Reporting:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Create/review/forward reports on lab operations to upper management 	
<p>Monthly Review and Monitoring:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Review and sign maintenance logs to ensure regular preventive maintenance and timely repairs <input type="checkbox"/> Monitor reagent performance <input type="checkbox"/> Review records of environmental checks & QC trends to assess impact on testing and take corrective action 	
<p>Inventory Management:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Review inventory log of all equipment and parts <input type="checkbox"/> Review inventory log of all supplies and reagent <input type="checkbox"/> Monitor consumption rate and inventory level to determine when and how much to re-order <input type="checkbox"/> Inspect quality of existing inventory and dispose of expired test kits, reagents, and supplies according to policy 	
<p>Procurement:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Accurately evaluate needs for equipment, supplies and reagent taking into consideration past patterns, present trends, and future plans <input type="checkbox"/> Place orders as necessary in accordance with needs and budgetary constraints <input type="checkbox"/> Communicate to upper management equipment specifications and maintenance needs <input type="checkbox"/> Monitor procurement orders <input type="checkbox"/> Appropriately document and maintain accurate records of all purchase orders and requisitions 	
<p>Managing Staff Performance:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Implement measures to motivate staff to improve quality of work and productivity (e.g., training, job rotation, Employee of the Month, thank-you letter, etc.) 	

MANAGEMENT ROUTINES

LEVEL II

TASKS PERFORMED AS NEEDED	Job Aids/ Management Tools
<p>Managing Productivity:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Organize the laboratory and coordinate work space to allow for smooth, efficient service operations <input type="checkbox"/> Design workflow for optimal productivity <input type="checkbox"/> Create a work plan and budget based on personnel, test, facility, and equipment needs <input type="checkbox"/> Communicate to upper management regarding personnel, facility, and operational needs 	
<p>Managing Staff Performance:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Assess personnel competency against standards and determine corrective action and training needs (bi-annually for new hires and annually afterwards) <input type="checkbox"/> Provide/coordinate new-hire orientation and training to staff <input type="checkbox"/> Maintain and update personnel records (training, certification, competency assessment) 	
<p>Facility and Equipment:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Assess any reported incidence or abnormalities <input type="checkbox"/> Take corrective actions or issue repair orders and record all issues <input type="checkbox"/> Follow up on all corrective action – see if equipment is properly functioning, observe for trends or determine training needs <input type="checkbox"/> Perform and record troubleshooting on malfunctioning equipment <input type="checkbox"/> Consolidate and post equipment service information (contact, service frequency & dates, etc.) at site <input type="checkbox"/> Ensure Safety Manual with safety procedures for laboratory functions and possible emergencies is accessible to and reviewed by all staff 	
<p>Ensuring Quality:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Ensure that the Quality Manual with quality assurance policies and procedures is accessible to and reviewed by all staff <input type="checkbox"/> Customize site-specific SOPs <input type="checkbox"/> Ensure that SOP are read and understood by staff <input type="checkbox"/> Establish acceptable ranges for control material <input type="checkbox"/> Validate new equipment, reagents, and supplies <input type="checkbox"/> Enroll in EQA program, monitor results, and take corrective actions <input type="checkbox"/> Develop and implement lab improvement plans based on best practices and feedback from staff, patients, customers, quality indicators, and external assessment 	
<p>Maintaining Customer Satisfaction:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Consult with clients regarding specimen quality, test results and findings in a professional manner and ensure each issue is resolved promptly and documented appropriately <input type="checkbox"/> Conduct customer satisfaction survey to identify areas for improvement 	

MANAGEMENT ROUTINES

LEVEL II

<p>Managing Documents & Records:</p> <ul style="list-style-type: none"><input type="checkbox"/> Maintain a library of documents (policies, guidelines, SOPs, references, etc.); review and update annually<input type="checkbox"/> Maintain integrity, organization, and confidentiality of records (client test results, specimen transfer logs, maintenance logs, inventory logs, etc.)<input type="checkbox"/> Assure proper record retention, rotation to storage, and disposal according to protocol	
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MANAGEMENT ROUTINES

LEVEL III

TASKS PERFORMED MONTHLY	Job Aids/ Management Tools
<p>Monthly Review and Monitoring:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Balance staffing level among sites according to test demands <input type="checkbox"/> Review, consolidate, submit and monitor procurement requests <input type="checkbox"/> Monitor all QA parameters routinely for trends and issues (e.g., reagent performance, occurrences) and ensure completion of corrective action <input type="checkbox"/> Monitor PT and retesting programs <input type="checkbox"/> Review referral reports to ensure timely return of test results and resolution of issues <input type="checkbox"/> Create/review/forward reports on lab operations to upper management 	
TASKS PERFORMED SEMI-ANNUALLY	Job Aids/ Management Tools
<p>Conduct off-site supervisory visits using an assessment checklist:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Ensure standardized forms for test requests, referrals, and reports are used at all satellite labs <input type="checkbox"/> Review logs and worksheets to ensure test information is documented according to standards for all satellite labs <input type="checkbox"/> Review maintenance logs to ensure maintenance schedule is followed and equipment failure is documented <input type="checkbox"/> Ensure standardized inventory forms and processes are in place <input type="checkbox"/> Investigate issues related to inventory management and take necessary action <input type="checkbox"/> Ensure standardized procurement forms and processes are in place <input type="checkbox"/> Enforce safety practices based on policy <input type="checkbox"/> Assess personnel competency during supervisory visits (by observation, PT panels, etc.) <input type="checkbox"/> Coordinate/provide new-hire orientation and training to satellite labs 	
TASKS PERFORMED ANNUALLY	Job Aids/ Management Tools
<p>Operations Planning:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Project service needs based on program data <input type="checkbox"/> Assess whether service provision is meeting program needs <input type="checkbox"/> Determine staffing needs at different service levels <input type="checkbox"/> Create an operational plan (personnel, test, facility, and equipment) and a budget based on service needs <input type="checkbox"/> Establish and review specifications for supplies and reagents <input type="checkbox"/> Establish service contract as needed 	
<p>Maintaining Standards of Satellite Sites:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Develop and distribute SOPs; review SOPs annually and update as necessary 	
<p>Maintaining Customer Satisfaction:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Conduct customer satisfaction survey to identify areas for improvement 	

MANAGEMENT ROUTINES

LEVEL III

TASKS PERFORMED AS NEEDED	Job Aids/ Management Tools
<p>Program Support:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Review discordant rates to assess effectiveness of test algorithms <input type="checkbox"/> Consolidate case reporting and look for trends (e.g., outbreaks, prevalence, etc.) <input type="checkbox"/> Determine public health implications of consolidated test results 	
<p>Referral System:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Establish a local specimen referral system <input type="checkbox"/> Develop a laboratory guide for referring clinicians outlining laboratory operating hours, cut-off times for specimen receipt, turn-around time, specimen requirements for specific tests, criteria for specimen rejection, etc. <input type="checkbox"/> Establish a system for assigning a unique identifier (accession number) for each patient specimen 	
<p>Managing Performance of Staff at Satellite Sites:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Write job descriptions (or provide template for development) <input type="checkbox"/> Develop selection process, assure that interviews are conducted properly, evaluate applicants and recommend applicants to fill vacant positions <input type="checkbox"/> Establish competency standards for personnel (create assessment criteria, policy, & procedures) <input type="checkbox"/> Establish personnel files (training, certification, competency assessment) 	
<p>Quality Assurance at Satellite Sites:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Establish a QA program (Quality Manual, forms, processes, roles & responsibilities, training, budgets) for all satellite labs <input type="checkbox"/> Establish/enforce safety practices based on policies & procedures (compiled in Safety Manual) for all satellite labs <input type="checkbox"/> Establish a process for approving, implementing, and monitoring necessary improvements 	
<p>Maintaining Customer Satisfaction:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Establish proper turn-around time for each test 	
<p>Managing Documents & Records:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Establish record keeping guidelines (what records to keep, frequency of recording, retention time, review process, procedures for making changes, etc.) for all satellite labs <input type="checkbox"/> Establish measures to protect patient information and confidentiality for all satellite labs <input type="checkbox"/> Develop a system for appropriately storing test records for all satellite labs <input type="checkbox"/> Establish reporting requirements (what to report, frequency, format, backup plan, etc.) per national or program guidelines 	

MANAGEMENT ROUTINES

LEVEL IV

STRATEGIC PLANNING	Job Aids/ Management Tools
<p>These tasks are performed <u>once every 5-year</u>, and <u>annually</u> for review and revision of the plan</p> <ul style="list-style-type: none"> <input type="checkbox"/> Develop a 5-year strategic plan for national laboratory services <input type="checkbox"/> Perform gap analysis and needs assessment 	
<p>Workforce Development:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Determine optimal laboratory structure and staffing level based on projected program needs <input type="checkbox"/> Develop (or provide input to) job description and certification (who works where, with what credentials) for all lab positions <input type="checkbox"/> Propose/create a career ladder and criteria for advancement 	
<p>Policy Development:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Establish national policy for QA and develop a plan for implementation <input type="checkbox"/> Define minimal standards for accreditation at each level of lab (staffing level/certifications, equipment, supplies, building, etc.) <input type="checkbox"/> Establish referral policy and guidelines (e.g., what can be referred?) <input type="checkbox"/> Establish (or provide input for) policy for equipment and reagents to be procured (incl. specifications) 	
<p>Information System Planning:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Define information needs (patient monitoring, policies, practices, etc.) and establish information management system (reporting forms, processes, LIS) <input type="checkbox"/> Assess and select methods/modes for communications and information system (telephone, computer, letter, courier, etc.) 	
<p>Financial Planning:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Forecast needs based on current and anticipated service provision <input type="checkbox"/> Develop a budget based on projected needs for personnel, facilities, equipment, programs, and testing. <input type="checkbox"/> Identify sources for funding <input type="checkbox"/> Prepare proposals or work plans to solicit funding 	
<p>M&E Planning:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Determine appropriate process and outcome indicators 	
TASKS PERFORMED ANNUALLY	Job Aids/ Management Tools
<ul style="list-style-type: none"> <input type="checkbox"/> Develop an annual operations plan and budget <input type="checkbox"/> Inspect labs to assess needs and compliance to standards <input type="checkbox"/> Track key indicators to determine policy change and program improvement <input type="checkbox"/> Assess program coverage based on tests reported <input type="checkbox"/> Review program impact and make necessary changes 	

MANAGEMENT ROUTINES

LEVEL IV

TASKS PERFORMED REGULARLY <small>(frequency varies from weekly, quarterly, to bi-annually)</small>	Job Aids/ Management Tools
<p>Performance Management:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Conduct staff meetings to review lab operations, staff performance, and issues <input type="checkbox"/> Monitor personnel performance on a on-going basis (weekly, as needed, annual assessment/review cycle) 	
<p>Program Communications:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Conduct regular meetings with programs to facilitate information exchange – for example: <ul style="list-style-type: none"> ▪ Weekly meetings with program heads ▪ Quarterly meetings with zonal lab managers 	
<p>Program Coordination and Management:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Monitor the national EQA program, including: <ul style="list-style-type: none"> ▪ PT program – review a tracking log that documents PT participation frequencies for different tests (e.g., 3X for rapid test, 6 times for viral load), PT results, and follow-up actions ▪ Supervisory visits – establish and conduct monthly review of quality parameters ▪ Retesting program – supervise implementation of by tracking frequency and turn-around time <input type="checkbox"/> Send quarterly feedback to labs on EQA performance and follow up on corrective action <input type="checkbox"/> Review inventory log that tracks location, custodians, delivery, and quantity of equipment and reagents <input type="checkbox"/> Review referral tracking logs and ensure issues are resolved in a timely manner <input type="checkbox"/> Coordinate referral network for specimen transfer and result delivery 	
<p>Budget Management:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Manage budget by creating and reviewing quarterly reports on budget breakdown and spending on every activity <input type="checkbox"/> Advise regional lab managers on proper use of budgets (e.g., allocation to reagents, maintenance, etc.) 	
TASKS PERFORMED AS NEEDED	Job Aids/ Management Tools
<ul style="list-style-type: none"> <input type="checkbox"/> Work with key stakeholders to identify roles & responsibilities of the national reference lab 	
<p>Advocacy:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Advocate for a national laboratory recognition program (i.e. National Laboratory Week, media campaigns) <input type="checkbox"/> Advocate additional resources for staffing, facilities, salary, etc. <input type="checkbox"/> Advocate/ensure implementation of lab personnel retention program <input type="checkbox"/> Advocate for intensified pre-service education provision country-wide 	
<p>Policy Development:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Establish policy guidelines and national standards for all aspects of the medical laboratory services at each level (structure, facilities, tests, 	

MANAGEMENT ROUTINES

LEVEL IV

<p>techniques, equipment, and staffing)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Establish SOP templates for different tests and instruments for customization at each level <input type="checkbox"/> Establish test strategies and algorithms <input type="checkbox"/> Establish a policy and process to manage recalls of materials, equipment, or software 	
<p>Workforce Development:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Provide input for in-service/pre-service training and continuing education standards <input type="checkbox"/> Create a training program for new personnel and ongoing training for all personnel as needed <input type="checkbox"/> Establish grievance and termination procedures consistent with applicable laws and regulations 	
<p>Quality Assurance:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Establish a national EQA program <input type="checkbox"/> Identify & enroll in international PT programs <input type="checkbox"/> Create and coordinate referral network for specimen transfer and result delivery, including feedback mechanism (on specimen quality for example) <input type="checkbox"/> Create quality management tools - inventory log, PT log, quality parameters, retesting log, referral log, etc. 	
<p>Procurement Management:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Manage the equipment, reagents, and supplies ordering process (incl. establishing service contracts) <input type="checkbox"/> Manage the distribution system to ensure disbursement of equipment, reagents, and supplies to service points <input type="checkbox"/> Identify and report procurement issues to MOH, including feedback to vendors 	
<p>Operational Research:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Evaluate operational research requests from programs to assess suitability (e.g., are we capable, is it ethical and scientifically sound, etc.). <input type="checkbox"/> Conduct operational research to support program needs (e.g., evaluation of new technologies, drug surveys, support for clinical trials) 	