

KEY AREAS OF WORK

Productivity

Work Area

Management

Contact: Dr. Katy Yao (kvao@cdc.gov) International Laboratory Branch, GAP

Strengthening Laboratory Management Toward Accreditation

What does a Laboratory Manager do?

Organize the laboratory and coordinate work space to allow for smooth, efficient service operations Design workflow for optimal productivity

- Prioritize and assign work according to personnel skill level, workloads, and completion timeframe
- 4. Assess personnel competency against standards and determine corrective action and training needs Conduct weekly staff meetings to coordinate activities, review lab operations, reward success, celebrate
- 6. Meet with staff individually to communicate expectations and provide feedback, coaching, or on-the-job
- training to ensure competency and productivity
- Provide/coordinate new-hire orientation and training to staff
- Maintain and update personnel records (training, certification, competency assessment)
- 9. Create a work plan and budget based on personnel, test, facility, and equipment needs
- 10. Create/review/forward reports on lab operations to upper managemen
- 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.)
- 12. Develop and implement lab improvement plans based on best practices and feedback from staff, patients customers, quality indicators, and external assessment
- 13. Communicate to upper management regarding personnel, facility, and operational needs
- Assess any reported incidence or abnormalities
- Authorize and follow up on repairs
- Monitor staff adherence to safety rules and practices I. Ensure appropriate physical work environment for testing
- 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)
- 5. Ensure Safety Manual with safety procedures for laboratory functions and possible emergencies is accessible to and reviewed by all staff
- Ensure reagents and chemicals are stored properly
- Ensure that waste is properly disposed
- 1. Review inventory log of all equipment and parts 2. Review inventory log of all supplies and reagent
- Monitor consumption rate and inventory level to determine when and how much to reorde
- 4. Enforce good stock management practices (proper storage, stock cycling, inspection of incoming orders, etc.)
- 5. Inspect quality of existing inventory and dispose of expired test kits, reagents, supplies, and equipment

Procurement

Preventive

Maintenance of

Quality

Assurance

Inventory

Management

- Accurately evaluate needs for equipment, supplies, and reagents taking into consideration past patterns present trends, and future plans
- Place orders as necessary in accordance with needs and budgetary constraint
- . Monitor procurement orders
- . Appropriately document and maintain accurate records of all purchase orders and requisitions
- . Consolidate and post equipment service information (contact, service frequency and dates, etc.) at site Ensure proper preventive maintenance (e.g.., cleaning, proper shutdown) on instruments when used
- 3. Perform and record troubleshooting on malfunctioning equipment
- . Review and sign maintenance logs to ensure regular preventive mainte
- . Take corrective actions or issue repair orders and record all issues
- 5. Follow up on all corrective action, see if equipment is properly functioning, observe for trends, or determine training needs
- Communicate to upper management equipment specifications and maintenance need:
- 1. Ensure that the Quality Manual with quality assurance policies and procedures is accessible to and reviewed by all staff
- 2. Ensure that QC material is tested according to SOPs
- 3. Establish acceptable ranges for control materia
- 4. Validate new equipment, reagents, and supplies
- . Track test performance (e.g., Levy-Jennings chart) for trends Review discordant rates and determine appropriate action
- . Review records of environmental checks and QC trends to assess impact on testing and take corrective action
- Review occurrence log for patterns/trends and take corrective action
- 9. Monitor reagent performance
- 10.Customize site-specific SOPs as needed 11.Ensure that SOPs are read and understood by staff
- 12. Enroll in EQA program, monitor results, and take corrective actions
- 13. Periodically observe/assess accuracy of personnel's work and take corrective action

Specimen Collection k Processin

Laborator

Testing

Test Result

Reporting

10.

Documents &

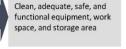
Records

Managemen

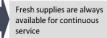
- . Determine appropriate tests based on test request and assign test responsibility
- . Review specimen log for completeness
- Enforce good specimen handling and processing practices
- Ensure adherence to specimen referral requirements
- . Track specimen referral status and review referral reports to ensure timely return of test results
- Monitor testing to ensure SOPs are followed and tests are performed and reported properly and promptly
- Cross-check test reports against test request to ensure completion of all tests
- Review test records and findings promptly to ensure accuracy and timely release of test results Validate assigned tests and specific abnormal results
- . Aggregate and report all test findings for each patient Ensure test results reach referral sites or test requestors
- . Consult with clients regarding specimen quality, test results, and findings in a professional manner and ensure each issue is resolved promptly and documented appropriately
- . Conduct customer satisfaction survey to identify areas for improvement
- . Maintain a library of documents (policies, guidelines, SOPs, references, etc.); review and update annually . Maintain integrity, organization, and confidentiality of records (client test results, specimen transfer logs,
- maintenance logs, inventory logs, etc.)
- . Enssure proper record retention, rotation to storage, and disposal according to protoco

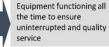
DESIRED OUTCOME

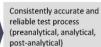
Efficient workflow; Evenly distributed workload; Uninterrupted service

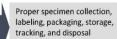


No overstocking: No understocking;









performed promptly and accurately: test results are validated and recorded before release

Reporting of accurate test results and findings within established turnaround time: satisfied clients

Permanent, secure, and traceable records and approved, up-to-date, and easily accessible documents

 Curriculum offers hands-on training in laboratory management tasks (left chart) and job routines, rather than theories.

Unique Design

Training content is closely linked to WHO-AFRO assessment

Activity-based and tool-driven training permits learning by doing.

checklist.

Proven **Implementation** Model

- Multi-workshop delivery facilitates learning transfer and behavioral changes.
- Implementation of improvement projects after each workshop assures immediate skill application and produces tangible
- Follow-up site visits allow for monitoring, mentoring, and reinforcement over time.

Program Implementation Model



Program Facts

No. of Modules: 10

- 1 Productivity Management
- 2 Work Area Management
- 3 Inventory Management
- 4 Procurement

Management

- 5 Equipment Maintenance
- 6 Quality Assurance
- 7 Specimen Management
- 8 Laboratory Testing
- 9 Test Result Reporting
- 10 Documents & Records

No. of activities: 45

No. of tools and job aides: 100+ Total training time: 50+ hours

Participant Testimony

- SLMTA is the most relevant, down to earth, practical approach to quality improvement and preparation for lab accreditation."
- "It is the best in real-time lab improvement. This is not just training. It is transformation in action."

Behavioral

Changes &

Laboratory

Improvement

- "SLMTA has a unique approach of not just telling but showing. The framework provides all tasks that a novice lab manager who wants to attain accreditation must do to fulfill WHO-AFRO /ISO 15189 standards. I have been seriously challenged in the past trying to implement the standards until SLMTA. "
- "Any laboratorian who has not gone through SLMTA is missing a lot!
 - A laboratorian + SLMTA = Digital Laboratorian!
 - A laboratorian without SLMTA = Analogue Laboratorian!"
- "It transforms your views on quality and broadens your horizons in commodity management, quality assurance, equipment use and maintenance and overall laboratory management."
- "All training on QA should be done the SLMTA way."

