KMLTTB/DC/10

REPUBLIC OF KENYA
MINISTRY OF HEALTH

KENYA MEDICAL LABORATORY TECHNICIANS AND TECHNOLOGISTS BOARD
Make Testing a Safe Reality

KENYA MEDICAL LABORATORY TECHNICIANS AND TECHNOLOGISTS BOARD

SCOPE OF PRACTICE

Pursuant to the Medical Laboratory Technicians and Technologists Act
(CAP253 A Laws of Kenya)

KENYA MEDICAL LABORATORY TECHNICIANS AND TECHNOLOGISTS BOARD *Make Testing a Safe Reality*	SCOPE OF PRACTICE		**DOCUMENT CONTROL** **Serial: KMLTTB/DC/10** **Revision No. 001** **Revision Date: 6th TH MARCH 2024**
	OWNER THE FORM	**REGISTRAR**	

The Medical Laboratory Science Profession

The Kenya Medical Laboratory Technicians and Technologists Board (KMLTTB) has established that medical laboratory science is a profession: as an autonomous profession; characterized by its own Body of Knowledge and Scope of Practice, which certifies its own practitioners; and requires of its practitioner's competency in scientific, technical, managerial and scholarly principles, and high standards of performance and professional conduct.

KMLTTB defines the profession of medical laboratory sciences as encompassing the design, performance, evaluation, reporting, interpreting, and clinical correlation of medical laboratory testing, and the management of all aspects of these services. Medical laboratory tests are utilized for the purpose of diagnosis, treatment, monitoring and prevention of disease. The profession includes basic trained individual in all medical laboratory sciences namely parasitology, entomology, microbiology, virology, hematology, immunology, blood transfusion medicine, clinical chemistry, toxicology, cytogenetics, histopathology, cytopathology and molecular diagnostics. The medical Laboratory sciences professional also include specialties in all the above basic medical laboratory sciences. Integral features of each of the specialties include diagnostic testing, research, consultation, education, information management, marketing and administration. KMLTTB has a professional code of ethics that sets forth the principles and standards by which medical laboratory professionals' practice.

Description of the Scope of Practice

Medical laboratory Sciences professionals, as members of the healthcare team, contribute to the prevention of disease, and the diagnosis, treatment, and prognosis of pathophysiological conditions in humans. Medical laboratory personnel are responsible for assuring reliable and accurate medical laboratory test results. Quality medical laboratory testing is evidenced by: performing the correct test, on the right person, at the right time, producing accurate test results, with the best outcome, in the most cost-effective manner. This is accomplished by:

- Ensuring that appropriate Medical laboratory tests are ordered;
- Procuring Medical laboratory test samples in an efficient, timely manner;
- Producing accurate medical laboratory test results;
- Correlating and interpreting Medical laboratory test data;
- Disseminating medical laboratory test information to clinicians and patients in a timely manner;
- Evaluating the outcome of medical laboratory testing for each individual patient and the entire health care system;
- Utilizing qualified medical laboratory personnel.

The practice of medical laboratory science requires:

- Assessing, designing, evaluating and implementing new medical laboratory test methods;
- Evaluating the appropriateness of existing and new medical laboratory methods for clinical utility, cost-effectiveness and cost-benefit analysis;
- Developing, implementing, and reporting results of medical laboratory research;
- Designing and implementing cost-effective delivery models for medical laboratories, including their services and personnel;
- Developing and implementing a comprehensive Quality Management System to include:
    - (i) Quality control and assurance of medical laboratory testing services;
    - (ii) Competency assessment of personnel;
    - (iii) Integration with other aspects of the healthcare delivery system for ensuring appropriate utilization of medical laboratory testing services;
    - (iv) Continuous process improvement activities to effectively utilize human resources.
- Designing, implementing and evaluating academic curricula for the education of new medical laboratory professionals;
- Designing, implementing and evaluating academic curricula for advanced education of medical laboratory professionals;
- Designing, implementing and evaluating continued education activities and career growth opportunities for medical laboratory professionals;
- Promoting awareness and understanding of the use of the medical laboratory.

Description of Current Practice

The following scenarios describe specific examples of the scope of practice of medical laboratory sciences.

Providers of Medical Laboratory Services

Medical laboratory officers qualified by education and experience, perform laboratory tests and provide test results to clinicians and to consumers upon request or upon clinician referral. These services can be used to assess wellness and identify disease risk factors, as well as assisting in the diagnosis, monitoring and treatment of disease. Medical laboratory officers exercise prudence and judgment to ensure that such services are consistent with good practice and sound professional ethics. In addition, medical laboratory officers may own or operate laboratories.

Directors of Full-Service medical Laboratories

Medical laboratory officers, with appropriate diploma and degree education, can direct full-service medical laboratories. This function is firmly grounded in Medical Laboratory Technicians and Technologists Act Cap 253A laws of Kenya.

Consultants for medical Laboratory Services

Medical laboratory officers may appropriately provide assistance and advice to clinicians, manufacturers, and consumers of medical laboratory testing services about the:

- Design and service scope of medical laboratories;
- Appropriate utilization, selection and sequencing of medical laboratory tests;
- Clinical correlations and interpretations of the quality and utility of specific laboratory results in collaboration with clinicians;
- Design and development of medical laboratory instruments, test kits and other components;
- Appropriate use, maintenance, quality assurance and other procedural and informational requirements.

Levels of Practice

There are hierarchical levels of practice, based upon education and experience, for each of the three areas of medical laboratory science practice: scientific, managerial and educational. Specific knowledge and experience are required for each level of practice within the three areas. An individual is eligible to practice at various levels after acquiring additional experience, education, and demonstrating competence. Specific knowledge and experience is common to all three areas; none is mutually exclusive of the other. Demands of the health care environment often require an individual to practice in more than one area, thereby performing at different levels of practice.

The *scientific function* includes the production of test data, monitoring the accuracy, precision and utility of laboratory testing, the correlation and interpretation of test data, and the design, evaluation and implementation of new laboratory test methods.

The *managerial function* includes managing all aspects, technical, fiscal, workflow, and human resources, of medical laboratory operations.

The *educational function* includes the establishment and management of educational programs for new and current medical laboratory practitioners, other healthcare providers and consumers.

Qualifications for Practice

KMLTTB has prescribed standards for ALL personnel including directors, superitendents , medical laboratory officers to ensure the accuracy and reliability of test performance.
KMLTTB has developed curricula for both diploma and degree level of medical laboratory sciences education and training at universities and colleges. These curricula forms the bases for basic training for one to join medical laboratory sciences profession in Kenya. Further , KMLTTB has set minimum standards of training in terms of physical facilities(Medical Laboratory Sciences Demonstration Laboratories, medical Library and lecture rooms. This standards also include academic profile where the requirement
for one to join **diploma training** is expected to have completed secondary school education and obtained, in one sitting, a minimum of mean grade of C plain at KCSE and cluster subject that consist of
English/Kiswahili- C plain
Mathematic /Physics- C plain,
Biology- C plain
Chemistry- C plain
for one to join **degree training** is expected to have completed secondary school education and obtained, in one sitting, a minimum of mean grade of C+ (plus) at KCSE and cluster subject that consist of
English/Kiswahili- C+ plus
Mathematics/Physics- C+ plus,
Biology- C+ plus
Chemistry- C+ plus
The Board has also made it mandatory for institutions to present all selected trainees in medical laboratory sciences to KMLTTB 30 days post admission for scrutiny of their qualification and they are thereby indexed for future reference in training and practical areas allocations
KMLTTB has also ensured approved medical laboratory sciences training institutions are equipped with human resource capacity that is composed of registered and licensed medical laboratory science professionals who are specialised in the areas that they teach. These areas are mainly the core units of medical laboratories sciences as indicated as the basic discipline.

Persons not qualified in the basic Medical Laboratory Sciences subjects are not allowed to participate in teaching the core areas.

In accordance with MLTT Act and this regulations, KMLTTB has requires that all invitro Diagnostics(Medical Laboratories reagents and equipment's) are validated and verified to ascertain their quality to ensure all medical laboratory test are accurate. This should be done by qualified medical laboratory professionals in certified medical laboratory institutions. The process is scientific excises that determines validity of invitro diagnostics information as claimed by the manufactures and establishes precision specify, specificity and linearity among other attributes required for specific testing.
KMLTTB requires all qualified medical laboratory technician and technologist to have sat and passed registration examinations offered just before registration.
KMLTTB requires practitioners to maintain CPD points for every year of practices in accordance with the CPD guidelines KMLTTB/GEN/03

KMLTTB requires that all medical laboratory Technicians and technologist in both public and private practice to observe medical laboratory quality improvement and implement ISO 15189:2022 and any subsequent version to ensure quality of medical laboratory service and not necessary for accreditation. All reference medical laboratory should ensure accreditation status