



# **Laboratory Scopes**

Laboratory Consultant Clinical Scientist

Laboratory Clinical Scientist

Laboratory Technician

Laboratory Technologist

Laboratory Technologist (Specific)

Pathologists' Assistant

Phlebotomist





# **Criteria for National Registration Requirements**

# - Laboratory Consultant Clinical Scientist

Criteria	Laboratory Consultant Clinical Scientist
Definition	The Laboratory Clinical Scientists are individuals who hold a current, valid license issued under a national authority or board that authorizes them to practice their profession and use the title Laboratory Consultant Clinical Scientist.
	A Laboratory Consultant Clinical Scientist is an individual who is qualified to serve as a director of a high complexity laboratory, provide interpretation of diagnostic results, and serve as a clinical consultant in laboratory medicine. The qualification is based on minimum requirements of academic degree, years of clinical experience, and board certification in the field of specialization.
Practice Settings	Laboratory Consultant Clinical Scientists practice in a wide variety of settings that provide diagnostic laboratory services in hospitals, clinics, health centers, independent laboratories, and any other settings where diagnostic laboratory services are provided. The diagnostic laboratory services include specialized services such as microbiology, virology, immunology, clinical chemistry, endocrinology, toxicology, cytogenetics, and molecular diagnostics.
Education	<ul> <li>US/Canadian Certificates; Minimum of a Doctorate Degree or Degree equivalent to (MD Pathologist).</li> <li>UK Certificates; Minimum of Master's degree and (FRC Path) certification.</li> <li>Other certificates will be assessed on a case by case basis</li> </ul>
Scope of Practice	<ul> <li>Provides formal and informal consultation with medical staff regarding laboratory test results, interpretation of test results, and diagnostic reports including recommendations for patient management.</li> <li>Reviews and approves internal quality control and external quality assurance programs in laboratory medicine.</li> <li>Participates in continuous professional development, corporate and laboratory accreditation programs, and laboratory quality management programs.</li> <li>Develops and validates new laboratory tests.</li> <li>Designs and directs the operation of national screening programs.</li> <li>Participates in research, education, and administration.</li> <li>Practices within the ethical and legal parameters of the profession.</li> </ul>
Licensure	The Laboratory Consultant Clinical Scientist must obtain licensure from Qatar Council For Healthcare Practitioners (QCHP).
Experience	2 years of clinical laboratory diagnostic experience after award of a Doctorate     Degree or required certification, or





	Newly graduates from a recognized academic program for Qatari Nationals
Competency	Competency is validated by passing the QCHP Licensing Exam (if applicable)
validation	Proposed competencies must meet entry to practice criteria according to the proposed scope of practice and competency requirement
Other	(Refer to additional QCHP requirement for license Registration/Evaluation)
Requirement for Evaluation & Registration	http://www.qchp.org.qa/en/Pages/HowToRegisterToPracticeInQatar.aspx
Requirements for License renewal	(Refer to additional QCHP requirement for license Registration/Evaluation)  http://www.qchp.org.qa/en/Pages/HowToRegisterToPracticeInQatar.aspx
Note: Applican	t with break from practice please see QCHP "Break from Practice Policy"





# **Laboratory Consultant Clinical Scientist Scope of Practice**

#### **INTRODUCTION**

The Laboratory Consultant Clinical Scientist Scope of Practice uses a competency framework built on five domains intrinsic to the role of the Laboratory Consultant Clinical Scientist:

- 1. Professional and Ethical Practice
- 2. Clinical Practice
- 3. Leadership and Management
- 4. Continuous Education
- 5. Research and Development

Each domain is described through competency standards and performance criteria that define the requirements for practice demanded of the Laboratory Consultant Clinical Scientist. This document is to be used as a foundation for all Laboratory Consultant Clinical Scientist roles, professional development, and performance appraisal.

## STATEMENT OF PURPOSE

The purpose of this document is to define the scope of practice for Laboratory Consultant Clinical Scientists in Qatar and to:

- (a) Describe the services offered by qualified Laboratory Consultant Clinical Scientist.
- (b) Define the professional accountability, required competencies, and scope of ethical and legal practice of the Laboratory Consultant Clinical Scientist in relation to patients, families, other members of the multidisciplinary team, community and society.
- (c) Serve as a reference for license regulating authorities and professionals governing healthcare.

# **DEFINITION OF LABORATORY MEDICINE AND PATHOLOGY**

Laboratory Medicine and Pathology is a laboratory where clinical specimens are tested for the purpose of diagnosis, monitoring treatment, and prevention of disease. The diagnostic tests are classified as low complexity, moderate complexity, or high complexity tests. Low complexity tests are stable basic tests that require minimal knowledge and training to perform the test. Moderate complexity tests are routine laboratory tests performed on automated or semi-automated instruments and require knowledge and training on sample preparation, quality management, instrument maintenance, troubleshooting, and result reporting. High complexity tests are performed on specialized instruments that require a thorough knowledge and training on the theory of the test and practical operation of the instruments.





#### **DEFINITION OF LABORATORY CONSULTANT CLINCIAL SCIENTIST**

A Laboratory Consultant Clinical Scientist is an individual who is qualified to serve as a director of a high complexity laboratory, provide interpretation of diagnostic results, and serve as a clinical consultant in laboratory medicine. The qualification is based on minimum requirements of academic degree, years of clinical experience, and board certification in the field of specialization.

#### **PROFESSIONAL ROLES AND ACTIVITIES**

The clinical practice of a Laboratory Consultant Clinical Scientist encompasses the independent review, reporting, and interpretation of laboratory tests and the management of all aspects of these services based on education and experience. The Laboratory Consultant Clinical Scientist provides formal and informal consultation with medical staff regarding laboratory test procedures, interpretation of test results, and diagnostic reports including recommendations for patient management. The clinical practice may be performed in a general clinical laboratory or in a number of specialized areas of expertise such as microbiology, virology, immunology, clinical chemistry, endocrinology, toxicology, cytogenetics, and molecular diagnostics. Integral features of each of the areas may include research, consultation, education, information management, and administration. The practice also includes review and approval of internal quality control and external quality assurance programs in laboratory medicine and the development and validation of new laboratory tests. Laboratory Consultant Clinical Scientists participate in continuous professional development, corporate and laboratory accreditation programs, and laboratory quality management programs. They design and direct the operation of national screening programs. The Laboratory Consultant Clinical Scientist practices within the ethical and legal parameters of the profession.

#### **COMPETENCY FRAMEWORK**

#### 1. DOMAIN ONE: PROFESSIONAL AND ETHICAL PRACTICE

This domain defines the professional accountability and scope of ethical and legal practice of the Laboratory Consultant Clinical Scientist in relation to patients, families, members of the healthcare team, community, and society.

# 1.1 Competency Standard: Accountability

Accepts accountability for own actions, decision-making and for the related outcomes.





#### Performance Criteria:

- 1.1.1 Demonstrates accountability for own professional judgments, actions, outcomes of care and continued competence in accordance with Qatari laws and regulations and the Scope of Practice.
- 1.1.2 Works within the limits of own competence and the boundaries of the Scope of Practice.
- 1.1.3 Seeks appropriate guidance when encountering situations beyond the limits of own competence and the Scope of Practice.
- 1.1.4 Acknowledges and respects the accountability and responsibilities of other healthcare professionals and personnel.
- 1.1.5 Takes accountability for delegation of aspects of care delivery.
- 1.1.6 Participates in activities to optimize patient access to the full range of services required for effective healthcare.
- 1.1.7 Assumes accountability for improving the quality and effectiveness of healthcare services provided.

# 1.2 Competency Standard: Ethical Practice

Delivers diagnostic services and practices embedding the standards of accreditation and certification related to laboratory medicine and pathology as the ethical and professional framework considering the needs of patients, families, communities and society.

#### Performance Criteria:

- 1.2.1 Engage in ethical decision-making with respect to own professional responsibilities or where ethical issues affect healthcare delivery or clinical decision-making.
- 1.2.2 Acts as patient advocate protecting the person's rights in accordance with Qatari law and terms and conditions of employment.
- 1.2.3 Maintains confidentiality and makes every reasonable effort to ensure the security of written, verbal and electronic patient information.
- 1.2.4 Respects the patient's right to be fully informed establishing a context for self-determination, assent and informed consent.
- 1.2.5 Respects and maintains the patient's and family's right for privacy and dignity.
- 1.2.6 Acts sensitively and fairly giving due consideration to diversity, including cultural and religious beliefs, race, age, gender, physical and mental state, and other relevant factors.
- 1.2.7 Liaises and collaborates with other healthcare professionals and personnel to ensure ethical practice is maintained.
- 1.2.8 Questions when appropriate, healthcare practice where the safety of patients or healthcare professionals is at risk and where the quality of care warrants improvement; acts where the safety of care is compromised and where necessary reports observed activity that may be risking patient safety.
- 1.2.9 Demonstrates professional integrity in matters where a conflict of interest could be construed.

#### 1.3 Competency Standard: Legal Implications

The Laboratory Consultant Clinical Scientist functions at all times in accordance with legislative, regulatory and policy guidelines relevant to laboratory medicine and pathology.





#### Performance Criteria:

- 1.3.1 Practices in accordance with agreed policies and procedures.
- 1.3.2 Practices in accordance with relevant laws and regulations that govern laboratory medicine and pathology.
- 1.3.3 Maintains valid registration and licensure to practice in Qatar.
- 1.3.4 Recognizes and acts upon breaches of laws and regulations relating to the professional role.

# 2 DOMAIN TWO: CLINICAL PRACTICE

This domain encompasses the key principles of the Laboratory Consultant Clinical Scientist role in laboratory medicine and pathology to maximize the delivery of healthcare to patients. Laboratory Consultant Clinical Scientists, as members of the health care delivery team, are responsible for assuring reliable and accurate low complexity, moderate complexity, and high complexity laboratory test results which contribute to the diagnosis, treatment, prognosis, and prevention of physiological and pathological conditions in humans.

#### 2.1 Competency Standard: Clinical Diagnostic Service.

Quality clinical 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.

#### Performance Criteria:

- 2.1.1 Ensures that appropriate laboratory tests are ordered.
- 2.1.2 Procures laboratory test samples in an efficient, timely manner.
- 2.1.3 Produces accurate laboratory test results.
- 2.1.4 Correlates and interprets laboratory test data.
- 2.1.5 Disseminates laboratory test information to clinicians and patients in a timely manner.
- 2.1.6 Evaluates the outcome of clinical laboratory testing for each individual patient and the entire health care system.
- 2.1.7 Assesses, designs, evaluates and implements new laboratory test methods.
- 2.1.8 Evaluates the appropriateness of existing and new laboratory methods for clinical utility, cost-effectiveness and cost-benefit analysis.
- 2.1.9 Implements a comprehensive Quality Management System.
- 2.1.10 Promotes awareness and understanding of the use of the clinical laboratory.
- 2.1.11 Maintains and promotes customer satisfaction through effective customer service.

# 2.2 <u>Competency Standard: Communication and Teamwork.</u>

Uses communication skills to ensure that other members of the health care team remain fully informed.

# Performance Criteria:

2.2.1 Demonstrates cultural competence across patient groups.





- 2.2.2 Consistently communicates relevant, accurate and comprehensive information in verbal, written and electronic forms in a timely manner to ensure the delivery of safe, competent and ethical care.
- 2.2.3 Works with others to affect change and produce positive outcomes through the sharing of knowledge.
- 2.2.4 Demonstrates the ability to work as a team member by engaging in teamwork and the team-building processes.
- 2.2.5 Works in collaboration with other members of the wider multidisciplinary team across patient pathways.

## 3 DOMAIN THREE: LEADERSHIP AND MANGEMENT

Exhibits leadership qualities required to manage the laboratory safely and effectively.

# 3.1 Competency Standard: Leadership

Exhibits leadership qualities and manages laboratory practices safely, efficiently and ethically.

#### Performance Criteria:

- 3.1.1 Applies clinical reasoning, critical thinking and problem solving skills to the organization, provision, management and evaluation of diagnostic tests.
- 3.1.2 Manages self, and where appropriate organizes laboratory staff, to ensure effective workload prioritization and time management.
- 3.1.3 Provides feedback, offers suggestions for change and deals effectively with the impact of change on own practice, the team and/or on the organization.
- 3.1.4 Advocates for, and contributes to, the creation and maintenance of a positive working environment and teamwork.
- 3.1.5 Participates in mentorship and coaching of laboratory staff to maximize the effectiveness of diagnostic tests, the provision of quality diagnostic results.
- 3.1.6 Acts as a role model for colleagues, students and other members of the laboratory team by treating all with respect, trust and dignity.
- 3.1.7 Seeks ways to advance clinical laboratory autonomy and accountability.
- 3.1.8 Promotes and maintains a positive image of Laboratory Consultant Clinical Scientist.
- 3.1.9 Assumes leadership responsibilities, as appropriate, in the delivery of diagnostic services and health care.

#### 3.2 Competency Standard: Quality Improvement and Safety

Ensures diagnostic testing meets organizational quality and safety standards and guidelines and participates in continuous quality improvement.

#### **Performance Criteria:**

- 3.2.1 Practices in accordance with approved quality standards and guidelines reflecting recognized evidence based best practice.
- 3.2.2 Seeks evidence from a wide range of credible sources to maintain, extend and evaluate the quality of diagnostic services.
- 3.2.3 Develops and implements a comprehensive Quality Management System to include,
- 3.2.3.1 Quality control and assurance of clinical laboratory testing services;





- 3.2.3.2 Competency assessment of personnel;
- 3.2.3.3 For ensuring appropriate utilization of clinical laboratory testing services
- 3.2.3.4 Continuous process improvement activities to maximize human resources.
- 3.2.3.5 Acts immediately and appropriately in accordance with the national and/or institutional disaster plan as needed assuming a leadership role in providing laboratory services.
- 3.2.3.6 Implements quality assurance and risk management strategies.
- 3.2.3.7 Ensures a safe environment by identifying actual and potential risks and takes timely action to meet national legislation and workplace health and safety principles.
- 3.2.3.8 Acknowledges own limitations based on competency and functions within those limitations.
- 3.2.3.9 Recognizes less than optimum or unsafe practices and intervenes, records, reports, and acts to provide support to ensure remediation of deficiencies.
- 3.2.3.10 Participates in ongoing quality improvement and risk management initiatives.
- 3.2.3.11 Adheres to and implements infection control policies and procedures.
- 3.2.3.12 Communicates and records safety concerns to the relevant authority and documents response.

#### 3.3 Competency Standard: Delegation and Supervision

Delegates and provides supervision to laboratory staff according to their competence and scope of practice.

# Performance Criteria:

- 3.3.1 Delegates to laboratory staff activities commensurate with their abilities and scope of practice.
- 3.3.2 Uses a range of supportive strategies when supervising aspects of care delegated to other staff.
- 3.3.3 Maintains accountability and responsibility when delegating aspects of care to other staff.

# 4 <u>DOMAIN FOUR: CONTINUOUS EDUCATION</u>

This domain defines the responsibilities of the Laboratory Consultant Clinical Scientist to provide a practical/professional environment that encourages education of others as well as personal development and growth.

## 4.1 Competency Standard: Education and Facilitation

Demonstrates commitment to the development of other members in the healthcare team, as well as patients, families, community and society.

# Performance Criteria:

- 4.1.1 Shares and disseminates professional knowledge and research findings with others.
- 4.1.2 Acts as a resource person for patients and healthcare professionals.
- 4.1.3 Contributes to the formal and informal education and professional development of students and colleagues facilitating and where appropriate coordinating learning opportunities.





- 4.1.4 Acts as an effective preceptor and/or mentor as assigned, undertaking appropriate preparation and updating to undertake the roles.
- 4.1.5 Takes opportunities to learn together with other healthcare professionals in order to contribute to healthcare improvement.

## 4.2 Competency Standard: Lifelong Learning

Assumes responsibility for own professional development through lifelong learning to ensure continued competence and performance improvement.

## Performance Criteria:

- 4.2.1 Undertakes regular self-assessment and reviews own practice through reflection, peer review, competency assessment, critical examination and evaluation.
- 4.2.2 Instigates planned updating knowledge and skills for safe, person-centered, evidence-based practice.
- 4.2.3 Actively engages in ongoing professional development and performance improvement of self and others.
- 4.2.4 Maintains a professional portfolio including evidence of continued competence, professional development and improvement as required for continuing certification and licensure.

#### 4.3 Competency Standard: Promotion of Health and Patient Education

Will enable and provide information on maintaining and optimizing health.

# Performance Criteria:

- 4.3.1 Takes part in health promotion and patient education.
- 4.3.2 Applies knowledge of resources available for health promotion and health education.
- 4.3.3 Provides relevant health information and patient education to individuals, families and communities.

# 5 DOMAIN FIVE: RESEARCH AND DEVELOPMENT

This domain articulates the requirement that the Laboratory Consultant Clinical Scientists incorporate best available evidence to provide quality health care and contribute to the creation and/or implementation of knowledge through active participation.

5.1 Competency Standard: Evidence-Based Practice

Integrates evidence and research findings into practice.

# Performance Criteria:

- 5.1.1 Utilizes current evidence-based knowledge, including research findings, to guide laboratory medicine and pathology practice.
- 5.1.2 Incorporates credible critically appraised evidence into practice and when initiating change.
- 5.1.3 Participates in the formulation of evidence-based practice based on best available credible research and/or national and international professional consensus and guidance and audit.





- 5.1.4 Disseminates personal or third-party research, practice development and audit findings with colleagues and peers in order enhance laboratory practice.
- 5.1.5 Promotes dissemination, use, monitoring and review of professional standards and best practice guidelines.

#### 5.2 Competency Standard: Using Data and Information Systems

Uses data systems to enhance the quality and delivery of patient care.

#### Performance Criteria:

- 5.2.1 Acquires the information technology skills needed to inform and provide optimum healthcare care and document accurately outcomes.
- 5.2.2 Understands how to use technology and data to assist in problem identification and identification of deficiencies that can be remediated to enable improvements in patient care.
- 5.2.3 Analyses data accurately and comprehensively leading to appropriate interpretation of findings and development of implementation plans.

#### 5.3 Competency Standard: Research Participation

Uses research, evaluation, service improvement and audit findings to enhance the quality of patient care and protect the rights of those participating.

# Performance Criteria:

- 5.3.1 Participates in activities that disseminate research findings such as, publications, journal clubs, grand rounds and presentations.
- 5.3.2 Promotes research, evaluation, service improvement initiatives and audits designed to improve healthcare and disseminate findings to colleagues, patients, families, communities, and society.
- 5.3.3 Undertakes appropriate development to ensure competency to recruit individuals, ensure informed consent is obtained, support involvement, facilitate, monitor and where appropriate advocate withdrawal of individuals participating in clinical research and evaluation.





# <u>Criteria for National Registration Requirements – Laboratory Clinical Scientist</u>

Criteria	Laboratory Clinical Scientist
Definition	The Laboratory Clinical Scientists are individuals who hold a current, valid license issued under a national authority or board that authorizes them to practice their profession and use the title Laboratory Clinical Scientist.
	A Laboratory Clinical Scientist is an individual who is qualified to review and interpret diagnostic results under the direction of a Laboratory Consultant or Consultant Clinical Scientist. The qualification is based on minimum requirements of academic degree and years of clinical experience.
Practice Settings	Laboratory Clinical Scientists practice in a wide variety of settings that provide diagnostic laboratory services in hospitals, clinics, health centers, independent laboratories, and any other settings where diagnostic laboratory services are provided. The diagnostic laboratory services include specialized services such as microbiology, virology, immunology, clinical chemistry, endocrinology, toxicology, cytogenetics, and molecular diagnostics.
Education	Minimum of a Doctorate Degree in:     Biomedical Sciences, or     Related basic science such as chemistry, biology, immunology, microbiology or molecular biology.
	<ul> <li>OR</li> <li>Registration as a Clinical Scientist with the Health &amp; Care Professions Council (UK) or equivalent body in the country of practice.</li> </ul>
Scope of Practice	<ul> <li>The Laboratory Clinical Scientist:</li> <li>Reviews laboratory test results and provides an interpretative report for review by a Laboratory Consultant or Consultant Clinical Scientist.</li> <li>Monitors internal quality control and external quality assurance programs in laboratory medicine.</li> <li>Participates in continuous professional development, corporate and laboratory accreditation programs, and laboratory quality management programs.</li> <li>Develops new laboratory tests.</li> <li>Contributes to the operation of national screening programs under the</li> </ul>
	<ul> <li>supervision of a Laboratory Consultant or Consultant Clinical Scientist.</li> <li>Participates in research, education, and administration.</li> <li>Practices within the ethical and legal parameters of the profession.</li> </ul>
Licensure	The Laboratory Clinical Scientist must obtain Licensure from Qatar Council For Healthcare Practitioners (QCHP)





Criteria	Laboratory Clinical Scientist
Experience	<ul> <li>2 years of clinical laboratory diagnostic experience in the area of specialization after award of a Doctorate Degree or,</li> <li>Newly graduates from a recognized academic program for Qatari Nationals and long term residents as per QCHP Circular No.1/2016.</li> </ul>
Competency Validation	<ul> <li>Competency is validated by passing the QCHP Licensing Exam (if applicable).</li> <li>Proposed competencies must meet entry to practice criteria according to the proposed scope of practice and competency requirement.</li> </ul>
Others	(Refer to additional QCHP requirement for license Registration/Evaluation)
Requirement for Evaluation & Registration	http://www.qchp.org.qa/en/Pages/HowToRegisterToPracticeInQatar.aspx
Requirements for	(Refer to additional QCHP requirement for license Registration/Evaluation)
License Renewal	http://www.qchp.org.qa/en/Pages/HowToRegisterToPracticeInQatar.aspx
Note: Applicants with	a break from practice please see QCHP "Break from Practice Policy".





# **Laboratory Clinical Scientist: Scope of Practice**

#### **INTRODUCTION**

The Laboratory Clinical Scientist Scope of Practice uses a competency framework built on five domains intrinsic to the role of the Laboratory Clinical Scientist:

- 1. Professional and Ethical Practice
- 2. Clinical Practice
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- a) Describe the services offered by qualified Laboratory Clinical Scientist.
- b) Define the professional accountability, required competencies, and scope of ethical and legal practice of the Laboratory Clinical Scientist in relation to patient's families, other members of the multidisciplinary team, community and society.
- c) Serve as a reference for license regulating authorities and professionals governing healthcare.

#### **DEFINITION OF LABORATORY MEDICINE AND PATHOLOGY**

Laboratory Medicine and Pathology is a laboratory where clinical specimens are tested for the purpose of diagnosis, monitoring treatment, and prevention of disease. The diagnostic tests are classified as low complexity, moderate complexity or high complexity tests. Low complexity tests are stable basic tests that require minimal knowledge and training to perform the test. Moderate complexity tests are routine laboratory tests performed on automated or semi-automated instruments and require knowledge and training on sample preparation, quality management, instrument maintenance, troubleshooting, and result reporting. High complexity tests are performed on specialized instruments that require a thorough knowledge and training on the theory of the test and practical operation of the instruments.

#### **DEFINITION OF LABORATORY CLINICAL SCIENTIST**

A Laboratory Clinical Scientist is an individual who is qualified to review and interpret diagnostic results under the direction of a Laboratory Consultant or Consultant Clinical





Scientist. The qualification is based on minimum requirements of academic degree and years of clinical experience.

#### **PROFESSIONAL ROLES AND ACTIVITIES**

The clinical practice of a Laboratory Clinical Scientist has a limited scope of practice which is intended to provide training and experience in evaluation, reporting, and interpretation of laboratory tests under the supervision of a Laboratory Consultant or Consultant Clinical Scientist and to meet the eligibility requirements for a recognized Board Certification. The Laboratory Clinical Scientist reviews laboratory test results and provides interpretative reports for review by a Laboratory Consultant or Consultant Clinical Scientist. The clinical practice may be performed in a general clinical laboratory or in a number of specialized areas of expertise such as microbiology, virology, immunology, clinical chemistry, endocrinology, toxicology, cytogenetics, and molecular diagnostics. Integral features of each of the areas may include research, education, and information management. The practice also includes monitoring of internal quality control and external quality assurance programs in laboratory medicine and the development of new laboratory tests. Laboratory Clinical Scientists participate in continuous professional development, corporate and laboratory accreditation programs, and laboratory quality management programs. They contribute to the operation of national screening programs under the supervision of a Laboratory Consultant or Consultant Clinical Scientist. The Laboratory Clinical Scientist practices within the ethical and legal parameters of the profession.

#### **COMPETENCY FRAMEWORK**

#### 1. DOMAIN ONE: PROFESSIONAL AND ETHICAL PRACTICE

This domain defines the professional accountability and scope of ethical and legal practice of the Laboratory Clinical Scientist in relation to patients, families, members of the healthcare team, community, and society.

#### 1.1 Competency Standard: Accountability

Accepts accountability for own actions, decision-making and for the related outcomes.

#### Performance Criteria:

- 1.1.1 Demonstrates accountability for own professional judgments, actions, outcomes of care and continued competence in accordance with Qatari laws and regulations and the Scope of Practice.
- 1.1.2 Works within the limits of own competence and the boundaries of the Scope of Practice.
- 1.1.3 Seeks appropriate guidance when encountering situations beyond the limits of own competence and the Scope of Practice.
- 1.1.4 Acknowledges and respects the accountability and responsibilities of other healthcare professionals and personnel.





- 1.1.5 Takes accountability for delegation of aspects of care delivery.
- 1.1.6 Participates in activities to optimize patient access to the full range of services required for effective healthcare.
- 1.1.7 Assumes accountability for improving the quality and effectiveness of healthcare services provided.

#### 1.2 Competency Standard: Ethical Practice

Delivers diagnostic services and practices embedding the standards of accreditation and certification related to laboratory medicine and pathology as the ethical and professional framework considering the needs of patients, families, communities and society.

## Performance Criteria:

- 1.2.1 Engages in ethical decision-making with respect to own professional responsibilities or where ethical issues affect healthcare delivery or clinical decision-making.
- 1.2.2 Acts as patient advocate protecting the person's rights in accordance with Qatari law and terms and conditions of employment.
- 1.2.3 Maintains confidentiality and makes every reasonable effort to ensure the security of written, verbal and electronic patient information.
- 1.2.4 Respects the patient's right to be fully informed establishing a context for self-determination, assent and informed consent.
- 1.2.5 Respects and maintains the patient's and family's right for privacy and dignity.
- 1.2.6 Acts sensitively and fairly giving due consideration to diversity, including cultural and religious beliefs, race, age, gender, physical and mental state, and other relevant factors.
- 1.2.7 Liaises and collaborates with other healthcare professionals and personnel to ensure ethical practice is maintained.
- 1.2.8 Questions when appropriate, healthcare practice where the safety of patients or healthcare professionals is at risk and where the quality of care warrants improvement; acts where the safety of care is compromised and where necessary reports observed activity that may be risking patient safety.
- 1.2.9 Demonstrates professional integrity in matters where a conflict of interest could be construed.

## 1.3 Competency Standard: Legal Implications

The Laboratory Clinical Scientist functions at all times in accordance with legislative, regulatory and policy guidelines relevant to laboratory medicine and pathology.

#### Performance Criteria:

- 1.3.1 Practices in accordance with agreed policies and procedures.
- 1.3.2 Practices in accordance with relevant laws and regulations that govern laboratory medicine and pathology.
- 1.3.3 Maintains valid registration and licensure to practice in Qatar.
- 1.3.4 Recognizes and acts upon breaches of laws and regulations relating to the professional role.

#### 2 DOMAIN TWO: CLINICAL PRACTICE





This domain encompasses the key principles of the Laboratory Clinical Scientist role in laboratory medicine and pathology to maximize the delivery of healthcare to patients. Laboratory Clinical Scientists, as members of the health care delivery team, are responsible for assuring reliable and accurate low complexity, moderate complexity, and high complexity laboratory test results which contribute to the diagnosis, treatment, prognosis, and prevention of physiological and pathological conditions in humans.

# 2.1 <u>Clinical Diagnostic Service</u>

Quality clinical 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.

#### Performance Criteria:

- 2.1.1 Ensures that appropriate laboratory tests are ordered.
- 2.1.2 Procures laboratory test samples in an efficient, timely manner.
- 2.1.3 Produces accurate laboratory test results.
- 2.1.4 Correlates and interprets laboratory test data.
- 2.1.5 Disseminates laboratory test information to clinicians and patients in a timely manner.
- 2.1.6 Evaluates the outcome of clinical laboratory testing for each individual patient and the entire health care system.
- 2.1.7 Assesses, designs, evaluates and implements new laboratory test methods.
- 2.1.8 Evaluates the appropriateness of existing and new laboratory methods for clinical utility, cost-effectiveness and cost-benefit analysis.
- 2.1.9 Implements a comprehensive Quality Management System.
- 2.1.10 Promotes awareness and understanding of the use of the clinical laboratory.
- 2.1.11 Maintains and promotes customer satisfaction through effective customer service.

#### 2.2 Communication and Teamwork

Uses communication skills to ensure that other members of the health care team remain fully informed.

## Performance Criteria:

- 2.2.1 Demonstrates cultural competence across patient groups.
- 2.2.2 Consistently communicates relevant, accurate and comprehensive information in verbal, written and electronic forms in a timely manner to ensure the delivery of safe, competent and ethical care.
- 2.2.3 Works with others to affect change and produce positive outcomes through the sharing of knowledge.
- 2.2.4 Demonstrates the ability to work as a team member by engaging in teamwork and the team-building processes.
- 2.2.5 Works in collaboration with other members of the wider multidisciplinary team across patient pathways.

# 3 <u>DOMAIN THREE: LEADERSHIP AND MANGEMENT</u>

Exhibits leadership qualities required to manage the laboratory safely and effectively.





#### 3.1 Competency Standard: Leadership

Exhibits leadership qualities and manages laboratory practices safely, efficiently and ethically.

#### Performance Criteria:

- 3.1.1 Applies clinical reasoning, critical thinking and problem solving skills to the organization, provision, management and evaluation of diagnostic tests.
- 3.1.2 Manages self, and where appropriate organizes laboratory staff, to ensure effective workload prioritization and time management.
- 3.1.3 Provides feedback, offers suggestions for change and deals effectively with the impact of change on own practice, the team and/or on the organization.
- 3.1.4 Advocates for, and contributes to, the creation and maintenance of a positive working environment and teamwork.
- 3.1.5 Participates in mentorship and coaching of laboratory staff to maximize the effectiveness of diagnostic tests, the provision of quality diagnostic results.
- 3.1.6 Acts as a role model for colleagues, students and other members of the laboratory team by treating all with respect, trust and dignity.
- 3.1.7 Seeks ways to advance clinical laboratory autonomy and accountability.
- 3.1.8 Promotes and maintains a positive image of Laboratory Clinical Scientist.
- 3.1.9 Assumes leadership responsibilities, as appropriate, in the delivery of diagnostic services and health care

## 3.2 Competency Standard: Quality Improvement and Safety

Ensures diagnostic testing meets organizational quality and safety standards and guidelines and participates in continuous quality improvement.

#### Performance Criteria:

- 3.2.1 Practices in accordance with approved quality standards and guidelines reflecting recognized evidence based best practice.
- 3.2.2 Seeks evidence from a wide range of credible sources to maintain, extend and evaluate the quality of diagnostic services.
- 3.2.3 Develops and implements a comprehensive Quality Management System to include:
- 3.2.3.1 Quality control and assurance of clinical laboratory testing services;
- 3.2.3.2 Competency assessment of personnel;
- 3.2.3.3 Integration with other aspects of the health care delivery system for ensuring appropriate utilization of clinical laboratory testing services.
- 3.2.3.4 Continuous process improvement activities to maximize human resources.
- 3.2.4 Acts immediately and appropriately in accordance with the national and/or institutional disaster plan as needed assuming a leadership role in providing laboratory services.
- 3.2.5 Implements quality assurance and risk management strategies.
- 3.2.6 Ensures a safe environment by identifying actual and potential risks and takes timely action to meet national legislation and workplace health and safety principles.
- 3.2.7 Acknowledges own limitations based on competency and functions within those limitations.
- 3.2.8 Recognizes less than optimum or unsafe practices and intervenes, records, reports, and acts to provide support to ensure remediation of deficiencies.





- 3.2.9 Participates in ongoing quality improvement and risk management initiatives.
- 3.2.10 Adheres to and implements infection control policies and procedures.
- 3.2.11 Communicates and records safety concerns to the relevant authority and documents response.

#### 3.3 Competency Standard: Delegation and Supervision

Delegates and provides supervision to laboratory staff according to their competence and scope of practice.

## Performance Criteria:

- 3.3.1 Delegates to laboratory staff activities commensurate with their abilities and scope of practice.
- 3.3.2 Uses a range of supportive strategies when supervising aspects of care delegated to other staff.
- 3.3.3 Maintains accountability and responsibility when delegating aspects of care to other staff.

#### 4 DOMAIN FOUR: CONTINUOUS EDUCATION

This domain defines the responsibilities of the Laboratory Clinical Scientist to provide a practical/professional environment that encourages education of others as well as personal development and growth.

# 4.1 Education and Facilitation

Demonstrates commitment to the development of other members in the healthcare team, as well as patients, families, community and society.

# Performance Criteria:

- 4.1.1 Shares and disseminates professional knowledge and research findings with others.
- 4.1.2 Acts as a resource person for patients and healthcare professionals.
- 4.1.3 Contributes to the formal and informal education and professional development of students and colleagues facilitating and where appropriate coordinating learning opportunities.
- 4.1.4 Acts as an effective preceptor and/or mentor as assigned, undertaking an appropriate preparation and updating to undertake the roles.
- 4.1.5 Takes opportunities to learn together with other healthcare professionals in order to contribute to healthcare improvement.

## 4.2 Competency Standard: Lifelong Learning

Assumes responsibility for own professional development through lifelong learning to ensure continued competence and performance improvement.





#### Performance Criteria:

- 4.2.1 Undertakes regular self-assessment and reviews own practice through reflection, peer review, competency assessment, critical examination and evaluation.
- 4.2.2 Instigates planned updating knowledge and skills for safe, person-centered, evidence-based practice.
- 4.2.3 Actively engages in ongoing professional development and performance improvement of self and others.
- 4.2.4 Maintains a professional portfolio including evidence of continued competence, professional development and improvement as required for continuing certification and licensure.

#### 4.3 Competency Standard: Promotion of Health and Patient Education

Will enable and provide information on maintaining and optimizing health.

#### Performance Criteria:

- 4.3.1 Takes part in health promotion and patient education.
- 4.3.2 Applies knowledge of resources available for health promotion and health education.
- 4.3.3 Provides relevant health information and patient education to individuals, families and communities.

## 5 DOMAIN FIVE: RESEARCH AND DEVELOPMENT

This domain articulates the requirement that the Laboratory Clinical Scientists incorporate best available evidence to provide quality health care and contribute to the creation and/or implementation of knowledge through active participation.

# 5.1 Competency Standard: Evidence-Based Practice

Integrates evidence and research findings into Practice.

## **Performance Criteria:**

- 5.1.1 Utilizes current evidence-based knowledge, including research findings, to guide laboratory medicine and pathology practice.
- 5.1.2 Incorporates credible critically appraised evidence into practice and when initiating change.
- 5.1.3 Participates in the formulation of evidence-based practice based on best available credible research and/or national and international professional consensus and guidance and audit.
- 5.1.4 Disseminates personal or third-party research, practice development and audit findings with colleagues and peers in order enhance laboratory practice.
- 5.1.5 Promotes dissemination, use, monitoring and review of professional standards and best practice

# 5.2 Competency Standard: Using Data and Information Systems

Uses data systems to enhance the quality and delivery of patient care.





#### **Performance Criteria:**

- 5.2.1 Acquires the information technology skills needed to inform and provide optimum healthcare care and document accurately outcomes.
- 5.2.2 Understands how to use technology and data to assist in problem identification and identification of deficiencies that can be remediated to enable improvements in patient care.
- 5.2.3 Analyses data accurately and comprehensively leading to appropriate interpretation of findings and development of implementation plans.

#### 5.3 Competency Standard: Research Participation

Uses research, evaluation, service improvement and audit findings to enhance the quality of patient care and protect the rights of those participating.

#### **Performance Criteria:**

- 5.3.1 Participates in activities that disseminate research findings such as, publications, journal clubs, grand rounds and presentations.
- 5.3.2 Promotes research, evaluation, service improvement initiatives and audits designed to improve healthcare and disseminate findings to colleagues, patients, families, communities, and society.
- 5.3.3 Undertakes appropriate development to ensure competency to recruit individuals, ensure informed consent is obtained, support involvement, facilitate, monitor and where appropriate advocate withdrawal of individuals participating in clinical research and evaluation.





# <u>Criteria for National Registration Requirements – Laboratory Technician</u>

Criteria	Laboratory Technician
Definition	The Laboratory Technician is an individual who holds a current, valid license issued under a national authority or board that authorizes them to practice their profession and use the title Laboratory Technician.
Practice Settings	Laboratory Technicians practice in a wide variety of settings inclusive of blood collection, specimen reception, and laboratories areas in hospitals, clinics, health centers, independent laboratories, and any other setting where diagnostic laboratory services are provided. The diagnostic laboratory services may be a general multispecialty service or a specialized service such as microbiology, virology, hematology, histopathology, immunology, transfusion medicine, clinical chemistry, endocrinology, toxicology, cytogenetics, and molecular diagnostics.
Education	Minimum of a 2-year Diploma in Biomedical Sciences.
Scope of Practice	<ul> <li>Collects, registers, and transports laboratory diagnostic specimens.</li> <li>Designs, performs, evaluates, reports, and correlates laboratory tests for the purpose of diagnosis, monitoring treatment, and prevention of disease.</li> <li>Performs low complexity and moderate complexity laboratory tests and the management of all aspects of these services.</li> <li>Participates in research, education, information management, and administration.</li> <li>Practices within the ethical and legal parameters of the profession.</li> </ul>





Experience	<ul> <li>2 years clinical laboratory experience, or</li> <li>Newly graduated from an acceptable academic program for Qatari nationals and long-term residents.</li> </ul>
Competency Validation	Competency is validated by passing the QCHP Licensing Exam (if applicable).
Other Requirement for	(Refer to QCHP requirements for license Registration/Evaluation)
Evaluation & Registration	http://www.qchp.org.qa/en/Pages/HowToRegisterToPracticeInQatar.aspx
Requirements for License Renewal	(Refer to QCHP requirements for license Registration/Evaluation)  http://www.qchp.org.qa/en/Pages/HowToRegisterToPracticeInQatar.aspx
Note: Applicants with a break from practice please see QCHP "Break from Practice Policy".	





# **Laboratory Technician Scope of Practice**

#### **INTRODUCTION**

The Laboratory Technician Scope of Practice uses a competency framework built on five domains intrinsic to the role of the Laboratory Technician:

- 1. Professional and Ethical Practice
- 2. Clinical Practice
- 3. Leadership and Management
- 4. Continuous Education
- 5. Research and Development

Each domain is described through competency standards and performance criteria that define the requirements for practice demanded of the Laboratory Technician. This document is to be used as a foundation for all Laboratory Technician roles, professional development and performance appraisal.

# **STATEMENT OF PURPOSE**

The purpose of this document is to define the scope of practice for Laboratory Technicians in Qatar and to:

- a) Describe the services offered by qualified Laboratory Technicians.
- b) Define the professional accountability, required competencies, and scope of ethical and legal practice of the Laboratory Technicians in relation to patients, families, other members of the multidisciplinary team, community, and society.
- c) Serve as a reference for license regulating authorities and professionals governing healthcare.

# **DEFINITION**

Laboratory Medicine and Pathology is a laboratory where clinical specimens are tested for the purpose of diagnosis, monitoring treatment, and prevention of disease. The tests are classified as low complexity, moderate complexity, or high complexity tests. Low complexity tests are stable basic tests that require minimal knowledge and training to perform the test. Moderate complexity tests are routine laboratory tests performed on automated or semi-automated instruments and require knowledge and training on sample preparation, quality management, instrument maintenance, troubleshooting, and result reporting. High complexity tests are performed on specialized instruments that require a thorough knowledge and training on the theory of the test and practical operation of the instruments. The clinical practice of a Laboratory Technician encompasses the collection, registration, and transportation of laboratory diagnostic specimens; the design, performance, evaluation, reporting, and clinical correlation of low complexity and moderate complexity clinical laboratory testing; and the management of all aspects of these services. The Laboratory Technician may perform testing in a general clinical laboratory or in a number of specialized areas of expertise such as microbiology, virology, hematology, histopathology, immunology, transfusion medicine, clinical chemistry, endocrinology, toxicology, cytogenetics, and molecular diagnostics. Integral features of each of the areas may include research, education, information management, and administration. The Laboratory Technician practices within the ethical and legal parameters of the profession.





#### PROFESSIONAL ROLES AND ACTIVITIES

- The Laboratory Technician collects, registers, and transports laboratory diagnostic specimens;
- Designs, performs, evaluates, reports, and clinically correlates low complexity and moderate complexity clinical laboratory tests, and manages all aspects of these services;
- Performs testing in a general clinical laboratory or in a number of specialized areas of expertise such
  as microbiology, virology, hematology, histopathology, immunology, transfusion medicine, clinical
  chemistry, endocrinology, toxicology, cytogenetics, and molecular diagnostics;
- Participates in research, education, information management, and administration;
- And practices within the ethical and legal parameters of the profession.

#### **COMPETENCY FRAMEWORK**

# 1. DOMAIN ONE: PROFESSIONAL AND ETHICAL PRACTICE

This domain defines the professional accountability and scope of ethical and legal practice of the Laboratory Technician in relation to patients, families, members of the healthcare team, community, and society.

## 1.1 Competency Standard: Accountability

Accepts accountability for own actions, decision-making and for the related outcomes.

#### **Performance Criteria:**

- 1.1.1 Demonstrates accountability for own professional judgments, actions, outcomes of care and continued competence in accordance with Qatari laws and regulations and the Scope of Practice.
- 1.1.2 Works within the limits of own competence and the boundaries of the Scope of Practice.
- 1.1.3 Seeks appropriate guidance when encountering situations beyond the limits of own competence and the Scope of Practice.
- 1.1.4 Acknowledges and respects the accountability and responsibilities of other healthcare professionals and personnel.
- 1.1.5 Takes accountability for delegation of aspects of care delivery.
- 1.1.6 Participates in activities to optimize patient access to the full range of services required for effective healthcare.
- 1.1.7 Assumes accountability for improving the quality and effectiveness of healthcare services provided.

## 1.2 Competency Standard: Ethical Practice

Delivers diagnostic services and practices embedding the standards of accreditation and certification related to laboratory medicine and pathology as the ethical and professional framework considering the needs of patients, families, communities and society.

# Performance Criteria:

- 1.2.1 Engages in ethical decision-making with respect to own professional responsibilities or where ethical issues affect healthcare delivery or clinical decision-making.
- 1.2.2 Acts as patient advocate protecting the person's rights in accordance with Qatari law and terms and conditions of employment.





- 1.2.3 Maintains confidentiality and makes every reasonable effort to ensure the security of written, verbal and electronic patient information.
- 1.2.4 Respects the patient's right to be fully informed establishing a context for self- determination, assent, and informed consent.
- 1.2.5 Respects and maintains the patient's and family's right for privacy and dignity.
- 1.2.6 Acts sensitively and fairly giving due consideration to diversity, including cultural and religious beliefs, race, age, gender, physical and mental state, and other relevant factors.
- 1.2.7 Liaises and collaborates with other healthcare professionals and personnel to ensure ethical practice is maintained.
- 1.2.8 Questions when appropriate, healthcare practice where the safety of patients or healthcare professionals is at risk and where the quality of care warrants improvement; acts where the safety of care is compromised and where necessary reports observed activity that may be risking patient safety.
- 1.2.9 Demonstrates professional integrity in matters where a conflict of interest could be construed.

## 1.3 Competency Standard: Legal Implications

The Laboratory Technician functions at all times in accordance with legislative, regulatory, and policy guidelines relevant to laboratory medicine and pathology.

# Performance Criteria:

- 1.3.1 Practices in accordance with agreed policies and procedures.
- 1.3.2 Practices in accordance with relevant laws and regulations that govern laboratory medicine and pathology.
- 1.3.3 Maintains valid registration and licensure to practice in Qatar.
- 1.3.4 Recognizes and acts upon breaches of laws and regulations relating to the professional role.

## 2 DOMAIN TWO: CLINICAL PRACTICE

This domain encompasses the key principles of the Laboratory Technician's role in laboratory medicine and pathology to maximize the delivery of healthcare to patients. Laboratory Technicians, as members of the health care delivery team, are responsible for assuring proper specimen collection and producing reliable and accurate waived and moderate complexity laboratory test results which contribute to the diagnosis, treatment, prognosis, and prevention of physiological and pathological conditions in humans.

#### 2.1 Competency Standard: Clinical Diagnostic Service

Quality clinical laboratory testing is evidenced by: performing the correct test, on the right person, at the right time, producing accurate waived and moderate complexity test results, with the best outcome, in the most cost-effective manner.

# Performance Criteria:

- 2.1.1 Ensures that appropriate laboratory tests are ordered.
- 2.1.2 Accurately identifies patients for specimen collection.
- 2.1.3 Collects venous blood, capillary blood, and urine specimens using precautions that ensure the safety of the patient and laboratory staff.





- 2.1.4 Employs specimen collection procures that optimize the integrity of laboratory samples.
- 2.1.5 Produces accurate laboratory test results.
- 2.1.6 Correlates and interprets laboratory test data.
- 2.1.7 Disseminates laboratory test information to clinicians and patients in a timely manner.
- 2.1.8 Evaluates the outcome of clinical laboratory testing for patients and the entire health care system.
- 2.1.9 Assesses, designs, evaluates, and implements new laboratory test methods.
- 2.1.10 Evaluates the appropriateness of existing and new laboratory methods for clinical utility, cost-effectiveness and cost-benefit analysis.
- 2.1.11 Implements a comprehensive Quality Management System.
- 2.1.12 Promotes awareness and understanding of the use of clinical laboratory.
- 2.1.13 Maintains and promotes customer satisfaction through effective customer service.

# 2.2 Competency Standard: Communication and Teamwork

Uses communication skills to ensure that other members of the health care team remain fully informed.

#### **Performance Criteria:**

- 2.2.1 Demonstrates cultural competence across patient groups.
- 2.2.2 Consistently communicates relevant, accurate and, comprehensive information in verbal, written and electronic forms in a timely manner to ensure the delivery of safe, competent and ethical care.
- 2.2.3 Works with others to affect change and produce positive outcomes through the sharing of knowledge.
- 2.2.4 Demonstrates the ability to work as a team member by engaging in teamwork and the team-building processes.
- 2.2.5 Works in collaboration with other members of the wider multidisciplinary team across patient pathways.

#### 3 DOMAIN THREE: LEADERSHIP AND MANGEMENT

Exhibits leadership qualities required to manage the laboratory safely and effectively.

#### 3.1 Competency Standard: Leadership

Exhibits leadership qualities and manages laboratory practices safely, efficiently, and ethically.

# Performance Criteria:

- 3.1.1 Applies clinical reasoning, critical thinking, and problem solving skills to the organization, provision, management, and evaluation of diagnostic tests.
- 3.1.2 Manages self, and where appropriate organizes laboratory staff, to ensure effective workload prioritization and time management.
- 3.1.3 Provides feedback, offers suggestions for change, and deals effectively with the impact of change on own practice, the team, and/or on the organization.
- 3.1.4 Advocates for, and contributes to, the creation and maintenance of a positive working environment and teamwork.
- 3.1.5 Participates in mentorship and coaching of laboratory staff to maximize the effectiveness of diagnostic tests and provision of quality diagnostic results.
- 3.1.6 Acts as a role model for colleagues, students, and other members of the laboratory team by treating all with respect, trust, and dignity.





- 3.1.7 Seeks ways to advance laboratory medicine, autonomy, and accountability.
- 3.1.8 Promotes and maintains a positive image of Laboratory Technicians.
- 3.1.9 Assumes leadership responsibilities, as appropriate, in the delivery of diagnostic services and health care.

## 3.2 Competency Standard: Quality Improvement and Safety

Ensures diagnostic testing meets organizational quality and safety standards and guidelines and participates in continuous quality improvement.

# Performance Criteria:

- 3.2.1 Practices in accordance with approved quality standards and guidelines reflecting recognized evidence-based best practice.
- 3.2.2 Seeks evidence from a wide range of credible sources to maintain, extend, and evaluate the quality of diagnostic services.
- 3.2.3 Develops and implements a comprehensive Quality Management System to include:
- 3.2.3.1 Quality control and assurance of clinical laboratory testing services;
- 3.2.3.2 Competency assessment of personnel;
- 3.2.3.3 Integration with other aspects of the health care delivery system for ensuring appropriate utilization of clinical laboratory testing services.
- 3.2.3.4 Continuous process improvement activities to maximize human resources.
- 3.2.4 Acts immediately and appropriately in accordance with the national and/or institutional disaster plans as needed assuming a leadership role in providing laboratory services.
- 3.2.5 Implements quality assurance and risk management strategies.
- 3.2.6 Ensures a safe environment by identifying actual and potential risks and takes timely action to meet national legislation and workplace health and safety principles.
- 3.2.7 Acknowledges own limitations based on competency and functions within those limitations.
- 3.2.8 Recognizes less than optimum or unsafe practices and intervenes, records, reports, and acts to provide support to ensure remediation of deficiencies.
- 3.2.9 Participates in ongoing quality improvement and risk management initiatives.
- 3.2.10 Adheres to and implements infection control policies and procedures.
- 3.2.11 Communicates and records safety concerns to the relevant authority and documents response.

# 3.3 Competency Standard: Delegation and Supervision

Delegates and provides supervision to laboratory staff according to their competence and scope of practice.

## Performance Criteria:

- 3.3.1 Delegates to laboratory staff activities commensurate with their abilities and scope of practice.
- 3.3.2 Uses a range of supportive strategies when supervising aspects of care delegated to other staff.
- 3.3.3 Maintains accountability and responsibility when delegating aspects of care to other staff.

#### 4 DOMAIN FOUR: CONTINUOUS EDUCATION

This domain defines the responsibilities of the Laboratory Technician to provide a practical/professional environment that encourages education of others as well as personal development and growth.





#### 4.1 Competency Standard: Education and Facilitation

Demonstrates commitment to the development of other members in the healthcare team, as well as patients, families, community, and society.

#### **Performance Criteria:**

- 4.1.1 Shares and disseminates professional knowledge and research findings with others.
- 4.1.2 Acts as a resource person for patients and healthcare professionals.
- 4.1.3 Contributes to the formal and informal education and professional development of students and colleagues facilitating and where appropriate coordinating learning opportunities.
- 4.1.4 Acts as an effective preceptor and/or mentor as assigned, undertaking appropriate preparation and updating to undertake the roles.
- 4.1.5 Takes opportunities to learn together with other healthcare professionals in order to contribute to healthcare improvement.

#### 4.2 Competency Standard: Lifelong Learning

Assumes responsibility for own professional development through lifelong learning to ensure continued competence and performance improvement.

# Performance Criteria:

- 4.2.1 Undertakes regular self-assessment and reviews own practice through reflection, peer review, competency assessment, critical examination, and evaluation.
- 4.2.2 Initiates planned updating of knowledge and skills for safe, person-centered, evidence- based practice.
- 4.2.3 Actively engages in ongoing professional development and performance improvement of self and others.
- 4.2.4 Maintains a professional portfolio including evidence of continued competence, professional development, and improvement as required for continuing certification and licensure.

#### 4.3 Competency Standard: Promotion of Health and Patient Education

Will enable and provide information on maintaining and optimizing health.

#### Performance Criteria:

- 4.3.1 Takes part in health promotion and patient education.
- 4.3.2 Applies knowledge of resources available for health promotion and health education.
- 4.3.3 Provides relevant health information and patient education to individuals, families, and communities.





#### 5 DOMAIN FIVE: RESEARCH AND DEVELOPMENT

This domain articulates the requirement that Laboratory Technicians incorporate best available evidence to provide quality health care and contribute to the creation and/or implementation of knowledge through active participation.

#### 5.1 Competency Standard: Evidence-Based Practice

Integrates evidence and research findings into practice.

#### Performance Criteria:

- 5.1.1 Utilizes current evidence-based knowledge, including research findings, to guide laboratory medicine and pathology practice.
- 5.1.2 Incorporates credible critically appraised evidence into practice and when initiating change.
- 5.1.3 Participates in the formulation of evidence-based practice based on best available credible research and/or national and international professional consensus and guidance and audit.
- 5.1.4 Disseminates personal or third-party research, practice development, and audit findings to colleagues and peers in order to enhance laboratory practice.
- 5.1.5 Promotes dissemination, use, monitoring, and review of professional standards and best practice guidelines.

# 5.2 Competency Standard: Using Data and Information Systems

Uses data systems to enhance the quality and delivery of patient care.

#### Performance Criteria:

- 5.2.1 Acquires the information technology skills needed to inform and provide optimum healthcare and document accurate outcomes.
- 5.2.2 Understands how to use technology and data to assist in problem identification and identification of deficiencies that can be remediated to enable improvements in patient care.
- 5.2.3 Analyses data accurately and comprehensively leading to appropriate interpretation of findings and development of implementation plans.

# 5.3 Competency Standard: Research Participation

Uses research, evaluation, service improvement, and audit findings to enhance the quality of patient care and protect the rights of those participating.

#### **Performance Criteria:**

- 5.3.1 Participates in activities that disseminate research findings such as, publications, journal clubs, and presentations.
- 5.3.2 Promotes research, evaluation, service improvement initiatives, and audits designed to improve healthcare and disseminate findings to colleagues, patients, families, communities, and society.
- 5.3.3 Undertakes appropriate development to ensure competency to recruit individuals, ensure informed consent is obtained, support involvement, facilitate, monitor, and where appropriate advocate withdrawal of individuals participating in clinical research and evaluation.





# <u>Criteria for National Registration Requirements – Laboratory Technologist</u>

Criteria	Laboratory Technologist (Biomedical)
Definition	The Laboratory Technologist (Biomedical) is an individual who holds a current, valid license issued under a national authority or board that authorizes them to practice their profession and use the title Laboratory Technologist (Biomedical).
Practice Settings	Laboratory Technologists (Biomedical) practice in a wide variety of settings inclusive of blood collection, specimen reception, and laboratories areas in hospitals, clinics, health centers, independent laboratories, and any other settings where diagnostic laboratory services are provided. The diagnostic laboratory services may be a general multispecialty service or a specialized service such as microbiology, virology, hematology, histopathology, immunology, transfusion medicine, clinical chemistry, endocrinology, toxicology, cytogenetics, and molecular diagnostics.
Education	Minimum of a Bachelor of Science in Biomedical Sciences, or a 3-year Diploma.
Scope of Practice	<ul> <li>Collects, registers, and transports laboratory diagnostic specimens.</li> <li>Designs, performs, evaluates, reports, and correlates laboratory tests for the purpose of diagnosis, monitoring treatment, and prevention of disease.</li> <li>Performs low complexity, moderate complexity, and high complexity laboratory tests and the management of all aspects of these services.</li> <li>Participates in research, consultation, education, information management, and administration.</li> <li>Practices within the ethical and legal parameters of the profession.</li> </ul>





Experience	<ul> <li>2 years clinical laboratory experience, or</li> <li>Newly graduated from an acceptable program for Qatari nationals and long-term residents, or</li> <li>Newly graduated from a program accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).</li> </ul>
Competency Validation	Competency is validated by passing the QCHP Licensing Exam (if applicable).
	(Refer to QCHP requirements for license Registration/Evaluation)
Other Requirement for Evaluation & Registration	http://www.qchp.org.qa/en/Pages/HowToRegisterToPracticeInQatar.aspx
Requirements for License Renewal	(Refer to QCHP requirements for license Registration/Evaluation)  http://www.qchp.org.qa/en/Pages/HowToRegisterToPracticeInQatar.aspx
Note: Applicants with a break from practice please see QCHP "Break from Practice Policy".	





# <u>Laboratory Technologist (Biomedical) Scope of Practice</u>

#### **INTRODUCTION**

The Laboratory Technologist (Biomedical) Scope of Practice uses a competency framework built on five domains intrinsic to the role of the Laboratory Technologist (Biomedical):

- 1. Professional and Ethical Practice
- 2. Clinical Practice
- 3. Leadership and Management
- 4. Continuous Education
- 5. Research and Development

Each domain is described through competency standards and performance criteria that define the requirements for practice demanded of the Laboratory Technologist (Biomedical). This document is to be used as a foundation for all Laboratory Technologist (Biomedical) roles, professional development and performance appraisal.

## **STATEMENT OF PURPOSE**

The purpose of this document is to define the scope of practice for Laboratory Technologists (Biomedical) in Qatar and to:

- a) Describe the services offered by qualified Laboratory Technologists (Biomedical).
- b) Define the professional accountability, required competencies, and scope of ethical and legal practice of the Laboratory Technologists (Biomedical) in relation to patients, families, other members of the multidisciplinary team, community and society.
- c) Serve as a reference for license regulating authorities and professionals governing healthcare.

# **DEFINITION**

Laboratory Medicine and Pathology is a laboratory where clinical specimens are tested for the purpose of diagnosis, monitoring treatment, and prevention of disease. The tests are classified as low complexity, moderate complexity, or high complexity tests. Low complexity tests are stable basic tests that require minimal knowledge and training to perform the test. Moderate complexity tests are routine laboratory tests performed on automated or semi-automated instruments and require knowledge and training on sample preparation, quality management, instrument maintenance, troubleshooting, and result reporting. High complexity tests are performed on specialized instruments that require a thorough knowledge and training on the theory of the test and practical operation of the instruments. The clinical practice of a Laboratory Technologist (Specific) encompasses the collection, registration, and transportation of laboratory diagnostic specimens; the design, performance, evaluation, reporting, and clinical correlation of low complexity, moderate complexity, and high complexity clinical laboratory testing; and the management of all aspects of these services. The Laboratory Technologist (Biomedical) may perform testing in a general clinical laboratory or in a number of specialized areas of expertise such as microbiology, virology, hematology, histopathology, immunology, transfusion medicine, clinical chemistry, endocrinology, toxicology, cytogenetics, and molecular diagnostics. Integral features of each of the areas may include research, education, information management, and administration. The Laboratory Technologist (Biomedical) practices within the ethical and legal parameters of the profession.





#### PROFESSIONAL ROLES AND ACTIVITIES

- The Laboratory Technologist (Biomedical) collects, registers, and transports laboratory diagnostic specimens;
- Designs, performs, evaluates, reports, and clinically correlates low complexity, moderate complexity, and high complexity clinical laboratory tests, and manages all aspects of these services;
- Performs testing in a general clinical laboratory or in a number of specialized areas of expertise such
  as microbiology, virology, hematology, histopathology, immunology, transfusion medicine, clinical
  chemistry, endocrinology, toxicology, cytogenetics, and molecular diagnostics;
- Participates in research, education, information management, and administration;
- And practices within the ethical and legal parameters of the profession.

#### **COMPETENCY FRAMEWORK**

## 1. DOMAIN ONE: PROFESSIONAL AND ETHICAL PRACTICE

This domain defines the professional accountability and scope of ethical and legal practice of the Laboratory Technologist (Biomedical) in relation to patients, families, members of the healthcare team, community, and society.

## 1.1 Competency Standard: Accountability

Accepts accountability for own actions, decision-making and for the related outcomes.

## Performance Criteria:

- 1.1.1 Demonstrates accountability for own professional judgments, actions, outcomes of care and continued competence in accordance with Qatari laws and regulations and the Scope of Practice.
- 1.1.2 Works within the limits of own competence and the boundaries of the Scope of Practice.
- 1.1.3 Seeks appropriate guidance when encountering situations beyond the limits of own competence and the Scope of Practice.
- 1.1.4 Acknowledges and respects the accountability and responsibilities of other healthcare professionals and personnel.
- 1.1.5 Takes accountability for delegation of aspects of care delivery.
- 1.1.6 Participates in activities to optimize patient access to the full range of services required for effective healthcare.
- 1.1.7 Assumes accountability for improving the quality and effectiveness of healthcare services provided.

# 1.2 Competency Standard: Ethical Practice

Delivers diagnostic services and practices embedding the standards of accreditation and certification related to laboratory medicine and pathology as the ethical and professional framework considering the needs of patients, families, communities, and society.





#### Performance Criteria:

- 1.2.1 Engages in ethical decision-making with respect to own professional responsibilities or where ethical issues affect healthcare delivery or clinical decision-making.
- 1.2.2 Acts as patient advocate protecting the person's rights in accordance with Qatari law and terms and conditions of employment.
- 1.2.3 Maintains confidentiality and makes every reasonable effort to ensure the security of written, verbal and electronic patient information.
- 1.2.4 Respects the patient's right to be fully informed establishing a context for self-determination, assent, and informed consent.
- 1.2.5 Respects and maintains the patient's and family's right for privacy and dignity.
- 1.2.6 Acts sensitively and fairly giving due consideration to diversity, including cultural and religious beliefs, race, age, gender, physical and mental state, and other relevant factors.
- 1.2.7 Liaises and collaborates with other healthcare professionals and personnel to ensure ethical practice is maintained.
- 1.2.8 Questions when appropriate, healthcare practice where the safety of patients or healthcare professionals is at risk and where the quality of care warrants improvement; acts where the safety of care is compromised and where necessary reports observed activity that may be risking patient safety.
- 1.2.9 Demonstrates professional integrity in matters where a conflict of interest could be construed.

#### 1.3 Competency Standard: Legal Implications

The Laboratory Technologist (Biomedical) functions at all times in accordance with legislative, regulatory, and policy guidelines relevant to laboratory medicine and pathology.

# **Performance Criteria:**

- 1.3.1 Practices in accordance with agreed policies and procedures.
- 1.3.2 Practices in accordance with relevant laws and regulations that govern laboratory medicine and pathology.
- 1.3.3 Maintains valid registration and licensure to practice in Qatar.
- 1.3.4 Recognizes and acts upon breaches of laws and regulations relating to the professional role.

#### 2. DOMAIN TWO: CLINICAL PRACTICE

This domain encompasses the key principles of the Laboratory Technologist's (Biomedical) role in laboratory medicine and pathology to maximize the delivery of healthcare to patients. Laboratory Technologists (Biomedical), as members of the health care delivery team, are responsible for assuring proper specimen collection and producing reliable and accurate waived, moderate complexity, and high complexity laboratory test results which contribute to the diagnosis, treatment, prognosis, and prevention of physiological and pathological conditions in humans.





#### 2.1 Competency Standard: Clinical Diagnostic Service

Quality clinical laboratory testing is evidenced by: performing the correct test, on the right person, at the right time, producing accurate waived, moderate complexity, and high complexity test results, with the best outcome, in the most cost-effective manner.

#### **Performance Criteria:**

- 2.1.1 Ensures that appropriate laboratory tests are ordered.
- 2.1.2 Accurately identifies patients for specimen collection.
- 2.1.3 Collects venous blood, capillary blood, and urine specimens using precautions that ensure the safety of the patient and laboratory staff.
- 2.1.4 Employs specimen collection procures that optimize the integrity of laboratory samples.
- 2.1.5 Produces accurate laboratory test results.
- 2.1.6 Correlates and interprets laboratory test data.
- 2.1.7 Disseminates laboratory test information to clinicians and patients in a timely manner.
- 2.1.8 Evaluates the outcome of clinical laboratory testing for each individual patient and the entire health care system.
- 2.1.9 Assesses, designs, evaluates, and implements new laboratory test methods.
- 2.1.10 Evaluates the appropriateness of existing and new laboratory methods for clinical utility, cost-effectiveness and cost-benefit analysis.
- 2.1.11 Implements a comprehensive Quality Management System.
- 2.1.12 Promotes awareness and understanding of the use of clinical laboratory.
- 2.1.13 Maintains and promotes customer satisfaction through effective customer service.

# 2.2 Competency Standard: Communication and Teamwork

Uses communication skills to ensure that other members of the health care team remain fully informed.

#### Performance Criteria:

- 2.2.1 Demonstrates cultural competence across patient groups.
- 2.2.2 Consistently communicates relevant, accurate, and comprehensive information in verbal, written and electronic forms in a timely manner to ensure the delivery of safe, competent and ethical
- 2.2.3 Works with others to affect change and produce positive outcomes through the sharing of knowledge.
- 2.2.4 Demonstrates the ability to work as a team member by engaging in teamwork and the teambuilding processes.
- 2.2.5 Works in collaboration with other members of the wider multidisciplinary team across patient pathways.

## 3. DOMAIN THREE: LEADERSHIP AND MANGEMENT

Exhibits leadership qualities required to manage the laboratory safely and effectively.





#### 3.1 Competency Standard: Leadership

Exhibits leadership qualities and manages laboratory practices safely, efficiently, and ethically.

#### Performance Criteria:

- 3.1.1 Applies clinical reasoning, critical thinking, and problem solving skills to the organization, provision, management, and evaluation of diagnostic tests.
- 3.1.2 Manages self, and where appropriate organizes laboratory staff, to ensure effective workload prioritization and time management.
- 3.1.3 Provides feedback, offers suggestions for change, and deals effectively with the impact of change on own practice, the team, and/or on the organization.
- 3.1.4 Advocates for, and contributes to, the creation and maintenance of a positive working environment and teamwork.
- 3.1.5 Participates in mentorship and coaching of laboratory staff to maximize the effectiveness of diagnostic tests and provision of quality diagnostic results.
- 3.1.6 Acts as a role model for colleagues, students, and other members of the laboratory team by treating all with respect, trust, and dignity.
- 3.1.7 Seeks ways to advance laboratory technology, autonomy, and accountability.
- 3.1.8 Promotes and maintains a positive image of Laboratory Technologists (Biomedical).
- 3.1.9 Assumes leadership responsibilities, as appropriate, in the delivery of diagnostic services and health care.

### 3.2 Competency Standard: Quality Improvement and Safety

Ensures diagnostic testing meets organizational quality and safety standards and guidelines and participates in continuous quality improvement.

### Performance Criteria:

- 3.2.1 Practices in accordance with approved quality standards and guidelines reflecting recognized evidence-based best practice.
- 3.2.2 Seeks evidence from a wide range of credible sources to maintain, extend, and evaluate the quality of diagnostic services.
- 3.2.3 Develops and implements a comprehensive Quality Management System to include:
- 3.2.3.1 Quality control and assurance of clinical laboratory testing services;
- 3.2.3.2 Competency assessment of personnel;
- 3.2.3.3 Integration with other aspects of the health care delivery system for ensuring appropriate utilization of clinical laboratory testing services.
- 3.2.3.4 Continuous process improvement activities to maximize human resources.
- 3.2.4 Acts immediately and appropriately in accordance with the national and/or institutional disaster plans as needed assuming a leadership role in providing laboratory services.\
- 3.2.5 Implements quality assurance and risk management strategies.
- 3.2.6 Ensures a safe environment by identifying actual and potential risks and takes timely action to meet national legislation and workplace health and safety principles.
- 3.2.7 Acknowledges own limitations based on competency and functions within those limitations.
- 3.2.8 Recognizes less than optimum or unsafe practices and intervenes, records, reports, and acts to provide support to ensure remediation of deficiencies.
- 3.2.9 Participates in ongoing quality improvement and risk management initiatives.





- 3.2.10 Adheres to and implements infection control policies and procedures.
- 3.2.11 Communicates and records safety concerns to the relevant authority and documents response.

# 3.3 Competency Standard: Delegation and Supervision

Delegates and provides supervision to laboratory staff according to their competence and scope of practice.

# **Performance Criteria:**

- 3.3.1 Delegates to laboratory staff activities commensurate with their abilities and scope of practice.
- 3.3.2 Uses a range of supportive strategies when supervising aspects of care delegated to other staff.
- 3.3.3 Maintains accountability and responsibility when delegating aspects of care to other staff.

# 4. **DOMAIN FOUR: CONTINUOUS EDUCATION**

This domain defines the responsibilities of the Laboratory Technologist (Biomedical) to provide a practical/professional environment that encourages education of others as well as personal development and growth.

### 4.1 Competency Standard: Education and Facilitation

Demonstrates commitment to the development of other members in the healthcare team, as well as patients, families, community, and society.

# Performance Criteria:

- 4.1.1 Shares and disseminates professional knowledge and research findings with others.
- 4.1.2 Acts as a resource person for patients and healthcare professionals.
- 4.1.3 Contributes to the formal and informal education and professional development of students and colleagues facilitating and where appropriate coordinating learning opportunities.
- 4.1.4 Acts as an effective preceptor and/or mentor as assigned, undertaking appropriate preparation and updating to undertake the roles.
- 4.1.5 Takes opportunities to learn together with other healthcare professionals in order to contribute to healthcare improvement.

# 4.2 Competency Standard: Lifelong Learning

Assumes responsibility for own professional development through lifelong learning to ensure continued competence and performance improvement.

### **Performance Criteria:**

- 4.2.1 Undertakes regular self-assessment and reviews own practice through reflection, peer review, competency assessment, critical examination, and evaluation.
- 4.2.2 Initiates planned updating of knowledge and skills for safe, person-centered, evidence-based practice.





- 4.2.3 Actively engages in ongoing professional development and performance improvement of self and others.
- 4.2.4 Maintains a professional portfolio including evidence of continued competence, professional development, and improvement as required for continuing certification and licensure.

# 4.3 Competency Standard: Promotion of Health and Patient Education

Will enable and provide information on maintaining and optimizing health.

# **Performance Criteria:**

- 4.3.1 Takes part in health promotion and patient education.
- 4.3.2 Applies knowledge of resources available for health promotion and health education.
- 4.3.3 Provides relevant health information and patient education to individuals, families, and communities.

### 5. DOMAIN FIVE: RESEARCH AND DEVELOPMENT

This domain articulates the requirement that Laboratory Technologists (Biomedical) incorporate best available evidence to provide quality health care and contribute to the creation and/or implementation of knowledge through active participation.

### 5.1 Competency Standard: Evidence-Based Practice

Integrates evidence and research findings into practice.

# **Performance Criteria:**

- 5.1.1 Utilizes current evidence-based knowledge, including research findings, to guide laboratory medicine and pathology practice.
- 5.1.2 Incorporates credible critically appraised evidence into practice and when initiating change.
- 5.1.3 Participates in the formulation of evidence-based practice based on best available credible research and/or national and international professional consensus and guidance and audit.
- 5.1.4 Disseminates personal or third-party research, practice development, and audit findings with colleagues and peers in order enhance laboratory practice.
- 5.1.5 Promotes dissemination, use, monitoring, and review of professional standards and best practice guidelines.

# 5.2 Competency Standard: Using Data and Information Systems

Uses data systems to enhance the quality and delivery of patient care.

### **Performance Criteria:**

5.2.1 Acquires the information technology skills needed to inform and provide optimum healthcare care and document accurate outcomes.





- 5.2.2 Understands how to use technology and data to assist in problem identification and identification of deficiencies that can be remediated to enable improvements in patient care.
- 5.2.3 Analyses data accurately and comprehensively leading to appropriate interpretation of findings and development of implementation plans.

# 5.3 Competency Standard: Research Participation

Uses research, evaluation, service improvement, and audit findings to enhance the quality of patient care and protect the rights of those participating.

# Performance Criteria:

- 5.3.1 Participates in activities that disseminate research findings such as, publications, journal clubs, grand rounds, and presentations.
- 5.3.2 Promotes research, evaluation, service improvement initiatives and audits designed to improve healthcare and disseminate findings to colleagues, patients, families, communities, and society.
- 5.3.3 Undertakes appropriate development to ensure competency to recruit individuals, ensure informed consent is obtained, support involvement, facilitate, monitor, and where appropriate advocate withdrawal of individuals participating in clinical research and evaluation.





# **Criteria for National Registration Requirements – Laboratory Technologist (Specific)**

Criteria	Laboratory Technologist (Specific)
Definition	The Laboratory Technologist (Specific) is an individual who holds a current, valid license issued under a national authority or board that authorizes them to practice their profession and use the title Laboratory Technologist (Specific).
	The Laboratory Technologist (Specific) is a healthcare professional who performs of low complexity, moderate complexity, and high complexity clinical laboratory testing and manages of all aspects of these services within the specific area of specialization defined by academic qualifications, training, and competency for the purpose of diagnosis, monitoring treatment, and prevention of disease.
Practice	
Settings	Laboratory Technologist (Specific) practice in a wide variety of settings inclusive of all diagnostic laboratory services provided in hospitals, clinics, health centers, independent laboratories, and any other settings where diagnostic laboratory services are provided. The diagnostic laboratory services may be a general multispecialty service or a specialized service such as microbiology, virology, immunology, clinical chemistry, endocrinology, toxicology, cytogenetics, and molecular diagnostics.
Education	Minimum of a Bachelor of Science Degree or 3-year Diploma or equivalent in a basic science such as chemistry, biology, microbiology, and molecular biology.
Scope of Practice	<ul> <li>The Laboratory Technologist (Specific) designs, performs, evaluates, reports, and correlates laboratory tests for the purpose of diagnosis, monitoring treatment, and prevention of disease.</li> </ul>
	<ul> <li>The Laboratory Technologist (Specific) performs low complexity, moderate complexity, and high complexity laboratory tests and the management of all aspects of these services.</li> </ul>
	<ul> <li>In addition to performing diagnostic testing, the Laboratory Technologist (Specific) participates in research, consultation, education, information management, and administration.</li> </ul>
	<ul> <li>The Laboratory Technologist (Specific) practices within the scope of practice defined by competency, education, and training in the area of specialization.</li> </ul>





Criteria	Laboratory Technologist (Specific)
Licensure	The Laboratory Technologist (Specific)must obtain Licensure from Qatar Council for Healthcare Practitioners
Experience	<ul> <li>2 years clinical laboratory experience, or</li> <li>Newly graduates from a recognized academic program for Qatari Nationals and long term residents as per QCHP Circular No.1/2016.</li> </ul>
Competency Validation	<ul> <li>Competency is validated by passing the QCHP Licensing Exam (if applicable).</li> <li>Proposed competencies must meet entry to practice criteria according to the proposed scope of practice and competency requirement.</li> </ul>
Other Requirement for Evaluation & Registration	(Refer to QCHP requirements for license Registration/Evaluation)  http://www.qchp.org.qa/en/Pages/HowToRegisterToPracticeInQatar.aspx
Requirements for License Renewal	(Refer to QCHP requirements for license Registration/Evaluation)
	http://www.qchp.org.qa/en/Pages/HowToRegisterToPracticeInQatar.aspx  vith a break from practice please see QCHP "Break from Practice Policy".





# <u>Laboratory Technologist (Specific) Scope of Practice</u>

# **INTRODUCTION**

The Laboratory Technologist (Specific) Scope of Practice uses a competency framework built on five domains intrinsic to the role of the Laboratory Technologist (Specific):

- 1. Professional and Ethical Practice
- 2. Clinical Practice
- 3. Leadership and Management
- 4. Continuous Education
- 5. Research and Development

Each domain is described through competency standards and performance criteria that define the requirements for practice demanded of the Laboratory Technologist (Specific). This document is to be used as a foundation for all Laboratory Technologist (Specific) roles, professional development and performance appraisal.

# **STATEMENT OF PURPOSE**

The clinical practice of a Laboratory Technologist (Specific) encompasses the design, performance, evaluation, reporting, and clinical correlation of low complexity, moderate complexity, and high complexity clinical laboratory testing and the management of all aspects of these services. Low complexity tests are stable basic tests that require minimal knowledge and training to perform the test. Moderate complexity tests are routine laboratory tests performed on automated or semi-automated instruments and require knowledge and training on sample preparation, quality management, instrument maintenance, troubleshooting, and result reporting. High complexity tests are performed on specialized instruments that require a thorough knowledge and training on the theory of the test and practical operation of the instruments. Clinical laboratory tests are utilized for the purpose of diagnosis, monitoring treatment, and prevention of disease. The profession of clinical Laboratory Technologist (Specific) includes individuals qualified in a number of specialized areas of expertise such as microbiology, virology, hematology, histopathology, immunology, transfusion medicine, clinical chemistry, endocrinology, toxicology, cytogenetics, and molecular diagnostics. Integral features of each of the specialties may include research, consultation, education, information management, and administration. The Laboratory Technologist (Specific) practices with the specific area of specialization defined by academic qualifications, training, and competency and within the ethical and legal parameters of the profession.

# **DEFINITION**

The Laboratory Technologist (Specific) is a healthcare professional who performs of low complexity, moderate complexity, and high complexity clinical laboratory testing and manages of all aspects of these services within the specific area of specialization defined by academic qualifications, training, and competency for the purpose of diagnosis, monitoring treatment, and prevention of disease.





#### **PROFESSIONAL ROLES AND ACTIVITIES**

- a) The Laboratory Technologist (Specific) designs, performs, evaluates, reports, and correlates laboratory tests for the purpose of diagnosis, monitoring treatment, and prevention of disease.
- b) The Laboratory Technologist (Specific) performs low complexity, moderate complexity, and high complexity laboratory tests and the management of all aspects of these services.
- c) In addition to performing diagnostic testing, the Laboratory Technologist (Specific) participates in research, consultation, education, information management, and administration.
- d) The Laboratory Technologist (Specific) practices within the scope of practice defined by competency, education, and training in the area of specialization.

### **COMPETENCY FRAMEWORK**

# 1. DOMAIN ONE: PROFESSIONAL AND ETHICAL PRACTICE

This domain defines the professional accountability and scope of ethical and legal practice of the Laboratory Technologist (Specific) in relation to patients, family members of the healthcare team, community, and society.

# 1.1 Competency Standard: Accountability

Accepts accountability for own actions, decision-making and for the related outcomes.

# Performance Criteria:

- 1.1.1 Demonstrates accountability for own professional judgments, actions outcomes of care and continued competence in accordance with Qatar laws and regulations and the Scope of Practice.
- 1.1.2 Works within the limits of own competence and the boundaries of the Scope of Practice.
- 1.1.3 Seeks appropriate guidance when encountering situations beyond the limits of own competence and the Scope of Practice.
- 1.1.4 Acknowledges and respects the accountability and responsibilities of other healthcare professionals and personnel.
- 1.1.5 Takes accountability for delegation of aspects of care delivery.
- 1.1.6 Participates in activities to optimize patient access to the full range of services required for effective healthcare.
- 1.1.7 Assumes accountability for improving the quality and effectiveness of healthcare services provided.

# 1.2 Competency Standard: Ethical Practice

Delivers diagnostic services and practices embedding the standards of accreditation and certification related to laboratory medicine and pathology as the ethical and professional framework considering the needs of patients, families, communities and society.





#### Performance Criteria:

- 1.2.1 Engages in ethical decision-making with respect to own professional responsibilities or where ethical issues affect healthcare delivery or clinical decision- making.
- 1.2.2 Acts as patient advocate protecting the person's rights in accordance with Qatari law and terms and conditions of employment.
- 1.2.3 Maintains confidentiality and makes every reasonable effort to ensure the security of written, verbal and electronic patient information.
- 1.2.4 Respects the patient's right to be fully informed establishing a context for self-determination, assent and informed consent.
- 1.2.5 Respects and maintains the patient's and family's right for privacy and dignity.
- 1.2.6 Acts sensitively and fairly giving due consideration to diversity, including cultural and religious beliefs, race, age, gender, physical and mental state and other relevant factors.
- 1.2.7 Liaises and collaborates with other healthcare professionals and personnel to ensure ethical practice is maintained.
- 1.2.8 Questions when appropriate, healthcare practice where the safety of patients or healthcare professionals is at risk and where the quality of care warrants improvement; acts where the safety of care is compromised and where necessary reports observed activity that may be risking patient safety.
- 1.2.9 Demonstrates professional integrity in matters where a conflict of interest could be construed.

# 1.3 Competency Standards: Legal Practices

The Laboratory Technologist (Specific) functions at all times in accordance with legislative, regulatory and policy guidelines relevant to laboratory medicine and pathology.

# Performance Criteria:

- 1.3.1 Practices in accordance with agreed policies and procedures.
- 1.3.2 Practices in accordance with relevant laws and regulations that govern Laboratory medicine and pathology
- 1.3.3 Maintains valid registration and licensure to practice in Qatar.
- 1.3.4 Recognizes and acts upon breaches of laws and regulations relating to the professional role.

# 2 DOMAIN TWO: CLINICAL PRACTICE

This domain encompasses the key principles of the Laboratory Technologist's (Specific) role in laboratory medicine and pathology to maximize the delivery of healthcare to patients. Laboratory Technologists (Specific), as members of the health care delivery team, are responsible for assuring reliable and accurate waived moderate complexity, and high complexity laboratory test results which contribute to the diagnosis, treatment, prognosis, and prevention of physiological and pathological conditions in humans.

# 2.1 Competency Standard: Clinical Diagnostic Service





Quality clinical laboratory testing is evidenced by: performing the correct test, on the right person, at the right time, producing accurate waived, moderate complexity, and high complexity test results, with the best outcome, in the most cost-effective manner.

#### **Performance Criteria:**

- 2.1.1 Ensures that appropriate laboratory tests are ordered.
- 2.1.2 Procures laboratory test samples in an efficient, timely manner.
- 2.1.3 Produces accurate laboratory test results.
- 2.1.4 Correlates and interprets laboratory test data.
- 2.1.5 Disseminates laboratory test information to clinicians and patients in a timely manner.
- 2.1.6 Evaluates the outcome of clinical laboratory testing for each individual patient and the entire health care system.
- 2.1.7 Assesses, designs, evaluates and implements new laboratory test methods.
- 2.1.8 Evaluates the appropriateness of existing and new laboratory methods for clinical utility, cost-effectiveness and cost-benefit analysis.
- 2.1.9 Implements a comprehensive Quality Management System.
- 2.1.10 Promotes awareness and understanding of the use of clinical laboratory.
- 2.1.11 Maintains and promotes customer satisfaction through effective customer service.

### 2.2 Competency Standard: Communication and Teamwork

Uses communication skills to ensure that other members of the health care team remain fully informed.

### Performance Criteria:

- 2.2.1 Demonstrates cultural competence across patient groups
- 2.2.2 Consistently communicates relevant, accurate and comprehensive information in verbal, written and electronic forms in a timely manner to ensure the delivery of safe, competent and ethical care.
- 2.2.3 Works with others to affect change and produce positive outcomes through the sharing of knowledge.
- 2.2.4 Demonstrates the ability to work as a team member by engaging in teamwork and the team-building processes
- 2.2.5 Works in collaboration with other members of the wider multidisciplinary team.

# 3 DOMAIN THREE: LEADERSHIP AND MANAGEMENT

Exhibits leadership qualities required to manage the laboratory safely and effectively.

# 3.1 Competency Standard: Leadership

Exhibits leadership qualities and manages laboratory practices safely, efficiently and ethically.





### **Performance Criteria:**

- 3.1.1 Applies clinical reasoning, critical thinking and problem solving skills to the organization, provision, management and evaluation of diagnostic tests.
- 3.1.2 Manages self, and where appropriate organizes laboratory staff, to ensure effective workload prioritization and time management.
- 3.1.3 Provides feedback, offers suggestions for change and deals effectively with the impact of change on own practice, the team and/or on the organization.
- 3.1.4 Advocates for, and contributes to, the creation and maintenance of a positive working environment and teamwork.
- 3.1.5 Participates in mentorship and coaching of laboratory staff to maximize the effectiveness of diagnostic tests, the provision of quality diagnostic results.
- 3.1.6 Acts as a role model for colleagues, students and other members of the laboratory team by treating all with respect, trust and dignity.
- 3.1.7 Seeks ways to advance laboratory technology autonomy and accountability.
- 3.1.8 Promotes and maintains a positive image of Laboratory Technologists (Specific).
- 3.1.9 Assumes leadership responsibilities, as appropriate, in the delivery of diagnostic services and health care.

### 3.2 Competency Standard: Quality Improvement and Safety

Ensures diagnostic testing meets organizational quality and safety standards and guidelines and participates in continuous quality improvement.

#### Performance Criteria:

- 3.2.1 Practices in accordance with approved quality standards and guidelines reflecting recognized evidence based best practice.
- 3.2.2 Seeks evidence from a wide range of credible sources to maintain, extend and evaluate the quality of diagnostic services.
- 3.2.3 Develops and implements a comprehensive Quality Management System to include:
- 3.2.3.1 Quality control and assurance of clinical laboratory testing Services;
- 3.2.3.2 Competency assessment of personnel;
- 3.2.3.3 Integration with other aspects of the health care delivery system for ensuring appropriate utilization of clinical laboratory testing services
- 3.2.3.4 Continuous process improvement activities to maximize human resources.
- 3.2.4 Acts immediately and appropriately in accordance with the national and/or Institutional disaster plan as needed assuming a leadership role in providing laboratory services.
- 3.2.5 Implements quality assurance and risk management strategies.
- 3.2.6 Ensures a safe environment by identifying actual and potential risks and takes timely action to meet national legislation and workplace health and safety principles.
- 3.2.7 Acknowledges own limitations based on competency and functions within those limitations.
- 3.2.8 Recognizes less than optimum or unsafe practices and intervenes, records reports, and acts to provide support to ensure remediation of deficiencies.
- 3.2.9 Participates in ongoing quality improvement and risk management initiatives.
- 3.2.10 Adheres to and implements infection control policies and procedures.





3.2.11 Communicates and records safety concerns to the relevant authority and documents response.

# 3.3 Competency Standard: Delegation and Supervision

Delegates and provides supervision to laboratory staff according to their competence and scope of practice.

#### Performance Criteria:

- 3.3.1 Delegates to laboratory staff activities commensurate with their abilities and scope of practice.
- 3.3.2 Uses a range of supportive strategies when supervising aspects of care delegated to other staff.
- 3.3.3 Maintains accountability and responsibility when delegating aspects of care to other staff

# 4 DOMAIN FOUR: CONTINUOUS EDUCATION

This domain defines the responsibilities of the Laboratory Technologist (Specific) to provide a practical/professional environment that encourages education of others as well as personal development and growth.

# 4.1 Competency Standard: Education and Facilitation

Demonstrates commitment to the development of other members in the healthcare team, as well as patients, families, community and society.

#### Performance Criteria:

- 4.1.1 Shares and disseminates professional knowledge and research findings with others.
- 4.1.2 Acts as a resource person for patients and healthcare professionals.
- 4.1.3 Contributes to the formal and informal education and professional development of students and colleagues facilitating and where appropriate coordinating learning opportunities.
- 4.1.4 Acts as an effective preceptor and/or mentor as assigned, undertaking appropriate preparation and updating to undertake the roles.
- 4.1.5 Takes opportunities to learn together with other healthcare professionals in order to contribute to healthcare improvement.

### 4.2 Competency Standard: Lifelong Learning

Assumes responsibility for own professional development through lifelong learning to ensure continued competence and performance improvement.





#### Performance Criteria:

- 4.2.1 Undertakes regular self-assessment and reviews own practice through reflection, peer review, competency assessment, critical examination and evaluation.
- 4.2.2 Instigates planned updating knowledge and skills for safe, person-centered, evidence-based practice.
- 4.2.3 Actively engages in ongoing professional development and performance improvement of self and others.
- 4.2.4 Maintains a professional portfolio including evidence of continued competence, professional development and improvement as required for continuing certification and licensure.

# 4.3 Competency Standard: Promotion of Health and Patient Education

Will enable and provide information on maintaining and optimizing health.

### **Performance Criteria:**

- 4.3.1 Takes part in health promotion and patient education.
- 4.3.2 Applies knowledge of resources available for health promotion and health education.
- 4.3.3 Provides relevant health information and patient education to individuals, families and communities.

# 5 DOMAIN FIVE: RESEARCH AND DEVELOPMENT

This domain articulates the requirement that the Laboratory Technologist (Specific) incorporate best available evidence to provide quality health care and contribute to the creation and/or implementation of knowledge through active participation.

# 5.1 Competency Standard: Evidence-Based Practice

Integrates evidence and research findings into practice.

#### Performance Criteria:

- 5.1.1 Utilizes current evidence-based knowledge, including research findings, to guide laboratory medicine and pathology practice.
- 5.1.2 Incorporates credible critically appraised evidence into practice and when initiating change.
- 5.1.3 Participates in the formulation of evidence-based practice based on best available credible research and/or national and international professional consensus and guidance and audit.
- 5.1.4 Disseminates personal or third-party research, practice development and audit findings with colleagues and peers in order enhance laboratory practice.
- 5.1.5 Promotes dissemination, use, monitoring and review of professional standards and best practice guidelines.





### 5.2 Competency Standard: Using Data and Information Systems

Uses data systems to enhance the quality and delivery of patient care.

# Performance Criteria:

- 5.2.1 Acquires the information technology skills needed to inform and provide optimum healthcare care and document accurately outcomes.
- 5.2.2 Understands how to use technology and data to assist in problem identification and identification of deficiencies that can be remediated to enable improvements in patient care.
- 5.2.3 Analyses data accurately and comprehensively leading to appropriate interpretation of findings and development of implementation plans.

### 5.3 Competency Standard : Research Participation

Uses research, evaluation, service improvement and audit findings to enhance the quality of patient care and protect the rights of those participating.

### **Performance Criteria:**

- 5.3.1 Participates in activities that disseminate research findings such as, publications, journal clubs, grand rounds and presentations.
- 5.3.2 Promotes research, evaluation, service improvement initiatives and audits designed to improve healthcare and disseminate findings to colleagues, patients, families, communities, and society.
- 5.3.3 Undertakes appropriate development to ensure competency to recruit individuals, ensure informed consent is obtained, support involvement, facilitate, monitor and where appropriate advocate withdrawal of individuals participating in clinical research and evaluation.





# Criteria for National Registration Requirements – Pathologists' Assistant

Criteria	Pathologists' Assistant
Definition	The Pathologists' Assistant is an individual who holds a current, valid license issued under a national authority or board that authorizes them to practice their profession and use the title Pathologists' Assistant.
Practice Settings	Pathologists' Assistants practice in a wide variety of settings inclusive of all institutions providing histopathology, autopsy, and forensic investigations.
Education	Minimum of a baccalaureate degree from an accredited college/university; and completion of an accredited Pathologists' Assistant Program.
Scope of Practice	<ul> <li>The Pathologists' Assistant prepares, grossly describes, and dissects human tissue surgical specimens; and performs human postmortem investigations by:</li> <li>Assurance of appropriate specimen accessioning;</li> <li>Recording pertinent clinical information and history;</li> <li>Description of gross anatomic features of surgical specimens, preparation of tissues for histological processing, and collection of samples for testing;</li> <li>Preparation and submission of tissue sections for microscopy;</li> <li>Photographing gross specimens and microscopic slides;</li> <li>Performance of duties relating to administrative maintenance of surgical pathology protocols, reports and data.</li> <li>Ascertaining proper legal authorization for autopsy;</li> <li>Performing postmortem examinations which may include: external examination; in situ organ inspection; evisceration; dissection and dictation or recording of data such as organ weights, presence of body fluids, and gross anatomic findings;</li> <li>Selecting, preparing and submitting appropriate postmortem gross tissue sections for analysis;</li> <li>Obtaining postmortem specimens such as blood, tissue and toxicological material for analysis;</li> <li>Participating in research, consultation, education, information management, and administration.</li> <li>Practicing within the scope of practice defined by competency, education, and training in the area of specialization.</li> </ul>





Experience	<ul> <li>2 years laboratory experience, or</li> <li>Newly graduated from an acceptable academic program for Qatari nationals and long-term residents as per QCHP Circular No.1/2016</li> </ul>
Competency Validation	<ul> <li>Competency is validated by passing the QCHP Licensing Exam (if applicable).</li> <li>Holds current specialist certification as a Pathologists' Assistant, PA (ASCP), by the American Society for Clinical Pathology.</li> </ul>
Others Requirement for Evaluation & Registration	Refer to QCHP requirements for license Registration/Evaluation)  http://www.qchp.org.qa/en/Pages/HowToRegisterToPracticeInQatar.aspx
Requirements for License Renewal	Refer to QCHP requirements for license Registration/Evaluation)  http://www.qchp.org.qa/en/Pages/HowToRegisterToPracticeInQatar.aspx
Note: Applicants with a break from practice please see QCHP "Break from Practice Policy".	





# Pathologists' Assistant Scope of Practice

#### **INTRODUCTION**

The Pathologists' Assistant Scope of Practice uses a competency framework built on five domains intrinsic to the role of the Pathologists' Assistant:

- 1. Professional and Ethical Practice
- 2. Clinical Practice
- 3. Leadership and Management
- 4. Continuous Education
- 5. Research and Development

Each domain is described through competency standards and performance criteria that define the requirements for practice demanded of the Pathologists' Assistant. This document is to be used as a foundation for all Pathologists' Assistant roles, professional development, and performance appraisal.

# STATEMENT OF PURPOSE

The purpose of this document is to define the scope of practice for Pathologists' Assistants in Qatar and to:

- a) Describe the services offered by qualified Pathologists' Assistants.
- b) Define the professional accountability, required competencies, and scope of ethical and legal practice of the Pathologists' Assistants in relation to patients, families, other members of the multidisciplinary team, community and society.
- c) Serve as a reference for license regulating authorities and professionals governing healthcare.

# **DEFINITION OF LABORATORY MEDICINE AND PATHOLOGY**

Laboratory Medicine and Pathology is a laboratory where clinical specimens are analyzed for the purpose of diagnosis, monitoring treatment, and prevention of disease. The anatomical pathology or histopathology section of the laboratory analyzes tissues and cellular components to identify abnormal cells and to provide a diagnosis of the associated disease. In addition, the laboratory may be authorized to perform medical or forensic autopsies.

# **PROFESSIONAL ROLES AND ACTIVITIES**

A Pathologists' Assistant is a highly trained allied health professional who provides various services under the direction and supervision of a pathologist. Pathologists' Assistants are academically and practically trained to provide accurate and timely processing of a variety of laboratory specimens, including the majority of pathological specimens. Pathologists' Assistants are key components to helping the pathologist to render a diagnosis. Pathologists' Assistants perform in a wide scope of clinical practices in academic and community hospitals, private pathology laboratories, and forensic pathology laboratories.

# **COMPETENCY FRAMEWORK**

### 1. DOMAIN ONE: PROFESSIONAL AND ETHICAL PRACTICE

This domain defines the professional accountability and scope of ethical and legal practice of the Pathologists' Assistant in relation to patients, families, members of the healthcare team, community, and society.





#### 1.1 Accountability

Accepts accountability for own actions, decision-making and for the related outcomes.

# **Performance Criteria:**

- 1.1.1 Demonstrates accountability for own professional judgments, actions, outcomes of care and continued competence in accordance with Qatari laws and regulations and the Scope of Practice.
- 1.1.2 Works within the limits of own competence and the boundaries of the Scope of Practice.
- 1.1.3 Seeks appropriate guidance when encountering situations beyond the limits of own competence and the Scope of Practice.
- 1.1.4 Acknowledges and respects the accountability and responsibilities of other healthcare professionals and personnel.
- 1.1.5 Takes accountability for delegation of aspects of care delivery.
- 1.1.6 Participates in activities to optimize patient access to the full range of services required for effective healthcare.
- 1.1.7 Assumes accountability for improving the quality and effectiveness of healthcare services provided.

#### 1.2 Ethical Practice

Delivers diagnostic services and practices embedding the standards of accreditation and certification related to laboratory medicine and pathology as the ethical and professional framework considering the needs of patients, families, communities and society.

# **Performance Criteria:**

- 1.2.1 Engages in ethical decision-making with respect to own professional responsibilities or where ethical issues affect healthcare delivery or clinical decision-making.
- 1.2.2 Acts as patient advocate protecting the person's rights in accordance with Qatari law and terms and conditions of employment.
- 1.2.3 Maintains confidentiality and makes every reasonable effort to ensure the security of written, verbal and electronic patient information.
- 1.2.4 Respects the patient's right to be fully informed establishing a context for self- determination, assent and informed consent.
- 1.2.5 Respects and maintains the patient's and family's right for privacy and dignity.
- 1.2.6 Acts sensitively and fairly giving due consideration to diversity, including cultural and religious beliefs, race, age, gender, physical and mental state, and other relevant factors.
- 1.2.7 Liaises and collaborates with other healthcare professionals and personnel to ensure ethical practice is maintained.
- 1.2.8 Questions when appropriate, healthcare practice where the safety of patients or healthcare professionals is at risk and where the quality of care warrants improvement; acts where the safety of care is compromised and where necessary reports observed activity that may be risking patient safety.
- 1.2.9 Demonstrates professional integrity in matters where a conflict of interest could be construed.

# 1.3 Legal Implications

The Pathologists' Assistant functions at all times in accordance with legislative, regulatory and policy guidelines relevant to laboratory medicine and pathology.

# Performance Criteria:

1.3.1 Practices in accordance with agreed policies and procedures.





- 1.3.2 Practices in accordance with relevant laws and regulations that govern laboratory medicine and pathology.
- 1.3.3 Maintains valid registration and licensure to practice in Qatar.
- 1.3.4 Recognizes and acts upon breaches of laws and regulations relating to the professional role.

#### 2. DOMAIN TWO: CLINICAL PRACTICE

This domain encompasses the key principles of the Pathologists' Assistant role in laboratory medicine and pathology to maximize the delivery of healthcare to patients. Pathologists' Assistants, as members of the health care delivery team, are responsible for assuring reliable and accurate processing of pathology specimens that contribute to the diagnosis, treatment, prognosis, and prevention of pathological conditions in patients.

# 2.1 Clinical Diagnostic Service

Quality clinical 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.

# Performance Criteria:

- 2.1.1 Assures appropriate specimen accessioning.
- 2.1.2 Records pertinent clinical information and history, including scans and laboratory data.
- 2.1.3 Describes gross anatomic features of surgical specimens, prepares tissues for histological processing, and collects biological samples such as blood, tissue and toxicological material for studies such as flow cytometry, image analysis, and immunohistochemistry.
- 2.1.4 Prepares and submits appropriate tissue sections for light microscopy as well as special procedures such as frozen section, electron microscopy and immunofluorescence microscopy.
- 2.1.5 Photographs all appropriate gross specimens and microscopic slides.
- 2.1.6 Performs administrative maintenance of surgical pathology protocols, reports and data including the submission of reports, protocols, photographic data or slides; and assists in the completion of specimen coding and billing.
- 2.1.7 Assures proper maintenance of equipment and provision of adequate supplies.
- 2.1.8 Ascertains proper legal authorization for autopsy.
- 2.1.9 Performs postmortem examinations which may include: external examination; in situ organ inspection; evisceration; dissection and dictation or recording of data such as organ weights, presence of body fluids, and gross anatomic findings.
- 2.1.10 Selects, prepares and submits appropriate gross tissue sections for frozen section analysis as well as for light, electron, and immunofluorescent microscopy.
- 2.1.11 Obtains postmortem specimens such as blood, tissue and toxicological material for studies including flow cytometry, image analysis, and immunohistochemistry; and performs special procedures such as coronary artery perfusion, central nervous system perfusion, enucleation, inner ear bone dissection, and spinal cord removal.

#### 2.2 Communication and Teamwork

Uses communication skills to ensure that other members of the health care team remain fully informed.

# Performance Criteria:

- 2.2.1 Demonstrates cultural competence across patient groups.
- 2.2.2 Consistently communicates relevant, accurate and comprehensive information in verbal, written and electronic forms in a timely manner to ensure the delivery of safe, competent and ethical care
- 2.2.3 Works with others to affect change and produce positive outcomes through the sharing of knowledge.





- 2.2.4 Demonstrates the ability to work as a team member by engaging in teamwork and the teambuilding processes.
- 2.2.5 Works in collaboration with other members of the wider multidisciplinary team across patient pathways.

# 3. DOMAIN THREE: LEADERSHIP AND MANGEMENT

Exhibits leadership qualities required to manage the laboratory safely and effectively.

#### 3.1 Leadership

Exhibits leadership qualities and manages laboratory practices safely, efficiently and ethically.

#### Performance Criteria:

- 3.1.1 Applies clinical reasoning, critical thinking and problem solving skills to the organization, provision, management and evaluation of diagnostic tests.
- 3.1.2 Manages self, and where appropriate organizes laboratory staff, to ensure effective workload prioritization and time management.
- 3.1.3 Provides feedback, offers suggestions for change and deals effectively with the impact of change on own practice, the team and/or on the organization.
- 3.1.4 Advocates for, and contributes to, the creation and maintenance of a positive working environment and teamwork.
- 3.1.5 Participates in mentorship and coaching of laboratory staff to maximize the effectiveness of diagnostic tests, the provision of quality diagnostic results.
- 3.1.6 Acts as a role model for colleagues, students and other members of the laboratory team by treating all with respect, trust and dignity.
- 3.1.7 Seeks ways to advance laboratory technology autonomy and accountability.
- 3.1.8 Promotes and maintains a positive image of Pathologists' Assistants.
- 3.1.9 Assumes leadership responsibilities, as appropriate, in the delivery of diagnostic services and health care.

# 3.2 Quality Improvement and Safety

Ensures diagnostic testing meets organizational quality and safety standards and guidelines and participates in continuous quality improvement.

# Performance Criteria:

- 3.2.1 Practices in accordance with approved quality standards and guidelines reflecting recognized evidence based best practice.
- 3.2.2 Seeks evidence from a wide range of credible sources to maintain, extend and evaluate the quality of diagnostic services.
- 3.2.3 Develops and implements a comprehensive Quality Management System to include:
  - 1. Quality control and assurance of clinical laboratory testing services;
  - 2. Competency assessment of personnel;
  - 3. Integration with other aspects of the health care delivery system for ensuring appropriate utilization of clinical laboratory testing services.
  - 4. Continuous process improvement activities to maximize human resources.
- 3.2.4 Acts immediately and appropriately in accordance with the national and/or institutional disaster plan as needed assuming a leadership role in providing laboratory services.
- 3.2.5 Implements quality assurance and risk management strategies.
- 3.2.6 Ensures a safe environment by identifying actual and potential risks and takes timely action to meet national legislation and workplace health and safety principles.
- 3.2.7 Acknowledges own limitations based on competency and functions within those limitations.





- 3.2.8 Recognizes less than optimum or unsafe practices and intervenes, records, reports, and acts to provide support to ensure remediation of deficiencies.
- 3.2.9 Participates in ongoing quality improvement and risk management initiatives.
- 3.2.10 Adheres to and implements infection control policies and procedures.
- 3.2.11 Communicates and records safety concerns to the relevant authority and documents response.

#### 3.3 Delegation and Supervision

Delegates and provides supervision to laboratory staff according to their competence and scope of practice.

# Performance Criteria:

- 3.3.1 Delegates to laboratory staff activities commensurate with their abilities and scope of practice.
- 3.3.2 Uses a range of supportive strategies when supervising aspects of care delegated to other staff.
- 3.3.3 Maintains accountability and responsibility when delegating aspects of care to other staff.

#### 4. DOMAIN FOUR: CONTINUOUS EDUCATION

This domain defines the responsibilities of the Pathologists' Assistant to provide a practical/professional environment that encourages education of others as well as personal development and growth.

#### 4.1 Education and Facilitation

Demonstrates commitment to the development of other members in the healthcare team, as well as patients, families, community and society.

### Performance Criteria:

- 4.1.1 Shares and disseminates professional knowledge and research findings with others.
- 4.1.2 Acts as a resource person for patients and healthcare professionals.
- 4.1.3 Contributes to the formal and informal education and professional development of students and colleagues facilitating and where appropriate coordinating learning opportunities.
- 4.1.4 Acts as an effective preceptor and/or mentor as assigned, undertaking appropriate preparation and updating to undertake the roles.
- 4.1.5 Takes opportunities to learn together with other healthcare professionals in order to contribute to healthcare improvement.

### 4.2 <u>Lifelong Learning</u>

Assumes responsibility for own professional development through lifelong learning to ensure continued competence and performance improvement.

#### **Performance Criteria:**

- 4.2.1 Undertakes regular self-assessment and reviews own practice through reflection, peer review, competency assessment, critical examination and evaluation.
- 4.2.2 Instigates planned updating knowledge and skills for safe, person-centered, evidence-based practice.
- 4.2.3 Actively engages in ongoing professional development and performance improvement of self and others.
- 4.2.4 Maintains a professional portfolio including evidence of continued competence, professional development and improvement as required for continuing certification and licensure.

# 4.3 Promotion of Health and Patient Education

Will enable and provide information on maintaining and optimizing health.





#### Performance Criteria:

- 4.3.1 Takes part in health promotion and patient education.
- 4.3.2 Applies knowledge of resources available for health promotion and health education.
- 4.3.3 Provides relevant health information and patient education to individuals, families and communities.

### 5. DOMAIN FIVE: RESEARCH AND DEVELOPMENT

This domain articulates the requirement that the Pathologists' Assistant incorporate best available evidence to provide quality health care and contribute to the creation and/or implementation of knowledge through active participation.

# 5.1 Evidence-Based Practice

Integrates evidence and research findings into practice.

#### Performance Criteria:

- 5.1.1 Utilizes current evidence-based knowledge, including research findings, to guide laboratory medicine and pathology practice.
- 5.1.2 Incorporates credible critically appraised evidence into practice and when initiating change.
- 5.1.3 Participates in the formulation of evidence-based practice based on best available credible research and/or national and international professional consensus and guidance and audit.
- 5.1.4 Disseminates personal or third-party research, practice development and audit findings with colleagues and peers in order enhance laboratory practice.
- 5.1.5 Promotes dissemination, use, monitoring and review of professional standards and best practice guidelines.

## 5.2 Using Data and Information Systems

Uses data systems to enhance the quality and delivery of patient care.

# Performance Criteria:

- 5.2.1 Acquires the information technology skills needed to inform and provide optimum healthcare care and document accurately outcomes.
- 5.2.2 Understands how to use technology and data to assist in problem identification and identification of deficiencies that can be remediated to enable improvements in patient care.
- 5.2.3 Analyses data accurately and comprehensively leading to appropriate interpretation of findings and development of implementation plans.

# 5.3 Research Participation

Uses research, evaluation, service improvement and audit findings to enhance the quality of patient care and protect the rights of those participating.

## **Performance Criteria:**

- 5.3.1 Participates in activities that disseminate research findings such as, publications, journal clubs, grand rounds and presentations.
- 5.3.2 Promotes research, evaluation, service improvement initiatives and audits designed to improve healthcare and disseminate findings to colleagues, patients, families, communities, and society.
- 5.3.3 Undertakes appropriate development to ensure competency to recruit individuals, ensure informed consent is obtained, support involvement, facilitate, monitor and where appropriate advocate withdrawal of individuals participating in clinical research and evaluation.





# Criteria for National Registration Requirements – Phlebotomist

Criteria	Phlebotomist
Definition	The Phlebotomist is an individual who holds a current, valid license issued under a national authority or board that authorizes them to practice their profession and use the title Phlebotomist.
Practice Settings	Phlebotomists practice in a wide variety of settings inclusive of outpatient blood collection areas, inpatient wards, specimen reception, and laboratory areas in hospitals, clinics, health centers, and independent laboratories; and any other setting where diagnostic laboratory specimens are collected.
Education	Minimum of a Secondary School Certificate and completion of an accredited phlebotomy training program or 2 years of experience as a phlebotomist.
Scope of Practice	<ul> <li>The Phlebotomist:</li> <li>Collects, registers, and transports laboratory diagnostic specimens.</li> <li>Performs pre analytical procedures as required.</li> <li>Follows appropriate biohazard safety precautions at all times.</li> <li>Participates in research, education, information management, and administration.</li> <li>Practices within the ethical and legal parameters of the profession.</li> </ul>
Experience	<ul> <li>2 years of experience as a phlebotomist, or</li> <li>Newly graduated from an accredited phlebotomy training program for Qatari nationals and long-term residents.</li> </ul>
Competency Validation	Competency is validated by passing the QCHP Phlebotomy Licensing Exam (if applicable).





Other Requirement for Evaluation & Registration	(Refer to QCHP requirements for license Registration/Evaluation)  http://www.qchp.org.qa/en/Pages/HowToRegisterToPracticeInQatar.aspx
Requirements for License Renewal	(Refer to QCHP requirements for license Registration/Evaluation)  http://www.qchp.org.qa/en/Pages/HowToRegisterToPracticeInQatar.aspx
Note: Applicants with a break from practice please see QCHP "Break from Practice Policy".	





# **Phlebotomist Scope of Practice**

#### **INTRODUCTION**

The Phlebotomist Scope of Practice uses a competency framework built on five domains intrinsic to the role of the Phlebotomist:

- 1. Professional and Ethical Practice
- 2. Clinical Practice
- 3. Leadership and Management
- 4. Continuous Education
- 5. Research and Development

Each domain is described through competency standards and performance criteria that define the requirements for practice demanded of the Phlebotomist. This document is to be used as a foundation for all Phlebotomist roles, professional development and performance appraisal.

# **STATEMENT OF PURPOSE**

The purpose of this document is to define the scope of practice for Phlebotomists in Qatar and to:

- a) Describe the services offered by qualified Phlebotomists.
- b) Define the professional accountability, required competencies, and scope of ethical and legal practice of the Phlebotomists in relation to patients, families, other members of the multidisciplinary team, community, and society.
- c) Serve as a reference for license regulating authorities and professionals governing healthcare.

# **DEFINITION**

Laboratory Medicine and Pathology is a laboratory service where clinical specimens are collected, tested, and reported for the purpose of diagnosis, monitoring treatment, and prevention of disease. The clinical practice of a Phlebotomist encompasses the collection, registration, and transportation of laboratory diagnostic specimens and the management of all aspects of these services. The areas of practice of the Phlebotomist may include research, education, information management, and administration. The Phlebotomist practices within the ethical and legal parameters of the profession.

#### PROFESSIONAL ROLES AND ACTIVITIES

- The Phlebotomist collects, registers, and transports laboratory diagnostic specimens and manages all aspects of these services;
- Participates in research, education, information management, and administration;
- And practices within the ethical and legal parameters of the profession.

# **COMPETENCY FRAMEWORK**

1. DOMAIN ONE: PROFESSIONAL AND ETHICAL PRACTICE





This domain defines the professional accountability and scope of ethical and legal practice of the Phlebotomist in relation to patients, families, members of the healthcare team, community, and society.

### 1.1 Competency Standard: Accountability

Accepts accountability for own actions, decision-making and for the related outcomes.

#### **Performance Criteria:**

- 1.1.1 Demonstrates accountability for own professional judgments, actions, outcomes of care and continued competence in accordance with Qatari laws and regulations and the Scope of Practice.
- 1.1.2 Works within the limits of own competence and the boundaries of the Scope of Practice.
- 1.1.3 Seeks appropriate guidance when encountering situations beyond the limits of own competence and the Scope of Practice.
- 1.1.4 Acknowledges and respects the accountability and responsibilities of other healthcare professionals and personnel.
- 1.1.5 Takes accountability for delegation of aspects of care delivery.
- 1.1.6 Participates in activities to optimize patient access to the full range of services required for effective healthcare.
- 1.1.7 Assumes accountability for improving the quality and effectiveness of healthcare services provided.

# 1.2 Competency Standard: Ethical Practice

Delivers diagnostic services and practices embedding the standards of accreditation and certification related to laboratory medicine and pathology as the ethical and professional framework considering the needs of patients, families, communities and society.

# Performance Criteria:

- 1.2.1 Engages in ethical decision-making with respect to own professional responsibilities or where ethical issues affect healthcare delivery or clinical decision-making.
- 1.2.2 Acts as patient advocate protecting the person's rights in accordance with Qatari law and terms and conditions of employment.
- 1.2.3 Maintains confidentiality and makes every reasonable effort to ensure the security of written, verbal and electronic patient information.
- 1.2.4 Respects the patient's right to be fully informed establishing a context for self-determination, assent, and informed consent.
- 1.2.5 Respects and maintains the patient's and family's right for privacy and dignity.
- 1.2.6 Acts sensitively and fairly giving due consideration to diversity, including cultural and religious beliefs, race, age, gender, physical and mental state, and other relevant factors.
- 1.2.7 Liaises and collaborates with other healthcare professionals and personnel to ensure ethical practice is maintained.
- 1.2.8 Questions when appropriate, healthcare practice where the safety of patients or healthcare professionals is at risk and where the quality of care warrants improvement; acts where the safety of care is compromised and where necessary reports observed activity that may be risking patient safety.
- 1.2.9 Demonstrates professional integrity in matters where a conflict of interest could be construed.





#### 1.3 Competency Standard: Legal Implications

The Phlebotomist functions at all times in accordance with legislative, regulatory, and policy guidelines relevant to laboratory medicine and pathology.

### **Performance Criteria:**

- 1.3.1 Practices in accordance with agreed policies and procedures.
- 1.3.2 Practices in accordance with relevant laws and regulations that govern laboratory medicine and pathology.
- 1.3.3 Maintains valid registration and licensure to practice in Qatar.
- 1.3.4 Recognizes and acts upon breaches of laws and regulations relating to the professional role.

### 2. DOMAIN TWO: CLINICAL PRACTICE

This domain encompasses the key principles of the Phlebotomist's role in laboratory medicine and pathology to maximize the delivery of healthcare to patients. Phlebotomists, as members of the health care delivery team, are responsible for assuring proper specimen collection, registration, and transportation which are essential for reliable and accurate laboratory test results and contribute to the diagnosis, treatment, prognosis, and prevention of physiological and pathological conditions in humans.

### 2.1 Competency Standard: Clinical Diagnostic Service

Quality clinical laboratory testing is evidenced by: performing the correct test, on the right person, at the right time, with the best outcome, in the most cost-effective manner.

# **Performance Criteria:**

- 2.1.1 Maintains a safe environment for patients and laboratory staff.
- 2.1.2 Ensures that appropriate laboratory tests are ordered.
- 2.1.3 Accurately identifies patients and registers specimens.
- 2.1.4 Employs sample collection devices the minimize hazards.
- 2.1.5 Collects venous blood, capillary blood, and urine specimens using precautions that ensure the safety of the patient and laboratory staff.
- 2.1.6 Employs specimen collection procures that optimize the integrity of laboratory samples.
- 2.1.7 Disseminates laboratory test information to clinicians and patients in a timely manner.
- 2.1.8 Evaluates the outcome of pre analytical procedures for individual patients and the entire health care system.
- 2.1.9 Assesses, designs, evaluates, and implements new laboratory protocols and devices.
- 2.1.10 Evaluates the appropriateness of existing and new laboratory protocols for clinical utility, cost-effectiveness and cost-benefit analysis.
- 2.1.11 Implements a comprehensive Quality Management System.
- 2.1.12 Promotes awareness and understanding of the use of clinical laboratory services.
- 2.1.13 Maintains and promotes customer satisfaction through effective customer service.

#### 2.2 Competency Standard: Communication and Teamwork





Uses communication skills to ensure that other members of the health care team remain fully informed.

#### Performance Criteria:

- 2.2.1 Demonstrates cultural competence across patient groups.
- 2.2.2 Consistently communicates relevant, accurate, and comprehensive information in verbal, written and electronic forms in a timely manner to ensure the delivery of safe, competent and ethical care.
- 2.2.3 Works with others to affect change and produce positive outcomes through the sharing of knowledge.
- 2.2.4 Demonstrates the ability to work as a team member by engaging in teamwork and the teambuilding processes.
- 2.2.5 Works in collaboration with other members of the wider multidisciplinary team across patient pathways.

### 3. DOMAIN THREE: LEADERSHIP AND MANGEMENT

Exhibits leadership qualities required to manage the laboratory safely and effectively.

### 3.1 Competency Standard: Leadership

Exhibits leadership qualities and manages laboratory practices safely, efficiently, and ethically.

### **Performance Criteria:**

- 3.1.1 Applies clinical reasoning, critical thinking, and problem solving skills to the organization, provision, management, and evaluation of diagnostic tests.
- 3.1.2 Manages self, and where appropriate organizes laboratory staff, to ensure effective workload prioritization and time management.
- 3.1.3 Provides feedback, offers suggestions for change, and deals effectively with the impact of change on own practice, the team, and/or on the organization.
- 3.1.4 Advocates for, and contributes to, the creation and maintenance of a positive working environment and teamwork.
- 3.1.5 Participates in mentorship and coaching of laboratory staff to maximize the effectiveness of diagnostic tests and provision of quality diagnostic results.
- 3.1.6 Acts as a role model for colleagues, students, and other members of the laboratory team by treating all with respect, trust, and dignity.
- 3.1.7 Seeks ways to advance laboratory medicine, autonomy, and accountability.
- 3.1.8 Promotes and maintains a positive image of Phlebotomists.
- 3.1.9 Assumes leadership responsibilities, as appropriate, in the delivery of diagnostic services and health care.

# 3.2 Competency Standard: Quality Improvement and Safety

Ensures diagnostic testing meets organizational quality and safety standards and guidelines and participates in continuous quality improvement.





#### Performance Criteria:

- 3.2.1 Practices in accordance with approved quality standards and guidelines reflecting recognized evidence-based best practice.
- 3.2.2 Seeks evidence from a wide range of credible sources to maintain, extend, and evaluate the quality of diagnostic services.
- 3.2.3 Develops and implements a comprehensive Quality Management System to include:
- 3.2.3.1 Quality control and assurance of pre analytical procedures in the clinical laboratory;
- 3.2.3.2 Competency assessment of personnel;
- 3.2.3.3 Integration with other aspects of the health care delivery system for ensuring appropriate utilization of clinical laboratory services.
- 3.2.3.4 Continuous process improvement activities to maximize human resources.
- 3.2.4 Acts immediately and appropriately in accordance with the national and/or institutional disaster plans as needed assuming a leadership role in providing laboratory services.
- 3.2.5 Implements quality assurance and risk management strategies.
- 3.2.6 Ensures a safe environment by identifying actual and potential risks and takes timely action to meet national legislation and workplace health and safety principles.
- 3.2.7 Acknowledges own limitations based on competency and functions within those limitations.
- 3.2.8 Recognizes less than optimum or unsafe practices and intervenes, records, reports, and acts to provide support to ensure remediation of deficiencies.
- 3.2.9 Participates in ongoing quality improvement and risk management initiatives.
- 3.2.10 Adheres to and implements infection control policies and procedures.
- 3.2.11 Communicates and records safety concerns to the relevant authority and documents response.

### 3.3 Competency Standard: Delegation and Supervision

Delegates and provides supervision to laboratory staff according to their competence and scope of practice.

# **Performance Criteria:**

- 3.3.1 Delegates to laboratory staff activities commensurate with their abilities and scope of practice.
- 3.3.2 Uses a range of supportive strategies when supervising aspects of care delegated to other staff.
- 3.3.3 Maintains accountability and responsibility when delegating aspects of care to other staff.

# 4. DOMAIN FOUR: CONTINUOUS EDUCATION

This domain defines the responsibilities of the Phlebotomist to provide a practical/professional environment that encourages education of others as well as personal development and growth.

### 4.1 Competency Standard: Education and Facilitation

Demonstrates commitment to the development of other members in the healthcare team, as well as patients, families, community, and society.

# **Performance Criteria:**

4.1.1 Shares and disseminates professional knowledge and research findings with others.





- 4.1.2 Acts as a resource person for patients and healthcare professionals.
- 4.1.3 Contributes to the formal and informal education and professional development of students and colleagues facilitating and where appropriate coordinating learning opportunities.
- 4.1.4 Acts as an effective preceptor and/or mentor as assigned, undertaking appropriate preparation and updating to undertake the roles.
- 4.1.5 Takes opportunities to learn together with other healthcare professionals in order to contribute to healthcare improvement.

### 4.2 Competency Standard: Lifelong Learning

Assumes responsibility for own professional development through lifelong learning to ensure continued competence and performance improvement.

# Performance Criteria:

- 4.2.1 Undertakes regular self-assessment and reviews own practice through reflection, peer review, competency assessment, critical examination, and evaluation.
- 4.2.2 Initiates planned updating of knowledge and skills for safe, person-centered, evidence based practice.
- 4.2.3 Actively engages in ongoing professional development and performance improvement of self and others.
- 4.2.4 Maintains a professional portfolio including evidence of continued competence, professional development, and improvement as required for continuing certification and licensure.

### 4.3 Competency Standard: Promotion of Health and Patient Education

Will enable and provide information on maintaining and optimizing health.

# **Performance Criteria:**

- 4.3.1 Takes part in health promotion and patient education.
- 4.3.2 Applies knowledge of resources available for health promotion and health education.
- 4.3.3 Provides relevant health information and patient education to individuals, families, and communities.

# 5. DOMAIN FIVE: RESEARCH AND DEVELOPMENT

This domain articulates the requirement that Phlebotomists incorporate best available evidence to provide quality health care and contribute to the creation and/or implementation of knowledge through active participation.

# 5.1 Competency Standard: Evidence-Based Practice

Integrates evidence and research findings into practice.





#### **Performance Criteria:**

- 5.1.1 Utilizes current evidence-based knowledge, including research findings, to guide laboratory medicine and pathology practice.
- 5.1.2 Incorporates credible critically appraised evidence into practice and when initiating change.
- 5.1.3 Participates in the formulation of evidence-based practice based on best available credible research and/or national and international professional consensus and guidance and audit.
- 5.1.4 Disseminates personal or third-party research, practice development, and audit findings to colleagues and peers in order to enhance laboratory practice.
- 5.1.5 Promotes dissemination, use, monitoring, and review of professional standards and best practice guidelines.

#### 5.2 Competency Standard: Using Data and Information Systems

Uses data systems to enhance the quality and delivery of patient care.

#### **Performance Criteria:**

- 5.2.1 Acquires the information technology skills needed to inform and provide optimum healthcare care and document accurate outcomes.
- 5.2.2 Understands how to use technology and data to assist in problem identification and identification of deficiencies that can be remediated to enable improvements in patient care.
- 5.2.3 Analyses data accurately and comprehensively leading to appropriate interpretation of findings and development of implementation plans.

# 5.3 Competency Standard: Research Participation

Uses research, evaluation, service improvement, and audit findings to enhance the quality of patient care and protect the rights of those participating.

#### Performance Criteria:

- 5.3.1 Participates in activities that disseminate research findings such as, publications, journal clubs, and presentations.
- 5.3.2 Promotes research, evaluation, service improvement initiatives, and audits designed to improve healthcare and disseminate findings to colleagues, patients, families, communities, and society.
- 5.3.3 Undertakes appropriate development to ensure competency to recruit individuals, ensure informed consent is obtained, support involvement, facilitate, monitor, and where appropriate advocate withdrawal of individuals participating in clinical research and evaluation.