Pathology testing is a key medical service carried out at the request of doctors, specialists, accredited allied health professionals or nursing practitioners. Pathology laboratories are staffed by pathologists, clinical scientists, senior scientists, medical laboratory scientists, medical laboratory technicians, technical assistants and other support staff. The production of timely and accurate results for referred patients requires the collaborative efforts of all laboratory staff. This document describes the Scope of Practice of medical laboratory scientists and medical laboratory technicians.

The role that medically qualified pathologists play in supervising the cycle of patient care from test selection to reporting and interpreting results lies outside of the scope of this document.

Competency Based Standards

Competency Based Standards for the Workforce of Pathology Laboratories reflect the work performed by staff of different levels of qualification, skill, experience, responsibility and accountability.

The units and elements in the Competency Based Standards form the structure for the Scope of Practice document. Together these documents will provide the basis for potential future certification / registration of the pathology workforce.

Competency Based Scope of Practice

The competencies in the document are initially described for Medical Laboratory Scientists (Pathology); however, they are not specific for this group. Some competencies, such as clerical or technical work or interpretation, may be common to several different groups of staff, but can be practised at different levels or in different contexts. As a result, these same competencies may be applicable to all groups of staff in the workforce of the pathology laboratory, commensurate with their position or role.

The Role Delineation document (**Appendix 1**) seeks to break down the various laboratory roles into related tasks. These tasks or competencies provide a guide appropriate to the minimum level or qualification of staff involved in performing them. As such the competencies are cumulative i.e. a medical laboratory scientist should be able to undertake duties which are assigned as a minimum level to laboratory assistants, medical laboratory technicians and medical laboratory scientists, but the degree to which these tasks are undertaken will depend on their role.

Role Redefinition for Medical Laboratory Scientists and Medical Laboratory Technicians

Role redefinition is needed to clearly demonstrate suitable competencies appropriate to modern qualifications and outline a career pathway where competencies are cumulative. This also aids in scientific staff being removed from routine and technical tasks to ensure their scientific skills are utilised in more complex testing, troubleshooting unusual findings, method or equipment validation or higher-level roles involving supervision.

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Professional Body Descriptions and Qualification Requirements of Medical Laboratory Technicians

NPAAC defines a medical laboratory technician as a person with relevant training and competence, and who is authorised to perform laboratory functions.

This person must possess one of the following:

a) a qualification in the field of pathology awarded by a tertiary level Australian institution, following successful completion of a course of at least two years' full-time study or an equivalent period of part time study; or

b) a qualification at Australian Qualifications Framework level 5 or 6 with subjects relevant to the field of pathology awarded by an overseas institution accredited by the Australian Institute of Medical Scientists, according to their authority approved by Australian Education International via the National Office of Overseas Skills Recognition (AEI–NOOSR).

Professional body descriptions and Qualification Requirements of Scientist

A review of requirements by societies and associations shows diversity in requirements for a Medical Laboratory Scientist. These various requirements are detailed below:

NPAAC defines a scientist as a person with competence to perform the functions required and who is authorised to perform these functions. This person must possess one of the following qualifications:

a) a degree at Australian Qualifications Framework level 7 with subjects relevant to the field of pathology, as determined by the person responsible for the scientific management of the laboratory and/or person responsible for the clinical governance of the laboratory, awarded from a university in Australia; or

b) a degree at Australian Qualifications Framework level 7 with subjects relevant to the field of pathology awarded by an overseas tertiary institution if the qualification is assessed as equivalent to a degree accredited by the Australian Institute of Medical Scientists, according to their authority approved by Australian Education International via the National Office of Overseas Skills Recognition (AEI–NOOSR); or

c) an associate qualification conferred by the Australian Institute of Medical Technologists before 1 December 1973.

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Australian Institute of Medical and Clinical Scientists (AIMS) defines a Medical Laboratory Scientist as a Professional Member (MAIMS). They have:

a) Completed an AIMS accredited bachelor's or master's degree in medical laboratory science / laboratory medicine and one or two years post-graduate experience (or is considered a Graduate without the two-year's experience)
b) Completed an acceptable science degree (which includes full units in the foundation subjects - cell and tissue biology (including anatomy and physiology), chemistry, biochemistry, general microbiology, genetic and human molecular biology and statistics; and study in all the following areas with advanced study in at least two of the professional disciplines – pathophysiology, anatomical pathology / histopathology (and cytopathology where possible), chemical pathology, haematology including haemostasis, immunopathology, medical microbiology, genetic pathology, transfusion science)
   and
   successfully pass the examination (multidiscipline) and have two years of postgraduate medical pathology laboratory experience and meet the English requirements if from overseas
c) Graduate of a science degree (comparable to AQF7 or above) with subjects assessed as relevant to pathology and five years of full-time experience in a single discipline of pathology
   Or
   Graduate of a science degree (comparable to AQF7 or above) and eight years of full-time experience in a single discipline of pathology;
   And successfully pass the examination (single discipline) and meet the English requirements if from overseas
d) Completed an AIMS acceptable degree; and a Doctoral degree with a thesis assessed as relevant to pathology; and two years of full-time postgraduate professional experience in a medical pathology laboratory.

Australian Society of Cytology (ASC) follows the *NPAAC Requirements for cervical screening (Third Edition) 2025* which states:
The laboratory has processes to:
Define the scope of practice for pathologists, clinical scientists and cytology scientists

a) Monitor practices to ensure pathologists, clinical scientists and cytologists operate within their designated scope of practice
b) Review the scope of practice periodically and whenever a new procedure or technology is introduced or substantially altered

Cytology staff examining gynaecological liquid-based cytology will hold the qualification Certificate of Technology of the Australian Society of Cytology CT(ASC) that includes a gynaecological cytology component. Members of the workforce preparing for the examination of the Certificate of Technology of the Australian Society of Cytology may report on liquid- based cytology under supervision.

Review of scope of practice should be undertaken at least every three years or sooner if there is a change in position, technology, service provision by the laboratory or new procedures introduced.

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The ASC prerequisite for 'Members of staff preparing for the examination of the Certificate of Technology of the Australian Society of Cytology' is a candidate must have a Bachelor's (AQF7) or higher degree in science, with subjects relevant to pathology, issued by an Australian university or an overseas qualification assessed as equivalent. Applicants with other qualifications may apply to AIMS or the Australian government for an assessment of their qualifications. If these organisations determine that the qualifications are equivalent to an Australian university qualification, as defined above, they may apply to sit for the CTASC provided that all the other prerequisites have been met. A candidate must have at least two years full-time practical experience in cytology, or its part-time equivalent, and have completed the prescribed number of cytopathology cases.

Human Genetics Society of Australasia (HGSA) defines ordinary Members shall be such persons who:
Hold a relevant degree or professional qualification from an Australasian university or other institution, or an equivalent degree or qualification from a non-Australasian country.

a) Whose primary vocation is, or has been, research, education or administration related to Human Genetics.

Australasian Association of Clinical Biochemists (AACB) Associate Members must possess a degree from an approved University or an equivalent tertiary qualification, relevant to the practice of laboratory medicine.

Australian Society of Microbiology (ASM) professional class of membership (Member of the Australian Society for Microbiology) requires:

a) Completion of requirements of an academic qualification in microbiology at bachelors degree or post-graduate level acceptable to National Council; AND
b) Completion of two years of post-graduate full-time employment, or its equivalent, to advance the discipline of Microbiology.

Definition of Senior Medical Laboratory Scientist

The definition of a Senior Medical Laboratory Scientist is not clearly defined in NPAAC standards or alternative Australian guidelines. A senior laboratory scientist can be defined as a highly experienced scientist (at least 5 years' experience) who may hold a Master degree relevant to the position. They are responsible for the management of scientific, technical and support staff, overseeing laboratory operations, and/or ensuring quality and regulatory compliance overseeing laboratory tests, and may contribute to research and development. They provide leadership and have advanced analytical and communication skills, along with a deep understanding of laboratory accreditation frameworks and quality systems.

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Definition of Clinical Scientist

NPAAC 'Requirements for the Supervision in the Clinical Governance of Medical Pathology Laboratories (Eighth Edition 2025)' defines a Clinical Scientist as a person with the training and competence to perform the functions required, who has at least five years' relevant medical laboratory experience and possesses one or more of the following qualifications by examination:

a) a Fellowship of the Australasian Association of Clinical Biochemists
b) a Fellowship of the Australian Institute of Medical Scientists
c) a Fellowship of the Australian Society for Microbiology (medical microbiology or clinical microbiology)
d) a Fellowship of the Human Genetics Society of Australasia (biochemical genetics, cytogenetics or molecular genetics)
e) a Fellowship of the Faculty of Science of the Royal College of Pathologists of Australasia
f) a Fellowship of the Australian Society of Cytology

Or A Doctor of Philosophy, Australian Qualifications Framework level 10 or equivalent doctoral level degree, in a subject relevant to the scope of diagnostic testing of the laboratory they are supervising .

Or For ART laboratories, the Clinical Scientist must meet the criteria in the RTAC code of practice for scientific directors.

Or For Bone Marrow Transplant laboratories, the Clinical Scientists must meet the requirements of the Bone Marrow Transplant Scientists Association of Australasia (BMTSAA).

Or For American Society of Histocompatibility and Immunogenetics accredited laboratories, the Clinical Scientist must meet the requirements for a General Supervisor.

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Australian Society of Microbiology website (sourced 16 March 2025)

Human Genetics Society of Australasia website (sourced 16 March 2025)

NPAAC Requirements for supervision in the clinical governance of medical pathology laboratories (Eighth Edition, 2025)

NPAAC Requirements for cervical screening (Third Edition, 2025)

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Version	Endorsement	Date	Notation	Review Date
1 - Draft	Workforce & Training SIG	21 July 2026	First version	2027
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Appendix 1: Role Delineation

Laboratory Assistant/Technical Assistant

A Laboratory/Technical Assistant provides technical and operational support to scientists and technicians by preparing human biological material and other samples as appropriate, maintaining equipment, collecting and receiving samples, recording data, and ensuring the lab environment is clean and safe. This includes receiving and labelling samples, entering sample information into the Laboratory Information System (LIS), and managing specimens during pre-analysis, post-analysis storage, or transport. Laboratory Assistants support setting up and preparing work areas, reagents, stains and equipment for tests and experiments, and cleaning and maintaining laboratory equipment and the general lab environment to ensure it is functional and safe whilst following strict safety protocols to maintain a secure laboratory environment.

Medical Laboratory Technician

Medical Laboratory Technician qualifications and training include a general overview at basic level of the practice of medical laboratory science.

In addition to the functions of Laboratory Assistants, Laboratory Technicians practise routine technical work independently once deemed competent. They follow established methods and procedures to perform routine and standardised laboratory tasks, prepare samples, perform tests and assays that have been validated, use defined acceptance criteria for quality control and validation of results, and focus on execution of practical laboratory tasks. They operate and maintain laboratory equipment within defined, documented parameters and perform troubleshooting when both the cause and actions are clearly described in Standard Operating Procedures or vendor instructions. Departures from defined parameters are referred to Medical Laboratory Scientists or other appropriately qualified and registered health practitioners prior to their release to referring clinicians.

Laboratory Technicians practise under the direction of a Medical Laboratory Scientist or other appropriately qualified person who has expertise and knowledge in the relevant area. They are accountable for the accuracy of their work and perform their duties under general supervision, with access to more senior staff for guidance, oversight, and escalation when required.

There are higher graded or ***Senior Medical Laboratory Technicians*** (without degrees) that have honed their skills attaining competencies over many years. For example, in Anatomical Pathology they may perform direct transfers and dissection on non-complex and complex specimens as per indication below for a Medical Laboratory Scientist. In other disciplines they may have specialised in discipline specific testing, training, or supervision of staff under the direct management of Senior Medical Laboratory Scientists.

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Medical Laboratory Scientist

In addition to the functions of a Medical Laboratory Technician, a Medical Laboratory Scientist performs routine and complex analytical and technical work exercising scientific judgement using knowledge, skills and critical thinking. They work with complex or high-risk specimens, perform work where interpretation informs subsequent steps, and apply professional discretion when evaluating quality, validity, and clinical relevance. They evaluate results and findings in conjunction with other laboratory and clinical information and validate results within their scope. In certain circumstances they also advise of the need for further relevant testing. Scientists undertake investigative troubleshooting of assay performance, quality control failures, and analyser issues, using their scientific knowledge and professional judgement to determine the likely root causes and appropriate corrective actions. They contribute to method development, verification / validation of new equipment, and ongoing quality improvement.

On achieving competency, Medical Laboratory Scientists practise independently, under the general supervision and oversight of Senior Scientists and Pathologists and are responsible for directing the work of Laboratory Assistants and Technicians.

In anatomical pathology, they may undertake macroscopic assessment of specimens and selection of material for microscopic analysis. They can perform direct transfers and dissection on non-complex and complex specimens (defined by the NPAAC standard) within approved protocols and medical supervision.

A Cytology Medical Laboratory Scientist in training must meet the ASC prerequisite qualification and is in training and completing the CT(ASC) qualification defined in the NPAAC standards.

Medical Laboratory Technicians and Scientists may practise in single disciplines or in a multidiscipline environment within the medical laboratory science profession, however their breadth and depth of training may allow them to practise across all disciplines (with appropriate training and demonstrated competency). This is except for technicians and scientists qualified and practising in some specialised areas (e.g. embryology).

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Senior Medical Laboratory Scientist

A Senior Medical Laboratory Scientist is an experienced professional who is a scientific specialist overseeing the laboratory testing or taking responsibility for the operational management of the laboratory. They may have a composite role responsible across operational management and scientific oversight.

Scientific – They are responsible for overseeing laboratory testing, including staff training and competency and ensure services provided meet regulatory quality and accreditation standards. They are responsible for the verification and/or validation of new tests and laboratory equipment, long-term monitoring of assay's, may perform and report complex diagnostic tests, present and publish scientific data and be involved in research.

Leadership and Management - They are responsible for the operational management of the laboratory, including managing staff, overseeing budgets and resources to ensure efficient laboratory functioning; and implementing and maintaining the quality management system. As well as mentoring scientists and technical staff, they communicate effectively with others including clinicians, patients (where appropriate) and external stakeholders to support quality service provision.

Clinical Scientist

A Clinical Scientist works collaboratively with pathologists as part of the clinical team, undertaking a specialised scientific role, combining problem solving with clinical interpretation and extensive scientific expertise and leadership. They may be responsible for delegated clinical supervision of testing, validation of complex reports, identification of results requiring urgent action or referral to a pathologist and providing scientific laboratory advice to clinicians and other health care professionals when appropriate.

Clinical Scientists may be in-charge of a laboratory and/or providing supervision to one or more laboratories, supporting clinical governance, contribute to strategic planning and organisational objectives and planning including implementation of new and high-level programs.

They play a key clinical advisory role in regulatory compliance, quality management, risk management, supervision of quality improvement initiatives, instrument and method selection, validation and ongoing monitoring. They are involved in the design of training, competency and education of laboratory staff, and delivering training for senior scientific staff and medical staff including trainee pathologists.

Clinical Scientists also may be involved in translational research and the evaluation or development of new assays and bringing these into clinical use in collaboration with pathologists and other clinicians.

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	Laboratory Assistant	Medical Laboratory Technician	Medical Laboratory Scientist	Senior Medical Laboratory Scientist	Clinical Scientist
Qualification	• Qualifications are not required but can have Certificate III and IV qualifications • E.g. Cert III Pathology Collection or Assistance • E.g. Cert III Laboratory Skills • E.g. Cert IV Laboratory Techniques	• Two years of study at AQF5 or 6 with subjects primarily relevant to the position. • E.g. Diploma of Laboratory Technology (Pathology) • E.g. Diploma of Laboratory Technology (Chemistry) - FASS • E.g. Assoc Degree in Medical Laboratory Science	• Bachelor's degree at minimum AQF7 with subjects primarily relevant to pathology or the position. • E.g. Bachelor of Medical Laboratory Science (Pathology) • E.g. Master of Laboratory Medicine (course work)	• AQF 9 and/or with an appropriate undergraduate degree and at least 5 years of relevant experience in field of specialisation	• AQF 10 PhD or Fellowship in relevant field of position with a minimum 5 years relevant medical laboratory experience (that meets the NPAAC definition)
Supervision	• Works under supervision onsite in the same department	• Works independently under the direction of a Scientist • Has access to a Scientist for clinical support onsite or remotely	• Works under general supervision of Senior Scientists • Directs the work of Assistants and Technicians and supports other Scientists. • May provided limited / defined supervision of other staff	• Provides supervision and oversight of laboratory operations and / or scientific quality and accreditation. • May supervise activities in other laboratories or in a large complex department. • Provides scientific advice and supervision to scientists, technicians, assistants and trainees, including on matters of a complex nature requiring escalation. • Works under the general supervision and oversight of a Designated Person or their delegate and operational leaders.	• Partners with pathologists and provide delegated supervision from a Designated Person of a laboratory or a network of laboratories aligned with scope of practice, supporting clinical governance requirements. • Provides day to day supervision of testing.

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	Laboratory Assistant	Medical Laboratory Technician	Medical Laboratory Scientist	Senior Medical Laboratory Scientist	Clinical Scientist
Responsibility and risk	• Makes appropriate decisions commensurate with level of experience and job description. • Demonstrates knowledge of ethical issues in Medical Laboratory Science. • Considers ethics within laboratory relating to data, events or business relationships. • Refers ethical problems to senior staff. • Respects the rights of others. • Performs new procedures as directed.	• Follows established methods and procedures to perform routine and standardised tasks, tests and assays where actions are clearly described in Standard Operating Procedures and vendor instructions. • Escalates non-routine work to a Scientist. • Out of hours performs routine work including receipt, analysis, preparation and validation on samples, and maintenance of equipment. • E.g. Called in to perform and report an urgent GeneXpert • E.g. Called in to perform HIV, Hepatitis C serology testing where results are auto validated or referred to a pathologist. • E.g. Setting up routine microbiology cultures.	• Performs routine and complex analytical and technical work exercising scientific judgement using knowledge, skills and critical thinking. • Works with complex or high-risk specimens, perform work where interpretation informs subsequent steps, and apply professional discretion when evaluating quality, validity, and clinical relevance. • Able to add appropriate interpretative comments (as required) and authorise significant risk results without escalation but within established procedures. • Works independently in sole capacity where the duties require the level of responsibility, scientific knowledge, interpretation of laboratory findings / results or tests are more complex to perform and interpret. • Provides advice and guidance on procedural matters • E.g. Massive Haemorrhage Protocol; Interpretative microscopic work; Esoteric tests.	• Responsible for overseeing laboratory testing, including staff training and competency and ensure services provided meet regulatory quality and accreditation standards. And / Or • Provides high level scientific operational management of a laboratory or service • Makes decisions on complex issues and escalates when required • Contributes to the strategic direction of the laboratory and/or service. • Accountable for monitoring emerging issues and risks, identifying their impact and implementing mitigation strategies.	• Clinical responsibility within their scope of practice, including generation and validation of highly complex reports and identifying results requiring escalation to a pathologist. • Leads and supervises development of risk management strategies. • Demonstrates responsibility of meeting laboratory supervisory requirements. • Responsible for delegated clinical supervision in line with NPAAC Requirements for Supervision in the Clinical Governance of Medical Pathology Laboratories.

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	Laboratory Assistant	Medical Laboratory Technician	Medical Laboratory Scientist	Senior Medical Laboratory Scientist	Clinical Scientist
Specimen Reception / Pre-Analytical	• Receives and triages samples received into the laboratory. • Prepares specimens for analysis and deals with any inconsistencies in identification, labelling and sample problems. • Performs pre-analytical preparation of the specimen including separation and centrifugation. • Ensures appropriate billing and other information needed for specimen/patient registration. • Ensures correct packaging of specimen for transfer between sites. • Performs organisation and packaging for clinical trials.	• Ensures quality and timeliness of patient test results by investigating problems involving specimen collection, result reporting and turnaround time. • Recognises and troubleshoots samples and results for routine and standardised tests that are clotted, short samples, haemolysed or with interfering substances.	• Recognises appropriate and inappropriate selection of all laboratory tests. • Determines when 'backup' methods must be initiated.	• Communicates within and across disciplines regarding workflows to support effective laboratory processes. • Troubleshoots complex problems that may include multiple parties.	• Provides general supervision to ensure sample integrity is maintained. • Communicates complex problems to clinicians, other health professionals and patients.
Specimen Processing, Testing	• Performs basic laboratory techniques (point of care, automated and non-automated) under supervision (e.g. loading machines, setting up basic tests, checking a sample for clots, loading QC material, wiping an analyser probe).	• Ensures quality and timeliness of patient test results by investigating problems involving specimen collection, result reporting and turnaround time. • Performs, evaluates, interprets and validates routine laboratory tests and results using established procedures.	• Analyses and provides scientific interpretation of results, findings and determines a diagnosis, including in the context of associated information, determines the relevance and informs of subsequent process steps. • Identifies technical, instrumental, and/or physiologic causes of	• Utilises a high-degree of scientific knowledge and expertise to perform advanced interpretation, reviewing and/or reporting of results and contextual material of a complex nature, ensuring the accurate, quality, timely and customer-focused provision of tests and reports.	• Within the scope of expertise, and in collaboration with pathologists, uses professional judgement to provide clinical interpretation of laboratory tests, assisting clinicians with diagnostic testing strategies, as a member of the team providing clinical care.

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	Laboratory Assistant	Medical Laboratory Technician	Medical Laboratory Scientist	Senior Medical Laboratory Scientist	Clinical Scientist
	• Where necessary, records observations and details according to regulatory requirements (e.g. fridge temperatures). • Recognises and refers questions and /or problems to appropriate personnel. • Refers requests for special and unusual tests. • Answers enquiries and liaises with clients and /or suppliers. • Performs first manual entry of basic test results into a computer for verification by appropriately qualified staff. • Identifies and follows up on pending samples and overdue results.	• Makes decisions within established procedures about reporting results, repeating procedures, consulting senior staff and carrying out further tests differentiating technical, instrumental and/or physiologic causes. • Assesses validity of data / results against a possible range of outcomes including using rules-based software. • Performs setup, reads, enters and validates results for routine manual tests (including second-entry validation) and perform cell counts, where advanced interpretative analysis is not required. • Recognises and troubleshoots routine samples and results that are clotted, short samples, haemolysed or with interfering substances. • Recognises non-routine results and situations and escalates to a scientist. • Ensures abnormal and critical results are communicated to clinicians and pathologists, using established protocols. • Has standard knowledge of the theory of laboratory procedures and understands	unexpected test results and determines appropriate next steps. • Demonstrates solutions to problems based on knowledge, patient diagnosis and instrument performance. • Correlates abnormal laboratory data with pathologic states to determine validity and/or whether follow-up tests should be done. • Integrates and relates lab data generated by various lab sections in making judgements regarding possible discrepancies. • Performs interpretative microscopic / digital image review of material and interprets findings (excluding Histology). • Perform second-check manual entry for more complex and higher-risk results. • Maintain a thorough knowledge of the principles and limitations of the laboratory's procedures, policies and instruments, including uncertainty of measurement. • Prepares and reviews reports (written, verbal).	• Provides advanced troubleshooting and discussion with clear documentation of resolutions. • Works with Pathologists and Clinical Scientists to establish critical-level values, develop acceptable criteria, verification / validation of new tests and ensure processes are implemented and followed. • Interacts with other healthcare workers to solve complex problems and interpret patient lab results. • Identifies tests / parameters which help diagnose, screen and monitor treatment. • Contributes to strategic planning activities including providing advice on systems and methods to deliver the required testing outcomes efficiently for the department.	• Provides expert specialist advice and contributes to the daily review of patient results. • Validates highly complex reports and identifies results requiring urgent action or referral to a pathologist when appropriate. • Participates in case discussions with medical colleagues providing scientific insight into testing and results. • Utilises specialist expertise when problems may be systemic.

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	Laboratory Assistant	Medical Laboratory Technician	Medical Laboratory Scientist	Senior Medical Laboratory Scientist	Clinical Scientist
		the basic physiology behind laboratory results. • Recognises appropriate and inappropriate selection of basic laboratory testing. • Ensures results and /or reports are stored and disposed of according to regulatory requirements. • For Surgical Dissection, a Laboratory Technician can perform direct transfers and dissection on a limited range of non-complex specimens (define by the NPAAC standard) within approved protocols and medical supervision.	• Ensures accurate advice on laboratory testing is communicated where necessary and documented. • Interacts with other healthcare workers to solve problems and interpret patient lab results. • Informs clinicians concerning details and limitations of lab procedures. • Evaluates and validates new methodologies.		
Equipment	• Performs basic operation and troubleshooting of instruments using established procedures. • Performs basic preventative maintenance of instruments. • Cleans the laboratory equipment and environment, cleans and decontaminates laboratory glassware and disposes of samples.	• Performs routine operation and calibration of equipment against standards as part of their daily work within defined documented parameters. • Performs startup procedures, routine preventative and corrective maintenance, using established protocols. • Performs routine troubleshooting of instrument problems where cause and actions are clearly described in Standard Operating Procedures. Follows advise and organises repairs when required.	• Has advanced knowledge of instruments. • Could be trained as a Key Operator / Super User by vendors. • Performs advanced troubleshooting, preventative and corrective maintenance, repairs of instruments and problems with engineer support. • Monitors maintenance logs and provides staff training and competency assessment on instruments in consultation with Senior Scientists.	• Coordinates external suppliers and contractors to deliver equipment related services across a laboratory / dedicated region in alignment with procurement processes. • Participates in equipment evaluation committees and tender groups. • Accountable for evaluation and validation of new equipment and troubleshooting issues with suppliers.	• Provides scientific leadership in the introduction of new instruments, tests and methods including preparing scoping requirements, business cases, tender evaluation, and all steps in the implementation of new methods of equipment locally or statewide (e.g. policies, procedures, validation or verification studies, piloting, designing workflow).

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	Laboratory Assistant	Medical Laboratory Technician	Medical Laboratory Scientist	Senior Medical Laboratory Scientist	Clinical Scientist
		• May be trained by a vendor in routine operation as a secondary operator. • Maintains Point of Care Testing equipment including in other locations outside the laboratory. • Ensures safety protocols for equipment are maintained and risk assessments are performed. • Assists with implementation of new methodologies, workflows and selection of new equipment. • Undertakes UAT testing for interfaces.	• Evaluates and validates new equipment. • Completes complex calibration of equipment and lot numbers against standards.		
QC / QAP	• Understands the role of clinical governance in the laboratory. • Participates in quality improvement activities. • Documents issues and refers to senior staff. • Records incidents in quality management systems. • Processes QC and QAP samples and documents results / outcomes for tests that they would normally run.	• Processes QC and QAP material including reconstitution and entry of results. • Understands and has the ability to monitor, review and interpret QC and QAP results to enable specimen processing based on established procedures. • Undertakes basic troubleshooting following SOPs or after seeking advice and escalates problems and non-conformities to more senior staff.	• Monitors, interprets and troubleshoots internal quality control and external QAP results and problems ensuring appropriate action is taken or escalated to more senior staff. • Institutes and records appropriate corrective action to ensure patient safety. • Uses statistical methods to research and assess laboratory testing, including understanding and uses rules and software such as Westgard rules and Unity software.	• Signs off QC and QAP. • Reviews long term reports and supervisor reports with clinical supervisor. • Troubleshoots complex problems and implements appropriate actions. • When patient safety has been placed at risk, refers details to a clinical supervisor.	• Plays an active role in supervision and monitoring of quality control and quality assurance programs, including applying the principles, trend analysis and long-term review. • Are an escalation point for complex troubleshooting and supervising implementation of corrective actions.

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	Laboratory Assistant	Medical Laboratory Technician	Medical Laboratory Scientist	Senior Medical Laboratory Scientist	Clinical Scientist
			• Evaluates and calculates quality control statistics to assess accuracy, reproducibility and validity of current laboratory methods. • Calculates measurement of uncertainty.		
Inventory / Stock Management / Administration	• Performs stocktakes and checks receival of stock meets specifications. • Escalates inventory issues to more senior staff. • Provides general administrative functions including file control and administrative report reviewing.	• Performs routine inventory management e.g. stocktakes, unpacking, rotation of stock and lot numbers. • Disposes of expired or dangerous goods according to regulations. • Ensures quarantine of expired or contaminated stock to prevent inadvertent use. • Prepares, labels, handles and stores reagents according to requirements.	• Manages new shipments of lot numbers, supply issue management, monitoring stock levels and ordering, planning to avoid stock wastage. • Responsible for reporting stock quality issues.	• Develops and implements inventory management strategies. • Accountable for Goods & Services budget, end of year stocktake and troubleshooting issues with suppliers.	• Supervises laboratory inventory management procedures to provide assurance on appropriate use and availability
Training and Competency	• Participates and applies policies and procedures to obtain competency as required in the role. • Provides instructions and responds to technical questions on collection of specimens and testing consistent with training, knowledge and qualifications.	• Trains staff in duties they are trained and competent in. • Assists and provides support in training to ensure staff understand and follow protocols.	• Trains staff, including theory / principles in operation and troubleshooting of equipment, instruments, laboratory procedures including quality control procedures, patient confidentiality and safety measures. • Signs-off competency of staff.	• Develops and implements targeted training programs to ensure competency of staff e.g. quality assurance, methods etc. • Ensures staff training and competency records are maintained and up to date. • Regularly reviews and determines areas for building competency, for individuals and across the laboratory.	• Plays a key role in training and education of health professionals including registrars, trainee pathologists, senior scientists and clinical scientist trainees. • Leads the design of structured training, competency assessment and education modules. • Leads, provides expert specialist advice to, and participates in scientific

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	Laboratory Assistant	Medical Laboratory Technician	Medical Laboratory Scientist	Senior Medical Laboratory Scientist	Clinical Scientist
				• May provide training to registrars and other medical staff.	activities of relevant professional bodies, societies and educational institutions at state, national and international level. • Undertakes comprehensive and critical literature reviews of clinical pathology data and information to inform clinical advice and pathology advancement.
Service Development	• Participates in implementation of new workflow and methodologies as directed. • Consults with relevant personnel regarding the need for changes to documentation. • Updates documentation as requested by a senior staff member.	• Assists with troubleshooting new methodologies for implementation of new workflows. • Participates in preparation and revision of manuals and protocols. • Monitors records / documentation and communicates any updates required to senior staff. • Suggests cost effective laboratory procedures / protocols to streamline testing, minimise waste and increase efficiency.	• Assists to manage the introduction of new methodologies, policies and procedures and ensure standardisation of practices or procedures. • Creates analytically valid and traceable routine assays, underpinned by reference materials and methods. • Designs and implement procedures / protocols to streamline workflows, minimise waste and increase efficiency. • Maintains records and documentation and monitors for any updates.	• Designs, develops and implements ongoing review of policies, procedures, methodologies and ensure that all testing policies and procedures are documented to 'acceptable standards' and comply with the quality system. • Appropriately communicates changes to all staff. • Demonstrates innovation and highly developed and specialised skills.	• Involved in research and development of new assays and translating new developments into clinical use. • Plays a key role in strategic planning and development of organisational priorities. • Represents the organisation and contributes authoritative clinical scientific expertise to clinical groups both in hospitals and the community.

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Quality / Accreditation Functions	• Ensures samples are received and entered into the laboratory in a timely fashion, to meet accreditation requirements.	• Demonstrates awareness of key performance indicators to ensure laboratory meets clients' needs. • Undertakes internal audits, refers any failures and sign-off to senior staff. • Reports and submits incidents.	• Continually reviews laboratory processes, documentation, SOPs and delivery of quality results to ensure the laboratory is complying with accreditation requirements. • Implements process improvement including interfaces to pre and post analytical areas. • Troubleshoots non-conformance. • Identifies and suggests standards of practice. • Manages, investigates and reports incidents, including root cause analysis, and corrective and preventative actions.	• Develops and implements quality improvement initiatives including maintaining a regular internal audit schedule, signing off incidents, resolving non-conformance, assessing and mitigating risk in the laboratory, ensuring documentation is up to date and reporting on laboratory performance during the annual management review. • Promotes best practice. • Responsible for meeting requirements for NATA accreditation.	• Leads and supervises quality improvement initiatives, ensure regulatory compliance, lead and supervise test selection, validation and implementation. • Provides clinical scientific expertise into work practices and recommend changes based on evidence-based laboratory practices to improve quality and develop implementation pathways.
Work Health and Safety (WHS)	• Complies with and promotes WHS guidelines. • Follows protocols when handling spills. • Familiar with safety documentation and use of safety equipment for emergency situations. • Documents safety incidents. • Suggests improvement of WHS practices in the workplace.	• Maintains inventory of hazardous reagents including MSDS and reviews periodically to ensure substances no longer in use are discarded appropriately. • Raises concerns when procedures contain unsafe practice and notifies appropriate personnel with concerns or improvement suggestions. • Holds an appropriate licence for handling radioactive substances.	• Continually reviews safety procedures and practices to ensure a safe workplace. • Actions non-conformance. • Actively promotes safe work. • Ensures procedures do not contain unsafe practice and notifies appropriate personnel with concerns or improvement suggestions.	• Enforces safety regulations. • Develops safety and waste management procedures. • Responsible for the sign-off of investigations. • Undertakes defined Officer training.	• Leads investigations and establishes safety protocols around new instrumentation and testing methodologies aligned with scope of practice.

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	• Undertakes WHS audits after appropriate training.	• Aware of hazards caused by interaction of some substances. • Undertakes WHS audits and supports the investigation of incidents.			
Research/Clinical Trials	• Receipt, registration, preparation, retrieval and storage of samples.	• Identifies issues and communicates research ideas to appropriate personnel. • Assists with design of the project within position requirements. • Accesses appropriate information related to the project. • Follows research / development protocols. • Follows procedures, monitors and documents outcomes.	• Collects and analyses data and contributes to interpretation of results. • Assists in determining requirements for further research in consultation with appropriate personnel. • Prepares and reviews reports (written, verbal, journal) and submits for peer review. • Understands ethics and protocols associated with research.	• Initiates and leads grant applications, research activities. • Responsible for experimental design, contributes to grant applications and ethics approvals.	• Actively contributes to the organisations and departments strategic research direction including assessing business opportunities, writing grant applications, providing advice on research programs and active horizon scanning for new developments to provide better quality service. • Provides expert specialist advice and significant contributions to the research programs of clinician and academic researchers. • Participates in transitional research and/or service innovation projects, specifically research and

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					test development for new assays and bringing new developments into clinical use in their specialist field. • May undertake scientific research, including evaluation of scientific literature, to introduce new scientific procedures or solve diagnostic or therapeutic problems within their field. • Involved in research related to test development and implementation of new developments into routine clinical practice. • Contributes to scientific literature within the relevant field. • Analyses data and information, actively publish research papers in peer reviewed journals, protect Intellectual Property and present research findings at national and international scientific meetings.

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Professional Development	• Identifies and discusses professional development goals with supervisor, and actioning outcomes. • Records continuing professional development. • Responsible for enhancing and maintaining their own individual competency.	• Maintains skills and updates knowledge by attending relevant local and online meetings, courses, reviewing scientific and technical literature and case studies. • Presents technically focused presentations to others.	• Accountable for enhancing and maintaining their own professional development without relying on others. • Contributes and participates in professional activities including attending and oral/poster presentations at conferences, meetings, workshops and seminars, publishing articles. • May participate in a nationally recognised CPD program. • Contributes to professional development of staff.	• Accountable for ensuring staff they supervise are participating in professional development to an adequate level. • Apply high-level and/or specialised knowledge and skills to participate in, and contribute to, the development and implementation of educational activities. • May teach academically and mentor students.	• Maintains expert scientific and clinical knowledge by participating in an approved continuing professional development program (CPD) including peer review. • Actively contributes to and leads research initiatives and input to scientific literature.

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