

Position Statement

Subject: The Role of the Pathologist (Extended Version)

Approval Date: 25 July 2001, October 2002, August 2005, November 2009,

November 2013

Review Date: November 2017

Reviewed By: BPPQ Number: 2/2001

Introduction

Pathologists, who are medical specialists, have considerable skills which enable them to contribute significantly to the provision of high quality efficient and effective health care. The skills they develop as a consequence of training first as a medical practitioner and then as a specialist pathologist allow them to understand clinical disease processes and their diagnosis.

The Royal College of Pathologists of Australasia has developed this position statement in order to provide information to health care providers, pathology trainees, government administrative bodies and the broader community on the skills and role of pathologists. In particular, this paper outlines how pathologists significantly contribute to the delivery of high quality appropriate medical care.

Pathology is the branch of medicine that is involved in understanding the cause and processes of disease. It does this by looking at changes in the tissues of the body, in blood and other body fluids. Some of these changes show the causes while others reflect the severity of the disease and are used to follow the effects of treatment.

Pathologists are specialist medical practitioners who diagnose and monitor disease. This means a pathologist will have completed a general medical degree followed by a period of time in a teaching hospital working as a clinical doctor. Following this, pathologists will have undergone a minimum of 5 years additional training in pathology and have passed a series of examinations to become a specialist.

The primary role of the pathologist is to perform or supervise tests on blood, other body fluids, body secretions and samples of tissue taken at surgery or as a part of a medical examination or autopsy. Where appropriate, the pathologist may render a clinical interpretation or consultation based on the results of the test.

In addition, some pathologists see patients and may be involved directly in the performance of procedures and the delivery of care.

At present, pathology practice has nine different areas of activity relating either to the methods used or the types of disease that they investigate. These are:

- Anatomical Pathology
- Forensic Pathology
- Chemical Pathology
- Genetic Pathology

- Haematology
- Immunopathology
- Microbiology
- General Pathology
- Clinical Pathology

The pathologist has the ultimate responsibility for the test results, the quality and safety standards of the laboratory, advising clinicians on the interpretation of test results and the further investigation of the patient.

All laboratories in Australasia must participate in recognised quality assurance activities and receive formal accreditation to ensure doctors and patients can be confident that test results are reliable. The pathologist is primarily responsible for ensuring accreditation requirements are met at all times. No other medical specialty has promoted and implemented quality assurance to the sophisticated standard that has been achieved in the area of laboratory medicine.

Pathologists and their training

As with much modern medical care, the practice of pathology is a team activity. On the one hand, there is a range of other members of laboratory team involved in providing pathology testing. On the other there are clinicians who are specialists in their own field of medicine who refer patients to pathologists for investigation and who treat patients guided by the pathologist's test results. Pathologists, scientists and technicians form an integrated laboratory team, but pathologists are also active in the support of doctors and other medical professionals in the clinical setting. Pathologists routinely supervise the laboratory to ensure pathology results are appropriate and of the highest standard, and provide interpretation and further advice on the clinical implications of these results. In other words pathologists, through their medical background and extensive training, understand the needs of other clinicians caring directly for patients and at the same time understand the exact requirements in the laboratory to produce accurate, appropriate and timely results.

The value of pathologists to modern medical practice is thus related both to the depth and breadth of their initial training, and to their subsequent continuing professional development.

Pathologists' training encompasses:

- Training as a doctor, giving a broad understanding of disease processes from a clinical system perspective
- Experience in treating patients and directly requesting pathology services
- The depth of a minimum five-year training program provided by the RCPA covering a range of scientific, technical and clinical aspects of pathology along with management, safety and quality issues for the laboratory

An important further area of experience that distinguishes a pathologist from an experienced well-trained scientist is that as a senior medical student, intern and resident medical officer, the pathologist has been a referrer to a pathology service and has been trained in responsibly requesting diagnostic pathology investigations. The pathologist, therefore, has first hand experience of what is required of a timely efficient and accurate service.

As a fully trained medical practitioner the pathologist has a clear appreciation of the medical significance of a patient's results and is able to assess which require urgent notification to the treating clinician. As a consequence of their combined training, the pathologist can also advise clinicians on the most appropriate investigations both for an individual patient and for a group of patients.

A doctor's training is broad. The medical student should receive a thorough grounding in the basic sciences of Anatomy, Physiology, Biochemistry, Microbiology, Pharmacology, Immunology and Anatomical Pathology, as much as in aspects within those subjects of relevance to clinical practice and clinical pathology including Chemical Pathology, Haematology, Microbiology, Immunopathology and Histopathology. In addition, as a student, intern and resident medical officer pathologists have had personal exposure to all aspects of clinical medicine including Internal Medicine, Surgery, Paediatrics, Obstetrics and Gynaecology, Psychiatry, Anaesthetics, Emergency Medicine and Intensive Care.

No other members of laboratory staff have the breadth of training or the clinical experience equivalent to that of the pathologist.

While medical specialists other than pathologists have the same broad medical training, they will not, as a rule, have the detailed and comprehensive understanding of laboratory medicine provided by training in pathology. In consequence, they may not have as extensive knowledge on how to competently interpret some complex patterns of test results and understand what further testing may be appropriate to help in diagnosing and monitoring patients' conditions. Assisting clinicians in the quality use of pathology by advising on the most effective and efficient program of tests is a major activity for many pathologists.

Finally, because of the breadth of their training, pathologists are better able to coordinate testing when more than one discipline is involved (either laboratory or clinical). E.g. Multi-discipline testing of cerebrospinal fluid obtained at lumbar puncture.

Specific roles of pathologists

Pathologists have a wide range of skills to fulfil the following roles:

1. Expert

- Expert in clinical interpretation of diagnostic tests and an understanding of the nature and causation of disease processes
- Expert in understanding the principles of analysis and technical details of tests used to diagnose and monitor disease
- Expert in the development and assessment of new testing methodologies
- Expert in knowing the appropriate test to be performed: in a specific clinical situation ("the right test at the right time for the right patient")
- Expert in interpretation of individual and groups of test results and the significance these results will have on patient management
- Expert in quality methodologies in the laboratory
- Expert in safety requirements for laboratories
- Expert in the effect of disease and therapy on laboratory tests.

2. Communicator

- Communicates with the clinicians treating patients at two levels:
 - Ability to understand the needs of the clinician and the patient from the perspective of delivery of pathology services
 - Ability to provide clear and unambiguous laboratory result interpretations to discuss the implications of testing and further methods of testing available to the treating clinicians to assist in the diagnosis and management of their patients

- Communicates with other staff in the laboratory about testing methodologies, quality control techniques and delineating protocols for the issuing of results
- Communicates with administrators and government as required to ensure laboratory medicine is given appropriate support
- Communicates with other clinical specialists and pathologists on issues of patient care and professional practice and in seeking and providing referral opinion on difficult cases
- Communicates with patients and the wider community on issues relating to laboratory medicine

3. Collaborator

- Consults effectively with other medical practitioners and health care professionals
- Contributes effectively to other inter-disciplinary team activities such as peer review sessions and other education and quality activities

4. Manager

- Supervises and manages a laboratory effectively
- Uses personal resources effectively to balance laboratory and clinical skills along with own individual learning needs
- Uses available health care resources appropriately and effectively
- Works effectively and efficiently in the provision of pathology services
- Provides clinical direction

5. Health Advocate

- Identifies the important determinants of health which affect patients
- Contributes to improving the health of patients and of the community
- Responds to issues of advocacy as appropriate

6. Scholar, Teacher and Researcher

- Develops and monitors a personal continuing education strategy
- Critically appraises sources of medical information and applies them in appropriate ways to the practice of pathology
- Develops training and education sessions for medical practitioners undergoing
 postgraduate training in pathology and in pathology for postgraduate trainees in
 the clinical specialities, medical students, laboratory scientific and technical staff
 and other health professionals.
- Contributes to the development of new knowledge and research

7. Professional

- Delivers the highest quality service with integrity and honesty
- Demonstrates appropriate personal and interpersonal behaviour
- Practices pathology ethically, consistent with the obligations of a medical specialist

Other attributes

Fellows have the advantage of a significant resource in the form of the RCPA, which provides expertise in training, education, quality assurance activities, benchmarking and ethical guidelines for the practice of pathology.

As well, the RCPA maintains dialogue with a number of medical organisations, other learned medical colleges and government on a wide range of issues, and in particular utilises the Canadian CAN MED system.