

## **Notice of Scopes of Practice and Prescribed Qualifications for the Practice of Medical Laboratory Science**

The Medical Science Council (“Council”) hereby gives notice that the following notice replaces the previous notice, published in the [New Zealand Gazette, 5 August 2010, No. 95, page 2539](#), issued by the Medical Laboratory Science Board.

This notice sets out the scopes of practice and qualifications for the practice of medical laboratory science in New Zealand as required by sections 11 and 12 of the Health Practitioners Competence Assurance Act 2003 (“Act”).

The scopes of practice and qualifications were agreed by the Council following consultations undertaken in 2013, 2014, and 2015.

This notice takes effect from **1 February 2016**.

### **The Practice of Medical Laboratory Science**

Medical Laboratory Science is the collection, receipt, preparation, investigation and laboratory analysis of samples of human biological material for the purpose of supporting patient diagnosis, management and treatment and for the maintenance of health and wellbeing.

Medical laboratory science encompasses a number of distinct disciplines including:

- Biochemistry
- Blood Donor Services
- Blood Transfusion Services
- Cytogenetics
- Cytology
- Embryology
- Haematology
- Histology
- Immunology/Virology
- Microbiology
- Molecular Diagnostics/Genetics
- Mortuary Practice
- Phlebotomy
- Point of Care Testing
- Specimen Services

Medical laboratory science also includes:

- Medical laboratory management
- Medical laboratory science research and development
- Medical laboratory science teaching
- Medical laboratory quality management

Medical laboratory science is practised in diagnostic medical laboratories within both the public and private health sectors, and blood donor facilities. In a small number of circumstances medical laboratory science practitioners may work in the health sector but outside of the diagnostic medical laboratory setting and will require appropriate mechanisms to be in place to support their ongoing practice and competence.

### **Scopes of Practice**

#### **Medical Laboratory Scientist (Provisional Registration)**

Medical Laboratory Scientists (“scientists”) collect, test and analyse human biological material to support patient diagnosis, management and treatment. They are skilled in the selection of appropriate samples and preparation for testing and analysis, and in the use of sophisticated laboratory equipment. Scientists analyse and interpret laboratory results and report their findings to referring clinicians. In certain circumstances they also advise of the

need for further relevant testing.

While scientists typically practise in one or two of the disciplines within the medical laboratory science profession, their breadth and depth of training may allow them to practise across all disciplines (with appropriate training and demonstrated competency). This is with the exception of scientists practising embryology: Due to the specialised nature of embryology-related qualifications, scientists practising in that discipline will typically have their practice limited to embryology.

Provisional registration is applied when a practitioner has appropriate qualifications but lacks the required relevant New Zealand experience to practise independently as a Medical Laboratory Scientist. Scientists who hold provisional registration are required to complete a period of supervised practice during which time they gain work-based knowledge and experience (including laboratory equipment and protocols). The period of supervised practice for each applicant is determined by the Council and will be no less than three months and no greater than two years. Supervision is provided by an approved registered Medical Laboratory Scientist or other registered health practitioner who holds a current practising certificate and has expertise and knowledge in the relevant discipline.

#### **Medical Laboratory Scientist (Full Registration)**

Medical Laboratory Scientists collect, test and analyse human biological material to support patient diagnosis, management and treatment. They are skilled in the selection of appropriate samples and preparation for testing and analysis, and in the use of sophisticated laboratory equipment. Scientists analyse and interpret laboratory results and report their findings to referring clinicians. In certain circumstances they also advise of the need for further relevant testing.

While scientists typically practise in one or two of the disciplines within the medical laboratory science profession, their breadth and depth of training may allow them to practise across all disciplines (with appropriate training and demonstrated competency). This is with the exception of scientists practising embryology: Due to the specialised nature of embryology-related qualifications, scientists practising in that discipline will typically have their practice limited to embryology.

Medical Laboratory Scientists who hold full registration are able to practise without supervision.

Medical Laboratory Scientists with full registration are responsible for directing the work of Medical Laboratory Technicians and Medical Laboratory Pre-Analytical Technicians. They may also be required to supervise medical laboratory science practitioners (all scopes of practice) throughout the latter's period of provisional registration.

#### **Medical Laboratory Technician (Provisional Registration)**

Medical Laboratory Technicians ("technicians") collect, receive, prepare, test and analyse human biological material to support patient diagnosis, management and treatment. Technicians select appropriate samples and prepare those for analysis using the appropriate laboratory equipment and testing protocols. While technicians may analyse and interpret laboratory results, they work within approved guidelines and protocols. Departures from defined parameters are to be referred to Medical Laboratory Scientists or other appropriately qualified and registered health practitioners prior to their release to referring clinicians. Technicians training includes a general overview of the practice of medical laboratory science and they are qualified to practise in a particular discipline.

Provisional registration is applied when a practitioner has appropriate qualifications but lacks the required relevant New Zealand experience to practise as a Medical Laboratory Technician. Technicians who hold provisional registration are required to complete a period of supervised practice during which time they gain work-based knowledge and experience (including laboratory equipment and protocols). The period of supervised practice for each applicant is determined by the Council and will be no less than three months and no greater than two years. Supervision is provided by an approved registered Medical Laboratory Scientist who holds a current practising certificate and has expertise and knowledge within the relevant discipline. Technicians practising in the mortuary discipline must be supervised by a registered pathologist (who holds a current practising certificate).

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Medical Laboratory Technicians who hold full registration can practise under the direction of a registered Medical Laboratory Scientist or other appropriately qualified and registered health practitioner who holds a current practising certificate and has expertise and knowledge in the relevant discipline. Within the parameters of "working under direction", the technician takes full responsibility for his/her practice, with general oversight

by the Medical Laboratory Scientist/other health practitioner providing direction who must be available for consultation if the technician needs assistance. The Medical Laboratory Scientist/other health practitioner providing direction must conduct periodic reviews of the technician's practice.

**Medical Laboratory Pre-Analytical Technician (Provisional Registration)**

Medical Laboratory Pre-Analytical Technicians ("pre-analytical technicians") practise in the areas of laboratory specimen collection (commonly referred to as phlebotomy), laboratory specimen preparation (commonly referred to as specimen services), and donor technology.

Pre-Analytical Technicians may practise under a number of workplace titles including but not limited to: Phlebotomist, Donor Technician, and Specimen Services Technician. The scope of practice of Medical Laboratory Pre-Analytical Technician (Provisional Registration) is inclusive of these workplace titles.

The practice of specimen collection involves pathology laboratory specimen collection by following established procedures. Specimen collection includes collection of blood, non-blood specimens, and some specialised tests and procedures performed at the point of contact with patients.

The practice of laboratory specimen preparation involves the receipt and preparation of samples prior to laboratory testing.

The practice of donor technology involves the collection of blood and blood component donations from blood donors within the New Zealand Blood Service.

Pre-Analytical Technicians can practise within either a single or a combination of all three areas of specimen collection, laboratory specimen preparation and donor technology, following successful completion of on-the-job training.

Provisional registration is applied when a practitioner has appropriate qualifications but lacks the required relevant New Zealand experience to practise as a Medical Laboratory Pre-Analytical Technician. Pre-Analytical Technicians who hold provisional registration are required to complete a period of supervised practice during which time they gain work-based knowledge and experience.

The period of supervised practice for each applicant is determined by the Council and will be no less than three months and no greater than two years.

Supervision of Pre-Analytical Technicians is provided by an approved registered health practitioner who holds a current practising certificate and has relevant expertise and knowledge in the collection and preparation of samples for medical laboratory testing and/or collection of blood and blood product donations.

**Medical Laboratory Pre-Analytical Technician (Full Registration)**

Medical Laboratory Pre-Analytical Technicians practise in the areas of laboratory specimen collection (commonly referred to as phlebotomy), laboratory specimen preparation (commonly referred to as specimen services), and donor technology.

Pre-Analytical Technicians may practise under a number of workplace titles including but not limited to: Phlebotomist, Donor Technician, and Specimen Services Technician. The scope of practice of Medical Laboratory Pre-Analytical Technician (Provisional Registration) is inclusive of these workplace titles.

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The practice of donor technology involves the collection of blood and blood component donations from blood donors within the New Zealand Blood Service.

Pre-Analytical Technicians can practise within either a single or a combination of all three practices of specimen collection, laboratory specimen preparation and donor technology, following successful completion of on-the-job training.

Pre-Analytical Technicians who hold full registration must work under the direction of a registered Medical Laboratory Scientist, a registered Medical Laboratory Technician, or other appropriately qualified and registered health practitioner who holds a current practising certificate and has relevant expertise and knowledge in the collection and preparation of samples for medical diagnostic testing and/or collection of blood and blood product donations.

Within the parameters of "working under direction", the Pre-Analytical Technician takes full responsibility for his/her practice, with general oversight by the registered health practitioner providing direction who must be available for consultation if the Pre-Analytical Technician needs assistance. The registered health practitioner providing direction must conduct periodic reviews of the Pre-Analytical Technician's practice.

**Prescribed Qualifications**

**Medical Laboratory Scientist (Provisional Registration)**

The Medical Laboratory Scientist must satisfy one of the following:

1. Hold a Bachelor of Medical Laboratory Science (BMLS) issued by a New Zealand university accredited by the Council;
2. Hold a Graduate Diploma in Science (Medical Laboratory Science) issued by a New Zealand university accredited by the Council;
3. Hold a relevant New Zealand or overseas post-graduate science degree;
4. Have completed a course of training, examinations and post-qualification medical laboratory science experience that has been assessed by the Council as being substantially equivalent to the New Zealand BMLS; or
5. Hold a relevant overseas biological science undergraduate degree that has been assessed by the Council as being substantially equivalent to the New Zealand BMLS.

**Medical Laboratory Scientist (Full Registration)**

The Medical Laboratory Scientist must satisfy the following:

1. Hold one of the qualifications as stated in clauses 1-5 under Medical Laboratory Scientist (Provisional Registration) **and** have completed the period of provisional registration as specified by the Council **and** received a satisfactory supervision report certifying his/her competence to practise unsupervised as a Medical Laboratory Scientist.

**Medical Laboratory Technician (Provisional Registration)**

The Medical Laboratory Technician must satisfy one of the following:

1. Have completed a minimum of six calendar months employment in an appropriately accredited New Zealand laboratory **and** passed the Qualified Medical Laboratory Technician (QMLT) examination as set by the New Zealand Institute of Medical Laboratory Science (NZIMLS);
2. Hold a New Zealand Bachelor of Science degree (or equivalent) with a major in a relevant biological science;
3. Hold a Level 6 New Zealand Certificate in Science in a relevant biological science; or
4. Hold an overseas biological science qualification that has been assessed by the Council as being substantially equivalent to the New Zealand QMLT Certificate.

**Medical Laboratory Technician (Full Registration)**

The Medical Laboratory Technician must satisfy one of the following:

1. Hold a QMLT Certificate issued by the NZIMLS **and** have completed the period of provisional registration as specified by the Council **and** received a satisfactory supervision report certifying his/her competence to practise medical laboratory science under the direction of a fully registered Medical Laboratory Scientist or other appropriately qualified registered health practitioner; or
2. Hold one of the qualifications as stated in clauses 2-4 under Medical Laboratory Technician (Provisional Registration) **and** have completed the period of provisional registration as specified by the Council **and** received a satisfactory supervision report certifying his/her competence to practise medical laboratory science under the direction of a fully registered Medical Laboratory Scientist or other appropriately qualified and registered health practitioner.

**Medical Laboratory Pre-Analytical Technician (Provisional Registration)**

The Medical Laboratory Pre-Analytical Technician must satisfy one of the following:

1. Have completed a minimum of six calendar months' employment in an appropriately accredited New Zealand laboratory and passed the Qualified Medical Laboratory Technician (QMLT) Phlebotomy examination, or the

- QMLT Donor Technology examination or the QMLT Specimen Services examination as set by the NZIMLS;
2. Hold a New Zealand Bachelor of Science degree (or equivalent) with a major in a relevant biological science;
  3. Hold an overseas biological science qualification that has been assessed by the Council as being substantially equivalent to either the QMLT Certificate Phlebotomy, the QMLT Certificate Donor Technology, or the QMLT Certificate Specimen Services issued by the NZIMLS;
  4. Hold a level six New Zealand Certificate in Science in a relevant biological science;
  5. Hold New Zealand or overseas registration as a registered nurse combined with post-qualification medical laboratory science experience in phlebotomy and/or donor technology that in the opinion of the Council is sufficient for provisional registration; or
  6. Have completed at least three years and up to four years (FTE) in specimen services within the last eight years. Registration through this pathway is only open until 31 July 2016. At the expiry of this pathway all non-registered Medical Laboratory Pre-Analytical Technicians will be required to provide evidence that they hold a relevant qualification as set out in clauses 1-5 above.

**Medical Laboratory Pre-Analytical Technician (Full Registration)**

The Medical Laboratory Pre-Analytical Technician must satisfy one of the following:

1. Be registered and hold a current practising certificate as a Medical Laboratory Technician (with a condition of practice being limited to either phlebotomy or donor technology) as at 1 February 2016;
2. Hold a QMLT Specimen Services Certificate as at 1 February 2016;
3. Hold a QMLT Phlebotomy Certificate, or a QMLT Donor Technology Certificate, or a QMLT Specimen Services Certificate as issued by the NZIMLS **and** have completed the period of provisional registration as specified by the Council **and** received a satisfactory supervision report certifying his/her competence to practise pre-analytical medical laboratory science under the direction of a fully registered Medical Laboratory Scientist, a fully registered Medical Laboratory Technician, or other appropriately qualified and registered health practitioner;
4. Hold one of the qualifications as stated in clauses 2-5 under Medical Laboratory Pre-Analytical Technician (Provisional Registration) **and** have completed the period of provisional registration as specified by the Council **and** received a satisfactory supervision report certifying his/her competence to practise pre-analytical medical laboratory science under the direction of a fully registered Medical Laboratory Scientist, a fully registered Medical Laboratory Technician, or other appropriately qualified and registered health practitioner; or
5. Have completed at least four years (FTE) in specimen services within the last eight years. Registration through this pathway is only open until 31 July 2016. At the expiry of this pathway all Medical Laboratory Pre-Analytical Technicians will be required to provide evidence that they hold one of the other qualifications as set out in clauses 1-4 above.

Dated at Wellington this 7th day of December 2015.

MARY DOYLE, Registrar, Medical Sciences Council of New Zealand.