



Ag Rialáil Gairmithe Sláinte
agus Cúraim Shóisialaigh

Regulating Health +
Social Care Professionals

Medical Scientists Registration Board Standards of Proficiency for Medical Scientists

Bord Clárchúcháin na nEolaithe Míochaine
Medical Scientists Registration Board

Introduction

The Health and Social Care Professionals Act, 2005 (HSCP Act 2005) provides for the establishment of Registration Boards, to establish and maintain registers for a range of health and social care professions. Entry onto to the register allows a person to use the title of that profession. This system of statutory registration is fundamental to the delivery of quality and accountability in the provision of professional services. The objective of the statutory registration system is to protect, guide and inform the public by ensuring that health and social care professionals are properly regulated and qualified for the job whether they work in the public or private sectors or are self-employed.

The objective of the Registration Board is to protect the public by fostering high standards of professional conduct and professional education, training and competence among registrants of that profession (HSCP Act, 2005: Section 27(1)(as amended). To this end the Act makes provision for:

- › The approval of education and training programmes (HSCP Act, 2005: Section 48)
- › Monitoring the continuing suitability of education and training programmes (HSCP Act, 2005: Section 49).

Regulatory approval of a programme by a Registration Board is distinct from academic accreditation. Academic accreditation is based on the suitability of a programme for the award of a qualification. Regulatory approval is a judgment as to whether a programme associated with a given qualification consistently and effectively prepares graduates for entry into register of that profession. To receive approval a programme must demonstrate that it meets the requirements of the Registration Board. There are two types of requirements:

Criteria for education and training programmes

- › there are two sets of criteria; core and profession specific
- › the criteria specify the requirements for the design, organisation and management of a programme to ensure that it can consistently and effectively produce graduates who meet the standards of proficiency

Standards of proficiency

- › there is one set of standards which are profession specific
- › the standards of proficiency specify the threshold skills and abilities required for entry to the register

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Standards of Proficiency

The standards of proficiency detail the skills and abilities that individuals must possess in order to enter the register. They are the threshold standards deemed necessary by the registration board at the level of entry to practice. They are not standards for practice after entry to the register. Rather they offer a snapshot of the standards at entry to the register

This document sets out the standards of proficiency for the Medical Scientists under five domains:

1. Professional Autonomy and Accountability
2. Communication, Collaborative Practice and Teamworking
3. Safety and Quality
4. Professional Development
5. Professional Knowledge and Skills

Criteria for Education and Training Programmes

The criteria for education and training programmes are used to ensure that a programme has a system in place to consistently and effectively produce graduates who meet the standards of proficiency for entry to the register. There are two sets of criteria: core and profession specific. Together, the core and profession specific criteria form the Registration Board's requirements for the way education and training programmes are designed, organised and managed.

Approval and Monitoring of Programmes

Approved programmes are those which meet all of the Registration Board's criteria and ensure that all students who successfully complete the programme meet all of the required standards of proficiency.

A programme which meets the required criteria and standards of proficiency for entry to the register is granted approval and the qualification associated with the programme is listed on the Approved Qualifications Bye-Law as one of the entry criteria to the register. Graduates possessing an approved qualification are eligible to apply for entry to the profession's register. The programme will then be subject to monitoring.

Failure to demonstrate that the programme meets the criteria for programmes and the standards of proficiency, either during approval or subsequent monitoring, will mean that the programme is not approved. Students graduating from a non-approved programme are not eligible to apply for entry to the profession's register.

Supporting CORU documentation

This document should be considered in conjunction with the following documentation:

- > *Profession Specific Criteria for Education and Training Programmes*
- > *Profession Specific Criteria for Education and Training Programmes for your profession - Guidelines for Programme Providers*
- > *Standards of Proficiency for your profession*
- > *Code of Professional Conduct and Ethics for your profession*
- > *Approval and Monitoring Guide*
- > *Programme Information Guidelines for Education/Training Providers*

1. Professional Autonomy and Accountability

Graduates will:

1. Be able to practise safely and effectively within the legal, ethical and practice boundaries of the profession
2. Be able to identify the limits of their practice and know when to seek advice and additional expertise or refer to another professional
3. Be able to act in the best interest of service users at all times with due regard to their will and preference
4. Be aware of current guidelines and legislation relating to candour and disclosure
5. Respect and uphold the rights, dignity and autonomy of every service user including their role in the diagnostic, therapeutic and social care process
6. Be able to exercise a professional duty of care
7. Understand what is required of them by the Registration Board and be familiar with the provisions of the current Code of Professional Conduct and Ethics for the profession issued by the Registration Board
8. Recognise the importance of practising in a non-discriminatory, culturally sensitive way and acknowledge and respect the differences in beliefs and cultural practices of individuals or groups
9. Understand the role of policies and systems to protect the health, safety, welfare, equality and dignity of service users, staff and volunteers
10. Understand and respect the confidentiality of service users and use information only for the purpose for which it was given
11. Understand confidentiality in the context of the team setting
12. Understand and be able to apply the limits of the concept of confidentiality particularly in relation to child protection, vulnerable adults and elder abuse
13. Be aware of current data protection, freedom of information and other legislation relevant to the profession and be able to access new and emerging legislation
14. Be able to recognise and manage the potential conflict that can arise between confidentiality and whistle-blowing
15. Understand the importance of and, if relevant, be able to gain informed consent to carry out assessments, research or audit; be able to document evidence that consent has been obtained and be able to verify documented evidence that consent has been obtained
16. Be aware of current legislation and guidelines related to informed consent for individuals with lack of capacity
17. Recognise personal responsibility and professional accountability for one's actions and be able to justify professional decisions made
18. Be able to take responsibility for managing one's own workload as appropriate
19. Understand the principles of professional decision-making and be able to make informed decisions within the context of competing demands including those relating to ethical conflicts and available resources
20. Be aware of and be able to take responsibility for managing one's own health and wellbeing

2. Communication, Collaborative Practice and Teamworking

Graduates will:

1. Be able to communicate results in a way that can be understood by the service user¹ and others where appropriate including medical, health and social care professionals. This may include diagnosis, prognosis, monitoring and treatment options
2. Be able to modify and adapt communication methods and styles, including verbal and non-verbal methods to suit the individual service users considering issues of language, culture, beliefs and health and/or social care needs
3. Be able to summarise and present complex scientific ideas and findings of research and audit in an appropriate form
4. Recognise service users as active participants in their health and social care and be able to support service users in communicating their health and/or social care needs, choices and concerns, where appropriate
5. Understand the need to empower service users to manage their well-being where possible and recognise the need to provide advice to the service user on self-treatment, where appropriate
6. Be able to recognise when the services of a professional translator are required
7. Be able to produce clear, concise, accurate and objective documentation
8. Be able to apply digital literacy skills and communication technologies appropriate to the profession
9. Be aware of and comply with local/national documentation standards including, for example, terminology, signature requirements
10. Be able to express professional, informed and considered opinions to service users, health professionals and others e.g. carers, relatives in varied practice settings and contexts and within the boundaries of confidentiality
11. Understand and be able to recognise the impact of effective leadership and management on practice
12. Understand and be able to discuss the principles of effective conflict management
13. Understand the need to work in partnership with service users, relatives/carers or medical and health and social care professionals where appropriate in planning and evaluating goals, treatments and interventions and be aware of the concepts of power and authority in relationships with service users
14. Understand the need to build and sustain professional relationships as both an independent practitioner and collaboratively as a member of a team
15. Understand the role and impact of effective interdisciplinary team working in meeting service user needs and be able to effectively contribute to decision-making within a team setting
16. Understand the role of relationships with professional colleagues and other workers in service delivery and the need to create professional relationships based on mutual respect and trust.

¹ service user is the term used to describe a person who uses, requests or is affected by the services of registrants

3. Safety and Quality

Graduates will:

1. Be able to gather all appropriate background information relevant to the service user's health and where appropriate social care needs
2. Be able to justify the selection of and implement appropriate assessment techniques and be able to undertake and record a thorough, sensitive and detailed assessment
3. Be able to determine the appropriate tests/assessments required and undertake/arrange these tests
4. Be able to analyse and critically evaluate the information collected in the assessment process
5. Be able to demonstrate sound logical reasoning and problem solving skills to determine appropriate problem lists, action plans and goals
6. Be able to demonstrate an evidence-informed approach to professional decision-making, adapting practice to the needs of the service user and draw on appropriate knowledge and skills in order to make professional judgments
7. Be able to prioritise and maintain the safety of both service users and those involved in their care
8. Be able to evaluate intervention plans using appropriate tools and recognised performance/outcome measures along with service user responses to the interventions. Revise the plans as necessary and where appropriate, in conjunction with the service user
9. Understand the need to monitor, evaluate and/or audit the quality of practice and be able to critically evaluate one's own practice against evidence-based standards and implement improvements based on the findings of these audits and reviews
10. Be able to recognise important risk factors and implement risk management strategies; be able to make reasoned decisions and/or provide guidance to others to initiate, continue, modify or cease interventions, techniques or courses of action and record decisions and concerns
11. Understand and be able to apply the principles of quality assurance
12. Understand the principles of quality improvement and quality management systems
13. Be able to carry out and document a risk analysis and implement effective risk management controls and strategies; be able to clearly communicate any identified risk, adverse events or near misses in line with current legislation/guidelines
14. Be able to comply with relevant and current health and safety legislation and guidelines
15. Be able to establish safe environments for practice which minimises risks to service users, those treating them and others, including the use of infection prevention and control strategies
16. Understand the relevant biological, chemical, and physical hazard groups and associated risk containment and be able to apply appropriate standards and procedures
17. Understand how to manage safe and ethical collection, handling, retention, biobanking and disposal of cells, tissue genetic and microbial material

4. Professional Development

Graduates will:

1. Be able to engage in and take responsibility for professional development
2. Understand the need to demonstrate evidence of ongoing continuing professional development and education, be aware of professional regulation requirements and understand the benefits of continuing professional development to professional practice
3. Be able to evaluate and reflect critically on one's own professional practice to identify learning and development needs; be able to select appropriate learning activities to achieve professional development goals and be able to integrate new knowledge and skills into professional practice
4. Understand and recognise the impact of personal values and life experience on professional practice and be able to manage this impact appropriately
5. Understand the importance of and be able to seek professional development, supervision, feedback and peer review opportunities in order to continuously improve practice
6. Understand the importance of participation in performance management activities for effective service delivery.

5. Professional Knowledge and Skills

Graduates will:

1. Know, understand and apply the key concepts of the domains of knowledge which are relevant to the profession
2. Demonstrate a critical understanding of biological sciences, human development and normal functioning of the human body and the related physiological, immunological, biochemical and molecular sciences
3. Understand the integrated role of cellular pathology, clinical biochemistry, haematology, clinical and transplant immunology, medical microbiology and blood transfusion in the diagnosis, treatment and management of disease and disease surveillance and be able to apply to practice
4. Understand the role and importance of clinical governance to service user care and the role of laboratory results in clinical decision making as part of a multi-disciplinary team
5. Demonstrate a knowledge of, and be able to apply, best practice guidelines for delivery and operation of medical laboratory services, and be able to advise and guide professional colleagues in best practices for optimal utilisation of pathology services
6. Demonstrate an understanding of the integration and interpretation of laboratory-derived diagnostic parameters in the clinical assessment, monitoring and treatment of the service user and be able to apply to practice
7. Be able to identify the clinical context that a test and/or intervention will inform and be able to advise professional colleagues on pre-analytical requirements, as relevant to requirements of the medical science analyses

8. Demonstrate knowledge of blood and blood product provision and management and be able to identify and resolve cell and tissue incompatibilities, anomalies and adverse responses
9. Demonstrate knowledge of clinical biochemistry and its role in the investigation and monitoring of disease including endocrine and metabolic disorders and have knowledge of best practice guidelines for investigation and result interpretation
10. Demonstrate knowledge of haematology and the role of this laboratory in the investigation and monitoring of disease including anaemias, leukaemias and coagulation disorders and have knowledge of best practice guidelines for investigation and result interpretation
11. Demonstrate knowledge of and detection methods for infectious diseases, antimicrobial susceptibility, infection control and surveillance
12. Be able to identify and contain pathogenic and drug-resistant organisms and respond appropriately to infection outbreaks
13. Demonstrate knowledge of tumour pathogenesis and biology and the role and clinical application of cytology, histology, biomarker immunophenotyping and genetic analyses in diagnosis, therapy and staging of neoplasia, and be able to apply to practice
14. Demonstrate knowledge of clinical and transplant immunology and the laboratory investigation and monitoring of autoimmune, allergic and immunodeficiency diseases
15. Be able to select, apply and interpret molecular diagnostics as applied to the disciplines of medical science
16. Be able to analyse, interpret and communicate results of laboratory investigations, and advise on further testing or critical interventions required
17. Demonstrate an understanding of the overall operation and quality management of the laboratory service and its analytical processes, through pre-analytical, analytical, and post-analytical processes
18. Demonstrate safe and effective implementation of practical, technical and interpretive skills
19. Know, understand and apply the principles of scientific enquiry, including the evaluation of treatment/intervention efficacy, the research process and evidence-informed practice relevant to medical science
20. Understand and be able to use current core techniques, automation, laboratory information systems, and equipment employed in the practice of medical science
21. Be able to manage, source, prepare and verify reagents, controls and equipment utilised in the clinical laboratory
22. Demonstrate a detailed knowledge of the pre-analytical variables affecting clinical samples and their suitability for analysis, and the impact of incorrect and adverse sample handling, storage and preservation on the interpretation of results
23. Understand the requirements of method evaluation in the context of diagnosis, prognosis, monitoring and treatment and be able to use that information appropriately
24. Be able to monitor and interpret quality, standards, precision and accuracy of results, and effectively troubleshoot and resolve abnormalities, anomalies and variations in results

25. Be able to identify, process, store, analyse and interpret results from multiple types of clinical and biological specimens
26. Be able to contribute to the development of guidelines and provide advice regarding the collection, preservation, analysis, transport, storage, retention and disposal of clinical samples and related materials for service users
27. Demonstrate knowledge of and be able to apply appropriate acceptance and rejection criteria; and be able to apply correct procedures for samples with inappropriate labelling, storage and preservation
28. Demonstrate knowledge of and be able to apply rapid investigations, timely communication of results and advise on further testing
29. Be able to recognise, manage and contain biohazards encountered in clinical laboratories, including biological, chemical and physical hazards, and apply appropriate safety legislation, guidelines, monitoring and risk assessment procedures to ensure safety of service users, colleagues, the public and the environment
30. Be able to critically review, research and audit current practices and be able to identify and implement new developments in medical science
31. Demonstrate skills in evidence-informed practice, including translation of theory, concepts and methods to professional practice
32. Demonstrate ability to participate in clinical, academic or practice-based research
33. Be able to develop and conduct medical science practice based research within appropriate ethical and legal frameworks and be able to communicate the findings of research to a variety of audiences
34. Be able to critically review scientific and medical reports and research, be able to assess emerging scientific information, and be able to communicate those findings to peers
34. Know the basic principles of effective teaching and learning, mentoring and supervision
36. Be able to identify and understand the impact of organisational, community and societal structures, systems and culture on health and social care provision
37. Demonstrate an understanding of the relevant social and behavioural sciences and other related sciences, together with a knowledge of health and wellbeing, disease, disorder and dysfunction.

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