

## Membership in Prosthodontics (MPros RCSEd)

### Blueprint

This Blueprint of the examination for the specialty Membership in Prosthodontics of the Royal College of Surgeons of Edinburgh is based on the curriculum produced by the SAC in Restorative Dentistry.

There are Two components of the examination

1. Written Papers (MSA questions) in Prosthodontics
2. Structured Oral Examination on a series of clinical scenarios in the discipline of Prosthodontics

1. Examination and Diagnosis	Carry out a thorough and appropriate assessment and examination of the patient, their dental, pulpal, periradicular, periodontal, oral and peri-oral tissues in relation to the presenting complaints of the patient, arriving at an appropriate diagnosis of the condition from the information provided and examination and investigations undertaken;  Clearly appreciate the conditions confounding diagnosis of prosthodontic problems	Written Paper	Structured Oral on Clinical Scenarios	
	<b>The Specialist is able to do:</b>	Complete a thorough examination of the patient's oral mucosa and related structures, periodontium, dental hard tissues		
		Make an appropriate diagnosis	X	X
		take in to account any systemic factors likely to have a bearing <b>on the above</b>	X	X
		Complete a thorough examination of any existing prosthesis and related tissue and structures and be able to evaluate the biological and aesthetic quality of the prosthesis		
		Use all appropriate investigations (e.g. radiographic, sensitivity and vitality tests, haematological and microbiological tests and appropriately articulated study casts) to diagnose oral problems		
	<b>The Specialist should have knowledge of:</b>	Relevant biology, anatomy, physiology of normal and abnormal intra- and extra-oral structures and tissues	X	X
		Pain physiology and clinical presentations of relevant oro-facial conditions;	X	X
		Sensitivity and specificity of diagnostic tests;	X	X

		Dental, medical and social history factors likely to be relevant to the presenting condition and its previous management;	X	X	
		The influence of peri-oral structures on the appearance of the patient and their potential influence on function and stability of the dentition or any prostheses.	X	X	
<b>2. Development of Treatment Strategies and plans in Prosthodontics</b>	<b>Devise strategies and plans based on the likely prognosis and outcomes of the various treatment options, relating this to prognosis without treatment and establishing a resultant priority and sequence of treatment while considering the relevant ethical and fiscal issues. Develop a treatment strategy in conjunction with the patient producing a plan or plans according to their needs and preferences including future need for further corrective or supportive therapy.</b>		Written paper	Structured Oral on Clinical Scenarios	
	<b>The Specialist is able to do:</b>	Weigh options against each other and succinctly describe the pros and cons of each;	X	X	
		Communicate the facts in terms appropriate to the intellectual capacity of the patient;			
		Communicate clearly and succinctly the impact of oral status and proposed treatment on quality of life to the patient;			
		Advise on the possible and probable outcomes of the treatment options, as well as the need for future supportive care, prevention and maintenance;	X	X	
		Discuss the impact on proposed treatment of constraints of the political and financial systems;	X	X	
		Delineate strategies and plans according to the skills of other clinicians involved in the care of the patient;	X	X	
		Explain, motivate engage, assure and assess the patient's participation and compliance in their own oral care.			
		<b>The Specialist will have knowledge of:</b>	Dental, medical and social history factors relevant to proposed management	X	X
			Dental materials, equipment and technical requirements to achieve each treatment goal	X	X
			Current best evidence for effectiveness of various treatment modalities	X	X
			Prognostic and risk factors for various modalities	X	X

<b>3. Health Promotion and Prevention of Diseases, including Infection Control</b>	<p><b>Advise each patient on appropriate preventive methods especially in relation to oral hygiene, smoking cessation and home use of preventive chemical agents.</b></p> <p><b>Be able to use and deploy all methods to prevent occurrence and recurrence of dental diseases in individual patients. Develop a care strategy in conjunction with the patient, producing a plan according to their needs and preferences.</b></p> <p><b>Advise other health care professionals on methods and technologies to prevent infection during dental treatment procedures, between patients and staff and during transport of materials and prostheses between the laboratory and the clinic</b></p>		Written paper	Structured Oral on Clinical Scenarios
	<b>The Specialist is able to do:</b>	Communicate in lay terms appropriate to the intellectual capacity of the patient		
		Communicate with the patient on the impact of their oral status and the proposed advice on their quality of life		
		Advise on the possible outcomes of non-compliance and the need for supportive care, prevention and maintenance	<b>X</b>	<b>X</b>
	<b>The Specialist will have knowledge of:</b>	Use all methods and technologies to prevent infection during treatment procedures, between patients and staff and during transport of materials and prostheses between the laboratory and the clinic.		
		Relevant biology, anatomy, physiology, pathology and microbiology	<b>X</b>	<b>X</b>
		Infection control measures in dentistry and the value of appropriate vaccinations for self and other staff;	<b>X</b>	<b>X</b>
		Dental materials, equipment and technical requirements to achieve this.	<b>X</b>	<b>X</b>
<b>4. Interdisciplinary Interfaces</b>	<p><b>To understand the importance and implications of the inter-relationship between Prosthodontics and other clinical disciplines. Carry out periodontics and endodontics at the level of a general dental practitioner;</b></p> <p><b>Assess the periodontic and endodontic status of teeth relevant to their potential use in support of a prosthesis</b></p>		Written paper	Structured Oral on Clinical Scenarios
	<b>The Specialist is able to do:</b>	Use appropriate knowledge and clinical techniques to diagnose related clinical problems from first principles	<b>X</b>	<b>X</b>
		Co-ordinate management of patients requiring endodontic and/or periodontal treatment before, during and after prosthodontic treatment;	<b>X</b>	<b>X</b>
		Demonstrate treatment planning and management skills in dealing with medically compromised and special needs patients	<b>X</b>	<b>X</b>

	<b>The Specialist will have knowledge of:</b>	Demonstrate treatment planning and practical skills necessary for restoring endodontically treated teeth using a range of techniques;	X	X
		Demonstrate the ability to assess when the input of specialist colleagues is required in the planning and execution of integrated care	X	X
		Apply knowledge of occlusion in the assessment and management of teeth.	X	X
		Communicate clear treatment plans to colleagues including other dental specialists, primary care practitioners and DCPs, where appropriate		
		Relevant biology, anatomy, physiology, pathology and microbiology, including appropriate antimicrobial prescription where necessary	X	X
		The evidence and mechanisms by which oral microorganisms may be dispersed and cause disease in distant sites;	X	X
		The factors which make a tooth unrestorable;	X	X
		The adverse effects of treatment procedures on tooth structure	X	X
		The principles and practice of restoring root canal treated teeth	X	X
		Occlusion and its influence on periodontic practice;	X	X
		Soft tissue management in restorative practice;	X	X
		The pathogenesis, diagnosis and management of periodontal diseases;	X	X
		The biological rationale and indications for dental implants;	X	X
		The procedures for placement, restoration and maintenance of dental implants;	X	X
	Dental materials, equipment and technical requirements to provide relevant treatment	X	X	
<b>5. Fixed Prosthodontics</b>	<b>Plan and provide all types of fixed dental prostheses for appropriate clinical circumstances. Understand and use the appropriate techniques, materials and technologies available for all types of fixed dental prostheses. Understand the laboratory requirements for restorations and show effective communication with laboratory technicians provide treatment plans for primary care practitioners in relation to provision of fixed prosthodontic treatment. Monitor and evaluate the effectiveness of fixed prosthodontic treatment</b>	Written paper	Structured Oral on Clinical Scenarios	
	<b>The Specialist is able to do:</b>	Show specialist level skill in the planning of fixed prosthodontics	X	X
		Show competency at a specialist level for preparation of teeth for direct and indirect restorations		
		Provide appropriate provisional restorations for intermediate stages of treatment		
		Manage soft tissues atraumatically so as to obtain accurate impressions or		

		otherwise assist in provision of excellent restorations		
		Select the appropriate material for direct and indirect restorations	X	X
		Obtain accurate impressions for manufacture of all types of laboratory restorations and prostheses		
		Accurately record the occlusion including competency in using facebow and articulation and understand when these techniques are applicable		
		Fit restorations using appropriate cements ensuring that appearance, occlusion and function are in harmony with the remaining dentition and patient's wishes		
	<b>The Specialist will have knowledge of:</b>	Relevant biology, anatomy, physiology, pathology, microbiology and technical requirements in provision of such prostheses	X	X
		Current and seminal literature on indications for, success / failure criteria and biomechanical implications of such restorations	X	X
		Dental materials, equipment and techniques to provide relevant treatment and the response of the dental tissues to this treatment	X	X
<b>6. Removable Prosthodontics</b>	<b>Plan and provide dentures with the appropriate clinical and technical procedures. Understand the materials and technologies available for all types of removable dental prostheses. Understand the laboratory requirements for restorations and show effective communication with laboratory technicians. Undertake procedures necessary to extend lifespan of the prostheses, provide treatment plans for primary care practitioners in relation to provision of removable prosthodontic treatment. Monitor and evaluate the effectiveness of prosthodontic treatment</b>		Written paper	Structured Oral on Clinical Scenarios
	<b>The Specialist is able to do:</b>	Show a specialist level skill in the planning of removable prosthodontics	X	X
		Carry out appropriate tooth preparations or pre-prosthetic tissue management to obtain accurate impressions or otherwise assist in provision of excellent restorations		
		Record accurately the appropriate occlusal relationship, including the use of facebows or equivalent technologies where appropriate		
	<b>The Specialist will have knowledge of:</b>	Relevant biology, anatomy, physiology, pathology, microbiology and technical requirements in provision of such prostheses	X	X
		Current and seminal literature on indications for, success / failure criteria and biomechanical implications of such restorations	X	X
		Dental materials, equipment and techniques to provide relevant treatment and the response of the dental tissues to this treatment	X	X

7. Implants	Formulate appropriate treatment plans for implant retained or supported fixed or removable prostheses, while working as part of a multidisciplinary team to achieve optimum outcomes for the patient. To coordinate a treatment plan, with other relevant specialists, aimed at replacing teeth with implants. Plan appropriate radiographic images. Complete surgical and radiographic guides to aid planning of number, position and angulation of fixtures. Construct and deliver provisional and definitive implant-retained or -supported prostheses. Use appropriate clinical skills to restore implant fixtures. Monitor and evaluate the effectiveness of implant rehabilitation		Written paper	Structured Oral on Clinical Scenarios
	<b>The Specialist is able to do:</b>	Show a specialist skill in the choice and execution of appropriate techniques for all stages of the planned treatment in conjunction with other specialists/ dental care professionals as a multidisciplinary team when managing the patient	X	X
	<b>The Specialist will have knowledge of:</b>	Relevant biology, anatomy, physiology, pathology, microbiology and technical requirements in provision of dental implants	X	X
		Current and seminal literature on indications for, success / failure criteria and biological implications of provision of dental implants	X	X
		Surgical techniques for implant placement, healing and exposure	X	X
		Biological benefits of and indications for their use	X	X
		Principles and practice of prevention of diseases relating to implant structure	X	X
8. Temporomandibular Disorders	Diagnose oral parafunction and other factors in the development of dysfunction of mandibular movements and the TMJs. Provide behavioural advice for the management of these problems. Construct appropriate occlusal appliances for the diagnosis and treatment of these problems, communicate and work with colleagues on the multidisciplinary management of these problems. Monitor and evaluate the effectiveness of treatment regimes		Written paper	Structured Oral on Clinical Scenarios
	<b>The Specialist is able to do:</b>	Communicate effectively and empathically with patients to identify potential aetiological factors and signs and symptoms of temporomandibular disorders		
		Show a high degree of skill in the choice and execution of appropriate techniques for treatment in conjunction with other specialists/ dental care professionals managing the patient	X	X
	<b>The Specialist will have knowledge of:</b>	Relevant biology, anatomy, physiology, pathology and radiology in provision of care and advice for temporomandibular disorders	X	X
		Current and seminal literature on diagnosis and management of these disorders	X	X
		Different treatments available for TMJ disorders and recognize limitations (jaw exercises, interocclusal appliances, registration techniques, occlusal adjustment, conformative and reorganised approaches to oral reconstruction, psychological approaches	X	X

<b>9. Tooth Wear (Tooth Surface Loss)</b>	<b>Take an appropriate history to discover the aetiological factors involved in tooth wear. Understand and use the appropriate techniques, materials and technologies available to manage tooth wear. Understand the laboratory requirements for restorations and show effective communication with laboratory technicians. Provide treatment plans for primary care practitioners in the management of tooth wear. Monitor and evaluate the effectiveness of treatment in tooth wear</b>		<b>Written paper</b>	<b>Structured Oral on Clinical Scenarios</b>
	<b>The Specialist is able to do:</b>	Show a specialist level skill in the planning of patients with tooth wear	<b>X</b>	<b>X</b>
		Show competency at a specialist level for preparation of teeth for direct and indirect restorations		
		Select the appropriate material(s) for direct and indirect restorations	<b>X</b>	<b>X</b>
		Accurately record the occlusion including competency in using facebow and articulation and understand when these techniques are applicable		
		Provide appropriate provisional restorations		
	<b>The Specialist will have knowledge of:</b>	Fit restorations using appropriate adhesives or cements ensuring that appearance, occlusion and function are in harmony with the remaining dentition and patient's wishes	<b>Written paper</b>	<b>Structured Oral on Clinical Scenarios</b>
		Relevant anatomy, physiology, pathology, microbiology and technical requirements in the management of tooth wear	<b>X</b>	<b>X</b>
		Current and seminal literature on the aetiology and preventive management of tooth wear	<b>X</b>	<b>X</b>
		Dental materials, equipment and techniques to provide relevant treatment and the response of the dental tissues to this treatment	<b>X</b>	<b>X</b>
<b>10. Aesthetic Dentistry</b>	<b>Plan and provide all types of dental procedures for managing changes in tooth colour and morphology. Understand and use the appropriate techniques, materials and technologies available for altering tooth colour and proportion. Understand the laboratory requirements for restorations and show effective communication with laboratory technicians. Provide treatment plans for primary care practitioners in relation to smile design. Monitor and evaluate the effectiveness of treatment</b>			
	<b>The Specialist is able to do:</b>	Show a specialist level skill in the planning of smile design	<b>X</b>	<b>X</b>
		Show competency at a specialist level for preparation of teeth for direct and indirect restorations		
		Select the appropriate material for direct and indirect restorations	<b>X</b>	<b>X</b>

	<b>The Specialist will have knowledge of:</b>	Provide appropriate provisional restorations for intermediate stages of treatment		
		Fit restorations using appropriate adhesives or cements ensuring that appearance, occlusion and function are in harmony with the remaining dentition and patient's wishes		
		Relevant dental anatomy and tooth proportion involved in smile design	X	X
		Tooth whitening techniques for vital and non-vital teeth	X	X
		Use of micro- and macro-abrasion	X	X
		Use of gingival masks to manage gingival recession	X	X
		Use of direct composite layering techniques for managing alterations in tooth colour and morphology	X	X
		Use of veneers for managing alterations in tooth colour and morphology	X	X
<b>11. Pain Control, Analgesia, Sedation and Anaesthesia</b>	<b>Provide appropriate pain and anxiety control for patients attending for non-surgical and surgical treatment on a planned or emergency basis. Diagnose and provide appropriate emergency dental treatment for the relief of acute pain. Advise on appropriate perioperative analgesia. Recognise the need for interdisciplinary care in the management of pain and anxiety conditions</b>		Written paper	Structured Oral on Clinical Scenarios
	<b>The Specialist is able to do:</b>	Confidently and efficiently assess patients presenting with painful conditions.	X	X
		Appropriately manage the use of all standard local anaesthetic and analgesic regimes		
	<b>The Specialist will have knowledge of:</b>	Identify patients requiring specialist or interdisciplinary care for the management of non-dental and chronic pain conditions	X	X
		The basic and clinical science of acute and chronic peri-oral pain conditions	X	X
		The mechanisms of failed local anaesthesia	X	X
		Primary and supplementary techniques for local anaesthesia of the pulp	X	X
		Procedures for the emergency management of acute dental pain and sepsis	X	X
		Pharmacology and therapeutics related to analgesic use	X	X
		Features of non-dental and chronic pain conditions	X	X

12. Management & Administration	Plan and discuss management of a dental clinic/practice. Deal with complaints / grievances especially from patients. Deal effectively with other members of the dental team. Manage time effectively and adopt strategies for coping with stress. Demonstrate a working knowledge of employment and health and safety at work regulations. Discuss best practices in management and administration and contrast these with those in the training institution. Manage people in accordance with the law on equality and diversity		Written paper	Structured Oral on Clinical Scenarios
	<p><b>The Specialist is able to do:</b></p> <p><b>The Specialist will have knowledge of:</b></p>	<p>Utilise appropriate communication / presentation / negotiation / counselling/ appraisal / mentoring skills</p> <p>Communicate effectively and empathically with colleagues at all levels and to utilise appropriate negotiating and listening skills to achieve the desired result</p> <p>Treat patients, carers, colleagues and other members of the workplace team fairly and in line with the law and promote equal opportunities for all</p> <p>Handle complaints sympathetically and efficiently</p> <p>Manage time and delegate as appropriate</p> <p>Use appropriate computer hardware and software to facilitate administration and clinical practice</p> <p>Local and national NHS and corporate organisational and administrative structures relevant to one's sphere of practice</p> <p>Appropriate Health and safety (including cross-infection control) and employment / equality and diversity legislation</p> <p>Appropriate employment legislation</p> <p>The law pertaining to equality and diversity</p> <p>IT knowledge equivalent to the ECDL</p>		
13. Clinical Governance	Understand the principles of clinical effectiveness and audit both locally and nationally and contribute where possible. Demonstrate awareness of epidemiologically-based needs assessments and systematic reviews of research evidence. Contribute to peer review and the appraisal process. Carry out critical/adverse incident reports and demonstrate an awareness of the ways in which this process can be used to improve clinical care. Show in-depth awareness of clinician's medico-legal responsibilities particularly those related to the speciality of Prosthodontics. Understand quality assurance in the delivery of clinical care. Show knowledge of equality of access issues for minority groups requiring clinical care. Show an understanding of medical records administration		Written paper	Structured Oral on Clinical Scenarios
	<p><b>The Specialist is able to do:</b></p>	<p>Utilise appropriate communication / presentation skills</p> <p>Show the necessary skills of self-reflection and self-appraisal used to identify</p>		

	<b>The Specialist will have knowledge of:</b>	continuing professional development needs		
		Utilise critical appraisal skills and be able to apply to research evidence	X	X
		Organise and undertake a clinical audit project including implementation of outcomes and re-audit		
		Produce and update patient information material		
		Evidence based clinical practice including cost effectiveness.	X	X
		The development and application of clinical guidelines and standards.	X	X
		The process of risk assessment as relevant to clinical practice		
		multi-disciplinary clinical care pathways and appropriate integration of Prosthodontics	X	X
		The process of revalidation and the assessment of individual clinical performance.		
		The role of the GDC/GMC, Royal Colleges, Specialist Societies and Universities in the process of professional self-regulation.		
		Procedures for reporting concerns over the level of competency and fitness to practice of professional colleagues.		
<b>14. Teaching and Communication</b>	<b>Communicate effectively both orally and in writing with peers, practitioners, staff, patients and the public. Develop and present instructional sessions. Differentiate between appraisal and assessment and have a working knowledge of the advantages and disadvantages of each. Inspire, motivate and engage students and colleagues. Recognise the role of both verbal and non-verbal aspects of communication.</b>		Written paper	Structured Oral on Clinical Scenarios
	<b>The Specialist is able to do:</b> <b>The Specialist will have knowledge of:</b>	Utilise appropriate communication / presentation skills.		
		The responsibilities of a clinical teacher and service lead as a professional role model		
		The features of effective formative feedback		
<b>15. Clinical Imaging</b>	<b>Demonstrate an understanding and competence in intra-oral radiography. Demonstrate competence in intra-oral photography</b>		Written paper	Structured Oral on Clinical Scenarios
	<b>The Specialist is able to do:</b>	Interpreting radiographic images and write an accurate radiographic report	X	X
		Produce a standard set of photographs illustrating progress through a course of treatment		
	<b>The Specialist will have knowledge of:</b>	The relevant biology and anatomy of the oro-facial region necessary for the interpretation of radiographic images	X	X

		The principles of radiographic quality assurance and the practice of applied quality control	X	X
<b>16. Research</b>	<b>Understand research methodology, including study design, research governance, data management and report preparation. Understand different hierarchies of evidence. Understand the process of peer review in scientific publications</b>		Written paper	Structured Oral on Clinical Scenarios
	<b>The Specialist will have knowledge of:</b>	Different types of research investigation	X	X
		The role of governance in research		
		The hierarchy of research evidence	X	X
		The process of peer review in appraising grant submissions and scientific manuscripts		

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