Restorative Dentistry
Specialty Training Curriculum

Approved by GDC Registrar: 15 December 2022

Foreword

This specialty curriculum sets out the specialist knowledge, skills, and capabilities for the attainment of the award of the Certificate of Completion of Specialty Training (CCST) and admission onto the General Dental Council's (GDC) Specialist List for Restorative Dentistry.

It also demonstrates how Restorative Dentistry meets the GDC's Principles and Criteria for Specialist Listing. This standards-driven, transparent approach protects patients, the public, employers, and others through preparation of dentists to deliver high quality, safe, patient, and public-centred care as specialists within the UK healthcare system.

The curriculum has been written by the Restorative Dentistry Specialty Advisory Committee (SAC), a constituent committee of the Advisory Board for Specialty Training in Dentistry (ABSTD). The SAC is responsible for and owns the specialty-specific content and learning outcomes of the relevant specialty curriculum. They are also responsible for the choice of assessment of both the generic and the specialty content of the curriculum.

The delivery of the curriculum via training and assessment providers is quality assured by the GDC using the Standards for Specialty Education. Successful completion of the relevant specialty training and assessment will lead to the award of a CCST and successful candidates will be eligible to apply for inclusion on the relevant GDC specialist list and be eligible to use the title of "Specialist".

This curriculum will take effect for new trainees from September 2024.

Acknowledgements

The Restorative curriculum was written by the Curriculum Working Group drawn from the membership of Restorative Dentistry SAC and one representative from the Specialist Registrars in Restorative Dentistry Group (SRRDG):

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The wider membership of Restorative Dentistry SAC was instrumental in the production of the curricula for Restorative Dentistry, Endodontics, Periodontics and Prosthodontics. Many thanks to all members who provided expertise and representation from the associated UK specialist societies, UK Royal Colleges and Committee of Postgraduate Dental Deans and Directors (COPDEND).

Section A: Purpose statement for Restorative Dentistry

1. Introduction to the Restorative Dentistry Specialty

Restorative Dentistry is specialist dental care for patients requiring management of developmental conditions including hypodontia, cleft lip and palate and amelogenesis imperfecta and acquired conditions such as head and neck cancer, complex dental trauma and advanced tooth wear. Therefore, Restorative Dentistry may involve close interaction with colleagues from a number of other dental and medical specialties.

Specialist Restorative Dentistry is for patients who have complex dental problems, requiring multidisciplinary specialist dental care. It involves replacing missing teeth, repairing damaged teeth and gums, and extends to restoration and rehabilitation of the whole mouth. It is informed by research and requires the skills and knowledge from/shared with the related dental specialties of Prosthodontics (tooth restoration and replacement), Periodontics (treatment of gum conditions) and Endodontics (root canal treatment). The complexity and features of the presenting condition will determine which of those specialist skills are required.

The patient may present at any age, requiring either a first course of treatment or additional treatment for previous restorations that are now deteriorating.

Specialist restorative dentistry services, throughout the UK are predominantly delivered by a team led by consultants in restorative dentistry with the help of prosthodontic, endodontic and periodontic specialists, usually in a hospital setting. Some services are provided by restorative dentistry specialists, working in general or specialist dental practice or in community practice settings.

In general, dental practice and community dental settings, routine care provided by the dental team includes providing preventative advice, replacing missing teeth, repairing damaged teeth and treating dental conditions such as caries, periodontal and endodontic disease. These patients do not routinely require consultant-led, specialist restorative dentistry management. However, a number of patients seen in general and community dental practice, may have dental conditions that are more challenging to diagnose and manage. The diagnosis, planning and treatment of these conditions often requires a consultant-led restorative dentistry team, ideally within one of the developing managed clinical networks or potentially, from a Specialist in Restorative Dentistry working in a general dental or a community practice setting. The patients would then receive dental care from clinicians with suitable training and experience, as appropriate for their dental condition. In this way, the general dental practitioner receives support, to delivered shared care for their patients.

Specialists in Restorative Dentistry are also often involved with NHS management, clinical research, and delivery of undergraduate and postgraduate dental education.

Entry to specialty training is competitive, through a national recruitment process and generally takes five years full time. Those entering specialty training in restorative dentistry will have completed a broad education within or equivalent to Foundation Training, have gained additional experience within restorative dentistry, ideally within a training or education setting and have obtained a Fellowship from a Royal College of Surgeons (RCS) and the Royal College of Physicians and Surgeons of Glasgow (RCPSG).

2. Entry to the training programme

Entry to a specialty training programme is through competitive entry and the recruitment process will ensure that applicants are assessed against the essential and desirable criteria contained within the person specification.

A specialty trainee must be registered with the GDC. It is desirable that during previous early years training the individual has experienced work in as many sectors of dental provision as possible. Evidence of excellence in terms of attributes such as motivation, career commitment will be expected, as will an ability to demonstrate the competences and capabilities required for entry to specialist training, either by successfully completing a period of agreed dental foundation/vocational and core training or by demonstrating that those competencies have been gained in another way.

3. Outline of the training programme

It is anticipated that five years (full time) would normally be required to satisfactorily complete the Restorative Dentistry curriculum to the required depth and breadth. However, the Annual Review of Competence Progression (ARCP) process allows for adjustments to be made to this where appropriate.

Training programmes should include suitable placements/rotational arrangements to cover all the necessary areas of the curriculum and may include an appropriate balance between dental teaching hospitals/schools, district general hospitals and specialist clinical environments, such that each trainee gains the breadth of training required for satisfactory completion of the curriculum.

The training programmes are usually based around a training centre, normally comprising a dental teaching hospital/school together with other associated, recognised and validated training environments.

Many trainees in restorative dentistry undertake academic training, either within the National Institute for Health and Care Research (NIHR) academic clinical fellow posts or by other routes. The proportion of time in training used to undertake research will be reviewed at ARCP. Please refer to the Dental Gold Guide.

4. Training specific to Restorative Dentistry

The distinctive identity of Restorative Dentistry and the associated command of the evidence base that supports it provides an academic and clinical focus for undergraduate and postgraduate education, research, and scholarship. This supports advances in patient care through providing a framework for quality improvement and discovery, including extending the evidence base supporting restorative dentistry to support to fundamental science, translational research and clinical trials. The specialty, along with the cognate three specialist societies, the British Society for Restorative Dentistry (BSRD), Restorative Dentistry UK (RD-UK) and the Specialty Registrars in Restorative Dentistry (SRRDG), act as a focus and stimulus for further development in the UK, including through support and development of specialty trainees.

Training in Restorative Dentistry normally takes five years to complete. Trainees must spend time in training working in all specialties of Restorative Dentistry, including Endodontics, Prosthodontics and Periodontics in delivering integrated restorative dental care of patients, gaining experience in delivery of integrated care of patients ensuring the curriculum requirements are met. The cornerstone of training is devoted to integrating specialist training in restorative dentistry.

It is anticipated that trainees should be ready and eligible to sit the Intercollegiate Specialty Fellowship Examination (ISFE) administered through the UK or Ireland Royal Colleges as stipulated within the training programme, the final elements of the examination being sat toward the end of the final year of training. Trainees may also seek of their own choice to undertake the Fellowship examinations in the three single specialties of Endodontics, Periodontics or Prosthodontics (F(Endo) College; F(Perio) College; F(Pros) College) or equivalent accredited specialty summative assessments, to demonstrate specialist level knowledge, understanding and skills in those distinct specialties.

5. Evidence and assessment

The purpose of assessment is to reassure the trainee, their employer and the public that they have achieved the required outcomes associated with their chosen specialty.

Higher Level Outcomes (HLO) should not be demonstrated through singular assessments. A programmatic assessment approach should be used in the workplace in which there are multiple assessment points over time, undertaken by multiple assessors with a range of methodologies and sufficient evidence to ensure reliability.

The overall approach to assessment and provision of evidence of attainment in the curriculum is one of flexibility, as far as that is possible. Trainees should focus on 'quality over quantity', utilising assessments which are valid and appropriate to evidence the HLOs.

The principle of Workplace Based Assessments (WPBA) is that trainees are assessed on work that they undertake on a day-to-day basis and that the assessment is integrated into their daily work. The curriculum does not stipulate minimum numbers of assessments for WPBAs.

When there is a requirement by specialty, this can be found in the specialty assessment strategy at the Royal College of Surgeons' Higher Specialist Training Documents and Curricula.

A full list of WPBAs can be found in the glossary of assessment terms. WPBA tools will include but are not limited to:

- clinical examination exercise
- case-based discussions
- direct observation of procedural skills
- procedure-based assessments
- multisource feedback
- patient/user feedback.

Training courses may be an effective way of gaining the underpinning knowledge and skills for some of the HLOs. However, attendance at a course will not normally be sufficient evidence of competence; assessors will be looking for evidence of competence and how the learning is applied in practice.

Continuous assessment throughout training will be undertaken by the educational supervisor, clinical supervisors and other educators involved in training, using a range of WPBAs. All assessments completed in the workplace have a formative function, with trainees given contemporaneous feedback on their performance, and these all contribute to the decision about a trainee's progress. The assessment process should be initiated by the trainee, who should identify opportunities for assessment throughout their training.

In sections C and D, a list of sources of evidence are provided against each of the HLOs. These are provided as a list of possible sources, and there is no expectation that the full list of sources would be used as evidence of attainment of a particular HLO. Some of the assessments in section D will be mandatory (for example Royal College examinations), but other forms of assessment should be tailored to the training programme/local circumstances/stage of training and these should be agreed with the training provider(s) as part of the RCP process and the education supervisor(s) as part of a learning agreement. All mandatory assessments are clearly indicated in section D.

In section C no individual assessment is mandated for all specialties. Further guidance will be provided in the specialty assessment strategy which highlight how the HLOs are best achieved within each programme. This will normally be through application in practice rather than summative assessment, although this may vary by specialty dependent on the range of workplace assessments.

An assessment blueprint is provided within sections C and D which illustrates the WPBAs that can be used to assess the HLOs.

Progress through training is assessed through the RCP process, and training is completed when all the curriculum requirements are satisfied and HLOs have been evidenced.

6. Academic Training

Trainees may combine specialty training and academic development with an intention of becoming a clinical academic. The same curriculum outcomes for clinical training are required to be achieved as for any other trainee. Consideration of the required training time will need to be assessed depending on the proposed timetable.

Section B: Delivering the curriculum against the GDC Standards for Specialty Education

The GDC sets Standards for Specialty Dental Education and assures that training commissioners and examination providers (collectively referred to as "providers") meet these standards.

The standards relate to:

- patient protection (training commissioners only)
- quality evaluation and review
- specialty trainee assessment.

As part of the quality assurance process, the GDC will ensure that training and assessment is designed, delivered and reviewed within a quality framework, that patient safety is at the heart of programme delivery and that assessments are reliable, valid and clearly mapped to the specialty curriculum learning outcomes. Reports from GDC quality assurance activity are available on the dental specialty training webpage.

Section C – Generic professional content of the specialty curriculum

Domain 1: Professional knowledge and management

Outcome	Examples
1.1 Demonstrate they can communicate effectively and respectfully with patients and others and with colleagues	Effectively and respectfully communicate with patients, relatives, carers, guardians by: • consulting with patients and carers in a sensitive and compassionate way • giving clear and accurate verbal/oral information with information the recipient wants and needs and avoiding unnecessary jargon • giving clear, accurate and legible written information in a form the recipient can understand, with information the recipient wants and needs and avoiding unnecessary jargon • making accurate and contemporaneous records of observations or findings in English • making information accessible and inclusive by adapting written and verbal communication and tone and adopting appropriate techniques and communication aids/resources to suit others as appropriate • assessing their communication support needs and implementing appropriate methods to reduce communication barriers. For example, by using email, video conferencing tools, or any other communication tools suitable for individuals with disabilities or impairments and specifically with patients, relatives, carers, guardians, and others • demonstrating ability to communicate effectively and sensitively when delivering bad news • recognising own limitations and works within limits of capabilities • demonstrating competency in obtaining informed consent. Effectively and respectfully communicate with colleagues by: • promoting and effectively participating in multidisciplinary, interprofessional team working • communicating effectively with referrers regarding patient consultation and treatment

Outcome	Examples
	• ensuring continuity and coordination of patient care and/or management of any ongoing care through the appropriate transfer of information demonstrating safe and effective handover, both verbally and in writing.
1.2 Demonstrate that they can make decisions, while maintaining professional behaviour and judgement	They should do this by: • maintaining appropriate situational awareness and sensitivity to the impact of their comments and behaviours on others (emotional intelligence) • influencing, negotiating, continuously re-assessing priorities and effectively managing complex, dynamic situations and exploring and resolving diagnostic and management challenges.
1.3 Demonstrate they can deal with complexity and uncertainty	They should do this by: • showing appropriate professional behaviour and judgement in clinical and non-clinical contexts • demonstrating resilience • managing the uncertainty of success or failure • adapting management proposals and strategies to take account of patients' informed preferences, co-morbidities and long-term conditions • supporting and empowering patient self-care and respecting patient autonomy • recognising and managing dental emergencies.
1.4 Recognise their legal responsibilities and be able to apply in practice any legislative requirements relevant to their jurisdiction of practice	They should do this by: • understanding, and adhering to, the principles of continuing professional development • understanding relevant guidance and law including that relating to equality and diversity, employment, health and safety, data protection etc., with an appreciation that legislation may differ between England, Scotland, Wales and Northern Ireland

Outcome	Examples
	• understanding information governance, data protection and storage and the legal parameters relating to digital and written records in the context of their workplace • recognising the need to ensure that publicly funded health services are delivered equitably.
1.5 Recognise and work within the context of a health service and healthcare systems	They should do this by: • understanding the structure and organisation of the wider health and social care systems, including how services are commissioned, funded and audited • understanding that systems may differ between England, Scotland, Wales and Northern Ireland • demonstrating an appreciation of how services are deemed to be clinically effective, cost effective or restricted such as on a 'named patient' basis • understanding how resources are managed, being aware of competing demands and the importance of avoiding waste • having an awareness of how services are held publicly accountable through political and governance systems, public scrutiny and judicial review • recognising and working towards achieving carbon neutrality within the context of understanding the importance of sustainability in design and delivery of services and demonstrating application of these principles in practice.
1.6 Recognise and demonstrate their role in health promotion, disease prevention and dental population health	They should do this by: • understanding the factors affecting health inequalities as they relate to the practise of dentistry • being willing and able to work to reduce health inequalities relevant to the practise of dentistry • understanding national and local population oral health needs • understanding the relationship of the physical, economic and cultural environment to

Outcome	Examples
	health and its impact on patients and patient outcomes • understanding the role of national and local public health organisations and systems and how the role of a dental specialist supports these organisations in improving the public's dental health.

1.7 Recognise the importance of, and demonstrate the ability to practise, person-centred care (PCC), including shared decision making (SDM)	They should do this by:
	
	• understanding that patients are partners with their health care providers
	   o providing balanced information about treatment options
	   o eliciting the patient's concerns, values and preferences
	   o offering support to the patient to help them to reach a decision and making that final decision together
	• being able to articulate personal values and principles yet show understanding of how these may be different to those of others – patients and colleagues
	• valuing, respecting and promoting equality and diversity.

Domain 2: Leadership and teamworking

Outcome	Examples
2.1 Demonstrate understanding of the importance of personal qualities within leadership (focus on self)	They should do this by: • understanding a range of leadership principles and styles and being able to apply and adapt them in practice in a way that is relevant to the work context • understanding team dynamics, behaviours and personalities with insight and awareness of own behaviours and their effect on others. Please also see the NHS Leadership Academy's Healthcare Leadership Model.

Outcome	Examples
2.2 Demonstrate understanding of the importance of working with others both within their specialty and the wider healthcare system (working with others)	They should do this by: • being able to seek out the views of others in maintaining and improving specialist services • being able to effectively lead/chair multidisciplinary and interprofessional meetings • undertaking safe and effective patient handover, both verbally and in writing • demonstrating an understanding of leadership responsibilities as a clinician and why effective clinical leadership is central to safe and effective care • showing awareness of clinical leadership responsibilities and why effective clinical leadership is central to safe and effective care • being confident about challenging and influencing colleagues and the orthodoxy where appropriate • being able to lead the process of exploring and resolving complex diagnostic and management challenges • leading the formal appraisal process for their teams.
2.3 Demonstrate the importance of planning and an understanding of managing dental specialist services	They should do this by: • understanding and being able to work effectively within the relevant NHS funding, structures and pathways in their local healthcare system in relation to specialist dental services and the healthcare services with which they interface • understanding how to identify, mitigate and manage risk, including understanding local and national risk reporting structures.

Domain 3: Patient safety, quality improvement and governance

Outcome	Examples
3.1 Recognise a professional and statutory duty of candour and act accordingly within established governance, legal and regulatory systems, including equality and diversity	They should do this by: • understanding how to raise safety concerns appropriately through local and national clinical governance systems • understanding how to raise concerns where there is an issue with patient safety, dignity or quality of care • demonstrating a commitment to learn from patient safety investigations and complaints • understanding the process of root cause analysis for investigating and learning from patient safety incidents • demonstrating honesty and candour regarding errors in patient care • demonstrating familiarity with relevant patient safety directives • understanding the importance of sharing and implementing good practice.
3.2 Recognise the impact of human factors on the individual, teams, organisations and systems	They should do this by: • understanding the effects of teamwork, tasks, equipment, workspace, culture and organisation on human behaviour and abilities and the application of that knowledge in clinical settings • protecting patients and colleagues from risks posed by problems with personal health, conduct or performance • demonstrating an understanding of the learning by reporting and sharing these experiences locally and widely.
3.3 Design and employ quality improvement measures that improve clinical effectiveness,	They should do this by: • using a range of quality improvement methodologies to improve dental services and improve patient care

Outcome	Examples
patient safety, care or experience	- demonstrating an understanding of the importance of patient and public involvement in decision-making when changes to services are proposed - engaging with all relevant stakeholders in the planning and implementation of change - working with others to effectively measure and evaluate the impact of quality improvement interventions and their impacts on the wider systems - demonstrating knowledge of additional challenges related to oral health inequalities in minority ethnic populations and other groups with protected characteristics in the UK - assessing and recognising impact of cultural and language and other barriers and strategies for oral health promotion.
3.4 Act to safeguard patients, particularly children, other young people and vulnerable adults in accordance with the requirements of appropriate equality and diversity legislation	They should do this by: - recognising the individual oral health needs of patients with physical, sensory, intellectual, mental, medical, emotional or social impairments or disabilities, or with a combination of these factors - understanding the responsibilities and needs of carers as they play an increasing role in healthcare provision - recognising and taking responsibility for safeguarding vulnerable patients - understanding when it is appropriate and safe to share information on a patient.
3.5 Immediate life support	they should do this by: demonstrating competency and undertake annual training in immediate life support.

Domain 4: Personal education, training, research and scholarship

Outcome	Examples
4.1 Demonstrate that they can plan and deliver effective education and training activities	They should do this by: • providing safe clinical supervision of learners • providing effective educational supervision of learners, including giving supportive, developmental feedback to learners • seeking and respecting patients' wishes about whether they wish to participate in the education and training of learners • evaluating and reflecting on the effectiveness of their educational activities and changes to improve practice • promoting and participating in interprofessional learning (including with members of the wider healthcare team in dentistry and in other healthcare professions) • demonstrating an ability to use a range of teaching methods for individual and group teaching, including face to face and online teaching and the use of simulation and other technology enhanced learning methods.
4.2 Demonstrate that they can critically appraise and interpret scientific/academic literature and keep up to date with current and best practice	They should do this by: • demonstrating an ability to critically appraise evidence • interpreting and communicating research evidence and data to support patients and colleagues in making informed decisions about treatment • appreciating the role of both qualitative and quantitative methodological approaches in scientific enquiry • demonstrating an understanding of the strengths and limitations of different approaches to gathering research evidence • conducting literature searches and reviews to inform their professional practice • locating and using clinical guidelines appropriately • demonstrating an understanding of stratified risk and personalised care.

Outcome	Examples
4.3 Understand what is required to participate in research	They should do this by: • demonstrating understanding of clinical research design, ethics processes and research governance (GCP).

Generic learning outcomes assessments blueprint

Domain 1: Professional knowledge and management

HLO	Patient feedback / MSF	WPBAs	Reflective reports	Training course or qualification (inc. PG degrees)	Critical incidents or complaint reviews	Research or QI / audit projects	Logbook	Specialty specific summative assessment	Other (see list 1-9 below)	CS / ES reports
1.1 Demonstrate they can communicate effectively and respectfully with patients and others and with colleagues	*	*	*	*			*	*	*1	*
1.2 Demonstrate that they can make decisions, while maintaining professional behaviour and judgement	*	*	*	*	*			*		*
1.3 Demonstrate they can deal with complexity and uncertainty	*	*	*	*	*			*		
1.4 Recognise their legal responsibilities and be able to apply in practice any legislative requirements relevant to their jurisdiction of practice				*		*		*	*9	

HLO	Patient feedback / MSF	WPBAs	Reflective reports	Training course or qualification (inc. PG degrees)	Critical incidents or complaint reviews	Research or QI / audit projects	Logbook	Specialty specific summative assessment	Other (see list 1-9 below)	CS / ES reports
1.5 Recognise and work within the context of a health service and healthcare systems, understanding that systems may differ between England, Scotland, Wales and Northern Ireland		*	*	*		*		*		
1.6 Recognise and demonstrate their role in health promotion, disease prevention and population health	*	*				*		*		
1.7 Recognise the importance of, and demonstrate the ability to practise, person-centred care (PCC), including shared decision making (SDM)	*	*	*			*		*		*

Domain 2: Leadership and teamworking

HLO	Patient feedback / MSF	WPBAs	Reflective reports	Training course or qualification (inc. PG degrees)	Critical incidents or complaint reviews	Research or QI / audit projects	Logbook	Specialty specific summative assessment	Other (see list 1-9 below)	CS / ES reports
2.1 Demonstrate understanding of the importance of personal qualities within leadership (focus on self)		*	*	*		*		*		*
2.2 Demonstrate understanding of the importance of working with others both within their specialty and the wider healthcare system (working with others)	*	*	*	*	*	*		*		
2.3 Demonstrate the importance of planning and an understanding of managing dental specialist services		*	*	*	*	*		*	*9	*

Domain 3: Patient safety, quality improvement and governance

HLO	Patient feedback / MSF	WPBAs	Reflective reports	Training course or qualification (inc. PG degrees)	Critical incidents or complaint reviews	Research or QI / audit projects	Logbook	Specialty specific summative assessment	Other (see list 1-9 below)	CS / ES reports
3.1 Recognise a professional and statutory duty of candour and act accordingly within established governance, legal and regulatory systems, including equality and diversity	*	*		*		*		*	*2	*
3.2 Recognise the impact of human factors on the individual, teams, organisations and systems		*	*	*					*2	
3.3 Design and employ quality improvement measures that improve clinical effectiveness, patient safety, care or experience	*	*		*	*	*		*	*2	

HLO	Patient feedback / MSF	WPBAs	Reflective reports	Training course or qualification (inc. PG degrees)	Critical incidents or complaint reviews	Research or QI / audit projects	Logbook	Specialty specific summative assessment	Other (see list 1-9 below)	CS / ES reports
3.4 Act to safeguard patients, particularly children, other young people and vulnerable adults in accordance with the requirements of appropriate equality and diversity legislation		*	*	*			*	*	*2	
3.5 Immediate life support				*						

Domain 4: Personal education, training, research and scholarship

HLO	Patient feedback / MSF	WPBAs	Reflective reports	Training course or qualification (inc. PG degrees)	Critical incidents or complaint reviews	Research or QI / audit projects	Logbook	Specialty specific summative assessment	Other (see list 1-9 below)	CS / ES reports
4.1 Demonstrate that they can plan and deliver effective education and training activities		*	*	*				*	*2,3,4,5	

HLO	Patient feedback / MSF	WPBAs	Reflective reports	Training course or qualification (inc. PG degrees)	Critical incidents or complaint reviews	Research or QI / audit projects	Logbook	Specialty specific summative assessment	Other (see list 1-9 below)	CS / ES reports
4.2 Demonstrate that they can critically appraise and interpret scientific / academic literature and keep up to date with current and best practice		*		*		*		*	*6,7,8	
4.3 Understand what is required to participate in research		*		*		*		*	*2,6,7	

Other methods of assessment are:

1. Case presentation
2. CPD
3. Education feedback
4. Conference presentation
5. Observation of teaching
6. Journal clubs
7. Publications
8. Developing protocols
9. Objective structured assessments.

Section D - Specialty-specific content for Restorative Dentistry

Domain 5: Key Clinical Skills

Outcome	Examples
5.1 Demonstrate competence in the examination and diagnosis for patients who have complex conditions affecting their mouth. To use a combination of their specialist clinical skills (endodontics, periodontics and prosthodontics) in the assessment of the patient	Demonstrating detailed knowledge and understanding of: • relevant biology, anatomy, physiology of normal and abnormal intra- and extra-oral structures and tissues • dental, medical and social history factors likely to be relevant to the presenting condition and its previous management • the influence of peri- oral structures on the appearance of the patient and their potential influence on function and stability of prostheses. Demonstrating skills to complete a thorough extra-oral and intra-oral examination of the patient and their: • oral mucosa and related structures • periodontium • dental hard tissues • pulpal and peri-radicular tissues • occlusion • TMJs • relevant prosthesis and related tissues and structures and be able to evaluate the biological and aesthetic quality of the prosthesis and be aware of any systemic factors likely to have a bearing on the above. Using and interpreting correctly all appropriate investigations (e.g. radiographic, sensibility tests, haematological and microbiological tests and appropriately articulated study casts) to diagnose oral problems: • to make a diagnosis utilising appropriate classifications • to devise an appropriate evidenced based care plan

Outcome	Examples
	• to communicate with the patient with clarity and to the level appropriate for the intellectual capacity of the patient • to have a patient focused approach to care planning and treatment.
5.2 Demonstrates that they actively participate in the multidisciplinary management of patients, alongside a number of medical and specialist colleagues	Demonstrating knowledge of: • their role and responsibilities and those of other specialist colleagues within a multidisciplinary team (MDT) • the clinical and academic basis of the other specialties, but not necessarily to a specialist level, other than for the restorative dentistry specialties. Demonstrating skills of: • leadership of the MDT, with appropriate administrative involvement • leadership and contribution to the MDT clinical discussions, decision-making processes and patient management, to ensure the patient • the appropriate treatment being received for their condition.
5.3 Demonstrates competence to manage the needs of a patient presenting with hypodontia, by membership of a multidisciplinary team	Demonstrating knowledge and understanding of: • the evidence base required for understanding hypodontia • the aspects of care provided by the other MDT specialists and the general dental practitioner (GDP) • appropriate scheduling of each stage of treatment for hypodontia, and of the expected duration of the overall care plan • the life-long preventive and clinical management of these patients. Being able to: • assess, diagnose and plan care

Outcome	Examples
	• deliver treatment, including the restoration of teeth and supporting structures, including endodontic and periodontal treatment and the prosthetic replacement of missing teeth, which may include implant restorations • communicate effectively with GDP colleagues and patients • deliver specialist aspects of care in a shared care model.
5.4 Demonstrates competence to manage the needs of a patient, presenting with head and neck cancer, by membership of a multidisciplinary team	Demonstrating knowledge and understanding of: • the evidence base required for understanding head and neck cancer • the aspects of care provided by the other MDT specialists and the GDP • appropriate scheduling of each stage of care for head and neck cancers and of the expected duration of the overall care plan • the life-long preventive and clinical management of these patients. Being able to: • carry out pre-surgical and pre-oncological assessments and care to establish dental health with the understanding of the potential effects cancer surgery, radiotherapy and chemotherapy • understand the needs of the patients and future post cancer dental treatment needs • communicate the care plan to the patient with clarity and empathy. plan and undertake surgical treatment • manage the early and delayed effects of oncology treatment • undertake intra-oral and extra-oral rehabilitation, including restoration and replacement of the dental and facial structures affected by treatment, including the restoration of teeth and supporting structures. this will involve endodontic and periodontal treatment and the prosthetic replacement of missing teeth and oral structures, including using implant restorations and obturators • communicate effectively with GDP colleagues and patients • deliver specialist aspects of treatment, in a shared care model.

Outcome	Examples
5.5 Demonstrates competence to manage the needs of a patient, presenting with cleft lip and palate or other development or acquired cranio-facial conditions, by membership of a multidisciplinary team	Demonstrating knowledge and understanding of: • the evidence base required for understanding cleft lip and palate and other cranio-facial conditions • the aspects of treatment provided by the other MDT specialists and the GDP • appropriate scheduling of each stage of treatment for cranio-facial conditions, and of the expected duration of the overall care plan • the life-long preventive and clinical management of these patient. Being able to: • manage intra-oral and extra-oral rehabilitation, including the restoration of teeth and supporting structures, including endodontic and periodontal treatment and the prosthetic replacement of missing teeth and oral structures, including using implant restorations, oral and nasal obturators and speech devices • communicate effectively with GDP colleagues and patients • deliver specialist aspects of treatment, in a shared care model.
5.6 Demonstrates competence to manage the needs of a patient, presenting with dento-facial trauma, by membership of a multidisciplinary team	Demonstrating knowledge and understanding of: • the evidence base required for understanding dento-facial trauma • the aspects of treatment provided by the other MDT specialists and the GDP • appropriate scheduling of each stage of treatment for dento-facial trauma and of the expected duration of the overall care plan • the life-long preventive and clinical management of these patients. Demonstrating skills in: • assessment, diagnosis, care planning and recognising the importance of providing the appropriate interventions for each presentation of dento-facial trauma

Outcome	Examples
	• restoration of teeth and supporting structures, including endodontic and periodontal treatment and the prosthetic replacement of missing teeth and oral structures, including using implant restorations • supporting the GDP in managing the patient's condition.
5.7 Demonstrates competence to manage the needs of a patient presenting with developmental disorders of the teeth, such as amelogenesis imperfecta and dentinogenesis imperfecta, by membership of a multidisciplinary team	Demonstrating knowledge and understanding of: • the evidence base required for understanding developmental disorders of the teeth • the aspects of treatment provided by the other MDT specialists and the GDP appropriate scheduling of each stage of treatment for developmental disorders and of the expected duration of the overall care plan • supporting the GDP in the life-long preventive and clinical management of these patients. Demonstrating skills in: • assessment, diagnosis and care planning • restoration of teeth and supporting structures, including endodontic and periodontal treatment and the prosthetic replacement of missing teeth and oral structures, including using implant restorations • supporting the GDP in managing the patient's condition.
5.8 Demonstrates competence to provide dental treatment for the conservation of teeth, including the management of the worn dentition and endodontically treated teeth	Demonstrating knowledge and understanding of: • the evidence base required for understanding conservation of teeth, including caries management dental materials, diagnostic and prognostic indicators • the aspects of treatment which can be provided by the GDP. Demonstrating skills in: • the life-long preventive and clinical management of these patients' tooth preparation and tooth restoration techniques involving direct and indirect restorations and associated laboratory and digital technologies

Outcome	Examples
	- communicate effectively with GDP colleagues and patients - deliver specialist aspects of treatment, in a shared care model.
5.9 Demonstrates that they are comprehensively trained to manage the needs of a patient presenting with endodontic conditions, in line with the curriculum for specialist training in endodontics	History taking and examination: - demonstrates competence to carry out history taking and a thorough examination of the patient. Clinical investigating and imaging: - demonstrates an understanding and competence in relevant investigations and imaging. Diagnosing and developing treatment strategies: - demonstrates competence to synthesise information and arrive at the relevant diagnosis. They should be able to devise evidence-based treatment strategies in conjunction with the patient according to their needs and preferences whilst accepting the need to liaise with other specialists. Pulp therapy: - demonstrates deep understanding of the structure and function of the pulp, appreciates the causes and effects of pulp disease and is competent to carry out vital pulp therapies. Non-surgical endodontic treatment: - demonstrates competence to carry out endodontic treatment at a standard expected of a specialist using the appropriate diagnostic aids and operative equipment. Non-surgical endodontic retreatment: - demonstrates competence to diagnose and manage post-treatment endodontic disease by justifying the decision-making process and assess relevant treatment complexity and prognostic factors.

Outcome	Examples
	Endodontic surgery: • demonstrates understanding of the need for investigative and corrective surgery in the management of peri-radicular disease and competence to provide the appropriate surgical and soft tissue management. Dental traumatology: • demonstrates an understanding of the nature and consequences of soft and hard tissue wound healing after trauma and is competence to diagnose and manage dental trauma. Restoration of the root-filled tooth: • demonstrates understanding of the knowledge and skills necessary to assess teeth for root canal treatment and their subsequent restoration.
5.10 Demonstrates competence to undertake the examination and diagnosis of patients presenting with routine and complex periodontal treatment needs	• Outcome based treatment strategies for patients presenting with routine and complex periodontal treatment needs. • Health promotion for patients presenting with routine and complex periodontal treatment needs. • Non-surgical management of patients presenting with routine and complex periodontal treatment needs. • Surgical management of patients presenting with routine and complex periodontal treatment needs. • Periodontal plastic surgery for patients presenting with routine and complex periodontal treatment needs. • Dental implant surgery for patients either independently and/or part of a multidisciplinary team that provides an optimal health outcome. • Managing peri-implant diseases and conditions for patients either independently and/or as an appropriate member of a multidisciplinary team.

Outcome	Examples
	• Managing periodontitis as a manifestation of systemic diseases and conditions affecting periodontal tissues either independently and/or as part of an MDT. • Understanding the importance and implications of the interrelationship between endodontics and other clinical disciplines.
5.11 Demonstrates that they are comprehensively trained to manage the needs of a patient presenting with prosthodontic conditions, in line with the curriculum for specialist training in fixed and removeable prosthodontics	• Demonstrating competence to independently undertake, record and interpret a detailed history and examination of patients requiring management with simple and complex prosthodontics. From this information they will be able to provide an accurate and comprehensive dental and prosthodontic diagnosis. • Demonstrating independently how they determine and plan treatment strategies for patients requiring management that involves simple and/or complex prosthodontics rehabilitation (including when/if to require input from other specialties). • Demonstrating competence to integrate health promotion and prevention of diseases affecting the dental hard and soft tissues in patients who they manage with simple and/or complex prosthodontics. • Demonstrating competence to integrate and are effective in providing specialist prosthodontic input to interdisciplinary interfaces that provide whole patient oral healthcare. • Demonstrating competence to work within a multidisciplinary tea, to provide comprehensive dental care. • Demonstrating competence in the provision of simple and complex removable prosthodontics in the comprehensive management of patients either independently or in collaboration with other clinicians. • Demonstrating competence in the provision of simple and complex removable and fixed implant supported prosthodontics in the comprehensive management of patients either independently or in collaboration with other clinicians. • Demonstrating competence in the management of patients diagnosed with temporomandibular disorders (TMDs) either independently or in collaboration with other clinicians.

Outcome	Examples
	• Demonstrating competence in the prosthetic and conservative dental management of patients diagnosed with tooth wear (tooth surface loss) either independently or in collaboration with other clinicians. • Demonstrating competence in the aesthetic dental management of patients with fixed or removable prosthodontics and conservative dentistry either independently or in collaboration with other clinicians. • Demonstrating a comprehensive knowledge and understanding of materials science as related to the management of patients with prosthodontics. • Demonstrating competence in the prosthodontic management of patients who have experienced dental trauma with fixed or removable prosthodontics and conservative dentistry either independently or in collaboration with other clinicians. • Demonstrating competence in the application of digital dentistry as it relates to the dental management of patients with fixed or removable prosthodontics and conservative dentistry either independently or in collaboration with other clinicians. • Demonstrating competence in the application of clinical imaging (radiography, including digital radiography and photography) as it relates to the dental management of patients with fixed or removable prosthodontics and conservative dentistry either independently or in collaboration with other clinicians. • Demonstrating a comprehensive knowledge and understanding of the research that underpins the management of patients with fixed and removable prosthodontics and conservative dentistry.
5.12 Demonstrates that they are comprehensively trained to provide dental implant treatment	Demonstrating knowledge and understanding of: • the evidence base for surgical, technical and restoration aspects of dental implants, including the advanced surgical techniques and dental technology provided by other colleagues • current and seminal literature on indications for, success/failure criteria and biological implications of provision of dental implants • diagnostic and prognostic indicators • the aspects of treatment provided by the GDP.

Outcome	Examples
	Demonstrating skills in: • dental implant technical planning including use of CBCT in planning and the use of implant planning software programmes. To have a restorative approach in the planning of replacement of teeth with dental implants • dental implant surgery to include bone and soft tissue augmentation techniques • dental implant restoration with fixed and removable restorations including the use of digital technology • monitoring and maintenance of the implant restorations and provide suitable supportive advice. • management of long-term biological and mechanical complications, such as peri-implantitis and mechanical failure. To include non-surgical and surgical debridement and competency in surgical implant removal.
5.13 Demonstrates competence to utilise the clinical, technical and administrative digital technologies that are emerging in order to enhance patient care	Demonstrating knowledge and understanding of: • the evidence base required for understanding digital technologies as applied to the clinical and technical and administrative management of patients. examples of which are intra oral scanning, the use of software programs in the planning designing and printing of surgical guides • opportunities to improve patient care by using digital technologies instead of conventional patient management methods. Being able to demonstrate skills in: • the use of digital technologies in the assessment, diagnosis and care planning for patient care • the use of digital technologies to enhance restorative dentistry treatment.

Outcome	Examples
5.14 Demonstrates leadership of a team of colleagues from several professional groups and uses knowledge and experience to ensure the team delivers high quality patient care and continually develops their own professional and personal abilities	See Generic Specialist Learning Outcomes
5.15 Recognises the importance of leading and participating in the clinical and academic teaching and training of undergraduate and postgraduate students, core trainees and specialty trainees and other professional colleagues, at each stage of their careers	See Generic Specialist Learning Outcomes
5.16 Demonstrates an understanding of clinical research and innovation, is able to improve clinical outcomes by providing patient management that is supported by research evidence and by contributing to research programmes and the development of innovations	See Generic Specialist Learning Outcomes

Outcome	Examples
5.17 The specialist in restorative dentistry has an understanding of and participates in quality improvement processes to ensure patient care is safe and effective	See Generic Specialist Learning Outcomes
5.18 The specialist in restorative dentistry will often be based within a hospital environment and therefore, will demonstrate an ability to provide clinical dental support to improve outcomes for hospital patients, as requested by other medical and surgical healthcare professionals	See Generic Specialist Learning Outcomes
5.19 Demonstrates that they have an understanding of NHS management and participate in Trust management business	Being able to demonstrate knowledge of: • the structure and functions of the NHS and other healthcare delivery models • patient safety, quality of care, clinical effectiveness and healthcare leadership. Being able to demonstrate skills in: • communicating effectively and empathically with colleagues at all levels and to utilise appropriate negotiating and listening skills to achieve the desired result. Participating in and contributing to the organisational delivery of healthcare services. Participating in local directorate meetings. Participating in service quality improvement meeting.

Outcome	Examples
	Understanding the roles of the senior leadership team including clinical director.
	Participating in trust management meetings.
	Dealing with complaints / grievances especially from patients.
	Managing time effectively and adopt strategies for coping with stress.
	Managing people in accordance with the law on equality, diversity and inclusion.
	Developing business case / strategies with appropriate input from administrative colleagues.

Restorative Dentistry assessments blueprint

WPBAs are mandated (see section 5) but the individual tools are not. However, a balanced portfolio of WPBA evidence should be provided.

*Assessments in red are mandated.
*Assessments in black are flexible, and the trainee can choose whether they wish to use them to evidence their learning.

HLO	Patient feedback	MSF	DOPs	CBD	CEX	College examination	Logbook/clinical competency record	Reflective records	ES/CS reports
5.1 Demonstrate competence in the examination and diagnosis for patients who have complex conditions affecting their mouth. To use a combination of their specialist clinical skills (endodontics, periodontics and prosthodontics) in the assessment of the patient	*	*	*	*	*	*	*	*	*
5.2 Demonstrates that they actively participate in the multidisciplinary management of patients, alongside a number of medical and dental specialist colleagues	*	*	*	*	*	*	*	*	*
5.3 Demonstrates competence to manage the needs of a patient presenting with hypodontia, by membership of a multidisciplinary team	*	*	*	*	*	*	*	*	*
5.4 Demonstrates competence to manage the needs of a patient, presenting with head and neck	*	*	*	*	*	*	*	*	*

HLO	Patient feedback	MSF	DOPs	CBD	CEX	College examination	Logbook/clinical competency record	Reflective records	ES/CS reports
cancer, by membership of a multidisciplinary team	*	*	*	*	*	*	*	*	*
5.5 Demonstrates competence to manage the needs of a patient, presenting with cleft lip and palate or other development or acquired cranio- facial conditions, by membership of a multidisciplinary team	*	*	*	*	*	*	*	*	*
5.6 Demonstrates competence to manage the needs of a patient, presenting with dento-facial trauma, by membership of a multidisciplinary team	*	*	*	*	*	*	*	*	*
5.7 Demonstrates competence to manage the needs of a patient presenting with developmental disorders of the teeth, such as amelogenesis imperfecta and dentinogenesis imperfecta, by membership of a multidisciplinary team	*	*	*	*	*	*	*	*	*
5.8 Demonstrates competence to provide dental treatment for the conservation of teeth, including the management of the worn dentition and endodontically treated teeth	*	*	*	*	*	*	*	*	*

HLO	Patient feedback	MSF	DOPs	CBD	CEX	College examination	Logbook/clinical competency record	Reflective records	ES/CS reports
5.9 Demonstrates that they are comprehensively trained to manage the needs of a patient presenting with endodontic conditions, in line with the curriculum for specialist training in endodontics	*	*	*	*	*	*	*	*	*
5.10 Demonstrates that they are comprehensively trained to manage the needs of a patient presenting with periodontal conditions, in line with the curriculum for specialist training in periodontology	*	*	*	*	*	*	*	*	*
5.11 Demonstrates that they are comprehensively trained to manage the needs of a patient presenting with prosthodontic conditions, in line with the curriculum for specialist training in fixed and removeable prosthodontics	*	*	*	*	*	*	*	*	*
5.12 Demonstrates that they are comprehensively trained to provide dental implant treatment	*	*	*	*	*	*	*	*	*

HLO	Patient feedback	MSF	DOPs	CBD	CEX	College examination	Logbook/clinical competency record	Reflective records	ES/CS reports
5.13 Demonstrates competence to utilise the clinical, technical and administrative digital technologies that are emerging, in order to enhance patient care	*	*	*	*	*	*	*	*	*
5.14 Demonstrates leadership of a team of colleagues from several professional groups and uses knowledge and experience to ensure the team delivers high quality patient care and continually develops their own professional and personal abilities	*	*	*	*	*	*	*	*	*
5.15 Recognises the importance of leading and participating in the clinical and academic teaching and training of undergraduate and postgraduate students, core trainees and specialty trainees and other professional colleagues, at each stage of their careers	*	*	*	*	*	*	*	*	*
5.16 Demonstrates an understanding of clinical research and innovation, is able to improve clinical outcomes by providing patient management that is supported by research evidence and by contributing to research programmes and the development of innovations	*	*	*	*	*	*	*	*	*

HLO	Patient feedback	MSF	DOPs	CBD	CEX	College examination	Logbook/clinical competency record	Reflective records	ES/CS reports
5.17 The specialist in restorative dentistry has an understanding of and participates in quality improvement processes to ensure patient care is safe and effective	*	*	*	*	*	*	*	*	*
5.18 The specialist in restorative dentistry will often be based within a hospital environment and therefore will demonstrate an ability to provide clinical dental support to improve outcomes for hospital patients, as requested by other medical and surgical healthcare professionals	*	*	*	*	*	*	*	*	*
5.19 Demonstrates that they have an understanding of NHS management and participate in Trust management business	*	*	*	*	*	*	*	*	*

Section E: Glossary of terms and references

ABFTD	Advisory Board for Foundation Training in Dentistry
ABSTD	Advisory Board for Specialty Training in Dentistry
ACAT	Acute Care Assessment Tool
ACF	Academic Clinical Fellow
AoA	Assessment of Audit
ARCP	Annual Review of Competency Progression

CAT	Critically Appraised Topic
CBD	Case-based discussion
CCST	Certificate of Completion of Specialty Training
CEX/mini CEX	Clinical evaluation exercise
CPA	Competence in practice assessment
COPDEND	Committee of Postgraduate Dental Deans and Directors
CPD	Continuing Professional Development
DDMFR	Diploma in Dental and Maxillofacial Radiology
DDPH	Diploma in Dental Public Health
DOP/DOPS	Direct observation of procedure/procedural skills
DSFE	Dental Specialty Fellowship Examinations
EPA	Entrustable professional activities
ES	Educational Supervisor
ESR	Educational Supervisor's Report
F(DPH) College	Fellowship in Dental Public Health
F(Endo) College	Fellowship in Endodontics
F(Orth) College	Fellowship in Orthodontics
F(OS) College	Fellowship in Oral Surgery
F(OM) College	Fellowship in Oral Medicine
F(Paed Dent) College	Fellowship in Paediatric Dentistry
F(Perio) College	Fellowship in Periodontics
F(Pros) College	Fellowship in Prosthodontics
F(RD) College	Fellowship in Restorative Dentistry
F(SCD) College	Fellowship in Special Care Dentistry
FRCPath	Fellowship of the Royal College of Pathologists

FRCR	Fellowship of The Royal College of Radiologists
GDC	General Dental Council
HcAT	Healthcare Assessment and Training
HEIW	Health Education and Improvement Wales
HEE	Health Education England
ISCP	Intercollegiate Surgical Curriculum Project
ISFE	Intercollegiate Specialty Fellowship Examination
JCPTD	Joint Committee for Postgraduate Training in Dentistry
MSF	Multi-source feedback
NES	NHS Education for Scotland
NHSE	National Health Service England
NIHR	National Institute for Health and Care Research
NIMDTA	Northern Ireland Medical and Dental Training Agency
NTN	National Training Number
OoP	Out of Programme
OoPC	Out of Programme: Career Break
OoPE	Out of Programme: non-training Experience
OoPR	Out of Programme: Research
OoPT	Out of Programme: Training
OoT	Observation of teaching
OSCE	Objective Structured Clinical Examination
PBA	Procedure-Based Assessments
PGDD	Postgraduate Dental Deans and Directors
PDP	Personal Development Plan
QA	Quality Assurance

RCP	Review of Competency Progression
RCS Ed	Royal College of Surgeons of Edinburgh
RCS Eng	Royal College of Surgeons of England
RCPSG	Royal College of Physicians and Surgeons of Glasgow
RCR	Royal College of Radiologists
SAC	Specialty Advisory Committee
SCRT	Specialty Curriculum Review Team
STC	Specialty Training Committee
StR	Specialty Training Registrar* note, the interchangeable term Specialty Trainee is used in the Dental Gold Guide
TMJ	Temporomandibular Joint
TPD	Training Programme Director
VTN	Visitor Training Number
WPBA	Workplace Based Assessment
WR	Written report
WTE	Whole Time Equivalent

References:

- GDC Principles and Criteria for Specialist Listing incorporating the Standards for Specialty Education 2019 and GDC principles of specialist listing
- Dental Gold Guide 2023 – COPDEND