

The Royal College of Surgeons of England



# DIPLOMA IN SPECIAL CARE DENTISTRY

## CANDIDATE INFORMATION PACK

Faculty of Dental Surgery The Royal College of Surgeons of England | Registered charity no. 212808

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## Introduction

This guidance document provides information for candidates for Parts A and B of the Diploma in Special Care Dentistry (DSCD). They should be read in conjunction with the DSCD Regulations.

The examination is designed to assess knowledge to an equivalent standard of a dental practitioner with two years of experience working within the field of Special Care Dentistry. The examination is conducted in English and pertains to the practice of Special Care Dentistry within the United Kingdom of Great Britain.

The two parts of the examination will take place on consecutive days. To be awarded the DSCD, candidates must pass both Part A and B and both parts of the examination must be passed independently.

The College will consider equivalence for Part A where a candidate has completed and presents evidence to the college of another Certificate, Diploma or Masters in Special Care Dentistry. If the application for Part A equivalence is successful, the candidate will be eligible to sit Part B directly.

If candidates fail either Part A or Part B, they may apply to re-sit this part of the examination on two subsequent sittings (the exam is held annually).

## Part A

Part A consists of a written paper of 140 single best answer (SBA) questions mapped to the seven modules of the curriculum:

- 1. Oral Sciences of Relevance
- 2. Knowledge & Understanding of Conditions leading to Impairment & Disabilities
- 3. Behavioural Sciences & Sociology of Health, Impairment & Disability
- 4. Law, Ethics and Health & Safety
- 5. Provision of Comprehensive Oral Care
- 6. Developing Services in a Community Setting
- 7. Clinical Effectiveness

## Part B

The aim of this part of the examination is to assess the candidates' clinical reasoning skills, application of their knowledge of special care dentistry and communication skills.

Part B of the examination is conducted as a structured oral examination and is mapped to the seven modules of the curriculum.

There are seven stations consisting of:

- 2 problem solving structured clinical reasoning (SCR) stations (assessing clinical reasoning and application of knowledge)
- 2 clinical governance SCRs (assessing clinical reasoning and application of knowledge)
- **2 unseen case SCRs** (assessing communication, clinical reasoning and application of knowledge)
- 1 communication skills station (assessing communication only)

Apart from the communication skills station, all stations will have 10 minutes preparation time and 10 minutes structured examination time.

The communication station will be a total of 10 minutes which will include a short preparation time to familiarise the candidate with the scenario.

For the two unseen case SCRs and the communication skills station, candidates will interact with an actor and be assessed by an observing examiner.

The remaining five stations will be assessed by face-to-face interaction with an examiner.

## Module 1 – Relevant Basic Sciences

The examples given should not be considered to be exclusive; candidates are advised that they are indicative of the areas of the knowledge expected.

- 1. Craniofacial growth and development
- 2. Pharmacology and therapeutics
- 3. Patho-physiology
- 4. Microbiology
- 5. Cell biology.

#### Aims

The candidate should have knowledge of:

- 1. Normal and disordered craniofacial development and implication for oral care
- 2. The basic biological sciences and their relevance and application to clinical treatment of special care patients
- 3. Patho-physiology in relation to special care dentistry
- 4. Genetics where syndromes may have significant oro-facial features or impact on the delivery of care
- 5. Ageing in relation to delivering care.

#### Learning Outcomes

The candidate should be able to:

- 1. Apply their knowledge of the biological sciences and understand their relevance to the management of special care patients
- 2. Apply their knowledge of pharmacology and therapeutics in the management of special care patients
- 3. Demonstrate an understanding of a how the underlying patho-physiology can inform their decision making and management of special care patients
- 4. Discuss how microbiology can impact on the delivery of patient care.

#### Content

This should include the following in relation to special care:

- 1. Craniofacial growth and development
  - a. Normal and abnormal craniofacial development
  - b. Normal and abnormal development of the dento alveolar region
  - c. Tooth eruption
  - d. Impact of genetic conditions where there is an orofacial component.

- 2. Pharmacology and therapeutics
  - a. Indications for prescribing medications
  - b. Mode of action of medications which can be prescribed
  - c. Metabolism of medications which can be prescribed
  - d. Side effects of medications which can be prescribed
  - e. Drug interactions with medications which can be prescribed
  - f. Medically prescribed medications and their common oral complications.
- 3. Pathophysiology
  - a. Saliva and its role in oral health
  - b. Xerostomia and its implications
  - c. Normal and abnormal masticatory system
  - d. Normal swallowing and oral dysphagia
  - e. Speech and abnormalities of speech
  - f. Taste and olfaction.

Also, pathophysiology of the following systems in relation to special care dentistry:

- 4. Cardiovascular system
- 5. Respiratory system
- 6. Immune system
- 7. Musculoskeletal system
- 8. Nervous system
- 9. Gastrointestinal system
- 10. Endocrine system
- 11. Haematological system
- 12. Microbiology
  - a. Principles of infection control
  - b. Infectious diseases relevant to dentistry
  - c. Oral complications of bacterial disease
  - d. Oral complication of fungal disease
  - e. Oral complications of viral disease
  - f. Investigations associated with patient management
  - g. Periodontal disease in relation to special care patients
  - h. Caries in relation to special care patients.
- 13. Cell biology
  - a. Ageing
  - b. Relevance to patient management.

## Module 2 – Impairment & Disabilities

#### Subject groups within this module

The examples given should not be considered to be exclusive; candidates are advised that they are indicative of the areas of the knowledge expected.

Medically compromising conditions:

- 1. Learning disabilities
- 2. Mental illness including phobia, emotional impairment and social disability
- 3. Physical disabilities
- 4. Sensory impairments.

#### Aims

The candidate should have knowledge of:

- 1. The conditions leading to disability and impairment in people of all ages including factors which affect 'Quality of Life' including self-esteem, social acceptability, diet, nutrition (including alternative feeding routes), comfort and dignity.
- 2. How these conditions impact on the oral health and provision of oral care for people with disabilities and complex needs from a medical, dental and social perspective.

#### Learning Outcomes

The candidate should be able to:

- 1. Demonstrate a knowledge and understanding of the epidemiology of different impairments and of oral disease in disabled groups.
- 2. Demonstrate a knowledge and understanding of the conditions leading to impairment and disability.
- 3. Describe and identify the common oral manifestations of systemic disease including the treatment of specific conditions such as gingival hyperplasia in a patient with epilepsy on anticonvulsant medication, malocclusion or periodontal disease in Downs Syndrome patients, hypodontia in ectodermal dysplasia and provision of end of life care for terminally ill patients.
- 4. Recognise and manage the oral side effects of prescribed medications including chemotherapy/ radiotherapy or both (to treat malignancy) or immunotherapy post transplantation of an organ.
- 5. Manage patients with a history of:
  - a. Substance misuse
  - b. Polypharmacy

- 6. Diagnose and manage medical emergencies.
- 7. Demonstrate knowledge of managing a patient with multiple co- morbidities and assessment of medical risk such as quantifying bleeding risk in haemophilia patients.
- 8. Demonstrate knowledge of the relevance of appropriate electromechanical tests such as blood pressure, pulse oximetry and haematological tests such as clotting screen, Full Blood Count, HBA1c.
- 9. Demonstrate a knowledge of scoring systems in disease states such as MELD (Model of End Stage Liver Disease), POTTS (Physiological Observation Track and Trigger System) Score, AVPU scale for assessing level of consciousness, ASA (American Society of Anaesthesiology) Scale for assessing fitness for anaesthesia, eGFR for renal function.
- 10. Describe examples of care pathways depending on the medical risk status including multidisciplinary (MDT) teamwork such as a cancer MDT.
- 11. Demonstrate knowledge of appropriate pain management including available 'pain free' techniques for local anaesthesia and restorative procedures including Atraumatic restorative technique, Carisolv<sup>™</sup> Gel and use of air abrasion.
- 12. Demonstrate knowledge of pharmacological management of anxiety in both primary and secondary care including sedation techniques and general anaesthesia and their inclusion within a care pathway.

#### Content

Definition of impairment and disability

Medically compromising conditions:

- 1. Cardiovascular disease e.g. hypertension, cognitive heart failure, ischaemic heart disease angina, MI, cardiomyopathies, congenital heart disease, valvular disease, infective endocarditis.
- Haematological disease e.g. anaemias, haemaglobinopathies sickle cell disease, thalasssaemias, coagulopathies – congenital – haemophilia, Von Willebrand's disease, acquired – disorders of platelet function, thrombophilia, liver disease, anticoagulated patients
- 3. Respiratory disease e.g. asthma, chronic obstructive airway disease.
- 4. Gastrointestinal disorders e.g. Sjorgren's syndrome, Crohn's disease, coeliac disease, peptic ulceration, Gastro-oesophageal reflux disease (GORD).
- 5. Hepatic disease e.g. Cirrhosis, liver failure, transplantation.
- 6. Renal disease e.g. Chronic renal failure dialysis and transplantation.
- 7. Infectious diseases e.g. Hepatitis, HIV, CJD, MRSA, TB.
- 8. Endocrine and metabolic disorders e.g. Diabetes, thyroid & parathyroid disease, adrenal and pituitary glands.

- 9. Musculoskeletal disorder e.g. Osteoarthritis, rheumatoid arthritis.
- 10. Skeletal disorders e.g. Osteogenesis imperfecta, Ehlers Danloss Syndrome, Marfans Syndrome.
- 11. Dermatological disorders e.g. Epidermolysis bullosa.
- 12. Neurological disease e.g. Epilepsy, Parkinson's disease, Alzheimers and other dementias, CVA, Huntingdon's chorea, myasthenia gravis, multiple sclerosis, motor neurone disease.
- 13. Immunologically mediated disease e.g. asplenic patients, HIV.
- 14. Oncological disease e.g Oral cancer, haematological malignancies / myeloproliferative disease states and the role of chemotherapy, radiotherapy, palliative care in the management of oncological disease.

#### Learning disabilities

e.g. Down's syndrome, autism, fragile X syndrome

#### Mental illness

- 1. Organic delirium & dementia
- 2. Substance misuse / alcohol misuse
- 3. Schizophrenia, delusional disorders, personality disorders
- 4. Affective (mood) disorders depression, mania
- 5. Neurotic, stress related and somatoform disorders anxiety & phobia, obsessive-compulsive disorder
- 6. Behavioural syndromes associated with physiological disturbance eating disorders, sleep disorders

#### Physical disabilities

e.g. Head injury, spinal injury, amputees, cerebral palsy

- 1. Medically compromising conditions leading to physical disability
- 2. Muscular dystrophies and myotonic disorders
- 3. Neurological disease CVA, MS, MND, vCJD
- 4. Severe cardiovascular & respiratory disease.

#### Sensory impairments

e.g. Visual impairment, hearing impairment, speech disorders.

The effects of drugs/polypharmacy including management of patients on bisphosphonates.

Demonstrate knowledge on dental provision for older patients including dementia patients.

## Module 3 – Behavioural Science and Sociology of Health, Impairment and Disability

The examples given should not be considered to be exclusive; candidates are advised that they are indicative of the areas of knowledge expected.

#### Subject groups within this module

- 1. Theories of behaviour, phobias and anxiety
- 2. Theories of health promotion
- 3. Models of disability
- 4. Barriers to care
- 5. Inequalities in health.

#### Aims

The candidate should have knowledge of:

- 1. The concepts of sociological and psychological philosophies underpinning health and illness behaviour.
- 2. The determinants of health behaviour, health promoting activities and disability.
- 3. The models of disability.
- 4. Impairment related behaviour.
- 5. The barriers to care.
- 6. Inequalities in health, oral health.

#### Learning Outcomes

The candidate should be able to:

- 1. Demonstrate knowledge of sociological and psychological principles determining health actions.
- 2. Demonstrate knowledge of models of illness and disability.
- 3. Demonstrate an awareness of barriers to care experienced by people with disabilities.
- 4. Demonstrate an understanding of inequalities in health, oral health and health promoting strategies.

#### Content

Theories of behaviour, phobias and anxiety

- 1. Principles
- 2. Techniques and strategies
- 3. Aetiology and Assessment of anxiety.

Health promotion and dental health education

- 1. Theory and practice
- 2. Inequalities in health.

Models of disability

- 1. Medical Model
- 2. Social Model
- 3. Normalisation and social role valorisation
- 4. The sick role
- 5. Rehabilitation for health.

Barriers to care

- 1. Definitions
- 2. Physical and attitudinal barriers
- 3. The carers perspective
- 4. Health belief model
- 5. Measuring health and service
- 6. Quality of life and oral health related impacts
- 7. Oral health and service in impairment.

## Module 4 – Law, Ethics and Health & Safety

The examples given should not be considered too be exclusive; candidates are advised that they are indicative of the areas of knowledge expected.

#### Subject groups within this module

- 1. Consent
- 2. Risk Management
- 3. Decontamination and infection control in dentistry
- 4. Management of medical emergencies
- 5. Restraint and manual handling.

#### Aims

The candidate should have knowledge of the range of issues within law, ethics and health and safety applicable to special care dentistry.

#### Learning Outcomes

The candidate should be able to:

- 1. Demonstrate an understanding of the implications of consent for examination and treatment and an awareness of variations in UK legislation.
- 2. Demonstrate an understanding of the implications of risk management within special care dentistry.
- 3. Demonstrate knowledge of contemporary decontamination and cross-infection control procedures and policies.
- 4. Demonstrate knowledge of the management of medical emergencies in practice.
- 5. Demonstrate knowledge of current UK legislation pertaining to disability, mental capacity, equality and human rights.

#### Content

Consent

- 1. Definition
  - a. Competence
  - b. Capacity
- 2. Recording consent
- 3. Process and policies
- 4. Consent pertaining to paediatric patients transitioning to adult special care

**Risk Management** 

- 1. Risk and benefit
- 2. Assessing risk, including clinical risk
- 3. Risk avoidance
- 4. Management of challenging behaviour
- 5. Legislation related to disability

Decontamination and infection control in dentistry

- 1. Universal precautions Disinfection and sterilisation
- 2. Systems and practices
- 3. Infection control policies
- 4. Legislation

Management of medical emergencies

- 1. Sudden loss of consciousness
- 2. Respiratory distress
- 3. Acute chest pain
- 4. Life support skills

#### Clinical holding

- 1. Justification and planning
- 2. Physical and pharmacological options available
- 3. Ethical and consent issues

#### Manual handling

- 1. Regulations and legislations
- 2. Loads patient and non-patient

#### Risk assessment

- 1. Hazard, risk, likelihood
- 2. Risk avoidance

## Module 5 – Provision of Comprehensive Oral Care

The examples given should not be considered to be exclusive; candidates are advised that they are indicative of the areas of knowledge expected.

#### Subject groups within this module

- 1. Diagnosis and holistic care planning
- 2. Prevention of oral disease in the individual
- 3. Impact of disability on treatment techniques & management inn a range of settings
- 4. Behaviour management.

#### Aims

The candidate should have knowledge of how to provide appropriate oral care for the individual.

#### Learning Outcomes

The candidate should be able to:

- 1. Demonstrate an understanding of the methods of needs assessment and individuals' priorities in order to promote positive oral health gain.
- 2. Demonstrate an understanding of how the co-ordination of both intra and interprofessional teams can facilitate the delivery of optimal care for individuals.
- 3. Design, implement and monitor oral health care plans.
- 4. Demonstrate an understanding of the range of preventive regimens available and their appropriateness for the individual.
- 5. Demonstrate an understanding of the impact of disability on oral health care planning and how it may determine the delivery of care.
- 6. Demonstrate an understanding of how to assess the management requirements of the individual.
- 7. Demonstrate an awareness of the range of techniques available to alleviate pain and anxiety.

#### Content

Diagnosis and holistic care planning

1. Individual needs and expectations

2. Working with other health care professionals and carers to devise treatment in the best interests of the individual i.e. inter-professional and multi-professional

Prevention of oral disease in the individual

- 1. Personalised preventive regimens e.g. fissure sealants, fluoride toothpaste and supplements, individual relevant dietary advice, oral hygiene advice and aids
- 2. Level of self-care and dependency.

Impact of disability on treatment techniques/ management in a range of settings

- 1. Level of dependency
- 2. Access to care
- 3. Medical condition/disability limiting possible treatment options
- 4. Provision of care in surgery, hospital or domiciliary setting and treatment options within each setting
- 5. Diversity and equality issues.

Behaviour management

- 1. Encouragement & support, confidence boosting, allowing patients to feel in control
- 2. Non-pharmacological approaches to alleviation of dental anxiety including modelling, reducing uncertainty, relaxation training, cognitive approaches, systematic desensitisation
- 3. Neuro-linguistic programming
- 4. Hypnosis
- 5. Acupuncture
- 6. Conscious sedation oral transmucosal, inhalation and intravenous, pharmokinetics of sedation drugs used in the UK, indications/contraindications, regulations and training
- 7. General anaesthesia indications/contraindications, drugs commonly used and equipment required, regulations relating to general anaesthesia.

## Module 6 – Developing Services in a Community setting

The examples given should not be considered to be exclusive; candidates are advised that they are indicative of the areas of knowledge expected.

#### Subject groups within this module

- 1. Identification of special care groups.
- 2. Service provision for socially excluded and disadvantaged people.
- 3. Oral assessment.
- 4. Prevention and health promotion.
- 5. Prevention of oral disease within the community.
- 6. Service evaluation.
- 7. Clinical governance.

#### Aims

The candidate should have knowledge of:

- 1. How to provide appropriate oral health care for groups who require special care dentistry.
- 2. Methods of assessment.
- 3. Appraisal and evaluation techniques.

#### Learning Outcomes

The candidate should be able to:

- 1. Demonstrate knowledge of the challenges associated with the provision of care for special groups.
- 2. Demonstrate knowledge of the range of approaches used in assessment processes.
- 3. Demonstrate knowledge of the key principles of health promotion, and the practical application of strategies.
- 4. Demonstrate knowledge of the measures of quality of service provision.

#### Content

Identification of dental service delivery to groups requiring special care dentistry.

Oral health assessment, screening and epidemiological programmes:

Screening, e.g.

- 1. Special schools and opportunity groups
- 2. Pupil referral units
- 3. Adult education and training centres
- 4. Young offender units and prisons
- 5. Care homes e.g. Residential and Nursing Homes.

Inter-professional working with:

- 1. Primary health care teams such as:
  - a. GMPs
  - b. Health visitors, district nurses and school nurses
  - c. Learning disability and mental health services
  - d. Geriatric/psychogeriatric and rehabilitative clinicians
  - e. Community paediatricians
  - f. Allied health professionals
- 2. Secondary healthcare teams such as:
  - a. Consultants in oral surgery, paediatric dentistry and orthodontics
  - b. Physicians, cardiologist and geriatricians
  - c. Consultants in other specialties
- 3. Social Care Systems for vulnerable groups of people e.g. looked after children and older people
- 4. Voluntary support organisations.

Principles and practice of general and oral health promotion / prevention

Evaluation of methods and types of service delivery for groups requiring special care dentistry:

- 1. Primary and secondary oral health care
- 2. General anaesthetic and sedation services
- 3. Domiciliary dental care
- 4. Mobile dental services.

Clinical governance, clinical effectiveness and measures of quality of service provision.

## Module 7 – Clinical Effectiveness, Audit and Evidence-Based Practice

The examples given should not be considered to be exclusive; candidates are advised that they are indicative of the areas of the knowledge expected.

#### Subject groups within this module

- 1. Quality assurance
- 2. Clinical audit
- 3. Evidence-based practice
- 4. Research methods
- 5. Epidemiology.

#### Aims

The candidate should have knowledge of:

- 1. The principles of clinical audit, research techniques and epidemiology.
- 2. Evidence-based issues of relevance to special care dentistry.

#### Learning Outcomes

The candidate should be able to:

- 1. Demonstrate knowledge of audit and epidemiology.
- 2. Demonstrate an understanding of research methods and epidemiological principles as they relate to patient care.
- 3. Demonstrate an understanding of the technique of critical appraisal.

#### Content

- 1. Quality Assurance
- 2. Clinical effectiveness
  - a. Asking the right questions
  - b. Undertaking a library search
  - c. Framing your own question and searching for the evidence
  - d. Appraising the evidence and applying the evidence.

- 3. Clinical guidelines
  - a. Developing guidelines
  - b. Legal considerations
  - c. Using clinical guidelines
  - d. Implementation of guidelines.
- 4. Clinical audit
  - a. Clinical governance
  - b. Application of the audit cycle
  - c. Setting standards
  - d. Data collection
  - e. Data analysis
  - f. Report writing.
- 5. Evidence-based practice
  - a. Decision-making
  - b. Critical appraisal
  - c. Systematic review
  - d. Hierarchy of evidence.
- 6. Research
  - a. The scientific method
  - b. Qualitative and quantitative research methods
  - c. Framing the research question
  - d. Determining hypotheses
  - e. Setting aims and objectives
  - f. Writing a protocol
  - g. Ethical approval
  - h. Data analysis
  - i. Medical statistics
  - j. Writing scientific papers.
- 7. Epidemiology
  - a. Definitions
  - b. Causality and risk
  - c. Measures of disease frequency
  - d. Variability, bias
  - e. Types of epidemiological studies
  - f. Ethical considerations.