

# **Diploma in Geriatric Medicine**

# Syllabus and blueprint

## Syllabus

The following outlines the range of topics that may be covered in the Diploma in Geriatric Medicine (DGM) examination. The examination is divided into two parts: Part 1 is the online knowledge-based assessment (KBA) component and Part 2 is the clinical component. Emphasis is placed on the candidate's ability to synthesise understanding of the manifestation and course of age-associated impairments common in old age, with knowledge of the health and social care available in the UK, to identify appropriate plans of management and referral.

#### Epidemiological, demographic and social factors

- > Age structure of the UK population: present pattern and future trends; important factors that determine the implications of demographic ageing for health and social care services
- > Social processes in ageing: roles and expectations with their influence on behaviour; family relationships, effects of social background and life experience; pattern of family care for older people
- > Ageism and strategies to counteract this
- > Health promotion: candidates should be able to explain the:
  - benefits of a healthy lifestyle in older age, including adequate nutrition, exercise, smoking cessation and moderating alcohol intake
  - $\circ$  ~ limits of prevention of disease and disability in later life
  - specific techniques for disease prevention and maintenance of active healthy ageing in older persons
  - o techniques of risk reduction for relevant syndromes (e.g. stroke, falls, fragility fractures)

#### Clinical aspects of old age

- > Basic science and biology of ageing:
  - o the process of normal ageing in humans
  - the effect of ageing on the different organ systems (cardiovascular, neurological and special senses, gastrointestinal, renal, respiratory, hepatobiliary, immune system, bone and locomotor), and on homeostasis in these systems
  - $\circ$  the effect of ageing on functional ability
  - $\circ$  the concept of frailty in older people
  - o the concept of a life-course approach to ageing and to frailty
  - o demographic trends in UK society
  - o the basic elements of the psychology of ageing
  - o changes in pharmacokinetics and pharmacodynamics in older people
- > Common geriatric problems (syndromes): candidates should be able to describe the types of multiple pathology encountered in older people and the effect this has on presentation of illness; candidates should be knowledgeable of clinical features, diagnosis, assessment and management of common presentations in older people. These include:
  - o frailty and frailty syndromes; recognition of poorer prognosis and outcomes

- o falls:
  - causes including multifactorial and transient loss of consciousness (TLOC)
  - higher risk of injuries, including fragility fractures and head injuries (especially if on antiplatelets or anticoagulants)
  - prevention, including multifactorial interventions and exercise, balance and strength programmes
- delirium: recognition of high prevalence in many acute settings; clinical presentations, identification (CAM or other recognised score) and management of predisposing, precipitating and prolonging factors; outcomes and impact on person and others
- o dementia, depression, insomnia, anxiety
- o hypothermia and thermoregulation
- o continence problems and management
- o dizziness, sensory impairments, tinnitus
- o pain
- o constipation, diarrhoea
- o leg ulcers, pressure ulcers
- o diabetes
- o anaemia
- weight loss and malnutrition
- > Other illnesses affecting older persons: candidates should be familiar with the atypical presentations of common illnesses, and should be able to define the causes, pathophysiology, clinical features, laboratory findings, treatments, prognosis and preventative measures for common problems and presentations in older age. These should include:
  - o cardiovascular, e.g. chest pain, arrhythmias, hypertension, heart failure
  - o respiratory, e.g. dyspnoea, haemoptysis, infection
  - o gastrointestinal, e.g. nutrition, nausea, dysphagia, vomiting, altered bowel habit, jaundice
  - o endocrine, e.g. hyperglycaemia, thyroid dysfunction
  - renal, e.g. fluid and electrolyte imbalance, renal failure, infection, lower urinary tract symptoms
  - neurological, e.g. seizures, tremor, altered conscious level, movement disorders, speech disturbance
  - $\circ$  sensory loss, e.g. balance, impaired vision and hearing, neuropathy
  - o psychiatric, e.g. dementia, depression, delirium, anxiety, sleep disturbance
  - o dermatological, e.g. pruritus, rashes, leg ulcers and pressure sores
  - o musculoskeletal, e.g. joint pain and stiffness, degenerative joint disease
  - o non-specific, e.g. dizziness, fatigue, anaemia, suspected abuse

- > Pharmacology and therapeutics in older people: candidates should be able to explain the indications, effectiveness, potential adverse effects, potential drug interactions and alternatives for medications commonly used in older patients.
- > A working knowledge of the basic principles of therapeutics including adverse drug reactions, drug interactions, polypharmacy and effects of disease states on drug pharmacokinetics is important. They should demonstrate understanding of the principles of a medication review for an older person, including what medications might be stopped safely, and what medications are often omitted that might add benefit.
- Candidates should show awareness of relevant guidelines to support decision making, e.g. STOPP– START, as well as condition-specific guidance (e.g. NICE or best-practice guidance).

The following list provides examples of these but is not intended to be exhaustive:

- o gastrointestinal: ulcer healing drugs and laxatives
- cardiovascular: inotropes, diuretics, anti-arrhythmics, anti-hypertensives, drugs for heart failure and angina, antiplatelet agents, lipid lowering agents, anticoagulants
- o respiratory: bronchodilators
- CNS: hypnotics and anxiolytics, antipsychotics, antidepressants, analgesics, antiepileptics, drugs for Parkinson's disease, drugs for dementia
- $\circ$  infections: antibiotics
- endocrine: insulin and oral hypoglycaemics, drugs for thyroid disease, steroids, drugs for osteoporosis
- o urinary tract: drugs to promote continence and for lower urinary tract symptoms (LUTS)
- nutrition: dietary supplements, vitamins and mineral supplements, including but not limited to vitamin B12, folate, vitamin C, vitamin D
- o vaccines
- > Rehabilitation in older people: candidates should be familiar with principles of rehabilitation of older people following acute and chronic illness, including:
  - comprehensive geriatric assessment (CGA) including the roles and expertise of the different members of a multidisciplinary team
  - different measures (assessment scales) used to assess functional status and outcome of rehabilitation and their limitations: these measures are intended to evaluate activities of daily living (ADL) ability and level of activity limitation, cognitive status, and mood requirements
  - the range of interventions to include physical treatments, aids, appliances and adaptations, and a knowledge of specialist rehabilitation services available
  - o basic requirements of stroke and orthopaedic rehabilitation and falls prevention services
  - the medical and social models of management of functional limitation due to ageing and disease
  - prevention and management of complications of acute illness such as pressure sores, venous thromboembolism, contractures and aspiration pneumonia

- problems of domiciliary care for disabled older people
- the use of equipment and services, particularly occupational therapy, physiotherapy and social work
- principles of functional assessment, especially the ADL scale and its various measures, and cognitive function
- > Transfers of care and ongoing care in the community: candidates should be able to explain the:
  - determinants of successful transfers of care outside hospital that meet patient and carer perspectives and needs
  - o suitability for different levels of care within the community
  - o roles of the multidisciplinary team with regard to planning
  - liaison with primary care and social services to facilitate successful transfer of care from hospital
  - o systems of provision of social care, day care, respite care and carer support
  - palliative care, control of pain and other symptoms; emotional and personal aspects of care for patient and family

#### Administrative aspects of services

- > Candidates should be able to explain the:
  - structure of the NHS, its financing and organisation; candidates should have knowledge of the functions and responsibilities of the health and social services used by older people
  - roles of the National Institute for Health and Care Excellence (NICE) and Care Quality Commission (CQC), and familiarity with the advice and guidelines published by these and other statutory and advisory bodies in operation in the UK
  - o principles of audit of quality of primary care for older people
  - forms of income maintenance for older people: pensions, annuities and main forms of allowances, availability and criteria for eligibility
  - regulations and issues around driving for older people
  - appropriate use of specialist geriatric and psychogeriatric services, day centres and day hospitals, residential homes and nursing homes; types of housing available and intermediate care
  - the framework and dynamics of inter-agency and partnership working between the NHS and Social Services
  - o clinical governance and its relevance in geriatric medicine
  - o principles of the appraisal process
  - o legislation surrounding long and intermediate term care
  - legal aspects of medical practice among older people: mental capacity, including testamentary capacity, Court of Protection, Lasting Power of Attorney, advanced directives, compulsory admission and treatment (candidates are expected to be familiar with the main

relevant sections of the Mental Health Act and the Mental Capacity Act, including deprivation of liberty safeguards); the rights of institutionalised older people

 ethical aspects of care for older people: setting objectives for care, proper involvement of patient and family in clinical decisions and adherence to the ethical standards of autonomy, beneficence, non-maleficence and justice

## Blueprint

#### DGM Knowledge-based assessment

The DGM KBA tests systematic knowledge, and the management of clinical problems associated with geriatric medicine.

It consists of one paper containing 100 'best of five' type questions, where candidates choose the best answer from five possible answers. The examination lasts 3 hours. The questions in the Written Examination will be composed of a selection of the following topics in approximately the distribution shown in the table below:

Торіс	Approximate distribution of questions	
1. Epidemiological, demographic and social factors	5	
2. Clinical aspects of old age, comprising:	85	
2a. Basic science and biology of ageing	(2)	
2b. Common geriatric problems (syndromes)	(40)	
2c. Other illnesses affecting older persons	(15)	
2d. Pharmacology. and therapeutics in older people	(15)	
2e. Principles of rehabilitation	(8)	
2f. Transfers of care and ongoing care in the community	(5)	
3. Administrative aspects of services including ethics and law	10	
Total	100	

Sample written questions are published on the DGM website.

#### **DGM clinical examination**

The DGM clinical examination assessed a candidate's ability to:

- > establish a friendly and courteous rapport with older patients
- > elicit an adequate history
- > elicit and interpret physical signs
- > formulate a problem list and differential diagnosis
- > formulate a management plan
- > recognise and be familiar with rating scales commonly used in geriatric practice in the UK
- > conduct and interpret a comprehensive geriatric assessment (CGA)

#### Method of assessment

The DGM clinical examination comprises four stations, each lasting 15 minutes:

- 1. Integrated Clinical Assessment 1
- 2. Comprehensive Geriatric Assessment (CGA)
- 3. Ethical and legal principles in practice
- 4. Integrated Clinical Assessment 2
- > Candidates have 5 minutes outside each station to read the candidate instructions, which outline the background to the scenario and the tasks required.
- > Candidates then have 15 minutes inside each station. A two-minute warning is given after 13 minutes of each station.
- > The exam is 80 minutes in duration.
- > Each station features two examiners, who work in pairs to set the standard for each scenario ('calibration') but mark each candidate individually, without conferring.
- > The exam will still draw from areas of the DGM syllabus, which remains unchanged.
- > No station is mandated to focus on a specific healthcare setting. Instead, each exam will feature scenarios that span a range of settings and have a balance between urgent and planned/anticipatory care.

#### Station 1 and Station 4 – Integrated Clinical Assessment (ICA)

Each of the two integrated clinical assessment stations aim to assess the way in which candidates approach a clinical scenario in the care of older people in a cohesive and inclusive manner, involving history-taking, examination, and communication with a patient.

Candidates will need to:

- 1. Take a relevant history from the patient.
- 2. Conduct a focused physical examination of the patient.
- 3. Interpret their findings.
- 4. Communicate their findings to the patient and discuss a management plan with them.
- 5. Discuss their findings and management plan with the examiners.

Candidates will spend 13 minutes on steps 1-4, followed by 2 minutes discussion of their findings and plan with the examiners.

#### Station 2 – Comprehensive Geriatric Assessment (CGA)

A CGA is a valuable tool and a core skill in the assessment of the frail older person. Within this station candidates will be tested on their ability to conduct and utilise a CGA (initial details of which are provided as part of the candidate instructions), as well as management of a patient with one or more common clinical syndromes:

- > Confusion
- > Continence problems
- > Deteriorating mobility
- > Falls
- > Frailty
- > Palliative care
- > Sensory impairment

The primary aim of this station is not to make a diagnosis. Candidates are instead expected to gather any missing information necessary to developing a coherent management plan; provide a full review of the scenario; prioritise the issues faced by the patient and display understanding of how the patient's management will be undertaken, both individually and as part of a wider multi-disciplinary team.

This station does not utilise any patients, all interaction is between the candidate and examiner. Candidates have up to five minutes gathering any missing information required, via questions asked to examiners, to develop an appropriate assessment and management plan, before 10 minutes of discussion and questions from examiners.

#### Station 3 – Ethical and legal principles in practice

This station assesses candidates' ability to undertake a complex conversation with a patient or a patient's representative, drawing upon relevant ethical principles and legal frameworks to provide clinical guidance and support in a sensitive and professional manner. Legal frameworks are based upon those utilised across the four nations of the United Kingdom.

Candidates will interact with the patient or the patient's representative for 10 minutes, followed by 5 minutes of discussion with examiners.

#### Summary of timings

Station	Patient interaction (minutes)	Information gathering (minutes)	Examiner interaction (minutes)
1. Integrated Clinical Assessment 1	13		2
2. Comprehensive Geriatric Assessment		5	10
3. Ethical and legal principles in practice	10		5
4. Integrated Clinical Assessment 2	13		2

A two-minute warning will be given after 13 minutes of each station to support the best use of a candidate's time during each scenario.