Diploma in Geriatric Medicine

Syllabus & blueprint

1. 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, in order to identify appropriate plans of management and referral.

Epidemiological, demographic and social factors

a) 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

b) 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

c) Ageism and strategies to counteract this

d) Health promotion: candidates should be able to explain the:
   - i) benefits of a healthy lifestyle in older age, including adequate nutrition, exercise, smoking cessation and moderating alcohol intake
   - ii) limits of prevention of disease and disability in later life
   - iii) specific techniques for disease prevention and maintenance of active healthy ageing in older persons
   - iv) techniques of risk reduction for relevant syndromes (e.g. stroke, falls, fragility fractures)

Clinical aspects of old age

a) Basic science and biology of ageing: candidates should be able to explain:
   - i) the process of normal ageing in humans
   - ii) 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
   - iii) the effect of ageing on functional ability
   - iv) the concept of frailty in older people
   - v) the concept of a life-course approach to ageing and to frailty
   - vi) demographic trends in UK society
   - vii) the basic elements of the psychology of ageing
   - viii) changes in pharmacokinetics and pharmacodynamics in older people

b) 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:
   - i) frailty and frailty syndromes; recognition of poorer prognosis and outcomes
   - ii) falls:
     - (a) causes including multifactorial and transient loss of consciousness (TLOC)

(b) higher risk of injuries, including fragility fractures and head injuries (especially if on antiplatelets or anticoagulants)
(c) prevention, including multifactorial interventions and exercise, balance and strength programmes

iii) 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
iv) dementia, depression, insomnia, anxiety
v) hypothermia and thermoregulation
vi) continence problems and management
vii) dizziness, sensory impairments, tinnitus
viii) pain
ix) constipation, diarrhoea
x) leg ulcers, pressure ulcers
xi) diabetes
xii) anaemia
xiii) weight loss and malnutrition

c) 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:
i) cardiovascular, e.g. chest pain, arrhythmias, hypertension, heart failure
ii) respiratory, e.g. dyspnoea, haemoptysis, infection
iii) gastrointestinal, e.g. nutrition, nausea, dysphagia, vomiting, altered bowel habit, jaundice
iv) endocrine, e.g. hyperglycaemia, thyroid dysfunction
v) renal, e.g. fluid and electrolyte imbalance, renal failure, infection, lower urinary tract symptoms
vi) neurological, e.g. seizures, tremor, altered conscious level, movement disorders, speech disturbance
vii) sensory loss, e.g. balance, impaired vision and hearing, neuropathy
viii) psychiatric, e.g. dementia, depression, delirium, anxiety, sleep disturbance
ix) dermatological, e.g. pruritus, rashes, leg ulcers and pressure sores
x) musculoskeletal, e.g. joint pain and stiffness, degenerative joint disease
xi) non-specific, e.g. dizziness, fatigue, anaemia, suspected abuse

d) 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:

i) gastrointestinal: ulcer healing drugs and laxatives
ii) cardiovascular: inotropes, diuretics, anti-arrhythmics, anti-hypertensives, drugs for heart failure and angina, antiplatelet agents, lipid lowering agents, anticoagulants
iii) respiratory: bronchodilators
iv) CNS: hypnotics and anxiolytics, antipsychotics, antidepressants, analgesics, antiepileptics, drugs for Parkinson's disease, drugs for dementia
v) infections: antibiotics
vi) endocrine: insulin and oral hypoglycaemics, drugs for thyroid disease, steroids, drugs for osteoporosis
vii) urinary tract: drugs to promote continence and for lower urinary tract symptoms (LUTS)
viii) nutrition: dietary supplements, vitamins and mineral supplements, including but not limited to vitamin B12, folate, vitamin C, vitamin D
ix) vaccines

e) Rehabilitation in older people: candidates should be familiar with principles of rehabilitation of older people following acute and chronic illness, including:
   i) comprehensive geriatric assessment (CGA) including the roles and expertise of the different members of a multidisciplinary team
   ii) 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
   iii) the range of interventions to include physical treatments, aids, appliances and adaptations, and a knowledge of specialist rehabilitation services available
   iv) basic requirements of stroke and orthopaedic rehabilitation and falls prevention services
   v) the medical and social models of management of functional limitation due to ageing and disease
   vi) prevention and management of complications of acute illness such as pressure sores, venous thromboembolism, contractures and aspiration pneumonia
   vii) problems of domiciliary care for disabled older people
   viii) the use of equipment and services, particularly occupational therapy, physiotherapy and social work
   ix) principles of functional assessment, especially the ADL scale and its various measures, and cognitive function

f) Transfers of care and ongoing care in the community: candidates should be able to explain the:
   i) determinants of successful transfers of care outside hospital that meet patient and carer perspectives and needs
   ii) suitability for different levels of care within the community
   iii) roles of the multidisciplinary team with regard to planning
   iv) liaison with primary care and social services to facilitate successful transfer of care from hospital

v) systems of provision of social care, day care, respite care and carer support
vi) palliative care, control of pain and other symptoms; emotional and personal aspects of care for patient and family

Administrative aspects of services

a) Candidates should be able to explain the:
   i) 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
   ii) 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
   iii) principles of audit of quality of primary care for older people
   iv) forms of income maintenance for older people: pensions, annuities and main forms of allowances, availability and criteria for eligibility
   v) regulations and issues around driving for older people
   vi) 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
   vii) the framework and dynamics of inter-agency and partnership working between the NHS and Social Services
   viii) clinical governance and its relevance in geriatric medicine
   ix) principles of the appraisal process
   x) legislation surrounding long and intermediate term care
   xi) 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
   xii) 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

2. Blueprint

2.1 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:

Topic	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.

2.2 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 clinical stations. Candidates will start at one of the four stations and then move round the carousel of stations, at 14-minute intervals, until the cycle has been completed. The stations are:

Station 1	History-taking skills	(14 minutes)
Station 2	Comprehensive Geriatric Assessment (CGA)	(14 minutes)
Station 3	Communication skills and ethics	(14 minutes)
Station 4	Clinical examining skills including:	(14 minutes)
section a	Dermatology or locomotor examination	(5 minutes)
section b	Neurological, cardiovascular or respiratory examination	(9 minutes)

The DGM clinical examination lasts a total of 76 minutes (including a five-minute period before each station begins).

There are two examiners within each station, who collectively submit ten marksheets in total. The marks awarded on all 10 marksheets will determine the candidate's overall clinical examination score.

The marks are recorded on a four-point grading system and are detailed on the Clinical Examination marksheet as follows:

- clear fail
- fail
- pass
- clear pass

These grades will be converted to a numeric value of 1–4 (clear fail = 1, fail = 2, pass = 3, clear pass = 4).

The DGM clinical examination is marked out of a total of 40 marks (being the maximum available from the ten marksheets). The nominal pass mark for the clinical examination is 29, although this is confirmed at each diet by the DGM Lead Clinical Examiner and/or the DGM Senior Examiner.

An example of a DGM clinical examination marksheet can be found on the DGM website.

Notes for guidance in the clinical examination

You will meet eight examiners in the clinical section, two at each station. Trainee examiners may also be present but will play no part in the questioning or assessment.

Stations 1 and 3

Candidates will have five minutes before meeting the patient to read a clinical scenario. During the assessment, the examiners will be looking for the following points:

- the effectiveness of your history-taking and communication
- your ability to interpret these findings
- your ability to discuss the management and, if necessary, to make suggestions for appropriate further investigation of the patient
- your understanding of the social and demographic factors relevant to the patient, and of the information that may need to be given to the patient and/or carer

Station 3 (Communication skills and ethics) will assess the skills and attitudes of the candidates in dealing with common situations in geriatrics. This may include discussing end-of-life issues with nursing home managers or families, dealing with allegations of abuse, angry relatives, testamentary capacity, powers of attorney, advance directives, and so forth.

You will have approximately 10 minutes to talk with the patient or relative, and then about four minutes for discussion with the examiner. If you are not clear what the examiners want you to do, you should ask. The two examiners will take alternate cases in this part of the examination.

Station 2

In station 2, candidates will be tested on their ability to conduct and utilise a comprehensive geriatric assessment (CGA), as well as management of a patient with one or more of six common clinical syndromes, as follows:

- falls
- deteriorating mobility
- continence problems
- confusion
- impairment of the special senses
- palliative care

Candidates will have 5 minutes to summarise and identify the key issues in the scenario, and to say what additional assessments they would want to do, or information they would need. At the end of this period the examiners will confirm all the relevant additional information that is needed for subsequent discussion. In the remaining 9 minutes, candidates should develop a management plan. In this time, you will discuss the case with the examiners, and will be tested on your ability to:

- demonstrate a good understanding of the process of CGA, how the team would address the issues arising from the CGA, which team member(s) would do what, and what the team members would do
- discuss options for management
- identify and demonstrate understanding of the missing elements of the assessment
- bring the elements together and provide a prioritised summary of the patient's problems
- discuss how the prioritised problems might be addressed

Station 2 is not about making a medical diagnosis, as this will be provided. It is about formulating a multidisciplinary management plan for the patient. The best preparation for this station is by attending multidisciplinary teams where CGA is practised.

Station 4

This station tests the clinical examining skills components, and you will not meet the patient before the examination starts. During the assessment, the examiners will be looking for the following points:

- the effectiveness of your physical examination, including relevant clinical aspects of old age
- your ability to interpret these findings
- your ability to discuss the management and, if necessary, to make suggestions for appropriate further investigation of the patient

The examiners are looking for competent clinical skills and an appropriate approach to the patient, as well as the ability to recognise and interpret physical signs. If it is necessary to test a patient's sensation to pain, only the equipment provided by the centre should be used and disposed of in the receptacle provided.

Particular notice will be taken of your ability to relate to patients and their carers, and failure to act or speak in a kind and considerate manner could result in your failing the examination. Aggressive or rough treatment, either physical or verbal, of a patient will invariably lead to failure.