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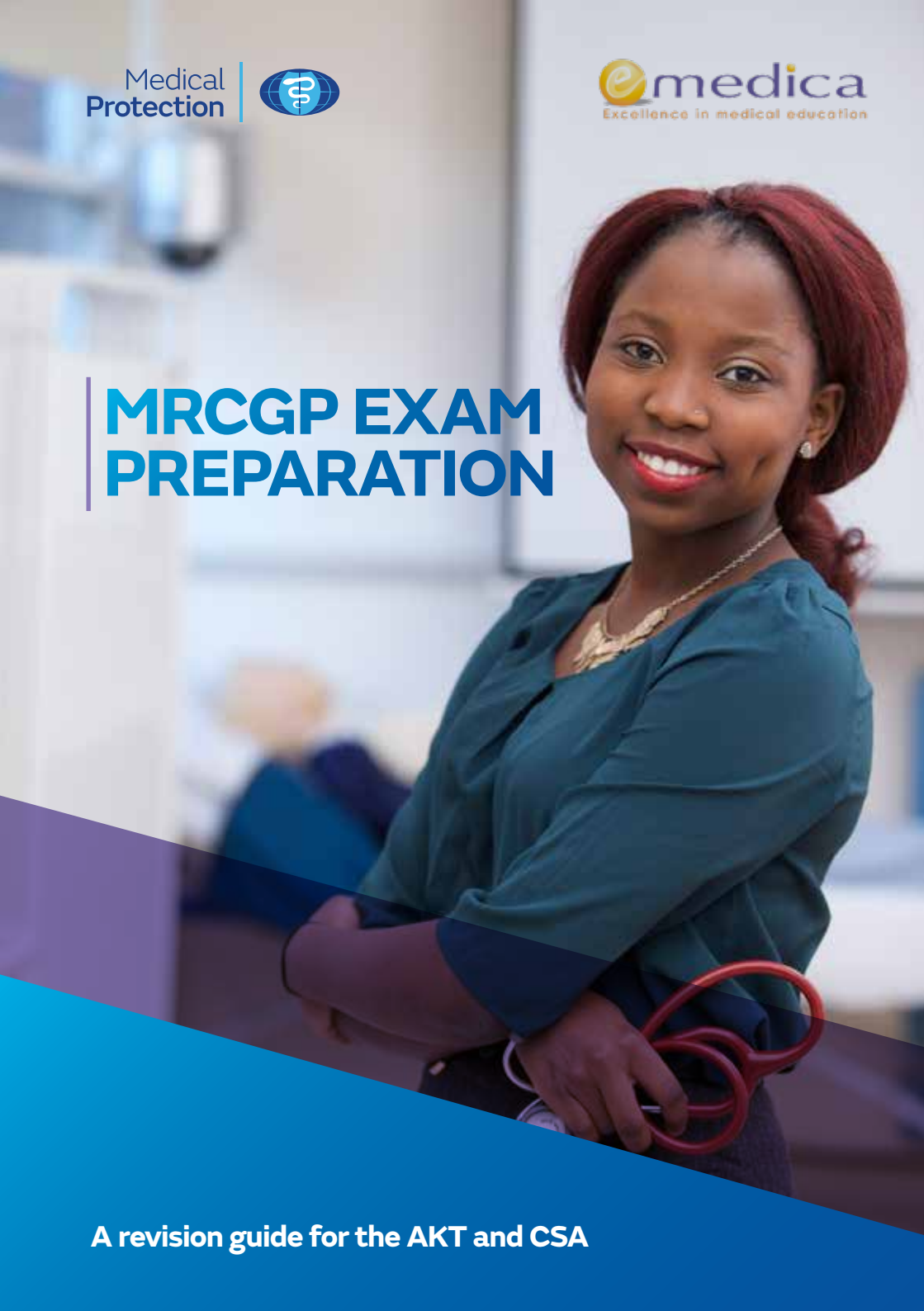


MRCGP EXAM PREPARATION

A revision guide for the AKT and CSA

Foreword

Dr Mahibur Rahman

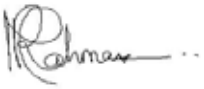
Dr Mahibur Rahman is the medical director of Emedica. He is a portfolio GP and a consultant in medical education. He helps hundreds of GP trainees prepare for the MRCGP AKT and CSA examinations each year through the Emedica MRCGP AKT and MRCGP CSA preparation courses. He also helps GP trainers support their trainees through the Emedica MRCGP for Trainers course.

Emedica is a leading provider of medical education related to GP training – from GP ST Entry and MRCGP courses to careers related courses to help guide GPs after qualification. Details of all courses are available at: www.emedica.co.uk

This study guide covers the two externally examined parts of MRCGP – the Applied Knowledge Test (AKT) and the Clinical Skills Assessment (CSA). For each examination, this guide provides an overview of the exam format, tips on effective preparation, and a detailed curriculum based checklist to help guide your revision.

I hope this guide will provide you with a good understanding of both exams, and help you plan your revision for these challenging exams.

I wish you every success with your preparation and in passing the AKT and CSA.
Dr Mahibur Rahman MB BCh MSc MRCGP



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AKT exam overview

The AKT is a computerised examination that is available 3 times each year. It can be taken by GP trainees in ST2 or later. Each trainee can have a maximum of 4 attempts at this examination. Testing is carried out at Pearson Vue examination centres all over the UK. The exam lasts 3 hours 10 minutes, and usually has around 200 questions. These are split to cover the following 3 domains:

- 80% - Clinical medicine (includes all clinical areas in the GP curriculum).
- 10% - Evidence based practice (statistics, interpreting data, types of study).
- 10% - Organisational (practice management, medicolegal issues, admin).

The pass mark and rate are variable. The exam pass standard was increased after AKT7, and since this, the pass rate has been around 73% (i.e. around 1 in 4 candidates fails each sitting).

Question formats:

There are various question formats in the exam including:

- Single Best Answer (SBA) – select the single correct answer from a list of 5 options.
- Extended Matching Question (EMQ) – select the best answer from a list of options (usually between 6 and 10 options). There are usually a series of 3-5 EMQs relating to the same list of options.
- Algorithm questions – testing knowledge of important management algorithms e.g. NICE guidelines, basic life support (BLS), management of anaphylaxis, etc.
- Picture questions – these may include a photograph or image with a question attached. Pictures could range from skin lesions to photographs of fundoscopy or otoscopy etc.
- Seminal trials – there may be a few questions testing knowledge of important studies that have made a large impact on general practice.
- Short answer questions (SAQ) – candidates type answers in free text – usually only one or two words.
- Video questions – this is a new format – candidates may be asked a question based around a short video clip – usually no more than 30 seconds long.
- Multiple Best Answer (MBA) – select multiple correct answers from a list of options.

The most common question types in the exam are SBA and EMQ, making up the vast majority of all marks available.

Effective Revision for the AKT

Effective preparation for the AKT exam requires planning, perseverance and practice.

Plan your revision

You need to plan when you want to sit the exam so you can make sure you have enough time to cover all the material. Most trainees need 3-4 months to be able to cover all the material thoroughly. When studying, break your revision into manageable chunks – concentration decreases drastically after about an hour, so take a short break before carrying on. Try to have a systematic approach to allow you to cover all the important topics in the curriculum. The bulk of your time should be spend on the clinical domain as this makes up 80% of the marks in the exam.

Persevere and you will get through

After formulating a revision plan you need to stick to it – there is no quick way to cover all the clinical material – you need to allow enough time to cover the whole curriculum. Many trainees find it difficult or dull to study the organisational and evidence based practice domains – it is important to persevere with these areas as they can offer easy marks for a small amount of reading time.

Practise makes perfect

Finally, active learning is more effective than passive learning (e.g. just reading), so you should balance your reading with practice questions. Ideally, these should be exam level questions in the correct format to help you become familiar with the exam. It is especially important to focus on your weak areas, rather than practising questions on areas that you know you will do well in. A big challenge in the exam is getting through all the questions – you have an average of just 57 seconds for each question, so try to practice to time.

To cover the clinical material, I recommend the current edition of the Oxford Handbook of General Practice, along with a good knowledge of the clinical guidelines for important conditions (which feature heavily in the exam). A good way to revise all the relevant guidelines is to read Guidelines, published by MIGP. It is also worth being familiar with management plans (including drugs and referral guidelines) for common conditions, along with drug interactions and side effects – the British National Formulary (BNF) and the BNF for children (BNFC) are good resources for this.

We have included some examples of AKT level questions for your to familiarise yourself with the style and content in the next section of this study guide.

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"Excellent course, liked the course material and the booklet covering the core knowledge and topics."

"Just wanted to let you know that I passed my AKT, at first sitting whilst on maternity leave! Your course helped me focus my revision, and was particularly helpful in covering the data interpretation and statistics that I had struggled with. I couldn't recommend your course highly enough."

AKT sample questions

1. Which of the following is part of the core treatment recommended for treating osteoarthritis in the current NICE guidelines?

A. Steroid injection
B. Topical NSAIDs
C. Oral NSAIDs
D. COX-2 inhibitors
E. Exercise

2. Patients with which of the following risk factors should be offered testing for chronic kidney disease (CKD)?

A. Obesity
B. Afro-Caribbean patients aged over 55
C. Family history of chronic kidney disease (CKD)
D. Ischaemic heart disease
E. Age over 65

3. A patient requests access to information from their medical record under the Data Protection Act. They have included the required fee with their written request. What is the maximum time allowed for you to allow access?

A. 40 calendar days
B. 40 working days
C. 28 calendar days
D. 28 working days
E. 20 working days

4. What value of gifts from patients or relatives must be recorded in a register of gifts under the General Medical Services (GMS) contract regulations?

A. All gifts regardless of value
B. £10 or more
C. £25 or more
D. £50 or more
E. £100 or more

5. A 60 year old caucasian patient has a diagnosis of hypertension confirmed on ambulatory blood pressure measurement (ABPM). His average BP on ABPM was 160/98 mmHg. He is not on any medication. Which of the following is the most suitable management option?

A. Suggest lifestyle modification only at this stage and repeat BP in 6 months
B. Treat with Amlodipine 5mg od
C. Treat with Lisinopril 10mg od
D. Treat with Indapamide 2.5mg od
E. Treat with Doxazosin 10mg od

6. A 68 year old lady has a risk assessment for osteoporosis and as a result is sent for a DEXA scan. What T-score for hip bone mineral density from the DEXA scan would indicate osteoporosis?

A. -2.5 or more
B. -2.0 or more
C. -1.5 or more
D. -1.0 or more
E. -0.5 or more

7. Which of the following drugs is listed under Schedule 1 of the controlled drugs regulations 2001?

A. Diamorphine
B. Methylphenidate
C. Mescaline
D. Cocaine
E. Pethidine

8. Which of the following statements does not apply when prescribing drugs other than temazepam that fall under Schedule 2 of the Misuse of Drugs Regulations 2001?

A. They cannot be prescribed on repeat prescriptions or under repeat dispensing schemes.
B. Patient's details must be written so as to be indelible.
C. The patient's full address must be provided, "no fixed abode" is not acceptable.
D. The form of the drug is required even where there is only one form available (e.g. tablet / liquid).
E. They cannot be prescribed without the patient's NHS or Community Index number.

9. The PRACtICe study commissioned by the GMC looked at prescribing and monitoring errors in general practice. What proportion of prescriptions studied contained either a prescribing or monitoring error?

A. 1%
B. 2%
C. 3%
D. 4%
E. 5%

10. One of your patients asks if her daughter has been prescribed the oral contraceptive pill. Her daughter is 14, and was seen on her own a week earlier, and prescribed the combined oral contraceptive pill by one of the other doctors in the practice. Which of the following is the most suitable action?

A. Provide information if the mother has parental responsibility.
B. Explain that you are unable to disclose information without the daughter's permission.
C. Explain that her daughter is taking contraception but that you cannot divulge details of the exact prescription.
D. Advise the mother to put in a request to access the notes in writing.
E. Provide full details as the mother has a right to know.

11. Where a patient has a notifiable disease, doctors have a duty to inform the Proper Officer of the details of the disease even if the patient does not consent to the disclosure. Which ONE of the following is not a notifiable disease?

A. Cholera
B. Tetanus
C. HIV
D. Malaria
E. Legionnaire's disease

12. Regarding sharing confidential information relating to knife wounds, which of the following statements is incorrect?

A. In some cases, the name and address of the patient need not be disclosed to the police when initially contacting them.
B. You should usually let the patient know if you are \ contacting the police.
C. Details of all patients that present with a knife wound should be reported to the police.
D. Where there is a risk of serious harm to others, you can disclose details to the police even if the patient refuses consent.
E. In some cases it is acceptable to disclose confidential details without first seeking the patient's consent or letting them know you are contacting the police.

13. You receive a request for a medical report based on a patient's notes from an insurance company. The request includes signed consent from the patient to allow you to provide this information. The patient contacts you asking to see a copy of the report before it is sent to the insurance company. The patient does not have any significant medical problems. What is the most appropriate way to deal with this request?

A. Contact the insurance company and request their permission to give the patient a copy of the report.
B. Tell the patient that he should request a copy from the insurance company.
C. Tell the patient that it is not possible for him to see the report, but that he can request access to his own records.
D. Provide a copy of the report to the patient before sending the original to the insurance company.
E. Provide a copy of the report to the patient after sending the original to the insurance company.

14. In which of the following situations would you NOT need to seek express consent from a patient to use identifiable information about them?

A. When completing a report requested by a solicitor.
B. When completing a report requested by the patient's employer.
C. When it relates to a mental health disorder.
D. When using the information for local clinical audit.
E. When the information is being used for research to be published in a journal.

15. How long must a practice retain confidential electronic medical records after a patient registered at the practice dies?

A. 5 years
B. 10 years
C. 20 years
D. 25 years
E. Indefinitely

16. A 55 year-old man with ischaemic heart disease attends surgery complaining of severe constipation. He says this has been going on for several months, but he was too embarrassed to seek treatment before. Which ONE of his current medications is the MOST likely cause of constipation?

a. Isosorbide mononitrate
b. Glycerol trinitrate (GTN) spray
c. Verapamil
d. Aspirin
e. Bendroflumethiazide

17. A 20 year-old student who has a simple faint while at a club. She said she "felt a bit funny" and was hot before she fainted. She has never had a similar episode, and there are no abnormal examination or investigation findings.

A. Can continue to drive without restrictions, no need to contact the DVLA
B. Can continue to drive without restrictions, but MUST contact the DVLA
C. Cannot drive until four weeks after the event, no need to contact the DVLA
D. Cannot drive until four weeks after the event, MUST contact the DVLA
E. Cannot drive until 12 months after the last event, no need to contact the DVLA
F. Cannot drive until 12 months after the last event, MUST contact the DVLA
G. Cannot drive until 10 years after the last event, MUST contact the DVLA

18. A 60 year-old retired man who has a sudden onset of slurring of speech and unilateral weakness. He has a complete recovery within 24 hours, and there are no neurological abnormalities at this time. He has not had any similar episodes in the past.

A. Can continue to drive without restrictions, no need to contact the DVLA
B. Can continue to drive without restrictions, but MUST contact the DVLA
C. Cannot drive until four weeks after the event, no need to contact the DVLA
D. Cannot drive until four weeks after the event, MUST contact the DVLA
E. Cannot drive until 12 months after the last event, no need to contact the DVLA
F. Cannot drive until 12 months after the last event, MUST contact the DVLA
G. Cannot drive until 10 years after the last event, MUST contact the DVLA

19. A randomised controlled trial investigating the effect of a new treatment for neuropathic pain found that the 1546 patients in the treatment group had an average pain score of 2.3 out of 10 compared to the 1550 patients in the placebo group who had an average pain score of 5.5 out of 10. The p value was 0.01. What is the probability that this finding was due to chance?

A. 10%
B. 1%
C. 0.1%
D. 0.01%
E. 0.001%

20. A 6 year old child presents with a history of cough and breathlessness. Which one of the following would make a diagnosis of childhood asthma less likely?

A. Moist cough
B. Family history of eczema
C. Early morning symptoms
D. Symptoms triggered by cold air
E. Chest tightness at night

Answers and explanations for these questions are available at www.emedica.co.uk/mpsakt.html

Core topics checklist

This checklist can be used to guide your revision – as you go through your reading and practice questions, tick off those areas that you have covered. If you find some areas have not been completed in your revision, cover them by using up to date reference materials including textbooks, current guidelines and online resources. Please note that this checklist aims to cover most of the core topics, but is not exhaustive – the RCGP AKT curriculum checklist and statements provide details of other subjects that could appear in the exam.

Clinical Domain

Health promotion / preventing ill health
- ✔ Healthy eating – recommended intake
- ✔ Screening programmes
- ✔ Smoking cessation

Genetics in primary care
- ✔ Family tree charts – pedigree symbols
- ✔ Modes of inheritance – autosomal, chromosomal, X-linked, polygenic
- ✔ Testing for genetic disorders
- ✔ Important genetic disorders
- ✔ Trisomy 21, Klinefelter's, Marfan
- ✔ Retinitis pigmentosa, cystic fibrosis, haemophilia
- ✔ Duchenne muscular dystrophy
- ✔ Phenylketonuria, albinism

Care of acutely ill people
- ✔ Anaphylaxis
- ✔ Aneurysms
- ✔ Appendicitis
- ✔ Basic life support – adult and paediatric
- ✔ Ectopic pregnancy
- ✔ Intestinal obstruction or perforation
- ✔ Limb ischaemia
- ✔ Meningitis
- ✔ Myocardial infarction
- ✔ Pulmonary embolus
- ✔ Status epilepticus
- ✔ Subarachnoid haemorrhage

Care of children and younger people
- ✔ Attention deficit hyperactivity disorder (ADHD)
- ✔ Autistic spectrum disorders
- ✔ Childhood asthma
- ✔ Child abuse, child protection
- ✔ Childhood hearing problems and screening
- ✔ Childhood infections – common + rare but serious
- ✔ Childhood vaccination schedule
- ✔ Constipation
- ✔ Developmental milestones
- ✔ Eating disorders
- ✔ Failure to thrive
- ✔ Febrile convulsions
- ✔ Glandular fever
- ✔ Meningitis
- ✔ Neonatal problems: feeding problems, heart murmurs, neonatal jaundice
- ✔ Nocturnal enuresis
- ✔ Otitis media
- ✔ Reporting sexual activity
- ✔ Respiratory illness – bronchiolitis, whooping cough, cystic fibrosis
- ✔ Urinary tract infection

Care of older people
- ✔ Assessing cognitive function: MMT, MMSE
- ✔ Confusion
- ✔ Dementia
- ✔ Dizziness
- ✔ Falls
- ✔ Living wills
- ✔ Parkinson's disease
- ✔ Power of attorney
- ✔ Stroke / TIA

Women's Health
- ✔ Antenatal care
- ✔ Breast disease
- ✔ Cervical screening
- ✔ Contraception
- ✔ Dysmenorrhoea
- ✔ Ectopic pregnancy
- ✔ Endometriosis

- ✔ Fibroids
- ✔ Gynaecological malignancies
- ✔ Hormone replacement therapy
- ✔ Infertility / subfertility
- ✔ Menopause
- ✔ Miscarriage and abortion
- ✔ Pregnancy related illness (e.g. pre-eclampsia, placenta praevia etc.)
- ✔ Urinary incontinence
- ✔ Vaginal and uterine prolapsed

Men's Health

- ✔ Prostate disease – BPH, prostatitis, PSA
- ✔ Benign testicular conditions
- ✔ Erectile dysfunction
- ✔ Male infertility
- ✔ Paraphimosis and priapism
- ✔ Testicular and prostate cancer
- ✔ Testicular torsion
- ✔ Vasectomy

Sexual Health

- ✔ Ano-genital warts
- ✔ Bacterial vaginosis
- ✔ Candidiasis
- ✔ Chlamydia
- ✔ Gonorrhoea
- ✔ Group B haemolytic streptococcus
- ✔ HIV/AIDS
- ✔ Reiter's syndrome
- ✔ Sexual dysfunction
- ✔ Syphilis
- ✔ Trichomonas vaginalis

Cancer and palliative care

- ✔ 2 week referral criteria for suspected cancers
- ✔ Pain management
- ✔ WHO pain ladder
- ✔ Syringe drivers
- ✔ Drug conversions – opioids
- ✔ Palliative symptom management
- ✔ Screening programmes for common cancers

Mental Health

- ✔ Acute psychosis / mania Alcohol and drug misuse
- ✔ Anxiety disorders
- ✔ Bipolar disorder
- ✔ Depression
- ✔ Eating disorders
- ✔ Mental Health Act
- ✔ Post-traumatic stress disorder
- ✔ Schizophrenia and other psychotic illness
- ✔ Self harm

Learning Disability

- ✔ Autistic spectrum disorder
- ✔ Cerebral palsy
- ✔ Fragile X syndrome
- ✔ Risks associated with learning disability
- ✔ Trisomy 21 (Down syndrome)

Cardiovascular Problems

- ✔ Arrhythmias
- ✔ Cardiovascular disease risk assessment
- ✔ Coronary heart disease
- ✔ Angina
- ✔ Acute coronary syndromes
- ✔ Cardiac arrest
- ✔ Cardiomyopathy
- ✔ Cerebrovascular disease (stroke and TIA)
- ✔ Congenital heart disease
- ✔ Heart failure
- ✔ Hypertension
- ✔ Lipid management
- ✔ Peripheral vascular disease (arterial and venous)
- ✔ Thromboembolic disease (DVT and PE)
- ✔ Valve disease

Digestive Problems

- ✔ Acute abdominal conditions
- ✔ Appendicitis
- ✔ Cholecystitis
- ✔ Pancreatitis
- ✔ Coeliac disease
- ✔ Constipation
- ✔ Colorectal cancer – screening, investigation, diagnosis
- ✔ Diverticulosis
- ✔ Gallstones
- ✔ Gastroenteritis
- ✔ GI cancers (oesophageal, gastric, hepatic, pancreatic, colonic)
- ✔ GORD - reflux
- ✔ Haemorrhoids
- ✔ Inflammatory bowel disease
- ✔ Irritable bowel syndrome
- ✔ Non-ulcer dyspepsia, gastritis peptic ulceration

Drugs and Alcohol

- ✔ Alcohol related emergencies
- ✔ Assessing alcohol intake – units
- ✔ National Clinical Guidelines - care of drug users
- ✔ Screening tools for alcohol dependence – CAGE and AUDIT
- ✔ Testing in drug treatment
- ✔ Treatment of alcohol dependence

ENT and Facial Problems

- ✔ Bell's palsy
- ✔ Cholesteatoma
- ✔ Epistaxis
- ✔ Glandular fever
- ✔ Hearing loss and audiology
- ✔ Infective and allergic rhinitis
- ✔ Laryngitis
- ✔ Ménière's disease
- ✔ Nasal polyps
- ✔ Oral candida
- ✔ Oral herpes
- ✔ Otitis extern
- ✔ Otitis media
- ✔ Perforated tympanic membrane
- ✔ Pharyngitis
- ✔ Salivary stones
- ✔ Sinusitis
- ✔ Snoring and sleep apnoea
- ✔ Suspected head and neck cancer
- ✔ Tempero-mandibular pain
- ✔ Tonsillitis and indications for tonsillectomy
- ✔ Trigeminal neuralgia
- ✔ Vertigo

Eye disease

- ✔ Blepharitis
- ✔ Cataract
- ✔ Conjunctivitis (infective and allergic)
- ✔ Corneal ulcers and keratitis
- ✔ Diplopia
- ✔ Dry eye syndrome
- ✔ Entropion and ectropion
- ✔ Episcleritis and scleritis
- ✔ Glaucoma
- ✔ Iritis and uveitis.
- ✔ Myopia, hypermetropia, astigmatism
- ✔ Naso-lacrimal obstruction and dacryocystitis.
- ✔ Optic disc atrophy
- ✔ Retinal detachment
- ✔ Retinopathy
- ✔ Strabismus
- ✔ Stye and chalazion
- ✔ Vitreous detachment / haemorrhage

Metabolic Problems

- ✔ Acromegaly
- ✔ Addison's disease
- ✔ Body mass index calculation
- ✔ Cushing's syndrome
- ✔ Chronic kidney disease and eGFR
- ✔ Diabetes insipidus
- ✔ Diabetes mellitus – Type 1 and 2
- ✔ Diabetic emergencies
- ✔ Hypoglycaemia
- ✔ Hyperglycaemic ketoacidosis
- ✔ Hyperglycaemic hyperosmolar non-ketotic coma

- ✔ Diabetic nutrition – glycaemic index
- ✔ Hyperlipidaemia
- ✔ Hyperuricaemia
- ✔ Impaired fasting glycaemia
- ✔ Impaired glucose tolerance
- ✔ Obesity
- ✔ Phaeochromocytoma
- ✔ Prolactinoma
- ✔ Thyroid disorders
- ✔ Thyroid emergencies – myxoedema coma and hyperthyroid crisis

Neurological Problems

- ✔ Amyotrophic lateral sclerosis
- ✔ Bell's palsy
- ✔ Brain tumours
- ✔ Carpal tunnel syndrome
- ✔ Epilepsy
- ✔ Headache – BASH guidelines
- ✔ Huntingdon's disease
- ✔ Meningitis / encephalitis
- ✔ Multiple sclerosis
- ✔ Parkinson's disease
- ✔ Polyneuropathies
- ✔ Raised intracranial pressure
- ✔ Subarachnoid haemorrhage
- ✔ Temporal arteritis
- ✔ Trauma and concussion
- ✔ Trigeminal neuralgia
- ✔ Vertigo

Respiratory

- ✔ Asthma
- ✔ Atypical pneumonias
- ✔ Bronchiectasis
- ✔ Community acquired pneumonia
- ✔ COPD
- ✔ Influenza (including avian flu and swine flu)
- ✔ Lung cancer
- ✔ Pneumothorax
- ✔ Smoking cessation
- ✔ Spirometry
- ✔ Tuberculosis
- ✔ Vaccination against respiratory illness

Musculoskeletal problems

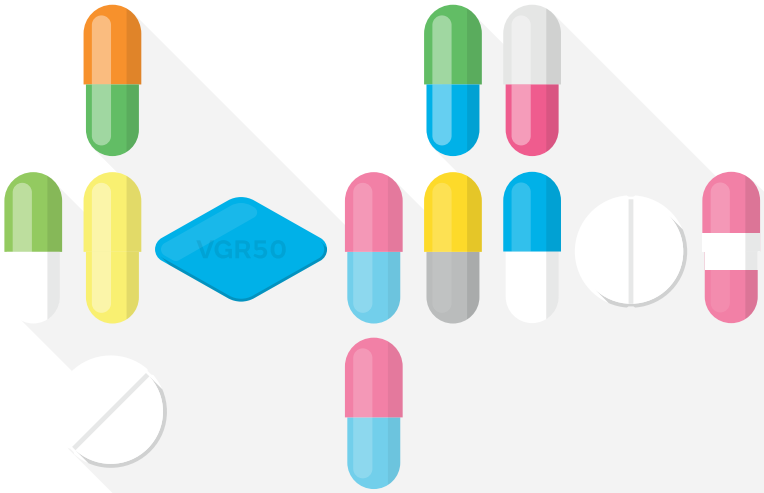
- ✔ Acute arthropathies
- ✔ Ankylosing spondylitis
- ✔ Back pain
- ✔ Cervicalgia
- ✔ Disease-modifying anti-rheumatic drugs
- ✔ Fibromyalgia
- ✔ Frozen shoulder
- ✔ Gout
- ✔ Indications for imaging
- ✔ Joint injections
- ✔ NSAIDs including monitoring
- ✔ Osteoarthritis
- ✔ Osteoporosis
- ✔ Polymyalgia rheumatica
- ✔ Rheumatoid arthritis
- ✔ Septic arthritis

Skin disease

- ✔ Acne and rosacea
- ✔ Angioedema
- ✔ Discoid lupus
- ✔ Disorders of hair and nails
- ✔ Disseminated herpes simplex
- ✔ Drug eruptions
- ✔ Erythroderma
- ✔ Generalised pruritus
- ✔ Granuloma annulare
- ✔ Leg ulcers and lymphoedema
- ✔ Lichen planus
- ✔ Necrotising fasciitis
- ✔ Pemphigus and pemphigoid
- ✔ Psoriasis
- ✔ Scabies and head lice
- ✔ Skin infections (bacterial, viral and fungal)
- ✔ Skin tumours (benign and malignant)
- ✔ Stevens-Johnson syndrome
- ✔ Toxic epidermal necrolysis
- ✔ Urticaria and vasculitis
- ✔ Vitiligo

Prescribing and drug safety

- ✔ Drug interactions and contraindications
- ✔ Drug side effects
- ✔ Drug monitoring for common and important drugs
- ✔ Over the counter (OTC) medications
- ✔ Selected List Scheme drugs



Evidence interpretation

Basic Statistics

- ✔ 95% confidence intervals
- ✔ P values and statistical significance
- ✔ Predictive value
- ✔ Prevalence and incidence
- ✔ Relative risk and odds ratios
- ✔ Risk - ARR and calculating NNT
- ✔ Sensitivity and specificity
- ✔ Standard deviation
- ✔ Types of average – mean, mode, median
- ✔ Types of error (Type 1 and Type 2)

Interpreting graphs and charts

- ✔ Cates plots
- ✔ Forrest plots for meta analysis
- ✔ Funnel plots
- ✔ L'Abbe plots
- ✔ Regression analysis and correlation
- ✔ Scatter plots

Types of study

- ✔ Case series
- ✔ Cross sectional survey
- ✔ Case control study
- ✔ Cohort study
- ✔ Randomised controlled trial
- ✔ Systematic reviews and meta analysis
- ✔ Strength of evidence
- ✔ Qualitative / quantitative studies

Organisational Domain

- ✔ Access to medical records
- ✔ Appraisal
- ✔ Certification – sickness, death, cremation, blindness
- ✔ Clinical governance
- ✔ Confidentiality / disclosure
- ✔ Controlled drugs regulations
- ✔ Drug administration rules for non prescribers
- ✔ Employment legislation
- ✔ Fitness to drive (DVLA)
- ✔ Fitness to fly
- ✔ Health and safety
- ✔ Legislation – Data protection Act, Access to Health Records Act, Freedom of Information Act
- ✔ Medicolegal issues
- ✔ NHS complaints procedures
- ✔ Organisations – HPA, MHRA, GPC, LMC, PCO
- ✔ Professionalism – GMC guidance
- ✔ Statutory duties of doctors
- ✔ Types of contract – GMS, PMS, APMS, PCTMS
- ✔ Types of service – essential, additional, enhanced (DES, NES, LES)

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MORE THAN DEFENCE

PREPARING FOR THE MRCGP CSA EXAM?

Pass first time with Emedica's 1 day CSA preparation course

- **Key theory for the CSA** – RCGP mark scheme, exam format and feedback statements in depth
- **Consulting skills** – The CARE model for CSA, breaking bad news, communication skills
- **Common reasons for failure** – How to avoid the common pitfalls for failure
- **Best practice demonstrations** – Professional examples of how to tackle difficult areas

Maximum 8 per course to allow for plenty of practice and individual feedback

CPD: 7 Credits, Certificate of attendance provided for study leave allowance claims

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"I passed the exam with a score of 106. Thank you for your help. I think it was useful to focus on the things we need to improve rather than what we did right as that's what tweaks us and makes us the best we can be"

"I have passed the CSA with a score of 92 on the second attempt. Before I took your course I had failed with a miserable 61. I never thought I could improve so much, your excellent advice really pushed me. "

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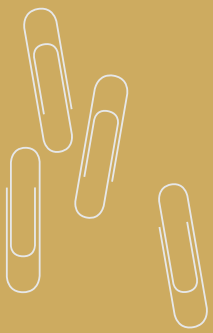
CSA exam overview

The CSA is a comprehensive examination of readiness to practice safely and independently as a qualified GP. It tests consulting skills, problem solving, knowledge of current management guidelines, ethics, holistic practice and practical clinical skills. It is a challenging exam that can only be taken in the ST3 year or later. You can have a maximum of 4 attempts at this exam. Exam sittings are available several times a year, and are held at a dedicated examination suite at 30 Euston Square, the RCGP's London headquarters.

The CSA is based around a simulated surgery format, with 13 consultations. You will have 2 minutes to read the case notes for the patient you are about to see before a buzzer sounds. The notes for all patients are displayed on a tablet on your table. Once the buzzer sounds, the patient will knock, and you will have 10 minutes for your consultation. After 10 minutes, another buzzer signals the end of the consultation, and the patient and examiner will leave, regardless of how far into the consultation you are. There is a short break after the first 7 consultations. Some cases may be based around a home visit– in these cases you will be taken to a different room that has been setup to simulate this. You may also have a telephone consultation – telephones are available in each consulting room.



CSA mark scheme

There are 3 domains assessed in each case in the CSA, with each carrying an equal number of possible marks. The domains are:

- Data gathering, technical & assessment skills
- Clinical management skills
- Interpersonal skills

Data gathering, technical & assessment skills

This domain is assessing your ability to take a concise, systematic and relevant history – both exploring the relevant symptoms and risk factors, and excluding the relevant rare but serious conditions by asking about red flag symptoms. It also assesses your choice and ability to perform the correct examinations. In some cases, your ability to use equipment as part of your data gathering will also be assessed – e.g. an otoscope, ophthalmoscope, or peak flow meter.

Clinical management skills

This domain assesses your ability to synthesise the data you gather and to come up with a sensible working diagnosis or differentials. It also assesses your decision making skills and ability to manage the patient holistically in line with current best practice. You may have to manage patients with multiple problems or co-morbidities as well as show an ability to promote good health and manage risk appropriately.

Interpersonal skills

This domain assesses your ability to communicate appropriately and effectively with the patient, demonstrating a patient centred approach. You should be able to take on board the patient's health beliefs and preferences, and to explain things using language that is understandable. Where appropriate, you should involve the patient in decision making.

Your performance in each domain will be assessed, with marks given according to the level achieved:

- Clear Pass (3 marks): excellent performance
- Pass (2 marks): adequate performance for a qualified GP
- Fail (1 mark): performance below standard for a qualified GP
- Clear Fail (0 marks): very poor performance, clearly below standard for a qualified GP

The total number of marks available for each case is therefore 9, with a total mark for the exam out of 117. The pass mark is set daily using the borderline group methods, which allows adjustment for variations in case difficulty. The range of pass marks has been between 72 and 78 so far since the new marking method was implemented.

Effective preparation for the CSA

The CSA tests both knowledge of general practice and the skills needed to consult at the level of a qualified GP.

You can develop the knowledge by revising the core clinical topics from the GP curriculum and by seeing patients regularly and reading around the cases you see.

To develop the skills required to consult in a concise, holistic, patient centred way requires practice – lots of practice! There are different types of practice that can help you to develop your own consulting style while ensuring that you are able to demonstrate the skills and competences needed to pass the CSA. Here are some of the things that you can do to help you prepare:

- See lots of patients – seeing patients in surgery day to day is the most effective way to develop your own consulting style and to improve your knowledge base. Try to get comfortable with 10-12 minute consultations before you sit the CSA – in the exam, you cannot have a few extra minutes to finish off – you will be marked on what you achieve in the 10 minutes consultation (although you do have 2 minutes to read prior to each case).
- Arrange joint surgeries – doing joint surgeries with your trainer will allow you to get valuable feedback on areas of weakness as well as a chance to discuss alternative ways to manage problems.
- Video your consultations – videoing consultations and then reviewing them yourself (and with your trainer) will often highlight things that can otherwise be missed. You may pick up small cues that you missed, or realise that your questioning style could be improved. You will need consent from patients – design a form and make it clear that the videos will only be used for training purposes and will be destroyed after a short period of time.
- Join a study group – form a study group with other registrars that are preparing for the CSA and try to meet regularly to practice. It is a good idea to start this early – 6 months before you plan to sit the CSA. As you get closer to the exam, try to meet more frequently, increasing to 2 or 3 times a week in the last couple of months before your exam. Meeting in a group of 3 will allow you to get a good amount of practice in a short amount of time, with useful feedback – you can each rotate being the patient, being the candidate and being the examiner. Try to be honest when giving feedback, and to avoid being defensive when receiving feedback. Watching others consult can also give you an insight into different ways to approach the same case.
- Attend a course - many registrars find attending a focused CSA preparation course useful as part of their revision. Ideally you want to be in a course with a small group that provides as much practice with individual feedback as possible. Experiencing mock CSA cases with professional role players can help you get a feel for the real exam, and honest feedback can help you understand your weaknesses and develop a clear plan to improve them prior to the real thing.

Core cases for review

The cases at each sitting of the CSA are chosen to cover a wide range of disease areas and a variety of case types – acute illness, chronic illness, cases with social and psychological aspects as well as cases that involve ethical or medicolegal issues. Every sitting of the exam will include at least 1 child health related case, and at least 2 cases will include testing of safe prescribing. There are several hundred different cases within the CSA database, so it is impractical to try to prepare for every possible case. There are some common or important case types within each disease are though – you can use this list to ensure you have covered some of these possible core cases. We have included 2 complete sample cases taken from the Emedica online CSA preparation package to help you practise.

- Cardiovascular
- Acute angina
- Worsening chronic heart failure
- Cardiovascular risk screening
- Palpitations
- Recent stroke – psychological impact
- TIA – risk assessment
- Hypertension management
- Respiratory
- Chest infection in asthmatic patient
- URTI – demanding antibiotics
- Worsening COPD
- Poorly controlled asthmatic
- Newly diagnosed asthmatic – peak flow monitoring
- Smoking cessation
- Haemoptysis – possible lung cancer
- Dyspnoea of unknown cause
- Neurology
- Forgetfulness / dementia
- Parkinson's
- Brain tumour
- Sudden onset headache
- Migraine management
- Pseudo-seizures
- Seizure – first presentation
- Frequent falls – patient living alone
- Musculoskeletal
- Back pain – demanding investigations
- Back pain - cauda equina
- Septic arthritis
- Osteoarthritis
- Rheumatoid – managing symptoms
- Frozen shoulder
- Ankylosing spondylitis
- Carpal tunnel syndrome
- Endocrine / metabolic
- Newly diagnosed Type 2 diabetic
- Poorly controlled diabetic
- Group 2 driver on insulin – refusing to stop driving
- Hyperthyroidism
- Hypothyroidism presenting with low mood
- Obesity – requesting slimming pills
- Psychiatry
- Schizophrenia with depression
- New onset depression
- Low mood associated with chronic illness
- Post traumatic stress disorder
- Reactive depression
- Suicidal patient
- Young student with eating disorder
- Cancer / palliative care
- Pain management – palliative patient

- Symptom control – nausea
- Discussing diagnoses – breaking bad news
- Chemotherapy side effects – affecting mood
- Eye disease
- Sudden loss of vision
- Painful red eye
- Acute glaucoma
- Cataracts – worsening vision
- Double vision
- ENT
- Ménière's – with drop attacks at work
- Otitis media – requesting antibiotics
- Recurrent tonsillitis
- Hearing loss – work related
- Dysphagia
- Skin disorders
- Severe uncontrolled acne
- Psoriasis
- Pigmented lesion with rapid growth
- Poorly controlled eczema in a child
- Itchy skin
- Dermatitis related to work environment
- Child health
- Parent worried about ADHD
- Parent requesting separate jabs for MMR
- Bed wetting
- Child refusing to go to school
- Childhood constipation
- Men's Health
- Haematuria
- Testicular torsion
- Healthy patient requesting PSA test
- Erectile dysfunction
- Athlete using steroids – side effects
- Young patient requesting vasectomy
- Women's Health
- Infertility
- Miscarriage
- Postnatal depression
- Breast lump – worried about cancer
- Patient missed cervical screening
- HRT options – symptomatic patient
- Contraception in a teenager
- Urinary incontinence – embarrassed patient
- Ruptured ectopic pregnancy
- Antenatal appointment – anomaly testing
- Sexual Health
- Patient with HIV – does not plan to tell his wife
- Pelvic inflammatory disease
- STI screening
- Emergency contraception request
- Renal / Urology
- Chronic kidney disease – worsening eGFR
- Recurrent UTIs
- Bladder cancer in a young man
- Circumcision request
- Gastro-intestinal
- Irritable bowel syndrome
- Inflammatory bowel – flare up
- Dyspepsia – suspicious endoscopy result
- Malaena
- Food poisoning
- Rectal bleeding – investigation
- Infectious diseases
- Malaria prophylaxis
- Notifiable disease - patient requesting

confidentiality

- Chicken pox exposure in pregnancy
- Antibiotic request for viral illness
- Miscellaneous
- Healthy patient requesting a sick note
- Child requesting treatment without parental knowledge
- Patient requesting access to partner's notes
- Patient angry about care from another doctor
- Allergic reaction to drug
- Request for homeopathic treatment
- Insomnia – request for sleeping tablets
- Heavy drinking with social issues
- Request for diazepam – patient taking heroin
- Request for fitness to fly certificate – multiple medical problems

CSA Sample Cases

We have included two detailed sample CSA cases for you to practice in a study group. You can access 52 more high quality CSA cases (4 full circuits) at

emedica.co.uk/csaonline

20% discount FOR MEMBERS your code **mpscsa**

Sample CSA cases

Doctor Sheet – Case 1

Context:

You are a locum General Practitioner who has recently finished training.

Name	**James Mahoney**
Date of birth / Age	**68**
Address:	**52 Acacia Avenue**
Social History:	**Married**
Past medical history:	**Type 2 diabetes** **Hypertension**
Current medication:	**Metformin 500mg TDS** **Lisinopril 10mg od**
Recent consultations:	**2 weeks ago: Diabetic annual review with nurse: examination normal, blood pressure 135/72. Bloods requested.**
Blood results:	**HbA1c** — **7.3%** **Urea and Electrolytes** — **Within normal range**

Patient Sheet – Case 1

Name: James Mahoney
Gender: Male
Age: 68

Background:

- You are a 68 year old retired architect.
- You are married to Winnie Mahoney, who is 65.
- You attended two weeks for your annual diabetic check.

Your opening line: "I had a bit of a funny turn yesterday...and I'm quite worried"

ONLY GIVE THE INFORMATION BELOW IF ASKED RELEVANT QUESTIONS

Symptoms:

- **Your wife mentioned that your speech was slurred during dinner – "She said I sounded like I was drunk".**
- **You had a small glass of wine with your meal.**
- **You also noticed your left arm felt weak – you dropped a pan when trying to clear up after dinner.**
- **You have never had these symptoms before.**
- **You did not feel dizzy or lightheaded.**
- **You have not felt sick or vomited.**
- **You did have a mild headache, but put this down to being tired.**
- **All your symptoms were better by the time you went to bed – about 2 hours after dinner.**
- **You woke this morning feeling absolutely fine.**
- **You sometimes forget to take your medications.**

If asked a relevant question, mention that:

Family History

- **Your father died of a heart attack aged 60.**
- **There is no family history of stroke.**

Social History

- **You live with your wife. She was diagnosed with breast cancer 2 months ago, and is currently undergoing chemotherapy – you drive her to appointments about an hour away three times a week.**

Lifestyle

- **You drink a small glass of wine most evenings with dinner. You sometimes drink a bit more if at a party or when dining out (2-3 glasses).**
- **You smoke 10 cigarettes a day and have done for over 40 years. You enjoy this and have never tried or wanted to give up.**
- **You are fairly active, and spend about an hour every day gardening.**
- **You used to go walking with your wife a lot, but since your wife started treatment for her cancer, she is tired a lot and you tend to stay in more.**
- **You normally eat healthy food, but since your wife has been unwell, she has been too tired to cook most days, and you have been eating a lot more take away food.**

Ideas, Concerns, Expectations

- **You think that this might be an early warning sign for a stroke.**
- **You are worried that this could be the first episode of many and that things might get worse in the future. You are quite worried and stressed about your wife's illness. If told that you should not drive for 4 weeks, then you become worried about how you will get your wife to her appointments.**
- **You want to know what is going on, and whether you need to have any tests to confirm a cause for your symptoms.**

Behaviour

- **You are quite anxious because of your worries.**
- **You are co-operative and non-demanding.**
- **If the doctor explains the reasons it is not safe for you to drive, you are willing to accept this.**

Notes:

- **If the doctor asks to examine you, ask them "what do you want to examine?"**
- **If the doctor wishes to discuss your diabetes, mention that you sometimes miss your evening tablet, and that you do enjoy a sweet dessert once in a while. You did not come to discuss this, so only go into this if the doctor specifically asks about it.**

Examiner Sheet - Examination Findings Case 1

Give the candidate the relevant doctor's sheet for this case. Inform them they have 2 minutes to read the case notes. Once 2 minutes is up, start your timer (10 minutes) as the simulated patient enters the consultation area.

Read through the specific mark scheme for this case, and observe carefully throughout so you can mark the case using the observed behaviours as follows:

Clear Pass (3)	Demonstrates all criteria mentioned for that domain- excellent.
Pass (2)	Demonstrates majority of criteria – satisfactory for qualified GP.
Fail (1)	Misses some areas – below the standard for a qualified GP.
Clear Fail (0)	Misses multiple areas / unsafe / significantly below standard for a GP.

If the doctor requests the relevant examinations, then give them the findings on the other side of this sheet.

Examination Findings

Case 1

If the doctor asks to examine the relevant areas, provide these findings:

BP	**150/80**
Pulse	**80, sinus rhythm, no neurological abnormalities, Cranial nerves intact no bruit.**

Examiner Sheet

Case 1 Mark Sheet

DOMAIN	OBSERVED BEHAVIOURS
DATA GATHERING ☐ Clear Pass ☐ Pass ☐ Fail ☐ Clear Fail	▪ Takes a detailed history including: – nature and duration of symptoms – speech, weakness, blurred vision, headache, facial drooping –risk factors for stroke - FH, smoking ▪ Uses recognised risk score to establish risk of stroke (e.g. ABCD2) ▪ Examination requested includes neuro + cranial nerves + check for bruit + pulse / BP ▪ Cranial nerve examination performed proficiently ▪ Asks about driving status
CLINICAL MANAGEMENT ☐ Clear Pass ☐ Pass ☐ Fail ☐ Clear Fail	▪ Makes a diagnosis of TIA ▪ Starts Aspirin 300mg ▪ Arranges specialist assessment within 24hrs ▪ Discusses risk reduction – smoking, cholesterol testing ▪ Explains the patient should not drive for 4 weeks ▪ Safety netting – explains the need to call "999" if any new weakness or speech disturbance
INTERPERSONAL SKILLS ☐ Clear Pass ☐ Pass ☐ Fail ☐ Clear Fail	▪ Explores the cue "and I'm quite worried" and acknowledges patient's worries about possible diagnosis and risk of future problems. ▪ Explores social issues – re: caring for wife ▪ Explains diagnosis of TIA clearly ▪ Explains risk / risk factors clearly ▪ Explains need to stop driving sensitively ▪ Engages and involves patient throughout

COMMENTS

Total Score:

Sample CSA cases

Doctor Sheet – Case 2

Context:

You are a locum General Practitioner who has recently finished training.

Name:	**James Wheeler re: Joshua Wheeler**
Date of birth / Age:	**8**
Address:	**18 Marcia Avenue**
Social History:	**Lives with parents and 2 siblings**
Past medical history:	**Asthma, Eczema**
Current medication:	**Epaderm 500ml** **Salbutamol 100 mcg PRN**
Recent consultations:	**4 weeks ago** **Asthma review with nurse: No recent attacks, inhaler technique with spacer good**

Patient Sheet – Case 2

Name:	**James Wheeler**
Gender :	**Male**
Age:	**38**

Background:

- **You are a 38 year old builder.**
- **You are married to Stephanie Wheeler, who is 36.**
- **You are attending to talk about your son, Joshua, who is 8.**

Your opening line: "I'm worried about Josh..."

ONLY GIVE THE INFORMATION BELOW IF ASKED RELEVANT QUESTIONS

Symptoms (Relating to Josh):

- **Joshua has been wetting the bed.**
- **This has been going for about 3 months.**
- **He wets the bed most nights without any real change in frequency of wetting.**
- **He does not wet himself in the day.**
- **Why today? – "Well he's been wetting the bed, and we need to do something about it soon."**
- **If they follow the cue re: "soon" – the reason you have come in now, is that Joshua is**
- **Going on a school trip in 5 days time, and you don't want him to wet himself while away.**
- **This is his first trip away from home with school.**
- **He was potty trained at 3 years old, and has been dry at night since age 4.**
- **Usually he will wet the bed in the middle of the night, just once.**
- **He has never had similar problems before, and not had any urine infections.**
- **His older brother, Jason (11), and his sister Clare (15) never wet the bed.**

- He likes to drink Ribena with his packed lunch and water at dinner. He is not allowed fizzy drinks at home, although sometimes has it if eating out as a treat (less than once a month).
- He usually has a glass of milk just before bedtime (usually goes to be at 8.30pm).
- He drinks a total of about 5 glasses of fluids a day, this has not changed recently.
- His asthma is well controlled, he has not had any serious attacks for over 2 years.
- He has been at the same school since nursery, and the teachers have not reported any problems.
- He enjoys school and rarely misses school.
- His eczema is generally well controlled, although he has the odd flare up, especially in colder weather.
- He doesn't pee excessively, and has not lost any weight. He does not complain of thirst.

Family History

- There is no family history of diabetes.
- There is no family history of bed-wetting.

Social History

- You live with your wife. If asked how things are at home mention "well things aren't exactly great..."
- If they follow this up, mention that you are having difficulties in the marriage, and you have been arguing for quite some time (about 4 months). You think that Joshua might have heard arguments.
- You are thinking about separating, and have not told the children yet.
- A lot of the arguments are about money – "things are tight at

the moment – but we get by".

Lifestyle (Joshua)

- **Josh is an active young boy, he plays football regularly.**
- **He has lots of friends and enjoys playing computer games.**

Behaviour

- **You are co-operative and non-demanding.**
- **However, you are very keen to get something that will work quickly, and if only offered the alarm or conservative measures, become more insistent.**

Notes:

- **If the doctor suggests that you come in with Joshua, you are happy to do so, as long as it can be done quickly (before his trip).**

Examiner Sheet - Case 2: Intructions

Give the candidate the relevant doctor's sheet for this case. Inform them they have 2 minutes to read the case notes. Once 2 minutes is up, start your timer (10 minutes) as the simulated patient enters the consultation area.

Read through the specific mark scheme for this case, and observe carefully throughout so you can mark the case using the observed behaviours as follows:

Clear Pass (3)	Demonstrates all criteria mentioned for that domain- excellent.
Pass (2)	Demonstrates majority of criteria – satisfactory for qualified GP.
Fail (1)	Misses some areas – below the standard for a qualified GP.
Clear Fail (0)	Misses multiple areas / unsafe / significantly below standard for a GP.

If the doctor requests an examination, then state there is no relevant examination today.

Examiner Sheet

Case 2 Mark Sheet

DOMAIN	OBSERVED BEHAVIOURS
DATA GATHERING ☐ Clear Pass ☐ Pass ☐ Fail ☐ Clear Fail	▪ Takes a detailed history including: – When the bed wetting started – If any daytime wetting – Fluid intake – what, how much, when – Previous wetting, including potty training – Family history of wetting (including siblings) – Family history of diabetes – History of urinary tract infections ▪ Excludes diabetes – asks about weight loss, polydipsia, polyuria. ▪ Explores possible non physical causes including issues at home / school.
CLINICAL MANAGEMENT ☐ Clear Pass ☐ Pass ☐ Fail ☐ Clear Fail	▪ Makes a diagnosis of nocturnal enuresis secondary to stress at home. ▪ Reassures father that there is unlikely to be any underlying serious physical pathology. ▪ Offers routine referral to enuresis clinic. ▪ Discusses conservative management options: ▪ Motivational counselling – avoiding fluids for 1h before bed, record keeping, reward charts. ▪ Does NOT advise fluid restriction throughout day. ▪ Enuresis alarms. ▪ Requests to see Joshua for examination. ▪ Offers Desmopressin 200 micrograms. ▪ Review with Joshua within a few weeks.
INTERPERSONAL SKILLS ☐ Clear Pass ☐ Pass ☐ Fail ☐ Clear Fail	▪ Explores cues relating to things not being “great at home”, and needing to sort this out “soon” ▪ Explores social issues – re: home situation, issues with marriage and possible stress on Joshua. ▪ Explains diagnosis of nocturnal enuresis clearly. ▪ Offers options for conservative management. ▪ Takes on board father’s desire for urgent resolution. ▪ Reassures father in a sensitive way that this is relatively common and most grow out it

COMMENTS

Total Score:

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