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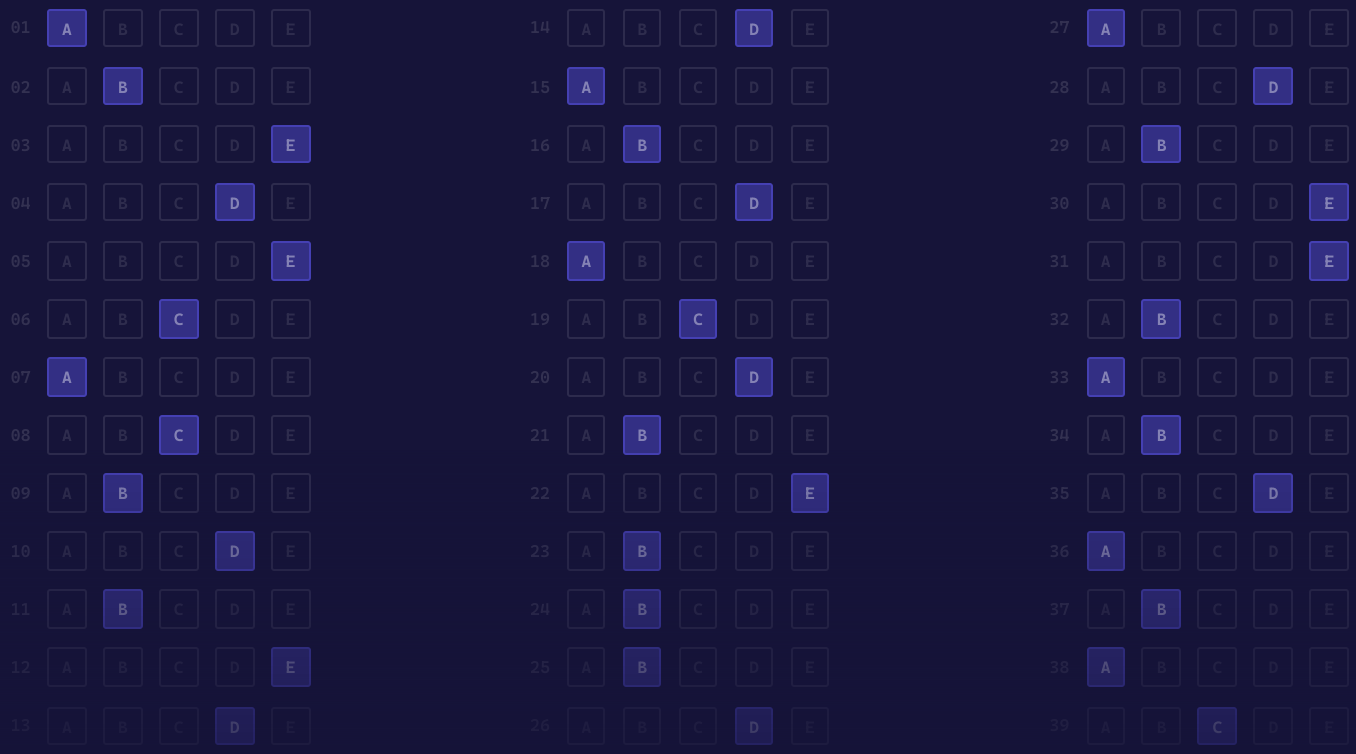


PRACTICE QUESTIONS

## NBME® Subject Examination Program, Medical School Services (MSS), including International Foundations of Medicine (IFOM)

# FMALL

Family Medicine Modular Exams

| EDITION | QUESTIONS | FORMAT |
|---|---|---|
| Demo | 9 | Limited Edition PDF |

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# Before you begin

## What this is

9 practice questions for NBME® Subject Examination Program, Medical School Services (MSS), including International Foundations of Medicine (IFOM) `FMALL`, each with its answer key and an explanation. Answer a question before you read its key — the explanation is worth more once you have committed.

## If something looks wrong

Send us three things and we will check it:

- the exam code, `FMALL`
- the question number
- the email address on your order

Write to **support@mometrix.net**. We reply within one business day.

**QUESTION 1** MULTIPLE CHOICE

A 58-year-old man with a 30-pack-year smoking history who quit 2 years ago presents for a routine visit. His blood pressure is 128/78 mm Hg, BMI is 27 kg/m$^2$, and fasting glucose is 98 mg/dL. He takes no medications. Which of the following preventive interventions are recommended by the U.S. Preventive Services Task Force (USPSTF) for this patient? (Choose two.)

A Low-dose aspirin for primary prevention of cardiovascular disease

**B Annual low-dose CT (LDCT) of the chest for lung cancer screening**

**C Screening for type 2 diabetes mellitus with HbA1c**

D Statin therapy for primary prevention of cardiovascular disease

E Prostate-specific antigen (PSA)–based screening for prostate cancer

**ANSWER** **B** · **C**

**WHY** USPSTF recommends annual LDCT for lung cancer screening in adults aged 50–80 years (previously 55–80) who have a ≥20 pack-year smoking history and currently smoke or have quit within the past 15 years. This patient meets criteria. The task force also recommends screening for prediabetes and type 2 diabetes in adults aged 35–70 years who have overweight or obesity (BMI ≥25); his BMI is 27. Low-dose aspirin for primary prevention of CVD was withdrawn in 2022 and is no longer routinely recommended. Statin therapy is not automatically indicated at this ASCVD risk level without a formal risk calculation and shared decision-making, and PSA-based screening is a Grade C recommendation only for men aged 55–69 after individualized decision-making, which is not a strong general recommendation here. The two best evidence-based recommendations are lung cancer screening with LDCT and diabetes screening with HbA1c.

**QUESTION 2** MULTIPLE CHOICE

A 45-year-old woman with hypertension comes to the clinic for follow-up. She has been adherent to lifestyle modifications and lisinopril 20 mg daily, but her average home blood pressure remains 145/92 mm Hg and her office blood pressure today is 152/96 mm Hg. Her basic metabolic panel is normal except for a potassium of 5.1 mEq/L and creatinine of 1.0 mg/dL. Which of the following changes to her antihypertensive regimen are most appropriate? (Choose two.)

**A** **Add chlorthalidone 12.5 mg daily**

B Replace lisinopril with losartan

C Add spironolactone 25 mg daily

**D** **Add amlodipine 5 mg daily**

E Continue lisinopril 20 mg and recheck blood pressure in 3 months

**ANSWER** **A · D**

**WHY** For a patient whose blood pressure is not controlled on an ACE inhibitor monotherapy (above the goal of <140/90, or <130/80 per newer ACC/AHA targets), the guideline-recommended approach is to add a thiazide-type diuretic (chlorthalidone or indapamide) or a calcium channel blocker (amlodipine). Therefore, adding chlorthalidone and adding amlodipine are both evidence-based choices. Switching lisinopril to losartan (another ARB) is not indicated because they have the same mechanism and would not improve her potassium of 5.1; in fact, ARBs can also raise potassium. Adding spironolactone is reserved for resistant hypertension after three-drug therapy and would worsen her already elevated potassium. Continuing current therapy without intensification leaves her uncontrolled and is not acceptable.

**QUESTION 3** SINGLE CHOICE

A 32-year-old woman with a 4-year history of type 1 diabetes mellitus becomes pregnant. Her current insulin regimen is glargine 20 units at bedtime and lispro sliding scale with meals. Her HbA1c is 7.4%. Which of the following is the most appropriate management plan?

A Switch glargine to NPH insulin and continue lispro with meals

B Discontinue all insulin and start metformin

**C Continue her current insulin regimen and intensify glycemic targets to HbA1c <6.5% in the second trimester**

D Continue glargine and lispro, with a goal of HbA1c <6.0% throughout pregnancy

**ANSWER C**

**WHY** Pregnancy in type 1 diabetes requires pregestation-to-postpartum intensive management. Insulin glargine and lispro (and aspart) are both considered acceptable in pregnancy; many patients also use NPH. The glycemic target in pregnancy is to achieve HbA1c as close to normal as possible without hypoglycemia, generally <6.0% in early pregnancy and <6.0% if achievable safely in the second and third trimesters, but an HbA1c below 6.5% is a commonly cited clinically reasonable goal when 6.0% cannot be safely reached. Metformin is not appropriate as primary therapy in type 1 diabetes. A target of HbA1c <6.0% throughout is too aggressive given hypoglycemia risk and is not the standard recommendation.

**QUESTION 4** SINGLE CHOICE

A 27-year-old man presents with low mood, anhedonia, insomnia, decreased appetite, and poor concentration for the past 6 weeks following a job loss. He denies substance use and has no suicidal ideation. Physical examination and laboratory studies, including TSH, are normal. Which of the following is the most appropriate initial treatment?

**A** **Cognitive behavioral therapy (CBT)**

B Sertraline

C Combination therapy with CBT and an SSRI

D Electroconvulsive therapy (ECT)

**ANSWER** **A**

**WHY** For mild to moderate major depressive disorder, either psychotherapy (CBT or interpersonal therapy) or pharmacotherapy with an SSRI is first-line. In a young patient with a recent precipitant, no medical comorbidities, no substance use, and no suicidality, CBT alone is generally preferred as the initial treatment. Combining psychotherapy and an SSRI is more appropriate for severe, recurrent, or chronic depression. ECT is reserved for severe, treatment-resistant depression, depression with psychotic features, or acute suicidality requiring rapid response.

**QUESTION 5** SINGLE CHOICE

An 18-month-old boy presents for a well-child visit. His mother received all prenatal care, and his immunizations to date are up to date for hepatitis B, rotavirus, DTaP, Hib, PCV13, IPV, MMR, and varicella given at his 12-month visit. Which of the following vaccines is most appropriate to administer today?

**A** **DTaP**

B Tdap

C MMR booster

D Influenza vaccine (annual)

**ANSWER** **A**

**WHY** The fourth dose of DTaP is recommended at 15–18 months of age. Tdap is a booster containing a reduced diphtheria component used in adolescents and adults. The second dose of MMR is given at 4–6 years, not at 18 months. Influenza is annual, but the child's age group is 18 months; if it is influenza season and he has not yet received the current season's dose, it would be given, but the scheduled immunization that always falls at this visit is DTaP #4.

**QUESTION 6** SINGLE CHOICE

A 65-year-old man with osteoarthritis of the right knee returns for follow-up. He has tried acetaminophen, topical NSAIDs, and weight loss without adequate relief. Examination shows effusion, bony enlargement, and mild varus deformity. Radiographs show joint space narrowing and osteophytes. Which of the following is the most appropriate next step in management?

A Begin oral methotrexate

**B Begin a trial of oral NSAIDs with a proton pump inhibitor**

C Refer for immediate arthroscopic knee surgery

D Order a rheumatoid factor panel to evaluate for inflammatory arthritis

**ANSWER B**

**WHY** For knee osteoarthritis refractory to acetaminophen, topical NSAIDs, and nonpharmacologic measures, oral NSAIDs (with a proton pump inhibitor for gastroprotection in an older adult) are the next pharmacologic step. Methotrexate is for inflammatory arthritis such as rheumatoid arthritis, not osteoarthritis. Arthroscopic surgery is not effective for degenerative knee osteoarthritis and is generally not indicated unless there is a mechanical cause such as a loose body or meniscal tear. Rheumatoid factor is not indicated in a typical osteoarthritis presentation with bony enlargement and varus deformity.

**QUESTION 7** SINGLE CHOICE

A new screening test for disease X is evaluated in 1,000 patients. Of the 200 patients who truly have disease X, 180 test positive. Of the 800 patients without disease X, 720 test negative. Which of the following is the positive predictive value (PPV) of this test?

**A** **180 / 280**

B 180 / 1000

C 180 / 200

D 80 / 800

**ANSWER** **A**

**WHY** PPV = true positives / (true positives + false positives). There are 180 true positives, and 800 – 720 = 80 false positives, giving 180 / (180 + 80) = 180 / 280. 180/1000 is the prevalence-adjusted observed positive rate, not PPV. 180/200 is sensitivity. 80/800 is the false positive rate.

**QUESTION 8** SINGLE CHOICE

A 42-year-old man presents with epigastric pain that improves with eating and worsens 2–3 hours after meals. He has been taking ibuprofen for back pain. He is a smoker. He takes no other medications and denies NSAID use outside the ibuprofen. Vital signs and physical examination are normal. Which of the following is the most appropriate initial management?

**A** **Empirical Helicobacter pylori testing (urea breath test or stool antigen) followed by treatment if positive, along with PPI therapy and counseling to discontinue ibuprofen**

B Order an upper endoscopy as the first diagnostic test

C Start a proton pump inhibitor (PPI) for 8 weeks without testing for H. pylori

D Order an abdominal CT scan to rule out pancreatic disease

**ANSWER** **A**

**WHY** This presentation is consistent with peptic ulcer disease. In a patient younger than 55 with dyspepsia and no alarm features (no anemia, weight loss, dysphagia, odynophagia, persistent vomiting, family history of gastric cancer, or gastrointestinal bleeding), the recommended initial strategy is to test for H. pylori and treat if positive, plus a course of acid suppression with a PPI and to address NSAID use. Endoscopy is reserved for those with alarm features or who fail the test-and-treat strategy. Treating empirically with a PPI alone without testing for H. pylori misses a treatable cause and is not preferred first-line. CT scanning for pancreatic disease is not indicated for this benign-appearing dyspepsia without alarm features.

**QUESTION 9** SINGLE CHOICE

A 28-year-old G1P0 woman at 32 weeks' gestation presents for routine prenatal care. Her prenatal course has been uncomplicated, and she has had routine first- and second-trimester labs. She reports no contractions, bleeding, leakage of fluid, or decreased fetal movement. Vital signs and fetal heart tones are normal. Which of the following screening tests is most appropriate to perform at this visit?

A Maternal serum alpha-fetoprotein (AFP)

**B Group B Streptococcus (GBS) vaginal-rectal culture**

C Cell-free fetal DNA aneuploidy screening

D Repeat 1-hour glucose challenge test

**ANSWER B**

**WHY** GBS vaginal-rectal screening culture is performed at 36 0/7 to 37 6/7 weeks' gestation (some guidelines accept up to 38 0/7); at 32 weeks it is slightly early but the visit described is the next opportunity to perform it, and it is the universally recommended third-trimester screening at this stage of pregnancy. Maternal serum AFP is a second-trimester screening test (15–22 weeks). Cell-free fetal DNA screening is typically performed starting at 9–10 weeks and is not standard to repeat in the third trimester. The 1-hour glucose challenge test for gestational diabetes is performed at 24–28 weeks; a 32-week repeat is not routinely indicated unless risk factors were missed earlier.