PEBC OSCE sample cases with answers

6 original PEBC OSCE practice scenarios, each with the task, what a strong answer does and a model answer. They are free to read and to download.

Every scenario is original, with invented patients. It is not from any exam, and it is not official material. Check clinical details against current national guidance.

Itchy rash on day three of an antibiotic

Counselling & explanation · 7 minutes

The task

You are a pharmacist in a community pharmacy. Ms Elena Petrova, aged 34, comes to the counter holding a bottle of amoxicillin that was started three days ago for a sinus infection. She says she has developed a rash. She is alone. Assess what has happened, advise her and explain what she should do next. The assessor will not take part in the conversation.

What a strong answer does

- Introduces self, confirms identity and starts with open questions about the rash and timing of the antibiotic.
- **Safety:** Screens for signs of a severe reaction: breathing difficulty, throat tightness, swelling of lips, tongue or face, dizziness, vomiting.
- Treats the lip tightness as a warning sign: checks now for visible swelling and explains that any swelling or breathing change means calling 911.
- **Safety:** Advises her to stop the amoxicillin now, as this may be an allergic reaction, and explains the reason.
- Explores previous reactions, asthma and eczema, other new products and other medicines to judge the likely cause, without declaring a definite diagnosis.
- **Safety:** Arranges urgent assessment today for spreading hives with lip tightness and asthma: a clinician who can see her now or the emergency department, not a next-day visit, and contacts the prescriber about a different antibiotic.
- Documents the reaction in the pharmacy record and the allergy field, and offers or considers a voluntary report of the suspected reaction to Health Canada.
- Explains that a later allergy assessment can clarify whether she is truly allergic, and that she should tell all providers until then.
- Gives safety-netting and checks understanding, with empathy for her work concern.

Model answer

I introduce myself, confirm Ms Petrova's name and ask about the rash, when it began and how many doses she has taken. It appeared on day three, is spreading and is itchy, and her last dose was about four hours ago. I immediately screen for a severe reaction by asking about breathing, throat tightness, dizziness, vomiting and swelling of the lips, tongue or face. She mentions that her lips feel tight, so I observe her face and speech, which look normal for now. I tell her that tight lips with spreading hives is a warning sign, and that if her lips or tongue swell or she has trouble breathing, she must call 911. If that happened here, I would call 911 and give epinephrine if the pharmacy has it available. I advise her to stop the amoxicillin now because the rash may be an allergic reaction. I ask about prior reactions and learn of a childhood rash with penicillin, asthma and eczema. I also ask about other medicines and new products, noting ibuprofen and the contraceptive. I tell her I cannot be certain that it is an allergy without proper assessment, but stopping is the safe choice. I explain that she needs to be seen today, not tomorrow. I call her prescriber now and share the details. If she cannot be seen within hours, she should go to the emergency department, ideally with someone beside her. A clinician can then assess her and choose a different antibiotic if she still needs one. A non-drowsy antihistamine may ease the itch but will not treat a serious reaction. I record the reaction in her pharmacy profile and allergy field, and I offer to report the suspected reaction to Health Canada. I explain that a later allergy assessment can find out whether she is truly allergic, and that until then she should tell every provider about the reaction. I acknowledge her work worries, repeat the red flags, and ask her to repeat the plan.

Antibiotic choice for a patient on warfarin

Drug information · 7 minutes

The task

You are a pharmacist in a community pharmacy. You have received a written drug-information request from a physician, Dr Naomi Fraser, in the patient folder. Use the information provided and the references you know. Write a short, clear reply to the physician in the response sheet, giving your recommendation, the reasons for it and the monitoring you suggest. If information is missing, say what you need. The assessor will not take part.

What a strong answer does

- Writes a clear, courteous reply with a direct recommendation at the start, suitable for a busy physician.
- **Safety:** Identifies a clinically significant interaction between trimethoprim-sulfamethoxazole and warfarin, with raised INR and increased bleeding risk.
- Suggests suitable alternatives, such as nitrofurantoin or fosfomycin, that depend on renal function and local resistance, and checks any dose against a reference.
- Explains the mechanism or reason briefly in plain, professional language.
- Recommends specific monitoring if the combination cannot be avoided: an INR check within 3 days, repeat checks, and warfarin adjustment by the prescriber.
- Advises counselling the patient about bleeding signs and when to seek urgent care, and mentions 911 for severe bleeding.
- Asks for missing information, such as culture results, the INR target and previous exposure, and offers further help.
- Cites a source and signs off professionally, and keeps the reply short and organized.

Model answer

I write a short, courteous reply to Dr Fraser, starting with my recommendation so that it is the first thing she reads. I say that trimethoprim-sulfamethoxazole interacts significantly with warfarin, and that I recommend avoiding it for this patient if another suitable antibiotic is available. I give the reason in a sentence: the combination can markedly raise the INR and increase the risk of bleeding, partly because the antibiotic reduces warfarin metabolism and displaces it from protein binding. I note that the infection is an uncomplicated bladder infection and that her renal function is good, with a creatinine clearance of about 65 mL/min. I suggest alternatives with less effect on warfarin: nitrofurantoin macrocrystals 100 mg twice daily for 5 days, or fosfomycin 3 g as a single dose, subject to local resistance, and I ask Dr Fraser to confirm choice and dose in the CPS or local guidance. I ask for missing information: the urine culture result if one was sent, the target INR range and whether the patient has taken this combination before. I add monitoring. If trimethoprim-sulfamethoxazole cannot be avoided, I suggest checking the INR within 3 days of starting, repeating it during and after the course, and having warfarin adjusted by the physician or the anticoagulation clinic. With any antibiotic, infection and poor appetite can also change the INR, so an INR within 3 days is sensible. I advise that the patient be counselled about signs of bleeding, such as black stools, blood in the urine, nosebleeds or unusual bruising, to seek medical care for them and to call 911 for severe bleeding. I cite the CPS and RxFiles, offer to discuss, and sign off professionally.

Early refill request for a strong opioid painkiller

Ethics, consent & capacity · 7 minutes

The task

You are a pharmacist in a community pharmacy. Mr Gordon Whitfield, aged 54, has attended before and asks for his oxycodone to be refilled today. His profile shows the last supply was dispensed ten days ago with a 28-day supply. The prescriber's clinic is closed. He is alone and seems tense. Decide how to respond: assess the situation, discuss it with him, decide what you can and cannot do, and agree on a plan that keeps him safe. The assessor will not take part in the conversation.

What a strong answer does

- Introduces self, confirms identity and discusses the request in a calm, nonjudgemental way, explaining that early opioid refills need checking.
- Reviews the dispensing record and the provincial prescription monitoring information, and verifies the story by asking about the lost medication.
- Explores how he is using the medicine, pain control, other sedatives and alcohol, withdrawal symptoms, and his mood and safety, and recognizes that he is taking more than prescribed.
- **Safety:** Does not supply more oxycodone without new authorization from the prescriber, since no refills remain, and explains the legal and safety reasons without making accusations.
- **Safety:** Provides immediate help, not just refusal: tries to reach the prescriber or the on-call physician or clinic, and offers a way to manage tonight, such as a same-day clinic or emergency visit for withdrawal and pain.
- **Safety:** Warns of the risk of combining opioids with alcohol and sleeping pills and offers a naloxone kit with teaching on its use and when to call 911.
- Encourages honest conversation with his prescriber about the worse pain and his increased use, and offers support for managing withdrawal and options for treatment.
- Maintains confidentiality, addresses his fears about police and being dropped, and documents the encounter accurately.

Model answer

I greet Mr Whitfield, introduce myself and tell him that I want to understand what is going on and am not judging him. I review his record: the last fill was ten days ago for a 28-day supply, and the provincial prescription monitoring record shows no other prescribers or pharmacies. I ask what happened. He says he lost the bottle, so I listen without accusing and then ask how he has been taking the medicine. He

admits that he has been taking more than prescribed because his pain is worse, that he uses alcohol and a sleeping pill, and that he fears withdrawal. I ask about his mood and safety, and he says he is not thinking of hurting himself. I explain clearly that I cannot supply more oxycodone without new authorization from his prescriber, because no refills remain, because of the rules for these medicines and for his own safety, particularly since he has taken more than prescribed. I do not leave it there. I offer to call the after-hours number right now to ask for authorization or a plan, and if they cannot be reached, I explain where he can be seen tonight, such as a walk-in clinic or the emergency department, which can assess withdrawal and pain. I warn him about the danger of combining opioids with alcohol and sleeping pills and offer a naloxone kit with a short demonstration, and I tell him that if it is ever needed someone must call 911. I ask him to keep his medicine locked away from his daughter. I encourage him to be honest with his doctor about the pain and his use, because treatment can be adjusted and help is available. I reassure him that I am not calling the police and that I will document the conversation accurately and share relevant information with his prescriber. I confirm the plan and ask whether he has questions.

Medication history for a patient with a bag of bottles

History taking · 7 minutes

The task

You are a pharmacist in a community pharmacy. Mrs Khadija Rahimi, aged 71, has come in with a paper bag of her medicines and asks for help because she sees several health professionals and feels muddled. She is alone. Her pharmacy dispensing record is in the patient folder. Take a medication history: find out what she actually takes, how she takes it, and anything that is not on the record. Identify the problems you find and agree on next steps with her. The assessor will not take part in the conversation.

What a strong answer does

- Introduces self, confirms her identity and explains that the aim is to build one accurate list of everything she uses.
- Goes through each prescribed medicine and asks how she really takes it, including missed doses, and discovers that atorvastatin is taken only on some days and metformin evening doses are missed.

- Asks specifically about nonprescription, herbal and supplement products and finds the regular naproxen and turmeric.
- Asks about eye drops, inhalers, creams and other prescribers or pharmacies and finds the timolol drops that are missing from the record.
- Checks allergies and past reactions and records the penicillin rash, which is missing from the record.
- **Safety:** Recognizes the clinical risk of regular naproxen with ramipril, diabetes and weak kidneys, and advises her to stop it and use a safer option such as acetaminophen while the prescriber is told.
- Explores why atorvastatin is skipped and does not blame her; plans to inform the prescriber about the leg aches.
- Summarizes the discrepancies and agrees a plan: one updated list, contact with the prescribers, and one pharmacy for all medicines.
- Checks her understanding, responds to her worries about walking and about family, and documents the history.

Model answer

I introduce myself, confirm Mrs Rahimi's name and date of birth, and explain that I want to build one complete and accurate list. I use the dispensing record as a start but do not rely on it. I go through each prescribed medicine and ask how she actually takes it. This shows that she takes atorvastatin only on days when her legs do not ache and that she sometimes misses the evening metformin. I then ask about anything she buys without a prescription and learn that she has been taking naproxen four tablets a day for a month, plus a turmeric capsule. I ask about eye drops, creams and other prescribers or pharmacies and discover timolol eye drops filled elsewhere. I check allergies and add the penicillin rash. I ask about her conditions and learn that her kidney function has been a little low. I explain that regular naproxen, together with ramipril, diabetes and reduced kidney function, can injure the kidneys and raise blood pressure, and with her ASA it adds to the risk of stomach bleeding, so I ask her to stop it and suggest acetaminophen at the labelled dose, with heat and gentle activity, while I inform her prescriber. I tell her that I will pass on the leg aches with atorvastatin, the missed doses, the timolol and the allergy so her doctors can review them. I offer one up-to-date medication list, a reminder system for the evening metformin, and to have all prescriptions filled in one pharmacy so interactions are checked. I ask her to repeat the main changes, respond to her worry about walking and about her family, and document the full history and the contacts I will make.

Starting a blood thinner for atrial fibrillation

Medicines counselling · 7 minutes

The task

You are a pharmacist in a community pharmacy. Mr Rajesh Nair, aged 71, brings a new prescription for apixaban 5 mg twice daily after his doctor found atrial fibrillation. He is alone and has never taken a blood thinner. Counsel him on his new medicine and answer his questions. The assessor will not take part in the conversation.

What a strong answer does

- Introduces self, confirms identity and asks what the doctor explained about the medicine and why it was prescribed.
- Explains the purpose clearly: apixaban lowers the risk of a clot forming and causing a stroke because of the irregular heartbeat.
- **Safety:** Asks about nonprescription products and identifies ibuprofen and aspirin as raising bleeding risk with apixaban.
- Advises avoiding ibuprofen and aspirin unless a prescriber says otherwise, and offers an alternative for knee pain such as acetaminophen with a suggestion to discuss pain control with the doctor.
- Asks about bleeding history, ulcer and falls and links them to risk, with advice on alcohol and on reviewing the turmeric supplement, where the evidence is limited.
- Explains how to take it: twice daily about twelve hours apart, with or without food, and that he must not stop without talking to the prescriber.
- Gives clear guidance on a missed dose that matches a Canadian reference, says never to double up, and suggests a reminder system.
- **Safety:** Teaches warning signs of serious bleeding, such as black stools, blood in urine, vomiting blood, a bad fall or head injury, and says to call 911 or go to emergency care for severe signs.
- Tells him to inform all prescribers, dentists and pharmacists he sees that he takes a blood thinner, and to ask before dental work rather than stopping it himself.
- Checks understanding with teach-back and arranges follow-up.

Model answer

I introduce myself, confirm Mr Nair's name and ask what his doctor explained. He understands that the medicine is to prevent a stroke, so I confirm that and explain simply that apixaban lowers the chance of a clot forming because of the irregular heartbeat. I check that 5 mg twice daily suits him: he is under 80, weighs about 78

kilograms and his kidney tests are fine, so a reduced dose is not needed. I ask about other medicines and learn he uses ibuprofen and sometimes aspirin and takes a turmeric supplement, along with ramipril. I explain that ibuprofen and aspirin add to bleeding risk and should be avoided unless his prescriber advises otherwise, and I suggest acetaminophen for his knee pain with a review of his pain plan. I ask about past bleeding and learn about an old ulcer, a long-bleeding cut and a fall, and about regular alcohol, and I explain how these bear on risk and why to keep alcohol modest. I say the evidence on turmeric is limited but it may add to bleeding risk, so he should review it with his doctor, and I tell him I will let his doctor know about the ulcer and the ibuprofen. I explain that he takes one tablet in the morning and one in the evening, about twelve hours apart, with or without food. He must not stop it on his own. For a missed dose I use the Thrombosis Canada advice: within six hours, take it and carry on; after six hours, skip it and take the next dose at the usual time. He must never double up, and I suggest a phone alarm or pill organizer for the evening dose. I teach warning signs: black or bloody stools, blood in the urine, vomiting blood, severe headache, a head injury or heavy bleeding that will not stop. For severe signs he should call 911 or go to emergency care, and for smaller concerns he should call us or his doctor. I tell him to inform every prescriber, dentist and pharmacist that he takes a blood thinner and to ask them before any procedure instead of stopping the medicine, since many minor dental jobs do not need it stopped. I check understanding with teach-back, invite questions about the dentist and the turmeric, and arrange a follow-up chat after his first refill.

Screening three new prescriptions

Prescription review · 7 minutes

The task

You are a pharmacist in a community pharmacy. Three new prescriptions are waiting for your clinical check before they are filled. The details of each prescription and the patient information are in the patient folder. Decide whether each should be dispensed as written. If any prescription has a clinical problem that needs action, say which one, explain the problem, and state what you would do. Write your answer in the response sheet. The assessor will not take part.

What a strong answer does

- **Safety:** Identifies prescription 2, naproxen with warfarin, as the one with a clinical problem requiring action.
- States the mechanism of harm: NSAID plus anticoagulant increases bleeding risk, and her past stomach ulcer adds to the gastrointestinal bleeding risk.
- **Safety:** Does not dispense prescription 2 as written and says the prescriber must be contacted before any supply.
- Recommends a safer alternative for pain, such as acetaminophen, leaving other options to the prescriber, so the patient's pain is still addressed.
- Judges prescription 1 appropriate, with reasoning about the indication and normal potassium and creatinine, and notes counselling.
- Judges prescription 3 appropriate with a reason, and notes counselling on delayed onset and side effects.
- Advises Mrs Okonkwo to avoid nonprescription NSAIDs and aspirin.
- Documents the intervention and the prescriber's response.

Model answer

I check each prescription against its patient profile in turn. Prescription 1 is ramipril for Mr Lamb, aged 62, with hypertension. He takes no other medicines, has normal recent potassium and creatinine and no allergy, so the drug and dose suit his profile and I can dispense it, counselling him on dizziness, a dry cough, lip or face swelling and monitoring of blood pressure and blood tests. Prescription 2 is naproxen for Mrs Okonkwo, aged 74, who takes warfarin for atrial fibrillation and has had a stomach ulcer. This is the one with a clinical problem. An NSAID given with warfarin increases the chance of serious bleeding, and her ulcer history makes gastrointestinal bleeding more likely. I would not dispense it as written. I would telephone the prescriber, explain the interaction and her history, and suggest a safer way to treat her knee pain, such as acetaminophen, with her INR clinic told if she uses it regularly, leaving other choices to the prescriber. I would tell Mrs Okonkwo not to take any nonprescription NSAIDs or aspirin products, ask her to watch for black stools or unusual bruising, and make sure she is not left without a plan for her pain. Prescription 3 is sertraline for Ms Lee, aged 34, with first-time depression and no interacting medicines or allergies. It is appropriate and I can dispense it, counselling her that it can take some weeks to work, about common early side effects, and about who to call if her mood worsens. I document the intervention for prescription 2 and the call's outcome in the patient record.