

EXAMPLE: CASE SCENARIO - ANTICOAGULANT

EPA-1 Dispensing medicines

Key themes Pulmonary embolism, anticoagulant therapy, oral contraceptives, Pharmaceutical Benefits Scheme (PBS), lifestyle behaviours

Scenario in prose

A hospital pharmacy department received a prescription order for apixaban for a 32-year-old female Annabel Davidson, who was diagnosed with a pulmonary embolism. The prescription order is received by the intern pharmacist to dispense, in preparation for the patient's discharge from hospital. The patient has brought the prescription to the outpatient hospital pharmacy and details of the patient history records are available. The supervisor and intern agree this is an opportunity to perform a short practice observation (SPO) of the intern's dispensing process, starting with making a decision about the prescription's safety/appropriateness and then accurately dispensing the prescription.

History of presentation

Annabel presented to the emergency department with shortness of breath, chest pain and cough. Diagnostic testing confirmed pulmonary embolism (PE) and an anticoagulant, apixaban, has been prescribed to treat the condition. The recent commencement of a combined oral contraceptive pill (COCP - levonorgestrel 150mcg/ ethinylestradiol 30mcg) was considered a provoking factor in this diagnosis, and this medication was ceased by the medical team.

Medications

- Pantoprazole 20mg (Somac) – 1 tablet prn (commenced 4 years ago)
- salbutamol 100mcg/dose MDI (Ventolin) – 2 inhalations every four hours prn (commenced 8 years ago)
- levonorgestrel 150mcg, ethinylestradiol 30mcg (Levlen ED) – 1 tablet daily (commenced 5 months ago for contraception, ceased today)
- ibuprofen 200mg – 1-2 tablets prn for mild pain (intermittent use)

Patient information

- Annabel Davidson
- 32-year-old female, current weight 57kg

Medical history, including allergies and adverse drug reactions

- GORD
- Asthma – currently well controlled

Prescription order received

Patient Name/Address: Annabel Davidson, 102 Lindsay Street, Hamilton, NSW 2303
Prescriber Details: Dr. Susan Grene, principal place of practice XX hospital

Prescription details:

Apixaban 2.5mg tab

Take 1 tablet BD

Qty: 60 tablets

Rpt: 5

Streamlined authority code: 4269

Performance Outcomes (PO)¹ to be demonstrated

Performance outcome(s)	Description
3.14	Dispensing medicines safely and accurately in accordance with current legislation, scope of practice, Pharmacy Board of Australia (PharmBA) guidelines, and other relevant jurisdictional requirements to optimise patient outcomes
3.8	Identifying and acknowledging professional limitations and seeking appropriate support where necessary, including additional professional education and/or referral of patients to other health care professionals.
3.9	Recognising and responding to the inherent complexity, ambiguity and uncertainty of contemporary and future professional practice.

The activity may also provide evidence relating to other performance outcomes and this should be recorded in the '**Intern assessment and feedback form**'

Key activities undertaken during short practice observation

<p>Decision making phase</p> <p><i>Intern discusses their thought process as they determine the safety/appropriateness of the prescription with the preceptor.</i></p>	<p>The intern:</p> <ul style="list-style-type: none"> confirms the anticoagulant prescribed is appropriate for the patient's indication consults the <i>Australian Medicines Handbook</i>² and <i>Therapeutic Guidelines</i>³ to confirm the usual dosing schedule for PE treatment is 10mg BD for 7/7 then 5mg BD thereafter and identifies that the prescribed dose of 2.5mg BD may not be appropriate for this patient. Discusses with doctor appropriate dosing and receives a new prescription order for 5mg BD. Ensures the correct streamlined PBS code is on the prescription. checks relevant pathology e.g., kidney function to assess appropriateness of apixaban. Identifies the patient uses over-the-counter (OTC) ibuprofen intermittently for mild pain, 'when required', and suggests paracetamol would be a more appropriate simple analgesia from now on, to reduce the risk of bleeding with apixaban does not ask about or investigate any recent medication changes for this patient, and therefore does not acknowledge the patient was newly commenced on a COCP five months ago for contraception, and that estrogen is a major provoking factor for venous thromboembolism (VTE). Intern does not elicit that the doctor had recommended that the patient cease COCP and misses the opportunity to reinforce importance of ceasing this medicine and follow up for review of ongoing contraceptive use. does not enquire about lifestyle behaviours e.g. history of smoking, alcohol consumption. Intern does not elicit that the doctor had recommended that the patient quit smoking does not acknowledge the usual treatment length (anticoagulant) for a provoked PE is 3 months. <p>Intern and supervisor resolve to dispense the prescription from the new prescription order with the revised dose. The supervisor advises the intern that they will observe them prepare the prescribed order and may ask the intern to discuss their process from time to time.</p>
<p>Technical dispensing process phase</p> <p><i>Intern performs procedural aspects of preparing medicine for supply</i></p>	<p>The intern:</p> <ul style="list-style-type: none"> Intern accurately enters the details of the new prescription order in the dispense system including the correct PBS streamlined code. Intern selects the correct product and affixes appropriate ancillary labels Intern uses medication scanner to ensure dispensed medication matches the chosen product

¹ Entrustable professional activity (EPA) 1: Dispensing medicines Preceptor and intern user guide. [Intern Workplace-based Assessment | Australian Pharmacy Council](#)

² Australian Medicines Handbook, 2022. 'Apixaban' drug monograph.

³ Therapeutic Guidelines, 2022. Cardiovascular. "Anticoagulant therapy for proximal deep vein thrombosis and pulmonary embolism"

Entrustment discussion	<p>Preceptor and Intern then regroup to have an entrustment discussion.</p> <p>Key elements of discussion</p> <ul style="list-style-type: none"> • Safety and appropriateness of the anticoagulant and prescribed dose for indication • Consideration of patient medical and medication history before commencing new anticoagulant • Relevant lifestyle behaviours that may impact on anticoagulant use and management of PE • Appropriate labeling of dispensed medicine including use of additional advisory labels <p>Potential additional questions about the case</p> <ul style="list-style-type: none"> • “What considerations might there be if this patient had reduced renal function”? • “If dispensing apixaban for an elderly patient, what other information would you want to gain before dispensing the apixaban and why?”
Feedback and assessment of EPA	<p>At the end of the entrustment discussion, the preceptor pharmacist provides the intern with written and verbal feedback. The preceptor’s feedback (summarised below) describes the strengths that the intern had demonstrated and suggests some opportunities to develop their practice further.</p> <p>An assessment of the EPA is documented in the ‘Assessment of EPA-1 Form’. In this form:</p> <ul style="list-style-type: none"> • The intern documents their reflection on their performance before the preceptor completes their feedback. • The preceptor notes that the intern demonstrated achievement of some performance outcomes outside the scope of the EPA and recommends areas for development.

Performance outcome(s)	Preceptor feedback and expectations of Intern**
3.14	<p>The intern is considering most of the factors when deciding if a medication is safe/appropriate to dispense, however:</p> <p>The intern should acknowledge the patient was newly commenced on the COCP 5 months ago for contraception and that estrogen is a major provoking factor for VTE</p> <p>The intern could consider more holistic patient factors such as smoking history (10 cigarettes per day); that smoking increases the risk of thromboembolism, and that the doctor has recommended that the patient quit smoking.</p> <p>The intern has correctly pointed the correct dose of apixaban for PE but has not considered the usual treatment length for a provoked PE is 3 months.</p> <p>Intern is performing most of the required technical components to dispense prescription</p>

***Note that the feedback and expectations of the Intern should consider and be tailored to the stage of training of the Intern.*