

EXAMPLE: CASE SCENARIO - ANTIBIOTIC

EPA-1 Dispensing medicines

Key themes Paediatric, antibiotic choice and dose, quantity supplied, ancillary labels

Scenario in prose

A carer presents to the community pharmacy with a prescription for cefalexin oral liquid, for their 5-year-old son Jalu Jacobs, who was diagnosed by the local doctor last night with mild cellulitis affecting his right leg. The prescription is received by the intern in this dispensing activity. The supervising pharmacist 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

The problem began with a small cut sustained whilst playing in the park. There is some pus that is present around the site of infection (e.g. purulent cellulitis). Otherwise, the child is well, with no fever, and no signs of systemic infection. A diagnosis of cellulitis was confirmed within the last 24 hours, and an antibiotic has been prescribed to treat the condition.

Medications

- fluticasone propionate 50mcg MDI (Flixotide Jnr) inhaled twice daily via a spacer
- salbutamol 100mcg MDI (Ventolin) inhaled 1-2 puffs qid via a spacer prn (not required for at least 6 months.
- adrenaline 150mcg (Epipen Jr) to be used IM if required (not used yet)

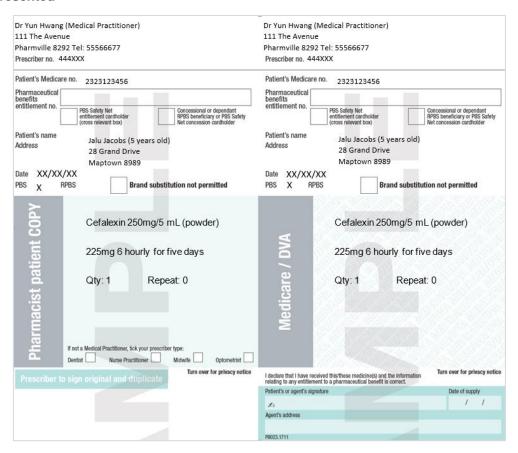
Patient information

- Jalu Jacobs
- 5-year-old boy, current weight 18kg

Medical history, including allergies and adverse drug reactions

- Asthma currently well controlled
- Allergic to peanuts (anaphylaxis). Nil known antibiotic allergies

Prescription presented





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.

assessment and feedback form'

Key activities undertaken during the short practice observation

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Decision	making	nhaca

Intern discusses their thought process as they determine the safety/appropriateness of the prescription with the preceptor.

The intern:

- confirms the antibiotic prescribed is appropriate for the patient's indication
- acknowledges that patient has no history of allergy to antibiotics.
- consults the Therapeutic Guidelines² to confirm the dose prescribed and accurately
 calculates that the usual dose is (child: 12.5 mg/kg up to 500 mg) orally, 6-hourly for 5
 days. Therefore, for this patient the recommended dose is 225mg 6 hourly (= 4.5mL of
 250mg/5mL mixture).
- Suggests to the preceptor that they should contact the prescriber as flucloxacillin is considered first line for cellulitis¹. The preceptor alerts intern that later in this therapeutic guideline section it comments that "cefalexin is often preferred to dicloxacillin or flucloxacillin in children, because the liquid formulation is better tolerated"¹.
- does not acknowledge if the patient has any other medical conditions or medications.
- does not comment on whether the amount dispensed would be sufficient for the full course (in this case, 5 days at 4.5mL x 4 times a day = 90mL so it is sufficient).

Intern and preceptor resolve to dispense the prescription. The preceptor advises the intern that they will observe them preparing the prescribed medicine and may ask the intern to discuss their process from time to time.

Technical dispensing process phase

Intern performs procedural aspects of preparing medicine for supply

The intern:

- enters the prescription details accurately using dispense system,
- selects the correct product verified by barcode scanning, and measures the required amount of distilled water to reconstitute mixture
- does not label the bottle with "Shake the Bottle", "Label 6" or a revised "expiry date" information (14 days from mixing).

The preceptor corrects these errors and asks the intern to prepare for counselling the carer about this medication

¹ Entrustable professional activity (EPA) 1: Dispensing medicines Preceptor and intern user guide. <u>Intern Workplace-based</u>
Assessment | Australian Pharmacy Council

² Therapeutic Guidelines, 2022. Antibiotic. "Empirical therapy for cellulitis and erysipelas without systemic features"



Entrustment discussion	Preceptor and Intern then regroup to have an entrustment discussion.
	Key elements of discussion
	 Appropriateness of antibiotic for patient age and diagnosis Patient history and other medical conditions Ancillary labels and total amount supplied
	Potential additional questions about the case
	"What if this patient had eczema that typically occurred around the same area of the cellulitis?"
	"What if the quantity (oral liquid) was not sufficient for the full course and we only provided one bottle?"
	"What if there was some remaining liquid at the end of the course and the carer decided to use it as the manufacturer expiry showed it was still in date?"
Feedback and assessment of EPA	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.
	An assessment of EPA is documented via the 'Assessment of EPA-1 Form'. In this form:
	 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	The intern is considering most of the factors when deciding if a medication is safe/appropriate to dispense but must always consider past medical history and concurrent medications.
	The intern has correctly pointed out that flucloxacillin is first-line in cellulitis but has not considered patient-centred factors (i.e., taste) that could affect compliance.
	The intern should check that the quantity provided will complete the duration of the course prescribed.
	Intern is performing most of the required technical components to dispense prescription but needs to consider importance of additional cautionary/advisory labels for patient education

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