

Goals for timely administration of medications

One of the recommendations to reduce medication errors and harm is to use the “five rights”: the right patient, the right drug, the right dose, the right route, and right time.

Why is the right time so important?

Adherence to drug regimens is critical to optimise therapeutic outcomes

Time-critical scheduled medications are those where early or delayed administration of maintenance doses of greater than 30 minutes before or after the scheduled dose may cause harm or result in substantial sub-optimal therapy or pharmacological effect.

Commonly encountered examples of these include medicines that:

- should be given before or after food
- contain paracetamol
- are prescribed to help mobility for people with Parkinson's disease
- should be taken at the same time each day to maximise their effectiveness



What do you do if the dosing of a time critical medication is delayed?

- Inform and / or liaise with Medical or Pharmacy staff as necessary if a dose cannot be given (e.g., patient declines, intended route of administration is unavailable).
- Report the incident to an appropriate staff member
- Document delayed or omitted doses of critical medicines in the patient's clinical record.
- Share early, delayed or omitted doses at clinical handover.

Pharmacy staff will supply time-critical medicines as a priority, once notified of the need, and assist in the identification of suitable alternatives as required.

Type of dose schedule	Goals for timely administration
<i>Time-critical medications</i>	<i>Administer at the exact time indicated, when necessary, otherwise within 30 mins before or after the scheduled time.</i>
<i>Weekly, monthly medications (intermittent)</i>	Within 6 hours before or after scheduled time
<i>Daily medications</i>	Within 2 hours before or after scheduled time
<i>Medications prescribed more frequently than daily, but no more than every 4 hours</i>	Within 1 hour before or after scheduled time

The actual timing used in practice is influenced by a number of variables. The above recommendations may not strictly apply to every clinical situation.

MEDICATIONS	EXAMPLES
<ul style="list-style-type: none"> • Anticoagulants • Anticonvulsants • Antimicrobials • Corticosteroids • Antiparkinson medication • Chemotherapy 	<ul style="list-style-type: none"> • warfarin, enoxaparin, apixaban, dabigatran, rivaroxaban • diazepam, phenytoin, levetiracetam • Antibiotics, antivirals and antifungals • Prednisolone Prednisone, cortisone • Levodopa combinations, bromocriptine, cabergoline • see 'Healthy Handout: High Risk Medications: Keeping you and your residents safe' for more information
<ul style="list-style-type: none"> • Hypoglycaemic agents • Immunosuppressants 	<ul style="list-style-type: none"> • Insulin, immediate release sulfonylurea • Cyclosporine, Tacrolimus