

HEALTH INNOVATION SERIES EVIDENCE BASED RECOMMENDATIONS TO IMPROVE CARE DELIVERY AND OUTCOMES

What time is the next dose due? Avoid errors by updating the schedule!

Electronic medication systems (EMS) assist medication administration by showing when the next doses are due. If the times displayed are inaccurate, this can lead to errors in medication timing or missed doses.

When a medication is prescribed, the EMS automatically schedules subsequent doses according to the time intervals prescribed (e.g. every 6 hours). A medication, however, may need to be administered at a different time to the default schedule because of patient clinical needs (e.g. attending radiology or operating theatre). If the administration schedule is not manually adjusted, this may result in a discrepancy between the time the EMS issues a prompt to administer the next dose, and when the dose is actually due.

In Example 1, a dose of cefotaxime was prescribed 8 hourly with a schedule of 06:00, 14:00, and 22:00. As the patient was in the operating theatre, the dose due at 14:00 was administered late at 19:04, however the dosing schedule was not updated. This meant that despite the next dose being due in 8 hours, it was administered after only 2 hours and 41 minutes, at 21:45, because of a prompt from the EMS which still had the next dose scheduled for 22.00.

Example 1

Time View	14/06/2016 0000 - 2359
cefotaxime 550 mg, IV Intermittent Infusion, 8 hourly, Severe Infection	550 mg @0703
	550 mg @1904
	550 mg @2145



**SYSTEM OPTIMISATION
TIP#1**

When a medication is administered outside of the scheduled time, provide an easily visible prompt for the user to update the administration schedule.



**SYSTEM OPTIMISATION
TIP#2**

Consider alerts when a medication is administered outside of acceptable hourly intervals for certain medications e.g. high-risk medications.



USER TIP

When administering medication, check whether the schedule requires updating so that subsequent doses are scheduled at the correct time.

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Suggested citation: Raban MZ, Merchant A, Fitzpatrick E, Woods, A, Westbrook JI. What time is the next dose due? Avoid errors by updating the schedule! Health Innovation Series e-Medication Safety Issue 18 2024. Sydney: Macquarie University; 2024. <https://doi.org/10.25949/FC6Q-K566>

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