

**BUSINESS RULE: Administration of a formulation of a medication other than that ordered within an electronic medication management system**

**SESLHDBR/082**

<b>Name</b>	Administration of a formulation of a medication other than that ordered within an electronic medication management system		
<b>What it is</b>	<p>The eMEDs electronic medication management system requires that a specific formulation be selected when ordering a medication. Occasionally the formulation ordered by the prescriber may be unsuitable for administration to the patient. This business rule describes the principles for management of these circumstances.</p> <p>For the purposes of this Business Rule <b>formulation</b> is defined as the product or preparation in which the drug is presented, for example: solution, suspension, tablet, capsule, wafer.</p>		
<b>Risk Rating</b>	High	<b>Review Date</b>	December 2023
<b>What it is not</b>	This business rule applies to the formulation component of the medication order only. <b>It does not apply to other aspects of the medication order, i.e. drug, dose, route and frequency.</b>		
<b>Who it applies to</b>	<p>All staff involved in management of medications for inpatients in SESLHD facilities.</p> <p>Safe and accurate medication administration required the 5 Rights (“the 5 R’s”) of:</p> <ul style="list-style-type: none"> <li>✓ The Right <b>Patient</b>, and</li> <li>✓ The Right <b>Drug</b>, and</li> <li>✓ The Right <b>Dose</b>, and</li> <li>✓ The Right <b>Time</b>, and</li> <li>✓ The Right <b>Route</b>.</li> </ul>		
<b>When it does not apply</b>	<p>This business rule does not apply to the following medications, for which the prescribed formulation should always be administered:</p> <ul style="list-style-type: none"> <li>- Phenytoin</li> <li>- Lithium</li> <li>- Clozapine</li> <li>- Warfarin</li> <li>- Thyroxine</li> <li>- Posaconazole</li> <li>- Digoxin</li> <li>- Insulin</li> <li>- Cytotoxic medications</li> <li>- All Schedule 8 medications</li> </ul> <p>Modified release and immediate release formulations must never be interchanged.</p>		

## What to do

Prescribers should make every effort to prescribe the most appropriate formulation for the patient. This may require consultation with the nurse/midwife caring for the patient or a pharmacist.

Where specific instructions apply to administration of the prescribed formulation (eg; disperse tablets in water) the prescriber should add these in the 'comments' field on prescribing. Pharmacists may also add these specific administration instructions to the order.

When administering the medication, the nurse/midwife should review the order and determine whether the prescribed formulation is suitable for the patient. Suitability will depend on factors such as:

- Availability of the prescribed formulation
- Availability of alternative formulations
- Patient's swallowing ability
- Patient's level of consciousness
- Presence and type of enteral feeding tube
- Patient preference

As these factors can change rapidly, an assessment of the suitability of the prescribed formulation should be made at each administration.

Refer to references such as "Don't Rush to Crush" handbook to determine whether the medication may safely be crushed.

If the prescribed formulation is suitable, administration should proceed in accordance with PD2013\_043 *Medication Handling in NSW Public Hospitals*.

If the formulation is not suitable, two different scenarios may apply and should be managed as follows:

**1. The prescribed formulation is likely to be unsuitable for all subsequent administrations.**

Contact the prescriber to change the order to the most suitable formulation. If this cannot be done immediately, one dose of an alternative formulation of the medication may be administered against the order. A comment must be entered into the administration window detailing the formulation used.

**OR,**

**2. The prescribed formulation is unsuitable for this administration, but likely to be suitable for subsequent administrations.**

At the discretion of the nurse/midwife, one dose of an alternative formulation of the medication may be administered against the order. A comment must be entered into the administration window detailing the formulation used.

	<p>If in doubt as to whether two formulations of the same medication are interchangeable refer to the prescriber or pharmacist for advice.</p> <p><u>Note: Under no circumstances should two separate orders be entered for different formulations via the same route.</u></p>																										
<p><b>When to use it</b></p>	<p>This process applies to all inpatient medication orders where different formulations of the same medication are available.</p> <p>Example ONE</p> <table border="1"> <tr> <td colspan="2" style="text-align: center;"><b>eMEDs MAR medication order</b></td> </tr> <tr> <td colspan="2" style="text-align: center;">Paracetamol (paracetamol 500mg oral tablet) 1,000mg, oral, <b>tablet*</b>, QID, PRN for pain, Max dose/24 hrs: 4g</td> </tr> <tr> <td><b>Modifiable field:</b></td> <td><b>tablet</b></td> </tr> <tr> <td colspan="2" style="text-align: center;"><b>Formulation which could be administered</b></td> </tr> <tr> <td colspan="2" style="text-align: center;"><b>Oral suspension* or oral liquid*</b></td> </tr> <tr> <td><b>Non-modifiable fields:</b></td> <td><b>drug, dose, route, frequency</b></td> </tr> <tr> <td colspan="2" style="text-align: center;"><i>Note: modified release and immediate release formulations must never be interchanged.</i></td> </tr> </table> <p>Example TWO</p> <table border="1"> <tr> <td colspan="2" style="text-align: center;"><b>eMEDs MAR medication order</b></td> </tr> <tr> <td colspan="2" style="text-align: center;">Amoxicillin 1,000mg, oral, <b>tablet*</b>, BD</td> </tr> <tr> <td><b>Modifiable field:</b></td> <td><b>tablet</b></td> </tr> <tr> <td colspan="2" style="text-align: center;"><b>Formulation which could be administered</b></td> </tr> <tr> <td colspan="2" style="text-align: center;"><b>capsule* or oral liquid* or powder for reconstitution*</b></td> </tr> <tr> <td><b>Non-modifiable fields:</b></td> <td><b>drug, dose, route, frequency</b></td> </tr> </table>	<b>eMEDs MAR medication order</b>		Paracetamol (paracetamol 500mg oral tablet) 1,000mg, oral, <b>tablet*</b> , QID, PRN for pain, Max dose/24 hrs: 4g		<b>Modifiable field:</b>	<b>tablet</b>	<b>Formulation which could be administered</b>		<b>Oral suspension* or oral liquid*</b>		<b>Non-modifiable fields:</b>	<b>drug, dose, route, frequency</b>	<i>Note: modified release and immediate release formulations must never be interchanged.</i>		<b>eMEDs MAR medication order</b>		Amoxicillin 1,000mg, oral, <b>tablet*</b> , BD		<b>Modifiable field:</b>	<b>tablet</b>	<b>Formulation which could be administered</b>		<b>capsule* or oral liquid* or powder for reconstitution*</b>		<b>Non-modifiable fields:</b>	<b>drug, dose, route, frequency</b>
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<p><b>Why the rule is necessary</b></p>	<p>This business rule ensures that nursing staff have appropriate flexibility in the choice of formulation when administering medications, whilst maintaining accountability for medication administration practices.</p>																										
<p><b>Who is responsible</b></p>	<p><b>Medical Officers</b> should:</p> <ul style="list-style-type: none"> <li>Consider patient circumstances to ensure an appropriate formulation is selected when ordering medications in an electronic medication management system.</li> </ul> <p><b>Pharmacists</b> should:</p> <ul style="list-style-type: none"> <li>Ensure appropriate formulation is prescribed and available for administration within a timely manner</li> <li>Provide advice on choice of medication formulation as required.</li> </ul> <p><b>Nursing staff</b> should:</p> <ul style="list-style-type: none"> <li>Consider patient circumstances to determine whether the prescribed formulation is suitable for the patient</li> <li>Be aware of the need to comply with the prescriber's order and follow the principles within this business rule if the formulation in the medication order is deemed unsuitable.</li> <li>Consider that some formulations of the same medicine may not be interchangeable.</li> </ul>																										

<b>References</b>	<a href="#">NSW Health PD2013_043 Medication Handling in NSW Public Health Facilities</a>
<b>Executive Sponsor</b>	Karen Tuqiri, Director Nursing and Midwifery Services
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### Revision and Approval History

<b>Date</b>	<b>Revision Number</b>	<b>Author and Approval</b>
1 August 2017	DRAFT v0.1	Katie Kerr
17 August 2017	DRAFT v0.2	Feedback from eMEDs team, Paediatric NUM TSH, Pharmacists
16 October 2017	DRAFT v0.3	Feedback from mental health
October 2017	Draft	Formatting reviewed by Executive Services
November 2017	Draft	SESLHD Drug and Quality Use of Medicines Committee endorsed for progression to SESLHD Clinical and Quality Council.
December 2017	0	Endorsed for publishing by SESLHD Clinical and Quality Council December meeting.
July 2021	1.0	Feedback from W&C Clinical Stream, Paediatric NUM TSH, Paediatric CNC SGH, Pharmacy
September 2021	1.0	Processed by SESLHD Policy prior to submission to QUMC for endorsement.
December 2021	1.0	Endorsed by SESLHD Drug and Quality Use of Medicines Committee.