

1. Introduction and who guideline applies to

It is imperative that patients receive their medication in a timely manner and every effort must be made to obtain medication following the processes listed within this guideline. The omission of a medication should be the exception.

In February 2010 the National Patient Safety Agency (NPSA), now subsumed into NHS England, issued an alert regarding the omission and delayed administration of medicines, highlighting this as a serious patient safety issue. Further to a number of Serious Incidents within the Trust where patients have come to harm as a result of not receiving medication in a timely manner, this guideline outlines steps in order to minimise the number of medicines which are either not administered or delayed significantly.

Practitioners must record the reasons for delay or unavailability including relevant details.

Harm can arise from missing one dose or repeated doses and is dependent on the medicine and the individual patient's condition.

This guideline should be read in conjunction with:

- Leicestershire Medicines Code Chapter 6 Administration of medicines for inpatients E5/2016 <http://insitetogether.xuhl-tr.nhs.uk/pag/pagdocuments/Administration%20of%20medicines%20for%20inpatients%20LMC%20chapter%206.pdf>
- Supply of Pre-Pack / Over Labelled Medication from Wards UHL Policy B25/2009
- Guideline for checking TTOs for adult patients B19/2015
- Policy and Procedures for the Use of Controlled Drugs (CDs) on Wards, Departments and Theatres (B16/2009)

2. Guideline Standards and Procedures

This guideline applies to all healthcare staff, including bank and agency involved in any medication processes including (not a definitive list):

- Nursing & Midwifery staff
- Medical staff
- Pharmacy staff
- Allied Health Care Professionals and Health Care Scientists involved in medication administration
- Medicines Administration Pharmacy Technicians

2.1 How to obtain medication from pharmacy (when pharmacy is open, closed and for discharge)

See Appendix 1

Note: Weekend ordering of controlled drugs should be by exception and reserved where possible for urgent supply or ordering of non-stock items.

2.2 UHL Critical List of Medicines

This is a list of medicines which have the potential for harm if not administered but please remember that these are not the only medicine which must not be missed. For individual patients other medicines can be equally harmful if not administered when prescribed.

See Appendix 2

2.3 Omissions definitions (paper drug charts and Nervecentre)

See Appendix 3

2.4 Administration from Dosette boxes/ compliance aids

See Appendix 4

2.5 Administration of medication when patient is Nil by Mouth (NBM) / has swallowing difficulties/ vomits

Where the patient is Nil by Mouth or has swallowing difficulties the medical team need to consider

- which key medicines must be continued and which can safely be omitted
- alternative formulations/ means of administration that may allow ongoing oral administration (e.g. use of liquids, crushing tablets, use of thickeners) [note that appropriateness of this will depend if the patient is strictly NBM or struggling with some/ all medication]
- alternative non-oral routes for administration
- if the medication cannot be given by an alternative route whether the early insertion of a nasogastric tube (NGT) is appropriate or alternative formulations for oral administration e.g. liquids, crushing tablets

The decision should be taken on an individual patient basis evaluating the risks and benefits for each option (see Leicestershire Medicines Code (LMC) section 6.4.9)

If a patient vomits within 30minutes of their medications being administered the nurse must contact the doctor in charge of the patient to decide if any medicines should be re-administered. Medicines to be re-administered must be prescribed on the once-only section of the chart (LMC 6.4.10)

2.6 Reviewing medication charts

Medication charts (paper and/ or electronic, including any supplementary charts) should be reviewed at the beginning of each drug round, looking for any prescribed stat and once only doses, hard & soft reviews (Nervecentre) which require review by a prescriber (where a hard review has been requested, the drug cannot be administered until reviewed and actioned by a prescriber), patterns of non-administration e.g. refused, not required. Omission of a critical medication must be discussed with a prescriber and other medications flagged where there are repeated omissions or there are concerns.

Review of medication charts (paper and/ or electronic, including any supplementary charts) should be a routine part of nurse/ midwife handover to identify any issues relating to medication including outstanding doses of medication , omissions, medications requiring ordering, refusal of medication, patterns of non-administration, hard & soft reviews. Review should also be undertaken routinely as part of daily medical ward/ board rounds.

On Nervecentre, any dose not given on time is described as 'overdue' after a period of 4 hours (if prescribed 1-2 times daily) or 2 hours for anything more frequent. The dose will automatically be flagged as 'missed' and become unavailable when the next dose becomes due.

2.7 How to utilise Pharmacy out of hours/ Medication Unavailable? Poster

These posters can be used/ displayed in clinical areas and has some hints and tips about actions that can be taken if medication is unavailable in an area.

See Appendices 4 & 5

2.8 Storage of medications

Prior to omitting the drug as being unavailable ensure thorough checks are carried out to try and locate the medication including in medication cupboards, drug trolleys, patient medication lockers and Drop Boxes. If a patient has been transferred from another area, check with the transferring areas if the medication has been left behind on the ward.

Where medication is not available follow Appendix 1.

2.9 Additional considerations

i) Specific patients e.g. patients with Parkinson’s disease, may need medication outside the regular drug round times. Consider actions within your area to ensure such patients receive medication on time e.g. use of timers, use of the ‘Due Medicines’ and filter function on Nervecentre (example below)

ARR ooo TTO ooo DRAFT DUE PRN ABX COAG OPI

ii) When a patient is not on the ward at the time medication is due, ascertain the reasons the patient is off the ward (e.g. investigations). If appropriate, give medication when patient returns to the ward. If missed critical medication, discuss with prescriber for review.

If the medication is omitted, ensure the reason for the omission is clearly documented.

2.10 Datix/ Duty of Candour

Whilst the Critical Medication list focusses on key groups of medication, any medication which has been omitted/delayed be that one dose or repeated doses has the potential to cause harm to a patient. This could be for example, a delay in recovery, the need for further intervention or a deterioration in symptom control.

If harm has been caused to a patient, this must always be reported on Datix. Additionally, if following discussion with a clinician, the delayed or missed medication is felt to have contributed to moderate/severe harm, the Duty of Candour requirements need to be met (see Duty of Candour Being Open Policy B42/2010).

3. Education and Training

These guidelines will be uploaded and available in the Policy & Guidelines Library on Insite.

They will be shared with the Ward Managers, Matrons and CMG Lead Pharmacists for onward communication to staff.

4. Monitoring Compliance

What will be measured to monitor compliance	How compliance will be monitored	Monitoring Lead	Frequency	Reporting arrangements
Number of medications not administered on eMeds	Review of eMeds	Medication Safety Lead Pharmacist	6 weekly	Reported via Medicines Optimisation Committee (MedOC) CMG Heads of Nursing
Medication incidents relating to harm from omitted/ delayed	Review of Datix	Medication Safety Lead Pharmacist,	6 weekly	Reported via MedOC

medication				
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5. Supporting References (maximum of 3)

NPSA 1183 | Omitted and delayed medicines RRR | February 2010.

6. Key Words

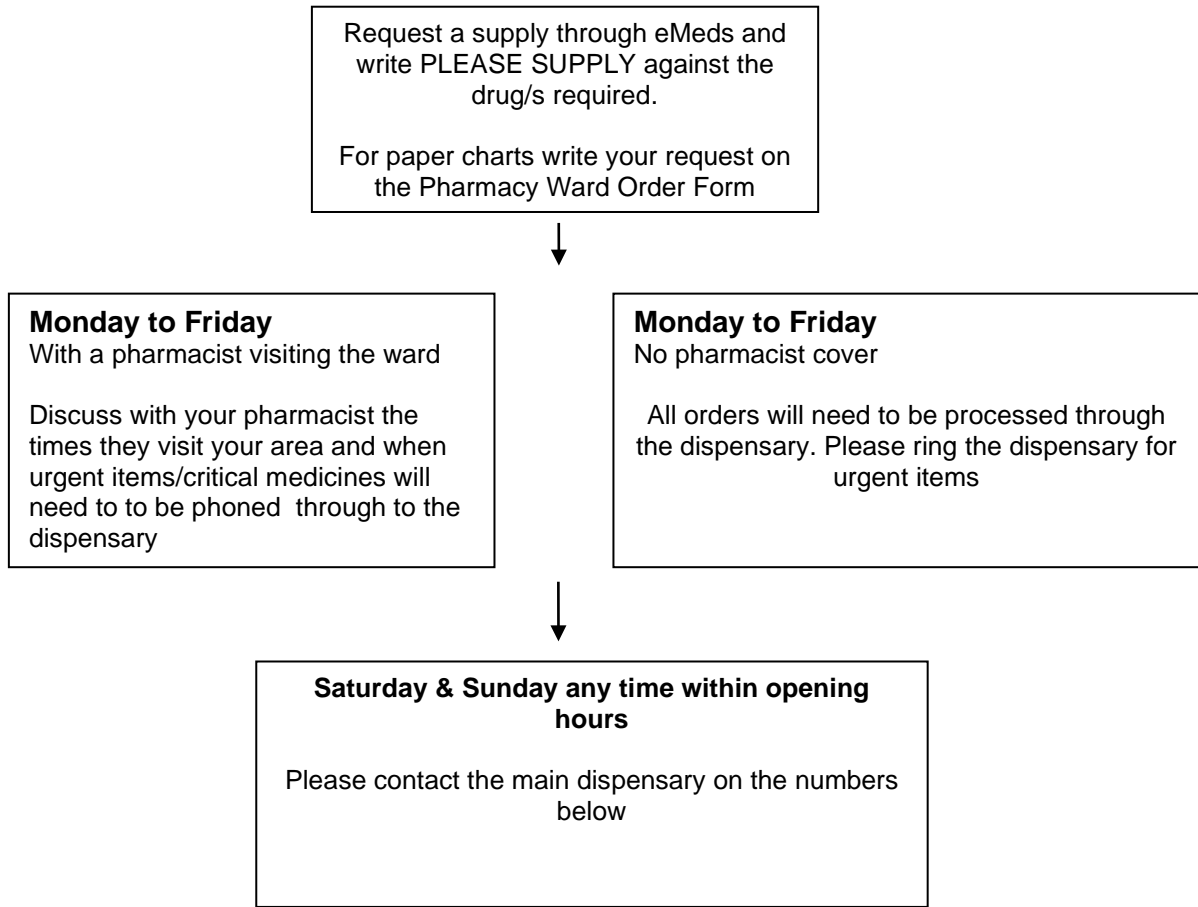
Pharmacy, ordering, medication, TTOs, critical medication, missed, delayed, withheld

CONTACT AND REVIEW DETAILS	
Guideline Lead (Name and Title) Hannah Flint, Senior Nurse Medicines Management	Executive Lead Julie Hogg, Chief Nurse
Details of Changes made during review: n/a Version 1 Version 2- removal of learning from incidents examples, removal of references to <i>Administration of Medicines to Adult Patients who Cannot Swallow Tablets or Capsules UHL Guideline B 31/2008</i> (withdrawn), changes to Appendix 1 (inclusion of new flowchart <i>How to Utilise Pharmacy Out of Hours</i> and Medicines Stock List QR code and removal of previous flowchart). Appendix 2 amendments to Critical Medication list. Removal of references to Medchart.	

Appendix 1

i. Obtaining medication when pharmacy is OPEN for general areas

(Some areas e.g. Admissions units, ED have extended pharmacy cover so please discuss with pharmacists in your area)



N.B For **URGENT** requests DO NOT only request via the chart. Communicate verbally with the Pharmacy team highlighting the urgency of the medication required

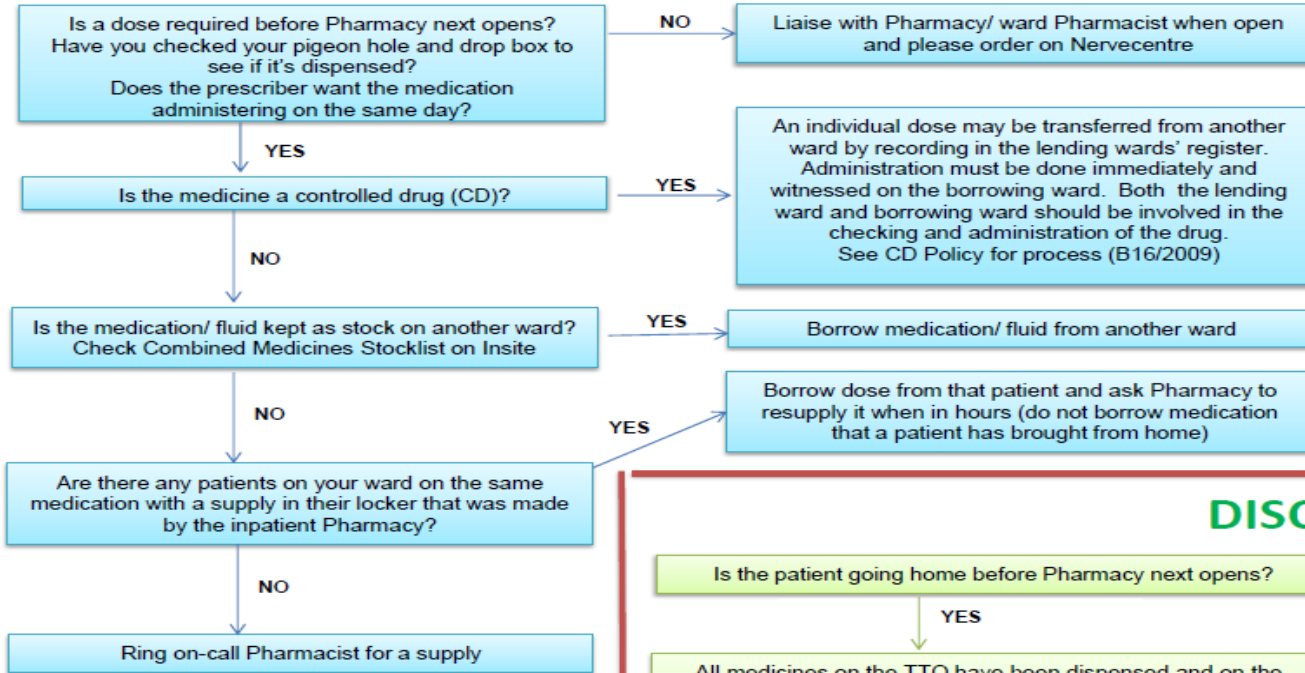
Please be aware that Nervecentre eMeds does not send an alert to a central place in the dispensaries so pharmacy will not see request on Nervecentre eMeds unless actively reviewing a ward.

Pharmacy Opening Hours				
Site	Mon-Fri	Sat	Sun	Ext No.
GH	9am to 6pm	9am to 12.30pm	10am to 12.30pm	13701
LGH	9am to 5.30pm	9am-12.30pm	10am-12.30pm	14463
LRI	9am to 6pm	9am to 12.30pm	10am to 12.30pm	15743

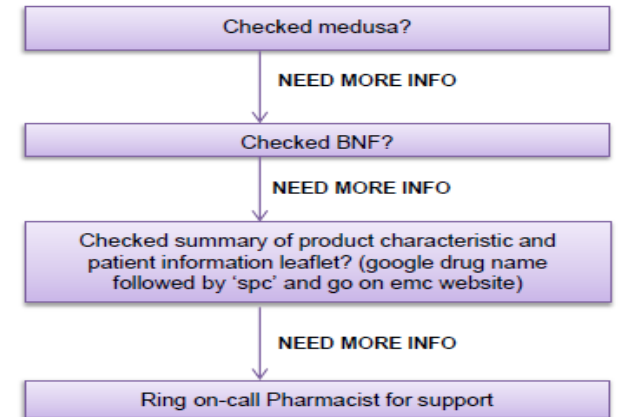
ii. Obtaining medication when pharmacy is CLOSED

**HOW TO UTILISE
PHARMACY OUT OF HOURS**

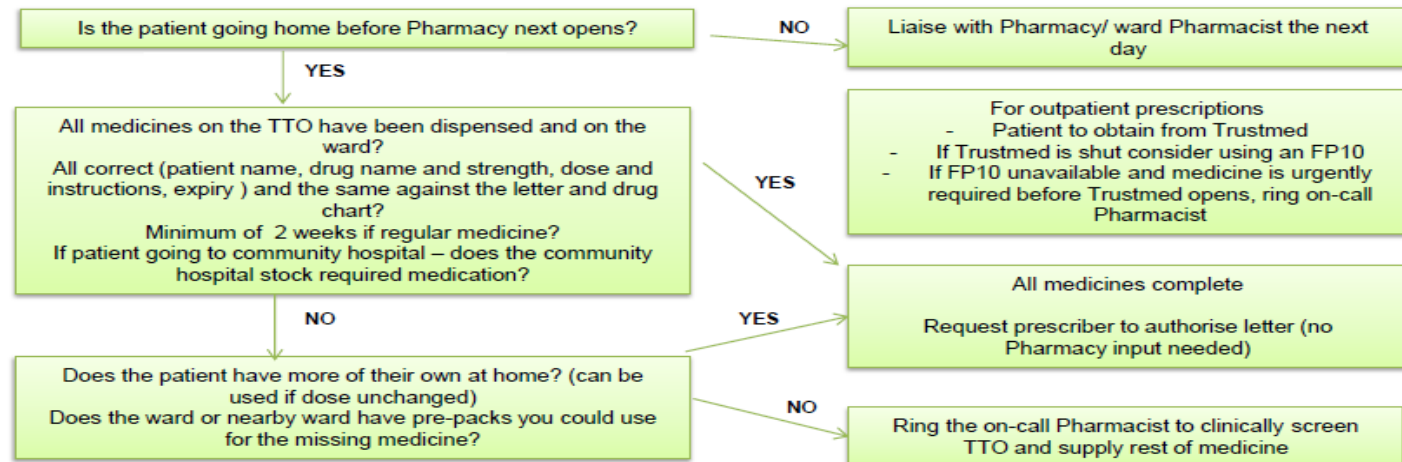
INPATIENT SUPPLY



HOW TO GIVE IV MEDS



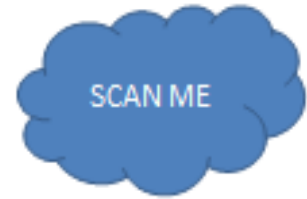
DISCHARGES



ON-CALL PHARMACY HOURS

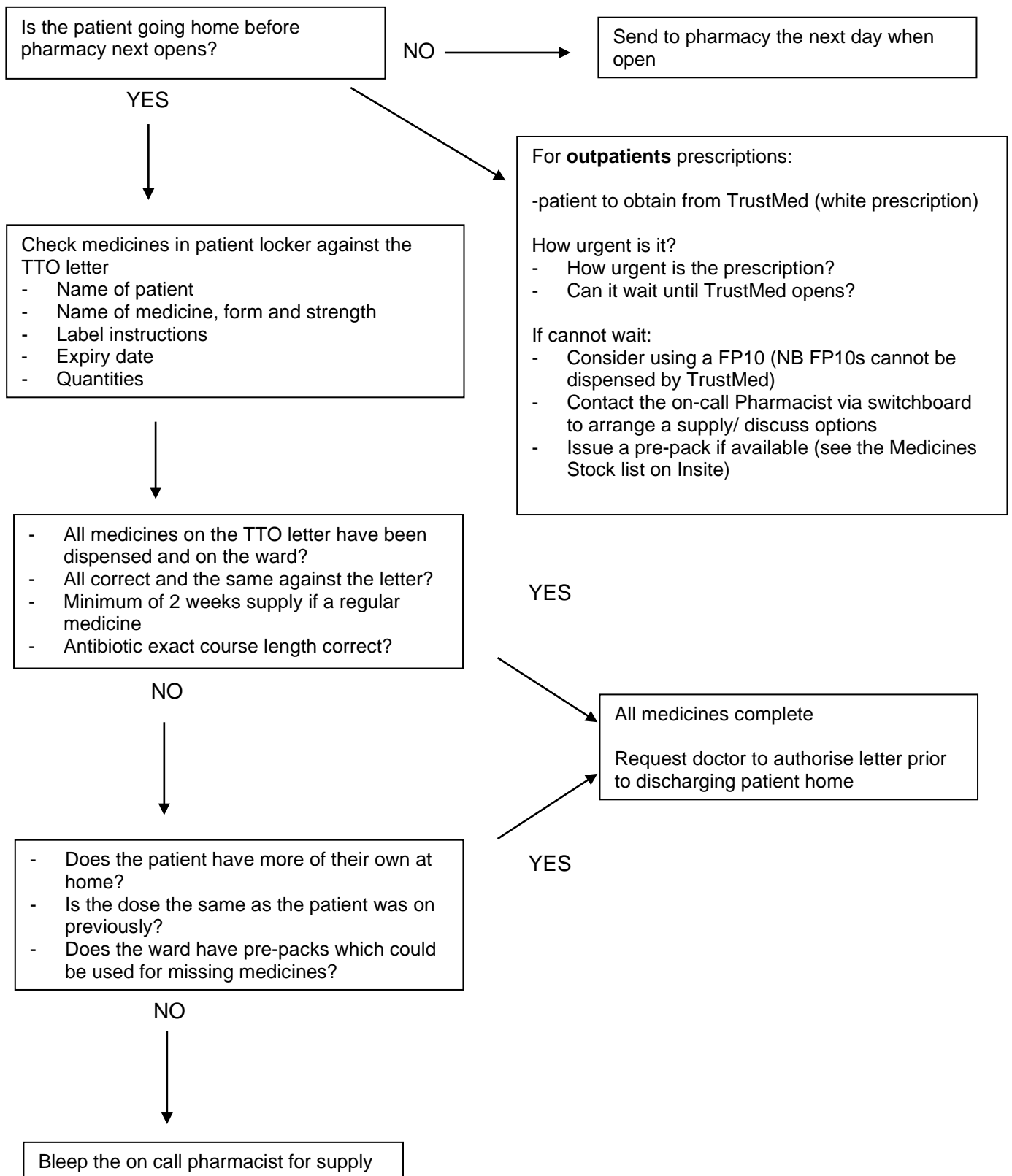
**PHARMACIST BASED AT LRI BUT COVERING ALL THREE SITES:
WEEKDAYS 6PM-12AM
WEEKENDS 12:30PM – 12AM**

**PHARMACIST NOT BASED AT ANY SITE BUT AVAILABLE VIA SWITCH FOR EMERGENCIES:
12AM – 9AM (10AM ON SUNDAY)**



Scan the QR code using a UHL ipad and log in using personal UHL username and password.

iii. Medication for discharge



Appendix 2 UHL Omitted/ Delayed medicines- Critical List

The following medicines have been identified as those which must never be unintentionally omitted or delayed and are considered critical. Delays **MUST** be flagged to medical staff to ensure suitable alternative measures are taken to prevent harm.

Critical medication/ Drug group	Risk if omitted or delayed
Analgesics	Avoidable pain, increased need for intermittent analgesic doses
Anticoagulants	Progression of thrombus, increase risk of embolic episode e.g. stroke/ DVT/ PE
Antimicrobials & MRSA decolonisation	Worsening of systemic infection, microbial resistance, deterioration in condition
Anti-epileptics	Increased risk of seizures, failure to treat seizures
Anti-Parkinsonism's	Loss of symptom control e.g. reduced mobility, swallowing problems
Corticosteroids	Treatment failure, risk of acute adrenal insufficiency with abrupt withdrawal after a prolonged period of corticosteroid use, flare up of condition
Insulin	Poor glycaemic control, diabetic ketoacidosis (DKA), brain damage
Eye drops for glaucoma	Deterioration in clinical condition Examples of common eye drops used in glaucoma include Latanoprost, Bimatoprost
MAOIs (monoamine oxidase inhibitors)	Severe withdrawal symptoms, disease recurrence with severe depression, delusions, hallucinations. Examples of MAOI include Phenzelazine, Isocarboxazid
Immunosuppressants post organ transplant	Disruption to regimen, risk of transplant rejection if levels sub-therapeutic
'Once only' drugs	Failure to treat patient with potential for deterioration in condition
Clozapine	Loss of symptom control
Desmopressin	Risk of life threatening dehydration and hypernatraemia when used for cranial diabetes insipidus

Remember: All medicines in individual circumstances may be critical and can compromise patient's treatment and therefore omission/ delay must be avoided where possible.

If you are unable to administer any of the above medications, you must discuss with the prescriber/ doctor.

Additional questions to ask

Has the patient missed a previous dose?

Does the medication need to be ordered?
Check the order/ dispense history on Nervecentre to see if already ordered

Does the patient need the medicine?
e.g. could analgesics be prescribed PRN or stopped if not required

What is the risk to the patient not receiving the medication?

Can the medication be given by another route if the patient is unable to swallow?

If yes, the drug will need re-prescribing and the dose reviewed

Appendix 3

Omission definitions

i. Paper drug charts

When a drug is not administered, the appropriate number should be recorded in the box against the medication being omitted, circled and signed. Doctors should be notified of the omission at the discretion of the nurse/ midwife. Doctors should always be notified about the omission if critical medication.

Code	Reason
1	Declined
2	Vomiting/ nausea
3	Nil by mouth
4	Not required
5	Drug not on ward
6	Omission- other treatment in progress
7	No access (NG, PEG/IV)
8	Unable to take
9	Patient not on ward
10	Inappropriate/ unclear prescription
11	Awaiting medical advice
12	Self-administration

ii. Nervecentre

When recording a dose that was not given, is overdue or missed, follow the instructions below. (MAR= Medication Administration Record).

Note if a dose was missed from a previous shift, this should be left as a missed dose on the system. The medication can be confirmed retrospectively however this should **ONLY** be completed by the nurse who omitted the dose.

Recording that a dose was not given

If a dose can't be given, record the reason.

Select the required cell on the MAR, or drug chart, and select **Unable to give**. Select a reason.

The screenshot displays a software interface for recording a missed dose. On the left, there are two status indicators: a green box labeled 'Due' and an orange box labeled 'Overdue'. The main area is divided into two panels. The left panel, titled 'Codolone', lists several actions: 'Give medicine', 'Confirm given retrospectively', 'Unable to give' (highlighted with a red border), 'Require hard review', 'Require soft review', 'Record adverse event', and 'Pause prescription'. The right panel, titled 'Unable to give', lists reasons for the omission: 'Drug unavailable', 'Patient refused', 'Patient off ward', 'Patient vomiting / experiencing nausea', 'Patient Nil by Mouth', 'Omit, other treatment in progress', 'No available access', 'Clinically inappropriate', and 'Missed in error'.

Missed doses

If the next dose of a medication becomes due before the previous dose is given it appears as **Missed?** on the MAR, or drug chart.

To retrospectively record the dose as given, select the cell, select **Confirm given retrospectively**, and complete the form.

The image shows a workflow for recording a missed dose. It starts with a 'Missed?' button. A user then selects a cell for 'Paracetamol' with options for 'Confirm given retrospectively' or 'Dose not given'. This leads to a 'Confirm given retrospectively' form for 'Paracetamol'. The form includes fields for 'Time given' (set to 31 Mar 2020 18:08), 'Patient sat, administered' (set to No), and a 'Notes' field. 'Submit' and 'Cancel' buttons are at the bottom.

To record the dose not given, select the cell, select **Dose not given**, and select a reason.

The image shows a workflow for recording a dose not given. It starts with a 'Missed?' button. A user then selects a cell for 'Paracetamol' with options for 'Confirm given retrospectively' or 'Dose not given'. This leads to a 'Dose not given' form for 'Paracetamol'. The form lists reasons for not giving the dose: 'Unable to give', 'Drug unavailable', 'Patient refused', 'Patient off ward', 'Patient vomiting / experiencing nausea', 'Patient Nil by Mouth', 'Omit, other treatment in progress', 'No available access', 'Clinically inappropriate', and 'Missed in error'.

Appendix 4

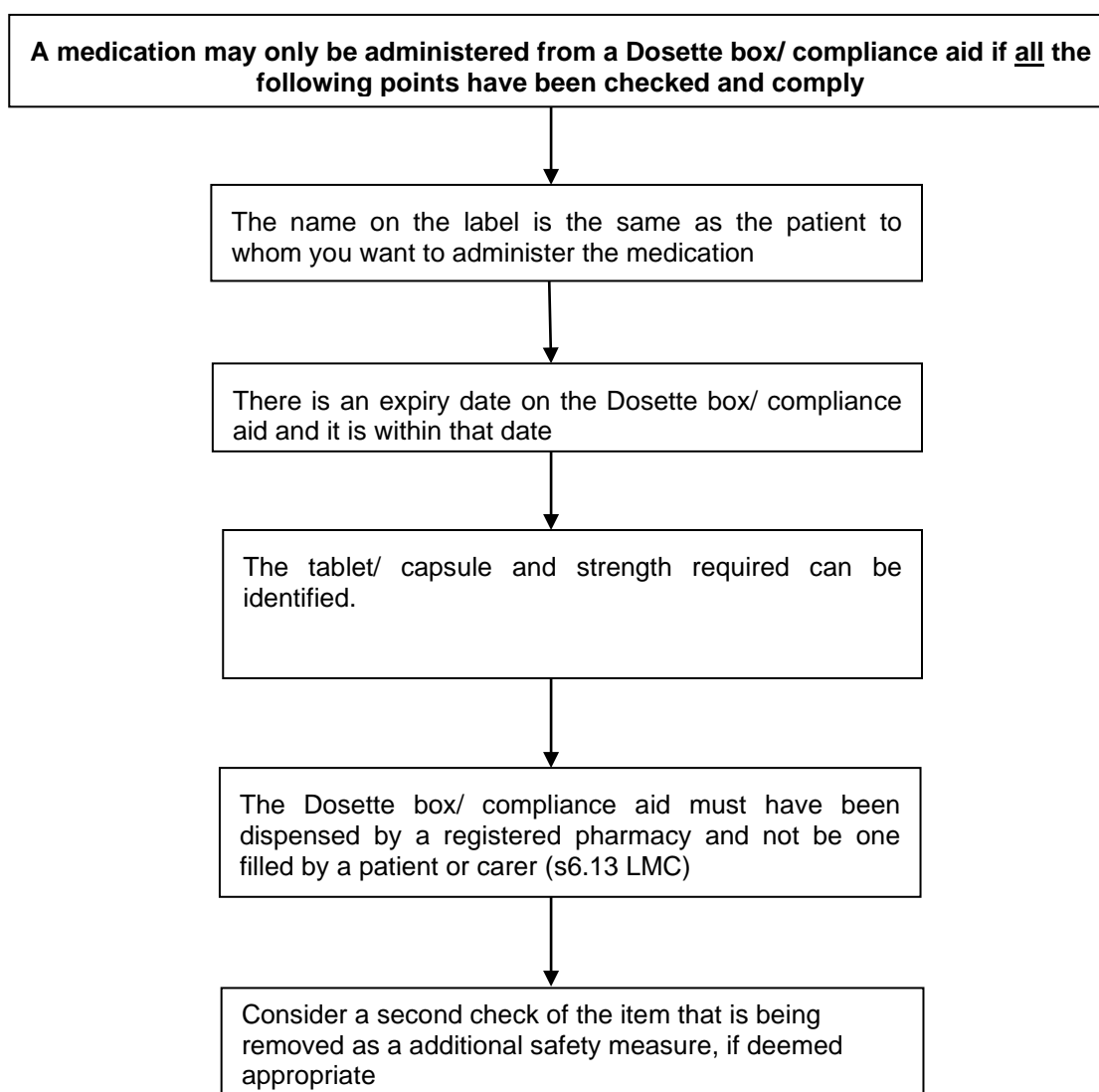
Administering from a Dosette box/ compliance aid to prevent missed doses

A medicine may be administered from a Dosette box/ compliance aid where there is no other possible method of supply and the medication is deemed critical for that individual patient.

Please discuss with a pharmacist about the method of supply and also with the prescriber.

Questions to consider before administering a dose from a Dosette box/ compliance aid:

- Is the medication critical? Is the medication ward stock or stocked on another ward?
- Can the medication be changed to an alternative which is available within the hospital?
- When will the medication likely be available if ordered for the specific use of that patient?
- How many doses will the patient miss?





Medication unavailable?



Has it been ordered / delivered but not yet put away?

Check the emeds/ paper chart. Check your drop box (if you have one) or the treatment room / envopaks and the fridge.



Patient's Own Medicines Available?

Has the patient brought in their own supply or could their relatives bring the patient's medication from home?



Is it Ward Stock?

Check your ward stock list. If you have run out of stock, order more from pharmacy



If Patient's Own Medicines are Unavailable & Medication is not in Ward Stock...

Inform your medicines management technician or pharmacist - bleep them if they are not on the ward. If unavailable order on emeds and phone the dispensary

Evenings/ Nights/ Weekends

Does the patient need the drug or **can it wait** until when the pharmacy is open?

Could you **borrow from another ward**? Look at the combined stock list available on INsite

If the drug is required out of hours, contact the on call pharmacist via switchboard for advice on **newly prescribed medication**, to check compatibility with existing medication and to arrange for supply



Missing doses of important medication may compromise your patient's treatment, and could be potentially harmful or may lengthen their stay in hospital



In the event of a missed dose, ensure the reason is fully documented on the chart