University Hospitals of Leicester NHS
NHS Trust

UHL Policy on Medicines Reconciliation for Adult and Paediatric Patients

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REVIEW DATES AND DETAILS OF CHANGES MADE DURING THE REVIEW

2023

Poly pharmacy information to be removed following comments when last reviewed and to become a separate information pack

KEY WORDS

Medicines reconciliation, medicines review, drug history

1 INTRODUCTION

1.1 This document sets out the University Hospitals of Leicester (UHL) NHS Trust's Policy and Procedures for the process described as 'Medicines Reconciliation'

1.2 Every time a patient is transferred from one healthcare setting to another it is essential that accurate and reliable information about the patient's medication is transferred at the same time. This enables timely, informed decisions about the next stage in the patient's treatment. This process is called 'Medicines Reconciliation' (MR) and is one of the basic principles of good medicines management.

1.3 Information from NRLS (National Reporting and Learning System) incident database demonstrates a large number of incidents of medication errors involving admission and discharge. Medication errors are one of the leading causes of injury to hospital patients. They can result in harm and fatalities and constitute an economic burden to the Trust.

1.4 Over half of all hospital medication errors occur at interfaces of care and most commonly at admission. It is essential that accurate and reliable information about patient's medication (s) is transferred at the same time, particularly for those patients being reviewed by other specialist physicians aside from their GP.

1.5 NICE issued guidance on this activity in *"Technical patient safety solutions for medicines reconciliation of adults to hospital" (2007).* This policy is based on this guidance for use within University Hospitals of Leicester NHS Trust.

1.6 The purpose of medicines reconciliation is to:

- Make sure the right patient gets the right drug, in the right dose at the right time (i.e. continuity of treatment)
- Reduce the risk of medication errors occurring when the care of a patient is passed from one care setting to another
- Provide ongoing personalised medicines management care for each patient..
- Reduce confusion about patient's medication regimens (for both healthcare professionals as well as patients)
- Improve service efficiency and make the best use of staff skills and time.

2 POLICY SCOPE

2.1 This policy applies to all UHL medical staff, non medical prescribers, nursing and midwifery staff, pharmacists and pharmacy technicians when involved in the admission and discharge of adult and paediatric patients.

3 DEFINITIONS

3.1 Medicines Reconciliation (MR)

3.1.1 Medicines Reconciliation is defined by the Institute for Healthcare Improvements as; the process of obtaining an up-to-date and accurate medication list for an individual that has been compared to the most recently available information and has documented:

- discrepancies
- changes
- deletions
- additions

resulting in: "a complete list of medications, accurately communicated".

3.2 Summary of levels of medicines reconciliation

Level	Brief description	Patient Groups	By	
Level 1	Admission or transfer-led	All admissions (exception those patients who present to an admissions area and receive basic treatment)	Admitting doctor or other healthcare professional including accredited pharmacy staff.	See Appendix 2 for check list to assist in taking an accurate medication history
Level 2	Pharmacy consolidation	Defined in consultation with Clinical Management Groups (the aim is all patients within 24 hours where clinical pharmacy service allows) Note: this is dependent on pharmacy staffing and will be limited at weekends.	Accredited members of the pharmacy teams which may include pharmacy technicians as well as pharmacists	
Level 3	Medication review / optimisation	Patients with multiple medicines, complex treatments with comorbidities – high risk/ targeted patients	Pharmacists	

3.3 Discrepancies

- Part of the checking process includes the identification of any discrepancies. A discrepancy can be defined as any difference between the medicines the patient has been taking in their previous setting and the medicines prescribed in their new setting.

- Discrepancies may be considered as:
  - Intentional – discrepancies agreed by the clinician
  - Unintentional – discrepancies that are not a conscious change

3.4 Medication (drug) history taking

Medication history taking encompasses the following:

- Checking allergies and sensitivities including side effects to medicines
- Documenting all regular and as required (prn) medicines including medicines recently started or stopped with reasons for the addition or discontinuation when known.
- Information on how the patient manages their medicines at home

3.5 Medication review / Optimisation (level 3)

- Defined as a structured, clinical examination of a patient's medicines with the objective of reaching an agreement with the patient about treatment, optimising the impact of medicines and minimising the number of medication-related problems.
- A medication review can only be completed once an accurate list of what the patient is currently taking is compiled. A medication review is a process requiring additional knowledge and skills to those required for medicines reconciliation.

3.6 Patient medical record

The main record in which a clinician records the patient's diagnosis, treatment plans and communications with other healthcare professionals- normally known as case notes.

4 ROLES AND RESPONSIBILITIES

4.1 The Executive Director with overall responsibility for this policy is the Medical Director.

4.2 Clinical Management Groups (CMGs) Heads of Nursing and Clinical Directors

a) It is the responsibility of Clinical directors, Heads of Nursing and CMG Lead Pharmacists to ensure that all staff working within their area are made aware of and follow this policy.

4.3 CMG Lead pharmacists are responsible for:

a) Agreeing the local arrangements and criteria to be made for Level 2, pharmacy consolidation with their CMG Heads of Operation and reviewing these arrangements as services change.

b) Reporting back to CMGs the level of medicines reconciliation being provided through use of the Pharmacy Clinical service metrics.

4.4 Admitting doctors are responsible for the initial level 1 medication history within 6hrs of admission. Whilst nurses have a part to play in obtaining a medicine history the responsibility lies with the admitting doctor.

4.5 Clinical staff on wards (nursing and medical) are responsible for flagging to the clinical pharmacy team those patients who are new to the area and it would be beneficial for a pharmacy level 2 or 3 medicines reconciliation.

4.6 Individuals

It is the responsibility of all medical, nursing and midwifery staff, pharmacists and pharmacy technicians involved in medicines reconciliation to understand and follow this policy when completing a medicines reconciliation for a patient on admission or transfer of care.

5. POLICY STATEMENTS, STANDARDS, PROCEDURES AND PROCESSES

The process of medicines reconciliation (MR) encompasses two key steps

level 1 -taken by the admitting healthcare professional within 6hrs of admission

level 2 –by accredited pharmacy staff within 24 hours of admission. Pharmacy staff to use the process described in Pharmacy SOP 308 medicines reconciliation

All patients should receive Level 1 MR. Patients receiving a Level 2 MR will be prioritised by pharmacy staff. This will not currently include patients in Admission areas who are seen and discharged within 24 hours and over weekends.

Following medicines reconciliation, it is important to then review the medicines (level 3) in context of the patients individualised care plan in order to optimise treatment and also reduce unnecessary harm.

5.1 Level 1 – obtain a medicines history on admission

5.1.1 Information of the medication history (also referred to as 'drug history') should be obtained ideally from the patient, where possible within 6 hours of admission. A checklist to use as a prompt whilst taking a medication history is available in appendix 2.

5.1.2 If the patient is unable to give a medication history due to communication barriers caused by their acute condition, sensory or cognitive impairment or language barriers, consideration may need to be given to accessing additional sources, depending on individual circumstances and confirming with the patient when able. See appendix 3 for other sources of information that can be utilised for medication histories.

5.1.3 Particular attention needs to be paid to securing any external support that may be required to facilitate communication.

- These may include the use of interpreters for non - English or British Sign language speaking patients.
- Access details can be sought from the equality office on ext 14382 or 18295 (and for any equality related issue).
- Some patients who have a learning disability will have an allocated key worker or advocate who could assist.

5.1.4 There may also be an increased need to rely on verbal or written information from GP's or family /residential carers in this group.

5.1.5 Thorough documentation of medicines reconciliation is particularly important so healthcare professionals or carers responsible for the next stage of the patients care have all the medicines information required to ensure effective medicines management. The medication history when taken must be recorded in the appropriate section of the patient medical notes or on an electronic chart in the medicines on arrival part of Nervecentre emeds , along with any identified discrepancies or intentional changes (see 5.3)

5.1.6 The prescriber must then complete a prescription chart (paper or electronic) for the patient in order for the medicines to be continued during admission.

5.1.7 If the medication list was obtained several days prior to admission, for example in a pre-admission clinic the prescriber must check whether there have been any subsequent changes before prescribing.

5.1.8 The individual completing a level 1 MR may consider making a referral for a level 2 or level 3 review (see 5.5)

5.2. Level 2 – pharmacy consolidation

5.2.1 Level 2 involves confirmation of the accuracy of level 1, ensuring that the medicines, doses and formulation that are prescribed for the patient are correct. This is often referred to as the pharmacy consolidation check and involves cross referencing sources listed in appendix 3.

5.2.2 During this step, discrepancies may be identified as intentional or unintentional (see 5.3). The identified discrepancies, whether intentional or unintentional, need to be communicated to the responsible medical practitioner at the time of undertaking the consolidation.

5.2.3 Pharmacists who have been trained may make minor changes to the prescription chart or electronic discharge letter as per the 'Guideline for amending prescribed medicines by pharmacists' C273/2016. Major changes must be discussed with the prescriber.

5.3 Communication / documentation

5.3.1 Any changes that have been made to the patient's prescription are documented and dated, ready to be communicated to the next person responsible for the medicines management care of the patient and ensure that the patient is informed of these changes.

Examples :

- When a medicines has been started or stopped, and for what reason
- When a dose has been changed, and for what reason
- When the frequency has been changed, and for what reason
- When the formulation or route has been changed, and for what reason
- The intended duration of treatment, particularly important for antibiotic prescribing
- Monitoring and follow up requirements, when these need to be actioned and by whom, for example GP follow up.

5.3.2 Documentation may be made in the patient medical record or on the electronic prescribing system (emeds) within the 'arrived on' tab noting the sources used, signed and dated.

5.3.3 Minimum data set required

- Complete patient details i.e. full name, date of birth, weight if under 16 years,
- NHS/unit number, GP, date of admission
- A list of all the medicines currently prescribed for the patient, including those bought over-the-counter (where this is known)
- Dose, frequency, formulation and route of all the medicines listed

- An indication of any medicines that are not intended to be continued and reason for change
- Known allergies **and nature of reaction** with source of information
- Previous drug interactions

5.3.4 **Prescription chart** – either paper or electronic (as list of medicines to be administered)

- Unintentional medication changes should be discussed with the prescriber and documented on the prescription chart (paper or electronic) with recommendations for follow up, dated and signed.

- Monitoring and follow up requirements identified during the medicines reconciliation should be documented in the patient's medical notes and prescription chart if appropriate, signed and dated

5.4 Medicines review / Optimising medication treatment (level 3)

It is important that a holistic review of treatment is undertaken which is individualised for the patient and takes into consideration the rationale for each medication prescribed alongside the risks and benefits of treatment. An admission to hospital is an opportunity to undertake a review of therapies in discussion with the patient and carers/relatives.

5.5 On Discharge

5.5.1 It is the responsibility of the discharging clinician to ensure that :

- Medication changes and reasons for the changes are documented on the discharge or transfer letter between care settings

- GPs are prompted (where applicable) to review changes made to therapy.

5.5.2 It is the responsibility of the person carrying out the level 2 MR(this is often a member of pharmacy staff but where there is no pharmacy input into discharge it should be the clinician or nurse discharging) to ensure that:

- Unintentional discrepancies highlighted by the MR are appropriately prioritised and resolved. Pharmacists may make minor changes as per the 'Guideline for amending prescribed medicines by pharmacists'.

- Any future transfer requirements between care settings are appropriately documented on the prescription chart, eg compliance aids, with any useful telephone numbers obtained on admission as these may aid smooth transfer between care settings

- Document changes to discharge letter if not already added by the discharging clinician.

5.6 Referral to pharmacy for different levels of MR

5.6.1 It is recognised that pharmacy staff will not be able to offer a MR consolidation service to every admitted patient within an appropriate time frame because of limited opening hours and/or limited availability of appropriately trained staff. It may be necessary to prioritise patient groups where resources fall short.

5.6.2 Where accurate medicines reconciliation has not been possible at Level 1 and Level 2 MR is not routinely offered in that area, the admitting practitioner should highlight the need for verification and refer for either a Level 2 MR or Level 3 medication review. The need for MR verification by the pharmacy team should be documented in the patient's medical record and on the prescription chart and verbally to pharmacy staff.

5.6.3 For criteria that may be used to prompt referral for a Level 2 medicines reconciliation (pharmacy consolidation) or a Level 3 medication review see Appendix 1.

6 EDUCATION AND TRAINING REQUIREMENTS

6.1 All relevant staff must have read and understood this policy and the procedures therein.

6.2 The skills and knowledge to undertake a medication history/medication reconciliation are covered during undergraduate stage of development. Any training needs identified during an appraisal should be addressed as required.

6.3 Pharmacists must have been assessed as competent prior to amending prescriptions using the 'Guideline for amending prescribed medications by pharmacists'. This training is available from the Pharmacy Training Team.

6.4 Pharmacy Medicines Management Technicians (MMT) must have received training and observed supervision while undertaking the MMT training programme and been signed as competent prior to undertaking MR without supervision. The training is organised and overseen by the Pharmacy Training team.

7 PROCESS FOR MONITORING COMPLIANCE

The following table lists the monitoring arrangements for this policy:

The Trust has set a standard that 76% of patients will have a level 2 review within 24 hours. This is acknowledged as aspirational but was set based on comparison and results from other Trusts using the medicines safety thermometer.

Element to be monitored	Lead	Tool	Frequency	Reporting arrangements
Medication incidents due to inaccurate medicines reconciliation	Medication Safety pharmacist	Datix	Quarterly	Medicines Optimisation Committee
Level of service provided to wards	CMG lead Pharmacists	Clinical service metrics	Monthly	CMG Quality & Safety Boards

8 EQUALITY IMPACT ASSESSMENT

8.1 The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment that is free from discrimination and to treat all individuals fairly with dignity and appropriately according to their needs.

8.2 As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

9 SUPPORTING REFERENCES, EVIDENCE BASE AND RELATED POLICIES

- Medicines Optimisation : the safe and effective use of medicines to enable the best possible outcomes NiCE guideline NG5 section 1.3 Published 04 march 2015 1 Recommendations | Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes | Guidance | NICE

- National Patient Safety Agency, available at www.npsa.nhs.uk/corporate/news/guidance-to-improve-medicinesreconciliation/

- A systematic review of the effectiveness and cost-effectiveness of interventions aimed at preventing medication error (medicines reconciliation) at hospital admission. Campbell et al, The University of Sheffield, School of Health and Related Research (ScHARR), September 2007

- Institute for Healthcare Improvement, www.ihi.org

- Moving patients, moving medicines, moving safely. Guidance on discharge and transfer planning. The Royal Pharmaceutical Society of Great Britain, The Guild of Hospital Pharmacists, The Pharmaceutical Services Negotiating Committee, and The Primary Care Pharmacists Association. 2006.

- Medicines reconciliation:A toolkit for pharmacists International Pharmaceutical Federation (FIP) 2021

- Leicestershire medicines code

- UHL Guideline for amending prescribed medicines by pharmacists C273/2016

- Pharmacy SOP 308 Medicines Reconciliation

10 PROCESS FOR VERSION CONTROL, DOCUMENT ARCHIVING AND REVIEW

10.1 This document will be uploaded onto SharePoint and available for access by Staff through INsite. It will be stored and archived through this system.

10.2 This Policy will be reviewed every three years or sooner in response to clinical or risk issues.

Criteria that may be used to identify patients requiring Level 3 medication review

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Appendix One

In agreed circumstances it may be necessary to target patients for a detailed medication review. These circumstances should be agreed locally and may vary for different CMGs and specialties. Examples of some situations where this may be necessary include:

- Patients for whom medicines may have contributed to current admission
- Patients who have medical issues that may contribute to poor medicines management
- Patients who have physical issues that may contribute to poor medicines management e.g. impaired sight, hearing, dexterity, mobility, swallowing, communication (language or speech)
- Patients who have social issues that may contribute to poor medicines management e.g. isolation, financial problems
- Patients who have mental health issues that may contribute to poor medicines management e.g. cognitive impairment, mental illness, confusion, learning disabilities, disorientation
- Patients who have had multiple, significant changes to their pre-admission medication
- Patients who have been recently discharged from hospital
- Patients with known adherence problems and where there is a low level of home support available
- Patients who are taking high risk, narrow therapeutic index drugs with a concentration above the therapeutic window e.g. Digoxin, Warfarin (labile INRs), Lithium, Phenytoin
- Patients requiring the use of medication reminder devices to support adherence

This list is not entirely exhaustive or exclusive and there may be circumstances where a patient does not fit any of the criteria above yet still needs a detailed review.

Checklist to support the process of Medicines Reconciliation (MR)

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Appendix Two

It is not intended that this checklist be completed on paper and stored for every patient, rather that it underpins training around MR and practically supports the MR process and guides the documentation that must be added to the patient medical record or the prescription chart.
(pharmacy staff – please see additional checklist in SOP 308 Medicines reconciliation which considers the suitability of patients own medicines, compliance aids and patient information charts/ cards for use on discharge)

- Patient details (full name, date of birth, weight, NHS/unit/hospital number, GP, date of admission
- The condition for which the patient was referred (or admitted) plus details of any co-morbidities
- Known allergies, nature of the reaction, date and source of information
- A complete list of all of the medicines currently being taken by the patient
- Dose, frequency, formulation and route of all the medicines listed
- Specific medication to ask about include:
    - Inhalers
        - It is important to confirm the name, strength, type of inhaler and any spacer devices used.
        - Specify the brand for beclomethasone inhalers
    - Eye drops
        - Confirm which eye(s) the drops are being administered and the appropriate strength of eye drops.
    - Topical preparations
        - Confirm the strength (often expressed as a percentage) and if preparation is a cream/ointment/gel/foam
    - Once weekly medication
        - Confirm which day of the week and document on the chart, crossing out the other non-administration days.
    - Injections
    - Medications not supplied through the patients' GP
    - Over the counter (OTC) medication
    - Oral contraceptives
    - Hormone replacement therapy
    - Nebules
        - Confirm if the patient has a home nebuliser
    - Home Oxygen
    - Herbal preparations
    - Parkinson's medication
        - ALWAYS confirm the time of day of doses as this can be very time specific and may not be given at usual medication administration times
        - Confirm formulation e.g. dispersible tablets, modified release capsules etc

- Steroids
  - It is important to obtain an accurate history and where possible, check the steroid card.
  - Ask about any recent course (s), frequency and length of course (s) or if they are on a maintenance dose for a long-term condition
- Insulin
  - The type, brand, administration device and dose must always be checked and annotated on the prescription.
  - Ask the patient if they have an insulin passport as this can be a useful source of information to provide an additional check.
- Methotrexate
  - Ask the patient for their methotrexate booklet which will have their dose, indication and recent blood tests
  - This is usually prescribed once a week, confirm with the patient which day they usually take methotrexate and annotate on the chart. Cross out the six days when methotrexate is not administered. For more information check the methotrexate policy (B25/2013)

- Additional information for specific drugs e.g. indication for medicines that are for short-term use only (antibiotics), day of week of administration for once weekly medication (bisphosphonates, methotrexate)

- Medication management in own home (include details of specific support). Possible questions to ask:

  - *Does anyone help you with your medicines at home? If so, who? What do they do?*

  - *Do you have any problems obtaining or ordering your repeat prescriptions (NB: relative / carer might help)*

  - *Do you have a regular community pharmacy that you use?*

  - *Do you have problems getting medicines out of their packages?*

  - *Do you have problems reading the labels?*

  - *Some people forget to take their medicines from time to time. Do you? What do you do to help you remember?*

  - *Some people take more or less of a medicine depending on how they feel. Do you ever do this?*

  - *Most medicines have side-effects. Do you have any from your medicines?*

- Sources used (minimum of 2) *Should be documented*

- Name, signature and date of practitioner carrying out medicines reconciliation in the patient's case notes.

There are many sources of information that can be used for medicines reconciliation, some are more reliable than others. In all cases, the information MUST be up to date to be considered reliable. This may mean using several sources of information

When recording information, the source of the information must be documented, dated and where possible, verified.

Reliable sources of information

- A recent (updated) print-out from the patient's GP records. Note that this list may be incomplete and may not always include medicines which are not supplied by the GP, for example Hospital-only clozapine. The dates that medication (s) were last issued and quantities supplied may help to determine compliance with medication (s).
- Information directly obtained from the GP computer records (eg using SystmOne)
- The patient's repeat prescription request form verified with the patient and/or carer. Check the date of issue as this may indicate when it was last supplied and if current.
- Patients own drugs (PODS) often brought in by patients (check label for patient name and dispensing date, alongside the contents of the PODS)
- Patient and/or carer knowledge of medication from patients that are well informed about their condition.
- Discharge letter or electronic prescription where patient has been discharged within the last month. Letters more than 1 month old must not be used as a sole source as a patient may have visited their GP within that time and medicines been changed.

Less reliable sources of information are:

- Medication Administration Record (MAR) sheets from care homes as they may not have been reconciled with the current GP list.
- Patient Medication Records (PMR) from a community pharmacy as they may be incomplete if patients use multiple pharmacies to obtain their medications.
- Specialist nurse care plans and clinical management plans as they may not contain all of the patient's current medication.
- Hand written sheets made by patients/carers.

It may be necessary to investigate additional sources from specialist teams to obtain an accurate medication history. Teams to consider include:

- Anticoagulation team
- Diabetes
- Community pharmacists
- Specialists nurses eg heart failure
- Drug and alcohol services
- Other hospitals eg clinical trials, specialist clinics