

Medicines Reconciliation in Adults Policy

Date	Version
September 2013	4.1

Purpose

This Policy has been written following guidance from the National Institute for Health and Clinical Excellence (NICE) and the National Patient Safety Agency (NPSA). This policy outlines the processes to ensure that any medication patients are taking prior to admission to hospital is properly documented on admission.

Who should read this document?

Trust Wide. All Medical and Pharmacy staff

Key messages

Prescribing errors can result in harm to patients and the aim of medicines reconciliation for patients at the point of admission to hospital is to ensure that important medicines are not stopped and that new medicines are prescribed, with a complete knowledge of what the patient is already taking.

Appropriate systems for effective Medicines Reconciliation on admission are a key requirement by the CQC relating to outcome 9.

Accountabilities

Production	Andrew Prowse, Associate Director Pharmacy
Review and approval	Medicines Governance Committee
Ratification	Clinical Support Services Care Group Clinical Director
Dissemination	Andrew Prowse, Associate Director Pharmacy
Compliance	Simon Mynes, Director of Pharmacy

Links to other policies and procedures

Medicines Management Policy

Version History

2.0	August 2011	<ul style="list-style-type: none"> Reference to Medicines Reconciliation section of new inpatient Drug Prescription and Administration Record and MAU admission booklet Removal of medicines reconciliation form secondary to the introduction of the above Removal of Appendix I – referral criteria for Pharmacy led medicines reconciliation as all patients have a MR on admission except for maternity where a referral to Pharmacy is needed if a second level MR is required The drug history taking guideline has been amended to include reference to several NPSA alerts/RRR including lithium, insulin and methotrexate.
3.0	July 2013	<ul style="list-style-type: none"> Reformatted in to revised Trust Policy format Prescriber documentation and Pharmacist endorsing updated following update to allergy section of the Drug Prescription and Administration record. It is the responsibility of the Pharmacist screening the e-discharge summary that where possible, medication changes and reasons for the changes are documented on the discharge summary if not already added by the discharging clinician. However, the primary responsibility for this lies with the discharging clinician

4	November 2018	Extended by Medicines Governance Committee
4.1	July 2021	Extended to December 2021
Last Approval		Due for Review
September 2013		Extended to December 2021

PHNT is committed to creating a fully inclusive and accessible service. Making equality and diversity an integral part of the business will enable us to enhance the services we deliver and better meet the needs of patients and staff.

We will treat people with dignity and respect, actively promote equality and diversity, and eliminate all forms of discrimination regardless of (but not limited to) age, disability, gender reassignment, race, religion or belief, sex, sexual orientation, marriage/civil partnership and pregnancy/ maternity.

An electronic version of this document is available on the Trust Documents Network Share Folder. Larger text, Braille and Audio versions can be made available upon request.

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1. Introduction / Background

The National Institute for Health and Clinical Excellence (NICE) in collaboration with the National Patient Safety Agency (NPSA) has issued guidance on how to improve processes to ensure that any medication patients are taking prior to admission to hospital is properly documented on admission.

Prescribing errors can result in harm to patients and the aim of medicines reconciliation for patients at the point of admission to hospital is to ensure that important medicines are not stopped and that new medicines are prescribed, with a complete knowledge of what the patient is already taking. The NPSA has reported the number of incidents of medication errors involving admission and discharge as 7070 with 2 fatalities and 30 that caused severe harm (figures from November 2003 and March 2007).

To improve medicines reconciliation at hospital admission NICE/NPSA has recommended that:

- All healthcare organisations that admit adult inpatients should make sure that they have policies in place for medicines reconciliation on admission. This includes mental health units, and applies to elective and emergency admissions.
- In addition to specifying standardised systems for collecting and documenting information about current medications, policies for medicines reconciliation on admission should ensure that:
 - Pharmacists are involved in medicines reconciliation as soon as possible after admission
 - The responsibilities of pharmacists and of other staff in the medicines reconciliation process are clearly defined; these responsibilities may differ between clinical areas
- Strategies are incorporated to obtain information about medications for people with communication difficulties.

2. Definitions

2.1 Medicines Reconciliation

Medicines reconciliation is a process designed to ensure that all medication a patient is currently taking is correctly documented on admission and at each transfer of care. It encompasses:

- *Collection* of the medication history from a variety of sources (usually a minimum of two)
- *Checking* that medicines prescribed on admission for the patient are correct. The 'checking' step involves ensuring that the medicines and doses that are now prescribed for the patient accurately reflect the sources consulted. Discrepancies may be identified at this stage and these may be intentional or unintentional.
- *Communicating* any changes in medicines so that they are readily available to the next person(s) caring for the patient. Communication must include reasons for the change(s) and any follow-up requirements. Although the process and outcomes may be verbally discussed with other members of the healthcare team there must

also be a written record in the patient's medical record and/or on the Drug Prescription and Administration Record.

Medicines reconciliation should involve pharmacists¹. This means that systems to deliver medicines reconciliation in different areas of care should be supported by pharmacists, and ideally should involve pharmacy team members in a clearly defined process.

2.2 Medication Review

Medication review has been defined as a structured, critical examination of a patient's medicines with the objective of reaching an agreement with the patient about treatment, optimising the benefits of medicines, minimising the number of medication-related problems and reducing waste^{2 3}.

A medication review can be accurately performed only once an accurate list of what the patient is currently taking, i.e. medicines reconciliation, has been completed.

Medication review is a process requiring additional knowledge and skills to those required for medicines reconciliation and so the two processes have been separated for the purposes of this document. The detailed processes involved in medication review are considered beyond the scope of this policy.

2.3 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 had been taking in their previous care setting and the medicines prescribed in their new care setting.

Discrepancies may be considered as:

- Intentional - discrepancies agreed by the clinician
- Unintentional – discrepancies that are not a conscious change

2.4 Patient Medical Record

Within each setting, this is the main record in which the clinicians record the patient's diagnosis, treatment and responses.

2.5 Drug Prescription and Administration Record

This refers to the chart used to record the prescribing and administration of medicines during the inpatient stay.

3. Levels of Medicines Reconciliation

3.1 Introduction

Medicines reconciliation (MR) is the responsibility of all staff involved in the admission, prescribing, monitoring, transfer and discharge of patients requiring medicines. MR can be considered to occur at different stages or 'levels':

3.2 Summary of Levels of Medicines Reconciliation

Level	Brief description	Patient groups
First	Admission or transfer-led	All
Second	Pharmacy consolidation	All ward areas (except maternity which require referring to Pharmacy if second level is needed)
Third	Medication review	High risk/targeted patients

3.3 Practical definitions

3.3.1 First Level - Admission-led

Patient group	By whom	Collection Method	Sources	Time frame
ALL adult admissions	- Admitting doctor - Other healthcare professional (who has received appropriate training)	Using Medication history taking guideline (Appendix 1) and documented in medical notes	Preferably at least two (Appendix 2)	Within 6 hours of admission

3.3.2 Second Level – Pharmacy consolidation

Patient group	By whom	Collection Method	Sources	Time frame
All adult admissions – (except maternity which require referring to Pharmacy if needed)	- Pharmacists - Accredited members of the pharmacy team (may include technicians and pre-registration pharmacists)	Using Medication history taking guideline (Appendix 1) and documented in medical notes	Preferably at least two (Appendix 2)	Within 48 hours of admission

3.3.3 Third Level - High-risk/Targeted patients requiring a pharmacist review

Patient group: These will include patients referred to a nominated pharmacist as a result of a first level or second level medicines reconciliation

By whom: Pharmacist

The detailed processes involved in medication review are considered beyond the scope of this policy.

3.4 Referral of patients for different levels of MR

- Where accurate medicines reconciliation has not been possible at first level, and second level MR is not routinely offered (e.g. maternity which do not have a daily pharmacist visit), the admitting practitioner should highlight the need for verification and refer for either a second level MR or a third level pharmacist review.
- The need for MR verification by the pharmacy team should be documented in the patient's medical record and bleep the ward pharmacist during pharmacy opening hours or contact hospital dispensary.

4. Process

4.1 Collection

Information should be gained from the patient and/or carer following the Medication History taking guideline (**Annex 1**) and ideally corroborated by at least two reliable sources (**Annex 2**). This should be documented in the patient's medical notes (on MAU, this will be documented in the medicines reconciliation section of the Admissions Records booklet). For patients with communication difficulties caused by their acute condition, sensory or cognitive impairment or language barriers, consideration may need to be given to accessing additional sources, depending upon the individual circumstances.

4.2 Communication

Any changes that have been made to the patient's Drug Prescription and Administration Record are documented and dated, ready to be communicated to the next person responsible for the medicines management care of that patient. Examples of this are:

- When a medicine has been stopped, and for what reason
- When a medicine has been started, and for what reason
- The intended duration of treatment
- When a dose has been changed and for what reason
- When the route or formulation of the medicine has been changed, and for what reason (this is particularly important when, for example a patient is being transferred from a high dependency unit to a medical or surgical ward)
- When the frequency of the dose has changed and for what reason
- Monitoring and follow up requirements, when these need to be actioned and by whom
- The patient required support to take his/her medicines in a previous care setting which may need to be resumed or reviewed.

(a) Communication following first level medicines reconciliation (admission led). *This is the responsibility of the admitting clinician*

- Documentation should always be made in the patient medical record noting sources used and dated and signed by the admitting practitioner (on MAU, this will be documented in the pre-printed medicines reconciliation section of the Admissions Records booklet).
- Confirm if the patient has any allergies or sensitivities to any medicines and document in the medical notes. Also document drug/allergen, type of reaction and sign on page one of the Drug Prescription and Administration Record. If no known allergies, tick and sign the relevant box. Cross reference to the green allergy chapter card which is at the front of the patient's medical notes.
- Drug Prescription and Administration Record (as list of medicines to be administered)

- For each drug prescribed indicate (by circling the relevant box) on the Drug Prescription and Administration Record if the drug is prescribed as no change from admission, an increased dose, a decreased dose or completely new.
- Intentional medication changes should always be documented on the Drug Prescription and Administration Record and in the patient medical record giving reasons for the change.

(b) Communication following second level medicines reconciliation (pharmacy consolidation). *This is the responsibility of the pharmacist or pharmacy technician who carried out the MR.*

- Documentation should always be made on the Drug Prescription and Administration Record in the Pharmacy Medicines Reconciliation section including:
 - List of any medication discrepancies (intentional and unintentional) and the reason (if known)
 - If there are no discrepancies document “as prescribed”, if the patient takes no regular medicines on admission document “nil regular medicines”.
 - The sources used
 - Who administers the patient’s medicines at home
 - Does the patient use a compliance aid and if so the relevant details. If the patient does use a blister pack, tick the relevant box on page one of the Drug Prescription and Administration Record
 - Signature and date
- Confirm if the patient has any allergies or sensitivities to any medicines and update the allergies and drug sensitivity box on page one of the Drug Prescription and Administration Record. Once this is complete, sign “Allergy status checked (Pharmacist/Technician) in the allergies and drug sensitivity box. If no known allergies, tick and sign the relevant box if not already completed.
- If not already completed, for each drug prescribed indicate (by circling the relevant box) on the Drug Prescription and Administration Record if the drug is prescribed as no change from admission, an increased dose, a decreased dose or completely new.
- Intentional medication changes not already documented should be documented in the patient medical record (on MAU, this will be documented in the pre-printed medicines reconciliation section of the Admissions Records booklet, signed and dated) and on the Drug Prescription and Administration Record with reasons for the change
- Medication changes that are suspected as being unintentional should be discussed with the prescriber, highlighted in the medicines reconciliation section of the Drug Prescription and Administration Record and documented in the patient’s medical record
- Monitoring and follow up requirements identified during the medicines reconciliation process should be documented in the patient medical record and

Drug Prescription and Administration Record and dated and signed by a pharmacist

4.3 Defining Responsibilities

It is the responsibility of the person carrying out the second level medicines reconciliation to ensure that:

- Unintentional discrepancies highlighted by the MR are appropriately prioritised and resolved.

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

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

It is the responsibility of the Pharmacist screening the e-discharge summary that:

- Where possible, medication changes and reasons for the changes are documented on the discharge summary if not already added. However, the primary responsibility for this lies with the discharging clinician

5. Training

Staff carrying out first level MR will receive appropriate training which is led by the pharmacy department. This is delivered as part of the e-learning package for doctors/clinical staff on induction and is also part of the Pharmacy led FY1/FY2 training and MAU doctor training sessions.

Pre-registration pharmacists are accredited to carry out level two MR after appropriate training and assessment. Registered pharmacy technicians can carry out level two MR following training and subsequent accreditation in medicines management (drug history taking module).

6. Standards

6.1 Process

Adult patients will have a Level 1 MR carried within 6 hours of admission

STANDARD: 100%

Adult patients designated to require a Level 2 (pharmacy consolidation) MR will have it carried out within 48hours

STANDARD: 80%

6.2 Documentation

6.2.1 First Level

Medications taken prior to admission should be documented in the patient medical record together with the source(s) used to obtain the information

STANDARD: 100%

Intentional changes to medicines are documented in the patient medical record together with reasons for the change

STANDARD 100%

6.2.2. Second Level

Confirmation of ratification of a Level 1 MR will be documented as set out as in policy

STANDARD: 100%

Intentional medication changes will be recorded on the patient's Drug Prescription and Administration Record

STANDARD: 100%

Identified unintentional changes to the admission medication will be recorded in the patient's medical record and on the patient's Drug Prescription and Administration Record

STANDARD: 100%

Identified unintentional changes to the patient's admission medication will be resolved before discharge

STANDARD: 100%

Entries on the Drug Prescription and Administration Record and in the patient's medical record related to the MR process must be dated, signed and include a contact number for the member of pharmacy staff making the entry

STANDARD 100%

Intentional changes to admission medication must be documented by the doctor or nurse discharging the patient or a member of the pharmacy staff on the discharge Drug Prescription and Administration Record

STANDARD: 100%

Medicines discontinued on admission will have the reason for discontinuation added to the discharge letter

STANDARD 100%

7. Overall Responsibility for the Document

Overall responsibility for this document lies with Simon Mynes, Director of Pharmacy.

8. Consultation and Ratification

The policy has been reviewed and ratified by the Medicines Governance Committee.

9. Dissemination and Implementation

Following approval and ratification by the Medicines Governance Committee this policy will be rolled out across the Trust.

Publication of this document has been publicised in Vital Signs, the Trust's weekly staff news briefing. The document will be available electronically on the Trust Documents Network Share Folder.

10. Monitoring Compliance and Effectiveness

The effectiveness of the policy will be audited according to the standards in section 6 every two years and reported to the Medicines Governance Committee.

In addition, medicines-related incidents reported via the Trust Incident reporting system are collated by the Patient Safety Pharmacist and reviewed by the Medicines Governance Committee on a monthly basis. The Medicines Governance Committee will then nominate a committee member to resolve any identified issues.

11. References

1. National Institute for Health and Clinical Excellence/ National Patient Safety Agency. Technical patient safety solutions for medicines reconciliation on admission of adults to hospital. Department of Health. December 2007.
2. Task force on Medicines Partnership and the National Collaborative Medicines Management Services Programme (2002). Room for Review. A guide to medication review: the agenda for patients, practitioners and managers
3. Clyne W, Blenkinsopp A, Seal R. A guide to medication review 2008. National Prescribing Centre/Medicines Partnership Programme. 2008.

Core Information				
Document Title	Medicines Reconciliation in Adults Policy			
Date Finalised	September 2013			
Dissemination Lead	Andrew Prowse, Assistant Director of Pharmacy			
Previous Documents				
Previous document in use?	Yes			
Action to retrieve old copies.	Nil – all electronic			
Dissemination Plan				
Recipient(s)	When	How	Responsibility	Progress update
All doctors	September 2013	Vital signs and Trust wide e-mail	Andrew Prowse	
All Pharmacists and Pharmacy technicians	September 2013	Vital signs and Trust wide e-mail	Andrew Prowse	

Review		
Title	Is the title clear and unambiguous?	Y
	Is it clear whether the document is a policy, procedure, protocol, framework, APN or SOP?	Y
	Does the style & format comply?	Y
Rationale	Are reasons for development of the document stated?	Y
Development Process	Is the method described in brief?	Y
	Are people involved in the development identified?	Y
	Has a reasonable attempt has been made to ensure relevant expertise has been used?	Y
	Is there evidence of consultation with stakeholders and users?	Y
Content	Is the objective of the document clear?	Y
	Is the target population clear and unambiguous?	Y
	Are the intended outcomes described?	Y
	Are the statements clear and unambiguous?	Y
Evidence Base	Is the type of evidence to support the document identified explicitly?	Y
	Are key references cited and in full?	Y
	Are supporting documents referenced?	Y
Approval	Does the document identify which committee/group will review it?	Y
	If appropriate have the joint Human Resources/staff side committee (or equivalent) approved the document?	NA
	Does the document identify which Executive Director will ratify it?	Y
Dissemination & Implementation	Is there an outline/plan to identify how this will be done?	Y
	Does the plan include the necessary training/support to ensure compliance?	Y
Document Control	Does the document identify where it will be held?	Y
	Have archiving arrangements for superseded documents been addressed?	Y
Monitoring Compliance & Effectiveness	Are there measurable standards or KPIs to support the monitoring of compliance with and effectiveness of the document?	Y
	Is there a plan to review or audit compliance with the document?	Y
Review Date	Is the review date identified?	Y
	Is the frequency of review identified? If so is it acceptable?	Y
Overall Responsibility	Is it clear who will be responsible for co-ordinating the dissemination, implementation and review of the document?	Y

Manager	Andrew Prowse
Directorate	Pharmacy
Date	September 2013
Title	Medicines Reconciliation in Adults Policy
What are the aims, objectives & projected outcomes?	<p>This Policy has been written following guidance from the National Institute for Health and Clinical Excellence (NICE) and the National Patient Safety Agency (NPSA). This policy outlines the processes to ensure that any medication patients are taking prior to admission to hospital is properly documented on admission.</p> <p>Prescribing errors can result in harm to patients and the aim of medicines reconciliation for patients at the point of admission to hospital is to ensure that important medicines are not stopped and that new medicines are prescribed, with a complete knowledge of what the patient is already taking.</p> <p>Appropriate systems for effective Medicines Reconciliation on admission are a key requirement by the CQC relating to outcome 9.</p>
Scope of the assessment	
See names and contributors on page one of the policy	
Collecting data	
Race	<p>Consideration has been given to the impact on patients with English as a second language In section 4.0 of the policy it states:</p> <p>For patients with communication difficulties caused by their acute condition, sensory or cognitive impairment or language barriers, consideration may need to be given to accessing additional sources to complete medicines reconciliation, depending upon the individual circumstances.</p>
Religion	<p>There is no evidence to suggest that there is a disproportionate impact on religion or belief and non-belief regarding this policy. However, data collected from datix incident reporting and complaints will ensure this is monitored.</p>
Disability	<p>Consideration has been given to the impact on patients who require communication support In section 4.0 of the policy it states:</p> <p>For patients with communication difficulties caused by their acute condition, sensory or cognitive impairment or language barriers, consideration may need to be given to accessing additional sources to complete medicines reconciliation, depending upon the individual circumstances.</p>
Sex	<p>There is no evidence to suggest that there is a disproportionate impact on sex regarding this policy. However, data collected from Datix incident reporting and complaints will ensure this is monitored.</p>
Gender Identity	<p>Data for this protected characteristic is not currently collected. However, data collected from Datix incident reporting and complaints will ensure this is monitored</p>

Sexual Orientation	There is no evidence to suggest that there is a disproportionate impact on sexual orientation regarding this policy. However, data collected from Datix incident reporting and complaints will ensure this is monitored.			
Age	There is no evidence to suggest that there is a disproportionate effect on age. However, data collected from Datix incident reporting and complaints will ensure this is monitored.			
Socio-Economic (Consider inequalities arising from social class, background, income, where they were born/live)	Data for this protected characteristic is not currently collected. However, data collected from Datix incident reporting and complaints will ensure this is monitored			
Human Rights	There is no evidence to suggest that there is a disproportionate impact on human rights regarding this policy However, data collected from Datix incident reporting and complaints will ensure this is monitored			
What are the overall trends/patterns in the above data?	No comparative data has been used to date which means that no trends or patterns have been identified			
Specific issues and data gaps that may need to be addressed through consultation or further research	No gaps have been identified at this stage but this will be monitored via data collected from datix incident reporting and complaints.			
Involving and consulting stakeholders				
Internal involvement and consultation	The Medicines Governance Committee Care Group Clinical Director Director of Pharmacy			
External involvement and consultation	No external consultation has been undertaken			
Impact Assessment				
Overall assessment and analysis of the evidence	In section 4.0 of the policy it states: For patients with communication difficulties caused by their acute condition, sensory or cognitive impairment or language barriers, consideration may need to be given to accessing additional sources to complete medicines reconciliation, depending upon the individual circumstances.			
Action Plan				
Action	Owner	Risks	Completion Date	Progress update
Collect and monitor data collected from Datix on incidents and complaints				

Introduction

Awareness of the numbers of medication-related errors both on hospital admission and at discharge is increasing. Systematic reviews show rates of 30-70% for unintentional variances between the medication patients are taking and their subsequent in-patient prescriptions ¹. The National Institute for Clinical Excellence produced UK guidance on medicines reconciliation in 2007 ².

Objective/Purpose

The objective of this guideline is to ensure that an accurate drug history is taken and recorded in order to minimise risk to patients from essential drugs being omitted and incorrect doses and drugs being prescribed.

Authorised Personnel

The following groups of staff are permitted to take medication histories:

- Registered doctors and dentists (including F1 level)
- Registered non-medical prescribers (independent or supplementary prescribers)
- Registered pharmacists
- Pre-registration pharmacists (after appropriate training)
- Registered pharmacy technicians with accreditation in medicines management (drug history taking module)

Overview

On admission, the medication history must be documented (including date and signature) in the medical notes (on MAU, this will be documented in the pre-printed medicines reconciliation section of the Admissions Records booklet). Intentional medication changes should always be documented in the patient medical record and on the Drug Prescription and Administration Record giving reasons for the change.

Unintentional medication changes identified must always be discussed with the prescriber and documented in the patient's medical record and on the Drug Prescription and Administration Record with recommendations for follow up and dated and signed by a pharmacist.

Information should ideally be corroborated by at least 2 reliable sources. For patients with communication difficulties caused by their acute condition, sensory or cognitive impairment or language barriers, consideration may need to be given to accessing additional sources, depending upon the individual circumstances.

The medication history should be collected from the most recent and reliable sources. Where possible, information should be cross-checked and verified. The person recording the information should always record the date that the information was obtained and the source of the information.

The following should be obtained whenever a medication history is taken:

- Drug name – should be prescribed by generic name, however recording the trade name may aid in identification of correct preparation and is essential for certain products; for example: antiepileptics, tacrolimus, ciclosporin, theophylline, diltiazem.
- Formulation – it is important to identify any modified release preparations
- Strength – be aware of drugs with more than one strength, especially combination products (for example co-careldopa 12.5/50 and co-careldopa 10/100)
- Combination products – be aware of which generic drugs are contained in the product including strengths (for example co-codamol 30/500, contains paracetamol and codeine phosphate whereas co-dydramol 10/500 contains dihydrocodeine and paracetamol)
- Dose and frequency of dosage – how much the patient is taking and the times of day should be recorded. Be aware that patients may be taking more than one strength of preparation, i.e. levothyroxine 50microgram and 100microgram; and more than one tablet of a preparation; i.e. simvastatin 40mg tablets; take two tablets at night

Where the patient has been admitted to hospital due to a potential adverse drug reaction or interaction, the following information should be documented:

- Drug name and dosage
- How long the patient has been taking the drug
- The actual adverse effect (i.e. what happened)
- Whether the drug is to be stopped or continued

The reaction should also be documented on the green allergy chapter card kept at the front of medical notes

Procedure for taking a Medication History

This process may not be applicable for patients with communication difficulties. If a carer or translator is not available, consideration should be given to relying solely on a variety of external sources. In such cases, the difficulties in obtaining the drug history, the sources used and possible areas of uncertainty must be clearly documented

- Introduce yourself to the patient and explain the purpose of your visit.
- Confirm if the patient has any allergies or sensitivities to any medicines and document in the medical notes. Also document drug/allergen, type of reaction and sign on page one of the Drug Prescription and Administration Record. If no known allergies, tick and sign the relevant box. Cross reference to the green allergy chapter card which is at the front of the patient's medical notes.
- Ask the patient if they have brought their own medicines and/or a list of their medicines into hospital.
- Ascertain what medicines the patient was using regularly at their previous care setting prior to admission.
- Ask the patient for details of medicine name, formulation, strength and frequency of administration for each medication.
- If the patient has been recently discharged, check the e-discharge system for the patients previous discharge summary
- Where the patient has been transferred from another care setting you may need to check the medication history against the medication record chart or administration record from that setting. You may need to use your discretion and reconcile medicines from prior to admission to the previous care setting.

- The first source of documentation of a medication history on admission should always be the patient medical record (on MAU, this will be documented in the pre-printed medicines reconciliation section of the Admissions Records booklet).
- In addition to asking the patient about regularly prescribed medicines, also check if the patient is using any of the medicines listed below as these are often forgotten by patients.
 - As required medication
 - Inhalers
 - Eye drops
 - Topical preparations including patches
 - Once weekly medication
 - Injections
 - Over the counter (OTC) medication
 - Oral contraceptives/Hormone replacement therapy
 - Nebules
 - Home Oxygen
 - Herbal preparations
 - Insulin
- Ascertain the patient's adherence to their prescribed medication regime. Ask the patient/carer if they take/administer the medicines as labelled.
- Ask if they use a compliance aid.
- Specific information should be collected about the following drugs:
 - **Inhalers**
 - It is important to confirm the name, strength, type of inhaler and any spacers devices used
 - Specify brand for beclomethasone inhalers
 - **Eye drops**
 - Confirm which eye(s) the drops are being administered and if appropriate the strength
 - Only one drop should be prescribed for each dose
 - **Parkinson's medication**
 - Always confirm time of day medication is administered as this can be very time specific and not at the usual medication administration times
 - Confirm preparation being taken, i.e. dispersible tablets, modified release (MR) capsules, etc
 - **Warfarin**
 - The following points should be recorded on the drug chart for patients taking warfarin:
 - Indication, duration of treatment and target INR
 - Patient's usual or most recent dose and time of day dose taken
 - Date of last INR test and result (ideally record to be brought into hospital)
 - Does the patient have a warfarin booklet
 - This information will be available in the patients yellow NPSA warfarin booklet
 - **Steroids**
 - It is important to obtain an accurate history and where possible ask to check the patients steroid card
 - Ask about any recent courses (within past 6 months) and if so, how many and for how long (whether they were short 5-7 day courses or reducing courses).

- For those on long-term steroids the usual maintenance dose should be annotated on the drug chart.
- **Insulin**
 - The type (human, bovine or pork), brand, administration device and dose should always be checked and annotated on the drug chart.
 - For those patients that say that they have an insulin pen, clarify between a pre-filled disposable pen (specify which one) and a penfill cartridge.
 - Also ask the patient if they have an insulin passport (issued by the NPSA). This is a record of the patient's current insulin products, including when the insulin was started, the brand of insulin the patient uses and the presentation. It provides an additional check to make a patient's use of insulin safer. Furthermore, patients may have in addition or as an alternative an insulin dose/blood sugar record booklet.
- **Oral contraceptives /HRT**
 - These are not always considered as medicines by the patient and should therefore be asked for.
 - Additional counselling may also be needed if antibiotics are started for the oral contraceptive pill or the oral contraceptive is temporarily stopped
- **Methotrexate**
 - Ask the patient for their purple NPSA methotrexate treatment booklet which will confirm the patients dose and recent blood tests
 - This is prescribed once weekly so the day of administration, strength and number of tablets taken should be confirmed with the patient and when available, their treatment booklet.
 - Check that this is correct on the drug chart and that the six days of the week when the dose is not to be administered are crossed off.
 - Any concomitant folic acid prescriptions should also be asked about.
 - For more information see the Medicines Management policy
- **Lithium**
 - Ask the patient for their purple NPSA lithium record book which will confirm the patients lithium preparation, dose, recent lithium blood levels and other relevant clinical tests
 - Lithium preparations are not bioequivalent, therefore should be prescribed by brand name.
- **Bisphosphonates**
 - The day of administration should be confirmed with the patient and annotated on the drug chart.
 - Ask the patient whether they take calcium preparations and confirm which brand.
- **Opioids**
 - Confirm dose, brand, strength and colour of tablet
 - Confirm frequency of use, particularly with modified release agents and patches. Note recent dose changes ⁴.
 - For patients with analgesic patches (buprenorphine and fentanyl) pay close attention to drug, dose, timing of administration, if a patch is already being used and when it was last changed. Note initiation or change in fentanyl patch dosage is a CONSULTANT ONLY prescription.
 - Please seek advice from the acute pain service or palliative care team if unsure.
- **Opiate substitution treatment (OST)**

- When a patient is admitted on opiate substitution treatment (OST), i.e. methadone, buprenorphine, for the management of addiction (excluding diamorphine, cocaine and dipipanone):
- Contact the appropriate prescriber to alert them of the patients admission to hospital and to confirm:
 - the patient is prescribed opiate substitution treatment for addiction
 - the patient's usual dosing schedule
 - when the last dose of substitute medication was taken or, at least, when the last prescription was issued and how many days have been supplied
 - a management plan for the duration of the patient's hospital admission
 - any modifications to be made because of the admitting condition
- A written management plan for the patient must be written in the medical notes following consultation with the OST prescriber.
- Contact the patients community pharmacist to:
 - alert them of the patient's admission
 - confirm the patients usual treatment and dosage
 - determine the normal dispensing schedule (daily, weekly, etc)
 - arrange for the patient's normal supply to stop
- For the procedure for Prescribing Diamorphine, Cocaine or Dipipanone for the management of addiction – see Medicines Management Policy
- **Nebulisers**
 - Identify whether the patient has own nebuliser and nebulisers at home and document on the drug chart.

References

1. Campbell F, Karson J, Czoski-Murray C, Jones R. A systematic review of the effectiveness of interventions aimed at preventing medication error (medicines reconciliation) at hospital admission. University of Sheffield School of Health and Related Research (SchARR). September 2007.
2. NICE patient safety guidance 1. 2007. Technical patient safety solutions for medicines reconciliation on admission of adults to hospital. (<http://www.nice.org.uk/PSG001>)
3. Audit Commission. Spoonful of Sugar. 2001. Building a Safer NHS for Patients (<http://www.publications.doh.gov.uk/buildsafenhs/>)
4. NPSA Rapid Response Report 2008: Reducing Dosing Errors with Opioid Medicines (<http://www.npsa.nhs.uk/nrls/alerts-and-directives/>)

The following sources of medication histories are listed below in no order of preference, as reliability can vary according to the situation. However it may be necessary to use two or more sources to establish an accurate medication history.

- **The Patient**
 - This is an important source as the patient will tell you exactly how they take their medicines.
 - Always try to establish how exactly a patient takes their medicines, as this could be very different from the formal records.
- **Patients Own Drugs (PODs)**
 - Encourage patients to bring in their medicines from home.
 - Discuss each medicine with the patient to establish what it is for, how long they have been taking it, and how frequently they take it.
 - Do not assume that the dispensing label accurately reflects patient usage.
 - Beware the potential for dispensing errors e.g. drug on label does not match drug in box, or patients using unorthodox ways of storing medicines
 - Check the date of dispensing since some patients may bring all their medicines into hospital, including those stopped.
 - Check the expiry of PODs especially inhalers, etc
 - Be aware of the number of tablets in a container with respect to the date of dispensing, this may give an idea of any compliance issues
 - Look out for items around the patient's bedside which are not prescribed.
- **Relatives/carers**
 - Patients may have relatives, friends or carers who help them with their medicines.
 - This is common with elderly patients or with patients where English is not their first language.
 - Carers can be very helpful in establishing an accurate drug history and can also give an insight into how medicines are managed at home.
 - Be mindful of maintaining confidentiality
- **Repeat prescriptions**
 - Some patients keep copies of all their repeat prescriptions. Many of these may include medicines that have been stopped.
 - This will exclude acute prescriptions
 - The date of issue and the date the FP10 repeat slip was printed should always be checked and each item confirmed with the patient.
 - Document if the patient is on weekly prescriptions due to the risk of overdose to insure only a week is issued on discharge
 - If there is any doubt, the GP surgery should be contacted.
- **GP Referral letters**
 - These are not always reliable.
 - They are often written by the on-call doctor and may be illegible or incomplete.
 - It may be necessary to double-check the drug history with the patient, relative/carer or GP surgery.
- **GP surgery**
 - Ideally, a faxed list is preferable, especially if the receptionist appears to be having problems pronouncing the drug names.
 - Be aware of 'acute medicines', 'repeat medicines' and 'past medicines' on the receptionist's screen.
 - Always check when the item was last issued and the quantity issued.

- Specific questioning may be needed for different formulations, for example different types of inhalers (metered-dose, breath-actuated, turbohaler), different calcium preparations (Calcichew®, Calfovite D3®, Adcal D3®), or medicines which are brand specific (aminophylline, theophylline).
- It may be necessary for you to speak to the GP directly to clarify any discrepancies.
- Specifically ask whether there are any 'Screen messages' and about any recorded allergies. Some medications are 'hospital only' and do not appear on the usual 'repeat list'.
- Be aware that not all medicines are prescribed by the GP, i.e. Aranesp® for renal patients, psychiatric medicines, etc
- **Compliance aids** e.g. Dosette, Venalinks, Medimax.
 - These may be filled by the community pharmacist, district nurses, relatives or patient.
 - If dispensed by a community pharmacist, the device should be checked for dispensing labels which will provide the pharmacy contact details.
 - The date of dispensing should also be checked bearing in mind that the medicines may have changed.
 - Remember to check for 'when required' medicines and medicines that may not be suitable for compliance aids such as inhalers, eye drops, once weekly tablets etc.
 - Contact the community pharmacist to inform them of the patient's admission to prevent unnecessary repeat dispensing. They may also inform you of the number of compliance aids that have been filled, since these may still be at the patient's home.
 - The community pharmacist's contact details should be documented in the medicines reconciliation section of the Drug Prescription and Administration Record with the relevant box on page one of chart ticked.
- **Medication reminder charts**
 - The chart should be checked through with the patient and the date of issue noted.
- **Recent hospital discharge summary/clinic letters**
 - Check whether any changes have been made by the GP since the patient's previous discharge from hospital/hospital clinic appointment.
 - If the patient has been home for more than two weeks it is likely that they may have visited their GP and changes made.
 - Discharge summaries (e-discharge) that are more than one month old should not be used as a sole source for a drug history.
- **Residential/Nursing home records** e.g. Medication Administration Record sheets.
 - Useful and accurate source for a drug history.
 - Usually sent in with the patient.
 - Handwritten lists from homes should be used with care as they often have transcription errors.
 - Beware of items listed which have been discontinued or are being given as required, always check the administration section.
 - Contact residential/nursing home by phone to confirm any discrepancies or to confirm exactly how medication is being taken if unclear.

In some cases it may be necessary to investigate additional sources to obtain a complete medication history. Examples of teams that may need to be contacted for further information include:

- Community pharmacists

- Other hospitals for clinical trials/unlicensed medicines
- Specialist Nurses e.g. heart failure/asthma nurse
- Drug and alcohol service
- Renal Dialysis unit