1. INTRODUCTION

1.1 The aim of medicines reconciliation on admission is to ensure that medicines prescribed for the patient on admission correspond to those the patient was taking before admission, apart from where a conscious decision has been made to make a change. Medication errors pose a threat of harm to patients, leading to increased morbidity, and economic burden to the healthcare system.

1.2 Medication errors commonly occur when a patient transfers from one care setting to another. Every time a transfer occurs it is essential that accurate and reliable information about the patient’s medication is transferred at the same time. This enables healthcare professionals responsible for the care of the patient to match the patient’s previous medication list with their current medication list; thereby enabling timely, informed decisions to be made about the next stage in the patient’s medication management journey.

1.3 In view of this, the NICE and the NPSA has issued patient safety guidance relating to medicines reconciliation which recommends all healthcare organisations admitting adult inpatients to put policies in place for medicines reconciliation on admission.

1.4 Medicines reconciliation aims to prevent typical problems which can occur at admission. These include the patient receiving the wrong dose, strength or formulation of one or more medicines or the patient not receiving one or more medicines at all. This forms one component of safer systems relating to the overall management of medication, and should be read in conjunction with CPLG13 on the Safe and Secure Handling of Medicines.

2.0 MEDICINES RECONCILIATION

2.1 Medicines reconciliation is the responsibility of all staff involved in the admission, prescribing, monitoring, transfer and discharge of patients requiring medicines. The process can be considered to consist of two levels – basic reconciliation and full reconciliation (see Table 1). These may depend on the training and capability of the staff available, but should ideally be driven by the needs of the individual patient.

2.2 Medication review is beyond the scope of medicines reconciliation but may be necessary for a small number of high risk or specifically targeted patients identified during the medicines reconciliation process. It involves a structured, critical examination of a patient’s medicines with the objective of reaching agreement with the patient about treatment, optimising medicines, minimising the number of medicines related problems and reducing waste. This can only be performed once an accurate list of what the patient is currently taking, i.e. medicines reconciliation, has been completed.
2.3 Medication review requires additional knowledge and skills to those required for medicines reconciliation. The detailed processes involved are beyond the scope of this procedural guideline.

Table 1: Stages of Medicines Reconciliation

<table>
<thead>
<tr>
<th>Level</th>
<th>Brief Description</th>
<th>Patient Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Basic Reconciliation</td>
<td>Admission or transfer led. Involves accurate drug history taking – the accurate collection of information on a patient’s current list of medicines from a number of sources.</td>
<td>All</td>
</tr>
<tr>
<td>2 – Full Reconciliation</td>
<td>Pharmacy Consolidation. Involves taking the information obtained during the basic reconciliation, comparing it to the list of current medicines, identifying any discrepancies between the two, acting on that information accordingly, and recording the decisions.</td>
<td>Defined wards (see Section 4) and individual patients referred for level 2 reconciliation</td>
</tr>
<tr>
<td>3 – Medication Review</td>
<td>Pharmacist Review Involves the structured, critical examination of a patient’s medicines with the objective of optimising the impact of medicines, minimising the number of medication-related problems and reducing waste.</td>
<td>High risk / targeted patients</td>
</tr>
</tbody>
</table>

2.4 It is recognised that pharmacy staff will not be able to offer a medicines reconciliation service to every admitted patient because of limited opening hours and availability of appropriately trained staff. It is therefore necessary to prioritise level 2 services to those areas of the Trust where the impact is likely to be greatest (see Section 4).

2.5 Level 1 - Basic Reconciliation

*Patient group:* All admissions

*Undertaken by:* Admitting doctor or other authorised healthcare professional who has received appropriate training

*Collection method:* Using the agreed local checklist which forms part of the clerking paperwork (see also Annex 1) as a reminder. Medicines Reconciliation should include allergy/hypersensitivity history and medications taken prior to admission. There should also be a statement on whether the patient appears to be adhering to their medication regimen, has poor adherence or is adhering to some of their medicines but not others (see also NICE clinical guideline 76 on medicines adherence).

*Referral:* In areas where full reconciliation is not routinely available the process must include referral for full reconciliation (level 2 - pharmacy consolidation) if concerns are identified during basic reconciliation about the reliability or accuracy of data collected. High risk/targeted patients
should be referred for level 3 - medication review (see Annex 2).

Sources: Preferably two, and ideally three, of the more reliable sources of information listed in Annex 3.

Timescale: Within 6 hours of admission

Communication: Patient healthcare record, Prescription chart

2.6 Level 2 - Full Reconciliation

Patient group: All admissions to defined wards (see section 4) and those level 1 patients referred for full reconciliation

Undertaken by: Pharmacists and accredited members of the pharmacy team which may include pharmacy technicians and pre-registration pharmacists

Collection method: Specified documentation (Annex 6)

Sources: Preferably two, and ideally three, of the more reliable sources of information listed in Annex 3. One of these sources should be the GP surgery records

Timescale: Within 24 – 72 hours of admission (see section 4)

Communication: Specified documentation (Annex 6) to include:

- confirmation of accuracy of basic reconciliation
- documentation of all unintentional discrepancies and their resolution
- documentation of all intentional discrepancies

2.7 Level 3 - Pharmacist Medication Review

Patient group: Specific patients identified as a result of a level 1 or level 2 medicines reconciliation as being high risk/targeted patients, and referred to the ward pharmacist (see Annex 2)

Undertaken by: Pharmacists

Communication: Patient’s medical record

2.8 Where accurate medicines reconciliation has not been possible during level 1 reconciliation, and level 2 reconciliation is not routinely available, the admitting practitioner should highlight the need for verification and refer for pharmacy to undertake a level 2 reconciliation.
2.9 Where the decision for a pharmacy referral is taken outside the hours that a pharmacy service is available this should be noted in the ward diary and referral to pharmacy made at the first available opportunity. A prompt will be included in the Admission Checklist (CLP30 Inpatient Form 2).

2.10 The need for reconciliation or medication review by the pharmacy team should be documented in the patient’s medical record and on the prescription chart.

3.0 PROCESS

3.1 Adopting a “3Cs” approach is a useful way to remember the steps of the reconciliation process. These steps should take place for each admission or transfer of care.

- **Collection** of a medication history from a variety of sources
- **Checking** that the medicines prescribed on admission for the patient are correct
- **Communicating** any changes in medicines so that they are readily available to the next person(s) caring for the patient.

3.2 **Collection** (see also Annex 4)

3.2.1 The “Collection” step involves taking a medication history and collecting other relevant information about the patient’s medicines. Information may come from a variety of sources, and some will be more reliable than others (see Annex 3). At least two sources of information, and preferably three, should be used to verify the usual medicines taken by the patient. A doctor, nurse, pharmacist or accredited member of the pharmacy team may obtain the medication history.

3.2.2 For patients with communication difficulties caused by their acute condition, sensory or cognitive impairment or language barriers, use additional sources, depending upon the individual circumstances.

3.2.3 The medication history should be collected from the most recent and reliable sources. Where possible this should be cross-checked and verified. Particular attention should be paid to drugs prescribed for non-mental health indications as these may be the most likely to be missed.

3.2.4 Full medicines reconciliation will be recorded using the specified documentation (see Annex 6) which must be signed and dated on completion. The source of the information and the date that the information was obtained must be completed.

3.3 **Checking**

3.3.1 The “Checking” step of the process involves ensuring that medicines and doses that are now prescribed for the patient are correct.
3.3.2 This does not necessarily mean that they will be identical to those documented during the basic reconciliation process. For example the doctor now responsible for the patient may make intentional changes to their medicines in response for the need to admit.

3.3.3 Where there appears to be a discrepancy between what the patient is currently prescribed, and what the patient is actually taking, this should be documented, along with the reasons for the variation, if these can be established. For example the patient has reduced the dose due to experiencing a side-effect.

3.4 Communication

3.4.1 “Communication” is the final step of the process, where 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 that patient.

3.4.2 Any omissions and discrepancies need to be resolved in this final step of the process.

3.4.3 They should be brought to the attention of the prescriber. The outcome of interventions should be documented in the patient’s medical notes, signed and dated. Examples might include:

- when a medicines has been stopped and for what reason
- when a medicines has been started and for what reason
- when a dose has been changed and for what reason
- when the route or formulation has been changed and for what reason
- when the dosing frequency has changed and for what reason
- the intended duration of treatment
- monitoring and follow up requirements, when these need to be actions and by whom
- Support required by the patient to take their medicines in a previous care setting which may need to be resumed or reviewed.

4.0 SERVICE PROVISION

4.1 Basic medicines reconciliation should be undertaken within 6 hours of admission for all patients, and will be carried out as part of the normal admission (“clerking”) process by the admitting clinician, using the ‘Current Medication’ section of the Part 1 Admission Assessment documentation (see Annex 5). This has been adapted to include some of the prompts included in Annex 1.
4.2 Full reconciliation will be undertaken for those wards where the impact is likely to be greatest. This service will be initially targeted at the Assessment Units within the Trust as the greatest proportion of acute admissions is admitted to these. Of secondary priority will be direct admissions to other wards receiving acute admissions. As resources become available this service will be extended to other inpatient units.

4.3 Where basic reconciliation identifies concerns about reliability or accuracy of the data collected the patient should be referred to the pharmacy team for full medicines reconciliation as soon as possible.

4.4 During the working week full medicines reconciliation will be undertaken within 24 hours of admission, wherever possible, to document that a comparison has been made between the medication history and the medicines ordered on the drug chart following admission. The medication history and the drug chart will be reconciled and discrepancies resolved.

4.5 This timescale is in line with World Health Organisation guidance on assuring medication accuracy at transitions of care, and NPSA/NICE guidance on medicines reconciliation at admission.

4.6 Where a weekend and/or bank holiday means that pharmacy staff will not be available to complete full medicines reconciliation within 24 hours reconciliation will be undertaken by pharmacy staff on the next working day.

4.7 Standards

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients will have a level 1 medicines reconciliation carried out within 6 hours of admission</td>
<td>100%</td>
</tr>
<tr>
<td>Medication taken prior to admission will be documented in the patient’s medical record together with the source(s) used to obtain the information</td>
<td>100%</td>
</tr>
<tr>
<td>Intentional changes to medicines will be documented in the patient’s medication record together with reasons for the change</td>
<td>100%</td>
</tr>
<tr>
<td>Patients designated to require a level 2 medicines reconciliation will have it carried out within:</td>
<td></td>
</tr>
<tr>
<td>24 hours – 70%</td>
<td></td>
</tr>
<tr>
<td>72 hours – 90%</td>
<td></td>
</tr>
<tr>
<td>5 days – 100%</td>
<td></td>
</tr>
</tbody>
</table>

5.0 RESPONSIBILITIES

5.1 Medicines reconciliation can be undertaken by any healthcare professional competent to do it. The key skills required are:

- effective communication
- a technical knowledge of medicines management processes
- a knowledge of basic therapeutics and clinical practice.
5.2 This level of therapeutic knowledge would normally be achieved by pharmacists, doctors and suitably experienced pharmacy technicians, pre-registration pharmacists and nurses. Therefore some practitioners will be better placed than others to undertake medicines reconciliation.

5.3 Communication of accurate and up-to-date information about a patient’s medicines is essential. Everyone involved in the process has a responsibility to act upon and resolve any discrepancies.

5.4 Admitting Doctor

5.4.1 The admitting doctor will be responsible for undertaking a level 1 (basic) medicines reconciliation, during the “clerking” process.

5.4.2 This should be documented in the ‘Current Medication’ section of the admission forms, noting the sources used and dated and signed by the admitting doctor.

5.4.3 The prescription chart should be written based on the information obtained, and intentional medication changes (i.e. where there is a difference between what is prescribed for inpatient administration and what the patient was taking prior to admission) should always be documented in the patient’s medical record, giving reasons for the change.

5.4.4 Where the admitting doctor has been unable to accurately reconcile the patient’s medicines on admission AND the ward is not one shown in Section 4 the patient should be referred to the pharmacy team for a level 2 full reconciliation.

5.5 Admitting Nurse

5.5.1 The admitting nurse should ensure that where a patient needs to be referred for level 2 medicines reconciliation by the pharmacy team and it is outside pharmacy working hours, this is noted in the ward diary and highlighted at handover.

5.6 Bed Management

5.6.1 The Bed Management team will provide the medicines management technicians with a list of new admissions to those wards shown in Section 4, on a daily basis. This should occur before 10am each morning.

5.7 Pharmacy Staff

5.7.1 Pharmacists, and pharmacy technicians and pre-registration pharmacists who have undergone a programme of training and been assessed as competent to perform this task without supervision, may undertake level 2 (full) medicines reconciliation.
5.7.2 The pharmacist or pharmacy technician will record a medication history in the patient’s notes using the specified documentation (Annex 6.1). Intentional medication changes, which have not already been documented in the patient’s medical record, should be documented with reasons for the change.

5.7.3 Unintentional medication changes should be documented on the specified form (Annex 6), and prescription chart if appropriate, with recommendations for follow up. These should be signed and dated by the member of the pharmacy team. Where a pharmacy technician or pre-registration pharmacist undertakes medicines reconciliation they should communicate any concerns regarding the patient’s medicines to the ward pharmacist, or if the matter is sufficiently urgent directly to the patient’s doctor.

5.7.4 The pharmacist’s role is often in an advisory capacity, supervising pharmacy technicians or other trained staff undertaking medicines reconciliation, and providing professional advice on the resolution of discrepancies.

5.7.5 Where a pharmacist undertakes medicines reconciliation they should resolve anomalies regarding the patient’s medicines directly with the patient’s doctor/prescriber at the earliest opportunity.

5.8 Crisis Resolution and Home Treatment Teams

5.8.1 Where admission occurs following an intervention by a community team or referral to the CRHT the patient or carer should be asked to bring with them the following:

- the patient’s current medication, including regular over-the-counter, herbal and homeopathic preparations.
- the patient’s GP repeat prescription re-order form
- reminder charts or compliance aids

6.0 DOCUMENTATION

6.1 Medicines reconciliation must be recorded on the relevant document, which must be dated and signed on completion. Basic reconciliation (level 1) should be recorded in the ‘clerking’ paperwork (see Annex 5), whilst full reconciliation by pharmacy staff (level 2) in the specified form (see Annex 6).

6.2 In the event that the process is incomplete (for example when awaiting a fax from the GP) and where there is likely to be a delay of several hours, the report should be signed, dated and the time entered with the reason for it remaining incomplete.

6.3 It is the responsibility of the completing staff member to ensure that any subsequent information is added to the documentation, signed and dated.
6.4 The ability of the patient to take their medicines, including any concordance issues, should be recorded in the comments section.
CHECKLIST TO SUPPORT LEVEL 1 (BASIC) MEDICINES RECONCILIATION

This checklist is intended to act as a prompt to support the process of basic medicines reconciliation and guide the information that must be added to the patient’s healthcare record and/or prescription chart.

- Patient details – full name, date of birth, weight, NHS/hospital number, GP, date of admission
- The condition for which the patient was referred or admitted plus details of any co-morbidities
- Known allergies and nature of reaction
- A complete list of all medication being taken by the patient (including medicines they have purchased)
  - Include dose, frequency, formulation, and route for all listed
  - Ask specifically about medication which may be omitted i.e.
    - prn medication
    - inhalers
    - eye drops
    - topical preparations including patches
    - once weekly medication
    - injections including insulin
    - OTC medicines
    - oral contraceptives
    - hormone replacement therapy
    - nebulers
    - home oxygen
    - complimentary, herbal and homeopathic preparations
- Include additional information for specific drugs
  - e.g. indication for medicines that are for short-term use only (antibiotics)
  - day of week for administration of once weekly medication (bisphosphonates, methotrexate)
- Sources used (minimum 2) should be documented
- Statement that the patient is adhering to medication, has poor adherence or is not adhering to all medications (provide details of any compliance aids/support normally provided)
- Name, signature and date of practitioner
**REFERRAL CRITERIA FOR LEVEL 2 MEDICINES RECONCILIATION AND MEDICINES REVIEW**

In certain circumstances it may be necessary to target patients for level 2 medicines reconciliation or a detailed medication review. These circumstances should be agreed locally and may vary for different care groups.

This list is not exhaustive and there may be circumstances where a patient does not fit any of the criteria below yet still needs a detailed medicines reconciliation.

<table>
<thead>
<tr>
<th>Type of Patient</th>
<th>Level 2 Reconciliation (Pharmacy Consolidation)</th>
<th>Medication Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients whose medication is likely to have contributed to, or caused, the current admission.</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Patients with complex medical history</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Patients on high risk drugs with a, e.g., digoxin, warfarin, lithium, carbamazepine, phenytoin, methotrexate etc.</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Patients on opioids or other drugs with potential for abuse, e.g., methadone, buprenorphine etc.</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Patient who are on medication but don’t know names or doses, especially those with &gt;4 drugs</td>
<td>Orange</td>
<td>Orange</td>
</tr>
<tr>
<td>Patients with communication difficulties (cognitive or sensory impairment, language barriers)</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Patients with complex medical, social, physical or mental health issues that could suggest poor medicines management</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Straightforward drug histories, e.g. patients transferred from nursing homes or other care settings</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Patients who have had significant or multiple intentional changes to their medication</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Patients with known adherence problems, where there may be a low level of home support available, who would benefit from assessment for compliance aids</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Younger patients with no previous medical history</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Patients recently discharged and re-admitted for non-medication related issues, e.g. social</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Patients due to be discharged imminently where no changes have been made to medication</td>
<td>Green</td>
<td>Green</td>
</tr>
</tbody>
</table>

RED = high priority; AMBER = medium priority; GREEN = lower priority

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*Based on worked carried out at Hammersmith Hospital and by Nina Barnett, Consultant Pharmacist Older People, Harrow PCT.*
There are many potential sources of information about patients’ medicine, although no source is reliable unless it is up-to-date. In every case, the source of the information should be documented, dated and were practicable, verified. The reliability of each source will vary depending on the situation of the admission.

The sources of information below are not listed in any order of preference within each sub-section.

More Reliable Sources

- **GP surgery** – remember that it is most likely to be the receptionist who will respond to your query. Be aware that medication may be recorded as “acute”, “repeat” or past on the surgery computer system and ask about all types.

  Ask the surgery to fax a print-out of current medication which includes when each item was last issued and the quantity issued. If the surgery is unable to do so make sure that full details are taken down including formulation, especially where more than one exists (i.e. modified release and non-modified release).

  Specific questioning may be needed for different formulations, for example different types of inhalers (metered-dose, breath-actuated, turbohaler); different calcium preparations (Calcichew®️️, Calfovit D3®️️, Adcal D3®️️) or medicines which are brand specific (aminophylline, theophylline).

  Ask whether there are any ‘screen messages’ on the patient’s record relating to medicines. Some medications are ‘hospital-only’ and do not appear on the usual repeat list.

  If there are any doubts about the information provided ask to speak to one of the nurses or doctors in the practice.

  Be aware that this will not include any over-the-counter or herbal medicines that the patient is taking, and may not include items issued by a hospital, such as anti-coagulants, unlicensed or clinical trial medicines, and medicines included in shared care arrangements.

- **Repeat prescription re-order form** – the patient may have brought a copy of the form used to reorder their medicines into hospital with them. However it may not be up-to-date or include medicines issued as a result of recent consultations with the GP or other prescribers. Check the date of printing and verify the list with the patient or carer if possible. Be aware that it may not include seasonal products (e.g. hayfever medicines).

- **Patient’s own drugs (PODs)** – encourage the patient or carer to bring these to the ward. Check the dispensing date and labelling (be cautious of anything
dispensed more than 2 months previously). Use these to confirm with the patient how s/he takes each medicines.

Do not assume that the dispensing label accurately reflects the way in which the patient takes the medicine. If possible, 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.

Remember that the patient may not bring everything with them, such as oral contraceptives, HRT, topical preparations, inhalers, herbal and homeopathic remedies as they do not think of these as medicines. Also they may forget to bring bulky items or those stored in the fridge.

- **The patient, relative or carer** – an important source as s/he will be able to tell you exactly how s/he takes the medication, which may be different from how it was originally prescribed. However pronunciation of medicine names and medical terms may not be accurate and can lead to confusion. Be mindful of maintaining confidentiality.

- **Recent discharge summary or TTO** - if the patient has had a recent hospital admission (within the last 4 weeks) then the take home summary, discharge prescription or hospital notes should be reliable. Check with the patient or carer whether anything has been changed since discharge. Look for a section on changes since admission and the reasons why, but be aware that discharge summaries may omit medicines which were not initiated during the admission or are not relevant to the condition for which the patient was admitted.

Less Reliable Sources (need additional verification):

- **Patient’s reminder charts** – check the date of preparation and confirm all items with the patient

- **GP referral letter** – unless the admission is planned and the letter has been written by the patient’s regular GP treat this with caution, if it has been written by an on-call GP with little information about the patient it may not be reliable.

- **Compliance Aids** filled by community pharmacist, district nurse or relatives – be aware that the patient may be taking additional medication which cannot be stored in this way, e.g. inhalers, liquids, creams, eye drops, patches, medicines used prn, etc.

In the case of blister packs (e.g. Venalink®) contact the appropriate community pharmacist, whose details should be on the pack, and confirm when the blister packs were last dispensed, whether there any medication supplied outside the pack, and whether there are any specific issues that the patient has with their medicines.

- **Patient Medication Records (PMRs)** – these are a record of all items which have been dispensed for a patient and are maintained by the community
pharmacist. However the patient may use more than one pharmacy so treat the content as possibly incomplete.

- **Medicines Administration Records (MARs)** – these are used in care home settings to record administration of the patient’s medicines. However they may not have been reconciled with the GP records, so should be used with caution.

Some care homes will use one community pharmacy to provide all of their medication needs. In that case the pharmacy records will be more accurate.

- **Nursing Care / Clinical Management Plans** – these may not contain all of the medicines that a patient is prescribed, especially if they relate to a specialist aspect of the patient’s care, e.g. diabetes, dementia etc.

- **“Message in a Bottle”** – this is a voluntary scheme co-ordinated by the Lions Clubs of Great Britain. A plastic canister containing essential information is kept in the patient’s fridge and is easily accessible to emergency services. However the information may be out-of-date, so may not include all the medicines that a patient is taking.

**Least Reliable Sources (need further investigation)**

Occasionally these sources may need to be contacted, but they would rarely hold up-to-date information about all of the medicines a patient is taking. Information from these should definitely be investigated further as soon as possible.

- Social worker
- Drug and alcohol team
- Prison service / probation officer
- School
- Homecare providers
- Specific clinics, e.g. anticoagulation, rheumatology etc.
- NHS Walk-in centres
- Private healthcare providers / insurers
COLLECTING INFORMATION FOR MEDICINES RECONCILIATION

The “collection” step involves taking a medication history and collecting other relevant information about the patient’s medicines. The information may come from a range of different sources, some of which will be more reliable than others (see Annex 3).

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 and that the information was obtained and the source of the information.

Information on drug or food allergies or previous adverse drug reactions should be sought, including details of reaction that occurred. If none are reported then record “no known drug allergies.”

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 the possible areas of uncertainty must be clearly documented.

1. Introduce yourself to the patient and explain the purpose of your visit.

2. Confirm with the patient whether they have any medication or food allergies or have suffered an adverse reaction to any past medication. Ask about the nature of any reaction and document this information in the patient medical record and the drug allergy/hypersensitivity box on the medication chart. If none are reported then record “no known drug allergies.”

3. Ask the patient if they have a medication list or have brought in their medication from home. If so, review the list with the patient. Inquire about each medication, asking when and why they take it. Ask for details of medicine name, formulation, strength and frequency of administration for each medication.

4. If no list is available and the patient is able to provide the information, use the medicines reconciliation documentation to prompt a discussion about medication.

5. If the patient is not able to provide this history, interview the patient’s carer or family, call the patient’s GP or use other sources of information such as the patient’s CPN, or community health service provider (see Annex 3)

6. Document the medication history including all prescription medications, over the counter and herbal medications on the medicines reconciliation form. For each medicines note the dose, route, frequency, when was the last dose and why the patient is taking it.
7. In addition to asking the patient about regularly used medicines, check if the patient is using any inhalers, eye drops, topical preparations, once weekly medication, injections, over-the-counter remedies, herbal products, oral contraception, hormone replacement therapy, has home oxygen or uses a nebuliser – these are often forgotten by patients.

8. Determine the patient’s adherence to their medication regime. Ask the patient / carer if they take / administer the medicines as labelled. Find out if they use a compliance aid. Some patients are confused on admission to hospital (especially the elderly) and claim not to be taking any medicines. In such cases alternative sources may define what medicines are prescribed and a view will need to be taken on whether the patient is adherent or not.

9. Specific information should be collected about the following drugs:

- **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
  - Quantity of tablets that the patient has at home
  - Whether patient has an anticoagulant “yellow” book (ask to see it)
  - Date of the last INR test and result
  - Details of the clinic they attend for monitoring and the date of the next appointment.

- **Steroids**
  
  It is important to obtain an accurate history particularly for patients with asthma or COPD, IBD or arthritis.
  - 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 this should be annotated on the drug chart so that treatment is not abruptly stopped.

- **Insulin**
  
  - Check the patient’s Insulin Passport if it is available
  - The type (human, bovine, pork or analogue), 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 and a pen-fill cartridge.

- **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 (refer to http://fsrh.org.pdfs/CEUGGuidanceDrugInteractionsHormonal.pdf)
Methotrexate
This is prescribed once weekly so the day of administration, strength and number of tablets taken should be confirmed with the patient.
- 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.
- Ask to see the patient’s monitoring booklet.
- Note and maintain continuity in the strength of tablets

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.
- Ensure that instructions around Alendronate are understood

Inhalers and Nebules/Nebulisers
- It is important to confirm the name, strength and type of inhaler and nebules. Identify whether the patient has their own nebuliser and nebules at home and document.
- Check inhaler technique as this is a common source of adherence problems

Methadone
- Check whether doses have been confirmed with the CDAS team, patient’s GP or community pharmacy.
- Contact the community pharmacist to alert them of the patient’s admission and determine the normal dispensing schedule and when the patient last collected their methadone.
- Ensure methadone is prescribed by number of milligrams not number of millilitres (since two different strengths of solution are available). This applies to ALL liquid medicines.
- Patients do not usually get a supply of methadone on discharge. The GP and community pharmacist/CDAS contact will need to be contacted pre-discharge to agree a plan of action.

Opioids
Confirm the dose, brand, strength, frequency of use, and colour of the tablet. Confirm with the GP if there are any concerns.

Oral Anti-cancer Drugs
It is possible that a patient may be admitted to an in-patient unit within the Trust whilst undergoing oral anti-cancer treatment. In line with NPSA Rapid Response Report 001, non-specialists must confirm the details of the treatment protocol and plan with the patient’s specialist team before writing an inpatient prescription for an oral anti-cancer medication. Oral anti-cancer drugs could include:
10. Other questions to support medicines reconciliation and help identify problems include:

- Does anyone help you with your medicines at home? If so, who? What do they do?
- Are your medicines normally dispensed into a compliance aid / monitored dosage system?
- Do you have any problems obtaining or ordering your repeat prescriptions? (a relative or 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?
- Have any medicines been stopped or any doses been changed recently?

<table>
<thead>
<tr>
<th>Bexarotene</th>
<th>Fludarabine</th>
<th>Procarbazine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Busulphan</td>
<td>Hydroxycarbamide</td>
<td>Sorafenib</td>
</tr>
<tr>
<td>Capecitabine</td>
<td>Idarubicin</td>
<td>Sunitinib</td>
</tr>
<tr>
<td>Chlorambucil</td>
<td>Imatinib</td>
<td>Tegafur/uracil</td>
</tr>
<tr>
<td>Cyclophosphamide</td>
<td>Lomustine</td>
<td>Temozolamide</td>
</tr>
<tr>
<td>Dasatinib</td>
<td>Melphalan</td>
<td>Tioguanine</td>
</tr>
<tr>
<td>Erlotinib</td>
<td>Mercaptopurine</td>
<td>Treosulfan</td>
</tr>
<tr>
<td>Estramustine</td>
<td>Methotrexate</td>
<td>Vinorelbine</td>
</tr>
<tr>
<td>Etoposide</td>
<td>Mitiante</td>
<td></td>
</tr>
</tbody>
</table>
In South Essex the Part 1 Admission Assessment ‘clerking’ paperwork and the A & E Liaison Psychiatry Assessment contain the section below for collecting information on medicines.

This should be used to record information gained during level 1 (basic; admission/transfer led) medicines reconciliation.

### Medicines on Admission
- Include a complete list of all medication being taken by the patient.
- Ask specifically about medication which may be omitted such as inhalers, eye drops, topical preparations (including patches), insulin, other injections, oral contraceptives, HRT, nebulisers, oxygen, OTC medicines, herbal remedies etc.

<table>
<thead>
<tr>
<th>Allergy / Intolerance</th>
<th>MEDICATION (including strength and form)</th>
<th>DIRECTIONS (including dose, route and frequency)</th>
<th>Source(s) (use codes below)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

The patient: appears to be adhering to all medications ☐

has poor adherence to some or all medications ☐

### Sources used to obtain information (minimum 2):

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient</td>
<td>Medicines from home</td>
<td>GP Surgery</td>
<td>Carer / Relative</td>
<td>Repeat Prescription</td>
<td>Care Home Record</td>
<td>Other (specify)</td>
</tr>
</tbody>
</table>
In North Essex the Joint Psychiatric & Physical Assessment Form contains the section below for collection information on medicines. This should be used to record information gained during level 1 (basic; admission/transfer led) medicines reconciliation.

<table>
<thead>
<tr>
<th>MEDICATIONS</th>
<th>(All tablets/inhalers/creams/injections/OTC/herbal remedies) If patient on lithium, check lithium levels.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
<td><strong>Dose</strong></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
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<td>12</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

**Allergies or Major Reactions:**
(Describe nature of reaction to each drug)

**Any other reactions:**

**SUBSTANCE USE**

**Smoking**

- Current Smoker [ ]
- No. smoked/day......
- How many years smoked?......
- Ex-smoker [ ]
- How many years smoked?......
- When stopped?.........

If patient currently smokes, offer smoking cessation service and advice.
- Smoking cessation advice given Yes [ ] No [ ]
- Smoking cessation referral made Yes [ ] No [ ]
- Never smoked [ ]

**Alcohol**

Max. recommended units:
- M = 21 units/week
- F = 14 units/week

- Normal beer = 2 units/pint
- Strong beer = 4 units/pint
- Bottle of wine = 10 units/bottle
- Single spirit = 1 unit

- Drinks alcohol [ ]
- No. of units a week……
- Duration ......
- Never drinks alcohol [ ]

- Wernicke's-Korsakoff's syndrome:
  - If excess alcohol, check for signs (confusion, nystagmus/ophthalmoplegia and/or ataxia).
  - If present, refer to BGH for IV pabrinex and alcohol withdrawal regime.

- Signs of withdrawal:
  - Consider alcohol detoxification
  - Check LFTs, albumin, clotting, B12 and folate
  - Prescribe pabrinex IM (I&II) 2 pairs TDS then convert to oral vitamins during admission.

**Illicit Drugs / legal highs**

If injecting, consent for HIV and hepatitis B & C Yes [ ] No [ ]
<table>
<thead>
<tr>
<th>Last Name</th>
<th>NHS No.</th>
<th>First Name</th>
<th>Date of Birth</th>
<th>Unit / Ward</th>
</tr>
</thead>
</table>

### MEDICINE RECONCILIATION FORM

**GP Details**
- **First Name**
- **Last Name**
- **Telephone Number**
- **Address**

**Allergy / Intolerance**
- **Latex** (complete alert form if ticked yes)
  - Yes
  - No

Information regarding Allergy / Intolerance received from (please tick)
- Patient
- Relative
- GP
- Notes
- Carer
- Other

**Prescription and over the counter medications**
(include herbal and homeopathic medicines, and vitamin and food supplements)

<table>
<thead>
<tr>
<th>Source of information</th>
</tr>
</thead>
<tbody>
<tr>
<td>On no medication at home</td>
</tr>
</tbody>
</table>

If unable to obtain medication history please give reason

**Prescription and over the counter medications**
(compare current prescription to home medications)

<table>
<thead>
<tr>
<th>Medication (Including strength and form)</th>
<th>Directions (Including dose, route and frequency)</th>
<th>Source (Use codes below)</th>
<th>Consistent (No reconciliation needed)</th>
<th>Discrepancy (i.e. wrong dose, not prescribed etc.)</th>
<th>POD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amiloride 5mg tablets</td>
<td>10mg in the morning by mouth</td>
<td>2, 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sources used to obtain information**
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
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</tbody>
</table>

**SAMPLE** - **DO NOT USE**
## Notes / Other Information

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Signature</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
</table>

Collection – List completed by
Checking – Comparison completed by
Communication – Discrepancies discussed by
With prescriber

Document overleaf

### Actions taken in response to medicines reconciliation
(i.e. alternations to medication regimen with reasons for discontinuation or change documented)

<table>
<thead>
<tr>
<th>By whom</th>
<th>Signature</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
</table>

---

**Adherence**

The patient appears to be adhering to all medications
Has poor adherence to some or all medications
Needs additional support (e.g. compliance aid, reminder charts etc.) to support adherence

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Name</td>
<td>Last Name</td>
</tr>
<tr>
<td>Designation</td>
<td></td>
</tr>
</tbody>
</table>