6. ADMINISTRATION OF MEDICINES for Inpatients

6.1. Responsibility

The practitioner in charge of the clinical area is responsible for ensuring that standards for medicines administration fall within the requirements of this code.

The suitably qualified health professional carrying out the medicine administration check should understand the prescription and should have knowledge of the common indications, side-effects and dosages of the medicine prescribed. They should also be aware if there are any risks in the handling or administration of the medicine and whether any specific equipment is required. Local procedures for handling high risk/hazardous material should be referred to where appropriate

6.2. Authorisation

6.2.1. Medicines must only be administered by:

a) Registered health professionals:

- Registered (including those with provisional registration) medical staff and dentists;
- A registered nurse, midwife or nursing associate, not including Student Midwives who are Registered Nurses;
- Other Allied Health Professionals (AHP)/ Pharmacy staff including Medicine Pharmacy Administration Technicians / Health Care Scientists (HCS) provided that this activity has been approved by the Trust and they have undertaken appropriate approved training and competency assessment agreed within the Trust.
- The registered healthcare professional administering the medication will be accountable for his/her practice in accordance with their professional code of conduct and standards for administration of medicines.

b) Non registered staff:

- Assistant Practitioners as part of an approved scheme of delegation
- Non registered staff, for example physician assistants/ healthcare assistants may administer medicines providing that this has been agreed by the Trust's Medicine Committee. Appropriate training, competency package and assessment must have been undertaken prior to administering medicines.
- Staff must only administer medicines under the agreed list of medicines and within the specialty specified. Appropriate policies & guidelines must be in place to cover staff.
- Non registered staff can administer sodium chloride 0.9% as a flush for cannulation procedures as long as they have undertaken appropriate Trust approved training and competency assessment.

c) Learners :

- A pre-registration student nurse, midwife or nursing associate, as part of their training, but only under direct supervision of a registered nurse.
- Other trainee health professionals agreed by the Trust but under the direct supervision of a registered nurse / midwife or heath professional (specified above)
- The person supervising must accept full responsibility for the correct administration and recording of the medicines prescribed.

For further information refer to organisational **'Guidelines for the Preparation, Checking and Administration of Medicines by Learners'**

d) Patients and carers:

- On paediatric wards parents will sometimes participate in medicine administration, (see Section 13 - Prescription and Administration of medicines in Children)
- Adult carers may participate in medicine administration when assessed under the Trust approved self-administration of medicines policy.
- Patients who have been assessed and approved for self administration following the appropriate Trust policy.

6.2.2. Practitioners must only administer medicines or medical products that have been prescribed by an authorised prescriber. This authorisation must be in writing / on an electronic system in advance of the administration of the medicine (except verbal orders and in limited emergency situations such as administration of adrenaline for anaphylactic reactions)

6.2.3. This means that medicines can be administered or supplied to patients by following:

- A prescription written on an approved chart or electronic system
- A Patient Group Direction (PGD) (see Section 2.10)
- A verbal order (extremely limited use) -see section 2.8
- Approved documentation for community nursing drug administration
- A Patient Specific Direction (PSD)

There is an exemption under the Medicines Act for individual professions holding appropriate qualifications to be able to administer specified medicines in the course of their practice e.g. podiatrists may administer specified local anaesthetics, midwives exemptions of medicines.

NB Single person administration is not recommended if the practitioner administering the medicine is also the prescriber.

6.2.4 Separate policies cover the administration of intravenous medication and syringe drivers by authorised health professionals. Staff undertaking such procedures must

successfully complete appropriate training, competency assessment and record keeping requirements according to Trust policies and in line with relevant professional codes of conduct.

6.2.5 The administration of intravenous radiodiagnostic agents is the subject of Trust arrangements and regulations concerning Radiological Protection. Each individual health professional will have special certification and will have attended a Radiation Protection Certification Course.

6.2.6 Nurses may adjust administered dosages of medicines within the range of the original prescription where there are separate Trust guidelines, (e.g. 'prn' doses and variable rate infusions). Check with the specialty to confirm if there are any specific guidelines relating to that specialty.

6.3. Checking

6.3.1 It is acknowledged that in the majority of circumstances, single person medicines administration is acceptable, providing that the person has demonstrated the necessary level of knowledge and competence. Exceptions include where:

- A practitioner is instructing a learner
- A controlled drug is involved
- An injection/infusion of any type (IM, IV, SC) is involved with the exception of prophylactic doses of Low molecular Heparin (LMWH)
- A complex calculation is required. The use of calculators to determine the volume or quantity of medication should not act as a substitute for arithmetical knowledge and skill
- Administration of medicines to children under the age of eighteen (section 13)
- Local circumstances make the involvement of an additional person desirable, in the interests of minimising the potential for error

Should a practitioner choose to have his/her practice checked, even where not required by this Code, it must be realised that full accountability for the correct administration of the medicine lies wholly with the administering practitioner. Anyone checking is individually accountable for his/her part in the process.

6.4. Procedure for the Administration and Recording of Medicines

Before administration of a medicine, the practitioner must:

READ the prescription carefully (electronic or paper). If there is any ambiguity or lack of clarity in the prescription, **including the signature of the prescriber,** the medicine must not be given.

Where a print out from an electronic system is used it is acceptable without a physical signature as the electronic signature is contained within the system.

When using electronic medication systems, the QR code on the patient wristband should be scanned to identify the patient, or the patient details on the wristband be read to confirm identity. Refer to patient identification policies.

CHECK the prescription for the following prescribing information, ensuring the medication chart (paper or electronic) is fully complete:

- Any medicine and food allergies or intolerances, including alternative medicines and latex allergy. If this information is incomplete then all reasonable efforts must be made to confirm allergy status prior to administration
- If there are no allergies or intolerances, the prescriber should have documented the prescription accordingly indicating that there are none known.
- Medicines should not be administered if the allergy status is not recorded. The exception to this is in emergency situations where a clinician considers that to wait for confirmation of allergies could be detrimental to the patient, for example in cases of suspected sepsis. A clinician must be present to administer the first dose where there is potential for an anaphylactic reaction.
- The approved name of the medicine
- The dose to be administered (age / weight must be considered where appropriate)
- The route of administration
- The frequency and time of administration of the medicine
- The time of last dose for medication, including PRN medicines
- The duration of treatment
- Any special instructions (e.g. administer with food)

If the administering practitioner is in any doubt or needs clarification of the dose or method of administration, this should be done with the prescriber or pharmacist before administration.

If it is necessary to re-write the prescription, the prescriber must do so before the medicine is given. It is the administering practitioner's responsibility to ensure this is done.

If any contra-indications or other concerns, such as reaction to the administration of any prescribed medicine are observed, the prescriber should be contacted with advice from the pharmacist where appropriate.

Where red tabards have been introduced for administration rounds these must be used. It is important that there are **no distractions** during the preparation or administration of medicines.

Medicines must not be administered unless the registered practitioner is certain of the patient's identity. Where a patient area uses identify bracelets, this will be done through checking that the name, date of birth and S number on the patient's identity bracelet are the same as on the prescription. In other areas, such as Mental Health wards, where patient identity bracelets are not used. Alternative arrangements should be in place to confirm patient identity.

- **SELECT** the medicine required and check label with prescription (correct name and form of medicine) and **CHECK** the expiry date of the medicine has not been passed.
- **PREPARE** the medicine and **CHECK** with the prescription
- The name of the patient
- The name and form of the medicine
- The medicine is due and is being given at the correct date and time
- The route of administration
- The calculation (if any)
- The measured dose ; liquid oral doses which are not in multiples of 5ml or 2.5ml (where there is a spoon measure available) must be administered using an oral (purple) syringes. **IV syringes must not be used for drawing up oral liquids (see also 6.5)**
- Insulin, including that for Variable Rate Insulin Infusions should only be drawn up using an insulin syringe.
- Insulin pens/ devices can be used to safely administer doses of insulin to patients. To support the safe use of insulin pen devices, extracting insulin from pen devices or cartridges is dangerous and should not happen *(Risk of severe harm and death due to withdrawing insulin from pen devices, NHS Improvement, November 2016*)
- Medications administered to patients via either a PEG or naso-gastric tube may need to be crushed or altered in order to administer down the tube. This is often an unlicensed use for the medicine and should be done in accordance with the Unlicensed Medicines Policy. Guidelines on what can / cannot be given down a tube are available within the Trust and if there is any ambiguity advice must be sought from a pharmacist prior to administration.
- Explain appropriately to the patient / carer, and ascertain consent to, the intended administration in line with the Trust consent policy (see also section 6.13 for guidance on Covert Administration)

6.4.1. After witnessing that the medicine has been taken and/or administered, the practitioner must initial and **sign** in the appropriate section of the prescription or electronic record of administration or IV fluid chart at the time of administration.

6.4.2. In some cases where a medicine is dispersed in a large amount of liquid for example Movicol, the medicine may be left with the patient to take over a short period of time under the supervision of a healthcare assistant. The responsibility for the administration still remains with the registered member of staff.

6.4.3. Where a second nurse/health professional checks the administration of medicine the identity of the checking person must also be recorded; however the ultimate responsibility remains with the administering health professional.

6.4.4. For intravenous infusions, there should be a record of those involved in setting up the medication and of those involved in monitoring the administration.

6.4.5. For specific products eg Immunoglobulins, additional records such as batch numbers are required by Department of Health guidance. The individual administering the medicine must ensure that all appropriate records are made, normally documented on the prescription chart.

Timeliness of administration & omissions:

6.4.6. It is important that medicines are given at the time when prescribed or as soon as possible. This is important for critical medicines where a delay or omission may cause the patient harm. Please refer to the Trust 'Critical medicine list.' (see Prevention of Omitted Medicines UHL guideline B45/2020)

6.4.7. All omitted medicines in individual circumstances may be critical and can compromise a patient's treatment and therefore must be avoided where possible. If a medicine is not administered for any reason, including refusal, the relevant code must be entered on the prescription chart at the time of omission. If an electronic record of administration is in use select the appropriate reason for the non-administration from the drop-down list.

6.4.8. Action should be taken to prevent repeated doses being missed. If a medicine is on the critical list for the Trust, immediate action should be taken to minimise missing any further doses. It may be necessary to consult with the prescriber, pharmacist, or other professional colleague regarding non-administration.

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

- which key medicines must be continued and which can safely be omitted.
- Alternative non-oral routes for administration
- if the medication cannot be given by an alternative route whether the early insertion of a nasogastric tube(NGT) is appropriate or alternative formulations for oral administration e.g. liquids, crushing tablets

The decision should be taken on an individual patient basis evaluating the risks and benefits for each option.

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

6.4.11. If any error is made during administration this must be reported and documented according to local procedures for medication errors

6.5. Oral Syringes

In order to minimise medication being inadvertently administered by the wrong route, National Patient Safety Agency guidance is that

6.5.1. Only oral/enteral syringes (that are not compatible with intravenous and other parenteral devices) are used to measure and administer oral liquid medicines or enteral feeds to patients.

6.5.2. The colour purple must be adopted for use in oral/enteral devices to aid differentiation between oral/enteral and other devices in practice.

6.5.3. ENfit Naso-gastric and enteral feeding tubes, administration and extension sets must be labelled as "**enteral"** to indicate the route of administration. Nasogastric and enteral feeding tubes, administration and extension sets must not contain any in-line female luer ports, or male luer terminal connectors (tips).

6.5.4. Three way taps must not be used in oral/enteral feeding systems.

6.5.5. Adaptors that convert oral/enteral syringes into devices that can connect with intravenous/parenteral connectors **must not** be used.

6.6. Tablet Crushers

6.6.1 In some cases tablets may be required to be crushed prior to administration. Prior to crushing a tablet it must be confirmed that it is safe and appropriate to do so. Please contact the pharmacy department or medicines information for advice.

6.6.2 Where tablets need to be cut or crushed before administration tablet crushers or cutters may be used. These **must** be washed in soapy water, rinsed and left to air dry to remove tablet residue after use.

6.7. Disposal of Medicines Prepared for Administration

The contents of opened ampoules and other medicines which are not required must be disposed of by emptying into the sharps bin container, with the exception of cytotoxic medicines, vaccines and other hazardous substances, which must be disposed of by incineration, in line with local policies for the disposal of clinical waste. See chapter 7.

For disposal of Controlled drugs prepared for administration see section 6.7.4

6.8. Controlled Drugs (CD)

6.8.1. All aspects of the reconstitution and preparation of the CD must be under the direct supervision of the person who is going to administer the medicine.

6.8.2. A second person must check all aspects of the administration, including entries made in the CD record book and sign the witness by section in the record book. One of the people must be a registered nurse/midwife. For practice in operating theatres see section15. The second person may be a:

- Registered nurse
- Registered midwife
- ODP/ODA who has satisfied their line manager of his/her knowledge and competence with medicines administration procedures

- Doctor

For additional staff authorised to check controlled drugs please refer to local policies.

6.8.3. Every column in the Ward or Department Controlled Drug Register must be completed without delay

- Date and time of administration
- Name of patient
- Dose administered and any doses discarded
- Signature in full of the practitioner administering the medicine and the signature of the witness
- Remaining balance of stock, checked on return to the cupboard
- Any entry found to be wrong or any actual or suspected medicine loss must be reported immediately to the registered professional in charge and to Pharmacy
- Under no circumstances must an error in an entry in the controlled drug register be altered. There must be no crossings out in the CD register. All errors must be bracketed signed, dated and witnessed.

6.8.4. Disposal of Controlled Drugs Prepared for Administration

The contents of partly used ampoules, syringes, unused tablets or liquid medicines must be disposed of by emptying into the sharps bin container; where the volume is less than 5ml. For larger quantities a denaturing kit should be used. In all cases this must be done with the minimum of delay, in the presence of a second health professional and appropriate records made in the register.

- Controlled Drugs in liquid form once measured must never be returned to the container.
- Bungs may be used to help reduce discrepancies when withdrawing liquids.
- Any tablets refused must never be returned to their container
- Unbroken ampoules must be checked back into their original container, witnessed by a second qualified health professional, carefully ensuring that the batch numbers on the ampoules correspond with those on the containers
- In the Central Operating Department, ampoules can be checked back into their original container, witnessed by a second registered nurse or registered ODP.

6.9. Administration of Medicines by Medical Staff

Where medical staff are involved in the administration of medicines, the responsibility for the safe preparation and administration lies with the doctor administering the medicine. Medical staff must adhere to all the safety guidelines detailed in this Code when administering medicine.

6.10. Administration of Medicines in Operating Theatres (see Section 15)

6.11. Verbal Orders (see Section 2.8)

6.12. Telephone Orders (see section 2.9)

6.13. Administration of Medicines Previously Checked by Another Practitioner.

The Royal Pharmaceutical Society Standards for Medicines Management states that registrants must not prepare substances for injection in advance of their immediate use or to administer medication drawn into a syringe or container by another practitioner when not in their presence. The Standards recognise there may be exceptions to this such as an already established infusion, which has been instigated by another practitioner following the principles, set out above, or medication prepared under the direction of a pharmacist from a central intravenous additive service and clearly labelled for that patient.

In clinical scenarios where the risk to the patient is going to be increased from a delay in receiving medicines it is possible to pre-prepare IV drugs. This must formally be risk assessed and documented through clinical governance arrangements. The risk assessment must put the patient at the centre, convenience of pre-preparing IV drugs because of staffing issues, shift change over and ward routine are not sufficient reason to allow for pre-preparation of IV drugs.

In very few clinical situations medicines (i.e. retrievals and paediatric cardiac arrest drugs or established infusions) the pre-prepared medicines will need to be transferred to another member of staff. This formal transfer requires the relevant clinical staff that have drawn up or mixed the medicine to formally hand over the medicines to the staff that will be responsible for its custody and potentially its administration. This requires documentation in the clinical notes, which must adhere to local guidelines and meet the professional standards regarding documentation.

The following scenarios are the only situations where pre-preparing injectable medicines is acceptable:

- An already established infusion
- Drugs which are required by their Summary of Product Characteristics (SPC) to be pre-prepared e.g. some chemotherapy treatments
- Medication prepared under the direction of a pharmacist from a central intravenous additive service and clearly labelled for that patient.
- In theatres where ODA/ODP/anaesthetic nurses are required to prepare medicines for administration by another person. This is only acceptable when carried out on the instructions and in the presence of a doctor or dentist. Refer to section 15 for further information on rules, responsibilities and accountabilities
- Paediatric cardiac arrest drugs drawn up at the beginning of a shift and calculated based on the specific weight of a patient (to ensure patient safety in critically ill paediatric patients).
- Medicines pre-prepared for patients requiring retrieval and transportation,
- Critically ill patients where the risk of pre-preparing intravenous medication is less than the risk of a rapid life threatening deterioration.

Any medicines that are pre-prepared in these exceptional situations must be:

- Administered against a valid prescription
- Checked by two appropriate practitioners
- Labelled with the name of the medicines, the dose, and the time prepared and given a 12 hour expiry unless the SPC states that the stability is less for that prepared injectable.

- Stored in a sealed tamper evident bag, or where in a syringe driver should have tamper evident luer locks in place.
- Security of these medicines remains the responsibility of the nurse caring for the patient.

It is also permitted to administer oral medicines where compliance aids are used and have been **filled by a registered pharmacy** and the tablets / capsules are clearly identifiable and where no changes have been made to doses or frequencies.

6.14. Covert administration of medicines

For full guidance please refer to the Trust Covert Administration Policy.

- The regulatory body for nursing, midwifery and health visiting says that disguising medication in food and drink can be justified in the best interests of patients who actively refuse medication but who lack the capacity to refuse treatment. It should be a contingency measure rather than regular practice and disguising medication simply for convenience of the health care team is unacceptable.
- The NMC recognises that this is a complex issue that has provoked widespread concern. It involves the fundamental principles of patient and client autonomy and consent to treatment, which are set out in the Mental Capacity Act 2008 and underpinned by the Human Rights Act 1998.
- Disguising medication in the absence of informed consent may be regarded as deception. However, a clear distinction should always be made between those patients or clients who have the capacity to refuse medication and whose refusal should be respected, and those who lack this capacity.
- Among those who lack the capacity, a further discussion should be made between those for whom no disguising is necessary because they are unaware that they are receiving medication, and others who would be aware if they were not deceived into thinking otherwise.
- In certain exceptional circumstances, in which covert administration may be considered to prevent a patient from missing out on essential treatment and where the patient is incapable of informed consent, the following considerations should apply.
    1) The medication must be considered essential for the patient's health and well-being, or for the safety of others. Disguising medication simply for convenience of the health care team is totally unacceptable.
    2) The decision to administer medication covertly should be considered as a contingency measure in an emergency rather than as regular practice.
    3) There should be broad and open discussion among the clinical team and the patient's relatives, carers or advocates before the decision is taken to administer medication covertly.
    4) The involvement of the pharmacist is especially important as adding medication to food or drink can alter its chemical properties and thereby affect its performance.
    5) The decision and action taken, including the names of all parties concerned, should be documented in the patient's care plan and regularly reviewed.

6) Regular attempts should be made to encourage the patient to take medication voluntarily.

6.15. Self Administration Of Medicines

Self administration of medicines is supported whenever it is appropriate and providing the necessary security, storage and assessment and monitoring arrangements are available. For further information refer to the self administration guidance within the relevant Trust