Cumbria Partnership NHS Foundation Trust

Injectable Medicines Policy

Document Summary

To ensure that injectable medicines are safely procured, prescribed, prepared, administered and monitored in all Clinical Areas

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Important Note:

The Intranet version of this document is the only version that is maintained.

Any printed copies should therefore be viewed as “uncontrolled” and, as such, may not necessarily contain the latest updates and amendments

Contents

1. SCOPE

This policy applies to all employees of the Trust including bank staff and agency staff working in the Trust; it also covers employees not working on Trust premises. The policy also applies to members of staff who are not directly employed by the Trust but who act in a professional capacity within the Trust through a service level agreement.

All NHS contractors registered with the Trust should also be compliant with this policy. It is written to be consistent with the North Cumbria University Hospitals Trust (NCUHT) medicines policy, to avoid any potential difficulties for staff who work across organisational boundaries. Any significant differences or discrepancies between the acute and Trust policies should be pointed out to the authors.

This policy is a supplement to the Trust Medicines Policy and is to be read in conjunction with that policy.

2. INTRODUCTION

NPSA alert 20 (March 2007) – Promoting safer use of injectable medicines - requires healthcare organisations to implement Standard Operating Procedures (SOPs) covering all aspects of the handling of injectable medicines. The procedures in this policy are to be followed by staff and should be read alongside the Royal Marsden Hospital clinical nursing procedures (available on the staff intranet).

The use of injectable medication has many healthcare benefits for patients. The complexities associated with prescribing, preparing and administering injectable medicines means that there are greater potential risks for patients than for other routes of administration. Weak operating systems increase the potential risk of harm and safe systems of work are needed to minimise these risks.

3. STATEMENT OF INTENT

This policy is supplementary to the Trust Medicines Policy.

The policy and procedures are relevant to injectable medicines for adults and children.

This policy and procedures will ensure that all aspects of the handling of injectable medicines are safe and in accordance with good practice, including:

- Injections are prescribed correctly and appropriately Injections are accurately, appropriately and safely prepared

- Injections are accurately, appropriately and safely administered Patients receiving injections are appropriately monitored Incidents and errors involving injections are minimised.

4. DEFINITIONS

See Medicines Policy and:

Administration devices

Medical devices designed to regulate or control, mechanically or electronically, the administration of injections or infusions of medicines.

Aseptic technique (Aseptic non-touch technique, ANTT)

Handling technique designed to minimise the risk of microbial contamination of a sterile medicine during preparation.

Bolus (push)

Administration from a syringe of a single dose of a sterile solution directly into a tissue, organ or vein, over a short period of time usually, between 30 seconds and 10 minutes.

Cannula

A thin tube inserted into a vein or body cavity to administer medication

Chemotherapy

Drugs used in chemotherapy for cancer are included within section 8.1 of the BNF

Clinical areas

Wards, clinical departments, operating theatres, clinics, GP surgeries. In the context of homecare, the term may also be considered to include the patient's home.

Closed system

Packaging and presentation of an injectable medicine, and/or procedures followed, to prepare doses for use which are designed to ensure that the injection solution never comes into direct contact with the open air.

Cytotoxic

Medications with anti-cancer activity. Most are teratogenic. Careful handling is needed.

Diluent

Any sterile injection solution, such as water for injection or sodium chloride 0.9%,

commonly used to dissolve (reconstitute) or dilute a medicine immediately before administration.

Extravasation

Leakage of drug or IV fluid from veins or inadvertent administration into subcutaneous or subdermal tissue. Can cause tissue necrosis.

Flag-labelling

The practice of applying a label to a small syringe in a way which allows the label to be read, without covering the graduations on the syringe, so that the volume can be checked.

Flush, flushing solution

A sterile solution of diluent such as sodium chloride injection 0.9%, used to purge (flush) access devices (e.g. cannulae) before and/or after injection of a medicine or between injections of different medicines.

Hazard, risk

Any factor, such as a difficult procedure or a complex calculation, with the potential to cause harm if carried out incorrectly.

High-risk procedures

Generic procedures involving the preparation and administration of (medicinal) products that have been identified by risk assessment as most likely to pose a significant risk to patients.
High-risk products: Those (medicinal) products whose preparation and/or administration have been identified by risk assessment as most likely to pose a significant risk to patients.

Infusion

Administration, from a syringe, or other rigid or collapsible container e.g. plastic bag, of a volume of sterile solution of an injectable medicine directly into a tissue, organ, vein or artery, at a constant rate, under gravity or by means of an electronic or mechanical pump or other means of rate control, over a defined period usually of at least 10 minutes.

Injectable medicines

Sterile medicines intended for administration by bolus injection, perfusion or infusion by any of the following routes: intravenous, intramuscular, intrathecal,

intra-arterial, subcutaneous, intraventricular, epidural, intravesicular, intravitreal, intrapleural, intraocular, intradermal and intra-articular.

Low-risk products

Those (medicinal) products whose preparation and/or administration have been identified by risk assessment as least likely to pose a significant risk to patients.

Luer

A type of connection used to allow connection of syringes and similar medical devices to catheters, cannulae and other access devices

Mixing of medicines

The law defines “mixing” as “combination of two or more medicinal products together for the purposes of administering them to meet the needs of a particular patient”. This does not include mixing where one product is a vehicle for the administration of another but does include medicines which mix at a ‘Y site’ where two or more infusions join. Mixing two licensed medicines, where one is not a vehicle/diluent for the administration of the other, results in a new unlicensed product being produced.

Medicines legislation was amended in 2009 to enable doctors and dentists to direct other healthcare professionals to mix drugs prior to administration, supporting common practice. Nurse, midwife and pharmacist Independent prescribers can also mix medicines themselves and direct others to mix for the purpose of administration to an individual patient. This also applies to Supplementary prescribers for medicines included in the Clinical Management Plan for an individual patient. Medicines legislation for Controlled Drugs was amended in April 2012 to support the mixing of controlled drugs where appropriate, supporting established practice. Products resulting from the mixing of medicines cannot be supplied or administered under Patient Group Direction (PGD) arrangements.

Multi-dose injectable medicines vs single dose injectable medicines.

Most injections do not contain an antimicrobial preservative and are licensed for single use only, i.e. for the preparation of a single dose for administration to one patient on one occasion.

Injectable medicines must be treated as intended for single use only unless the label specifically indicates that they are licensed and intended for use on more than one occasion or to provide more than a single dose on any one occasion, since the use of single-dose products to prepare more than one dose for the same patient means that a prepared injection or a part-used container must be stored before use and increases the risk of infection: use for more than one patient also adds a risk of cross-infection, as well as increasing the risk of incorrect dose or administration to one or more patients.

Multi-dose containers should be used in accordance with manufacturer’s

guidance and discarded after the indicated period once opened.

'Off-label' use

Use of a licensed medicine in a way not covered by its Manufacturing Authorisation (Product Licence).

Open systems

Packaging and presentation of an injectable medicine, and/or procedures followed, to prepare doses for use which do not prevent the injection solution from coming into direct contact with the open air. Excludes a single withdrawal of solution from an open ampoule into a syringe

Parenteral

Administered by any route other than the alimentary canal, for example by intravenous, subcutaneous or intramuscular routes.

Patient Group Direction (PGD)

A specific written instruction for the sale, supply and/or administration of named medicines in an identified clinical situation. It applies to groups of patients who may not be individually identified before presenting for treatment.

‘Purchasing for safety’

Procuring presentations and formulations of medicines approved for use in local medicine formularies. In this process, medicine products are reviewed by purchasing and pharmacy groups and products that are designed in such a way as to promote safer practice are selected. This process does not involve therapeutic substitution.

Ready-to-administer injectable products

These products require no further dilution or reconstitution and are presented in the final container or device, ready for administration or connection to a needle or administration set. For example, an infusion in a bag with no additive required.

Ready-to-use injectable products

These products require no further dilution or reconstitution before transfer to an administration device. For example, a liquid with an ampoule, of the required concentration, that only needs to be drawn up into a syringe.

'Specials'

Unlicensed medicines custom-manufactured to order, by hospital pharmacies or other facilities licensed by the MHRA (Medicines Healthcare Regulatory Agency). 'Specials' themselves are not licensed, cannot be advertised for sale and have not been formally assessed for quality, safety or efficacy, responsibility for which rests solely with the prescriber and purchaser.

Traffic Light Classification

Guidance on where clinical and prescribing responsibility rests between specialists and primary care prescribers. (Red for specialist/secondary care prescribing, amber for shared care and green for primary care prescribing).

Unlicensed medicine

A medicine (medicinal product) that does not have a Marketing Authorisation (Product Licence). Unlicensed medicines may be manufactured or assembled (prepared) from licensed products in clinical areas by clinical staff in order to be able to administer a medicine to a patient. Unlicensed medicines may also be manufactured or assembled in controlled environments in hospital pharmacy departments. Units with Specials Manufacturing Licences in hospital pharmacies and commercial organisations are also able to manufacture or assemble unlicensed 'Specials' in controlled environments that are inspected by the MHRA. Refer to Trust guidelines for unlicensed medicines.

5. DUTIES

5.1 Appointed Nurse in Charge (Ward or Team Manager, or the nurse/registered healthcare professional responsible for medicines in a community team if the team manager is not a registered healthcare professional).

Ensure that staff are suitably trained to carry out the procedures

Ensure staff maintain their work competences to undertake the prescribing, preparation, administration and monitoring of injectable medicines as appropriate to their role.

Ensure that staff have ready access to the relevant standard operating procedures, information and documentation to support safe prescribing, preparation, administration and monitoring of injectable treatment as appropriate to their role.

5.2 Registered nurse, registered healthcare professional

Read, understand and follow the policy and the associated SOPs

Complete appropriate training to carry out the procedures

Ensure maintenance of work competences to undertake the prescribing, preparation, administration and monitoring of injectable medicines as appropriate to role

Where complex calculations are required, consult with another registered nurse with appropriate competence for an independent check, recognising that this check may need to be undertaken externally/off-site/remotely

Participate in audit of injectables as required

5.3 Non-registered clinical support staff

Work within the framework of delegation (Delegation Guidelines for Registered Nurses and Allied Health professionals working with Non-registered clinical support staff)

Undertake the specified training and competency assessment for the specific medicine-related task(s) to be performed

Where necessary, undertake the role of second checker (as per Medicines Policy) only for those procedures for which appropriate training has been undertaken

Non-registered clinical support staff must not administer injectable medicines independently

In community settings assistant practitioners and health care assistants may only administer specified injectable medicines by delegation, after receiving specified training and a competency assessment at local level in relation to the task performed.

Note - At the time of writing the administration of insulin via Pen device and low molecular weight heparins the only injectable medicine for which a specific training resource and competency assessment has been developed

5.4 Cumbria Community Injectables Strategic Group (or equivalent sub-committee of Medicines Management Committee)

Monitor, advise and amend aspects of this policy, ratified by Medicines Management Committee and Policy Monitoring Group

Authority to approve forms and tools in relation to this policy, with reference to other groups or committees as appropriate

6. INJECTABLE MEDICINES PROCEDURES AND GENERAL PRINCIPLES

6.1 Risks of Injectable Medicines

This is a list of the principal risks associated with injectable medicines, and all staff involved in the administration of such medicines should be aware of such risks and how to minimise them.

- Incomplete and/or ambiguous prescriptions which do not include important information, for example, diluent, the final volume or concentration of medication to be administered, the intended rate of administration or the route of administration.

- Presentations of injectable medicines that may require complex calculations, dilution and handling procedures before the medicine can be administered.

- Lack of information about injectable medicines available to healthcare professionals at the point of use. This information may not always be included in the manufacturer's pack or in commonly available reference sources

- Selection of the wrong medicine or diluent.

- Use of a medicine, diluent or infusion after its expiry time and date.

- Calculation errors made during prescribing, preparation or administration of the medicine, leading to administration of the wrong dose and/or at the wrong concentration or rate.

- Unsafe handling or poor aseptic (non-touch) technique leading to contamination of the injectable and harm to, or infection of, the patient.

- Incompatibility between diluents, infusions or other medicines and administration devices.

- Failure to follow patient identification procedures leading to administration to the wrong patient.

- Failure to obtain information about the patient's allergy status, leading to administration of a medicine to which the patient may be allergic or have a high risk of hypersensitivity.

- Failure to follow administration checking and recording procedures leading to administration via the wrong route, or the giving of a medicine twice.

- Health and safety risks to the operator or environment.

- Variable levels of knowledge, training and competence amongst healthcare practitioners.

- Risk of inoculation injury – Safe handling and disposal of sharps is covered in the Infection Control Policy which should be referred to and followed.

6.2 Risk assessment

The risk assessment of injectable medicines will encompass both clinical and technical risks, covering patient and environment factors, and access to emergency services.

Risk assessment of injectable medicine procedures and products will be undertaken before new injectable products or procedures are introduced into practice.

In assessing risk, all the risk factors identified in the NPSA risk assessment tool for the preparation and administration of injectable medicines in clinical areas (March 2007) should be included as a minimum.

The “NPSA risk score”, for individual injectable products, is only one element of a comprehensive risk assessment. For some products the NPSA risk score (up to 7) may vary according to the dose and/or administration method.

The NPSA risk score for IV and IM products can be found in the Medusa injectables medicines guide accessed via the Trust intranet Medicines Management pages. Further details in section 6.23.

In assessment of clinical risk, factors to be considered include: -

- Potential for patient harm from medication that could cause serious adverse effects if administered incorrectly (including extravasation risk) or omitted
- Drugs with a narrow therapeutic index which require drug monitoring
- Drugs that require acute monitoring to ensure efficacy
- Monitoring for serious adverse effects
- Unlicensed use or indication

Trust documentation has been developed specifically to support completion and recording of a comprehensive risk assessment for injectables in community settings.

When two or more medicinal products are to be mixed together, the risk assessment should also take into consideration the compatibility of the drugs at required doses and concentrations, the unlicensed nature of the final product and staff competence.

6.3 Risk Reduction Methods

Risk reduction requires a co-ordinated multidisciplinary approach and measures to improve patient safety in relation to injectables have been included throughout this policy.

For medium and high risk injectable products (e.g. injectables with an NPSA risk score of 3 or more, Amber or Red in Medusa guide) or high risk injectable practices additional measures may be necessary to manage risk. Refer to Medusa help guides (use of monographs).

For higher risk injectable products and practices (medium-high NPSA risk score), and for injections with a higher risk of anaphylaxis or extravasation, consider in conjunction with Prescriber and Pharmacist, use of a community hospital or step-

up/step-down unit setting rather than a home environment, as appropriate.

Risk assessment will identify those products representing the highest risk to patients at the time of preparation. Consideration must be given to the use of safer products and safer systems, for example, double-checking.

Standard operating procedures (SOPs) for prescribing, preparation and administration of injectable medicines are available on the Medicines Management Intranet pages and must be followed.

Standard operating procedures (SOPs) for specific injectable products (examples: Methotrexate, Natalizumab, Denosumab) have been developed. Further details can be found on the Medicines Management Intranet pages.

Refer to section 6.16 for 'Antipsychotic Depot Injection Guidance'

6.4 Community Settings

For intravenous injections administered in community settings, Criteria for IV Drug Administration in the Home Environment have been specified. Further details in section 6.15

6.5 Clinical Responsibility for Prescribing

In relation to clinical risk, for medication initiated in secondary care, the clinical responsibility for prescribing should be consistent with the "Traffic Light Classification" - Guidelines on Prescribing Responsibility for Red/Amber/Green Medicines, accessed via the Cumbria Medicines Management webpage:

http://medicines.necsu.nhs.uk/

6.6 Unlicensed use of medicines

For unlicensed medicines refer to Trust guidelines.

An unlicensed medicine, or an unlicensed use of a licensed medicine (off-label use), should only be prescribed where there is no suitable licensed alternative and where there is an evidence base to support its use.

For unlicensed medicines, and unlicensed uses of licensed medicines, information must be provided by the prescriber to enable safe administration and monitoring.

6.7 Combinations of medications

For combinations of drugs, a licensed product should be used where this exists. For mixing of medicines, e.g. for subcutaneous administration via syringe driver, drug compatibility information should be checked to ensure proposed mixtures are evidence based.

For any other proposed mixing practice a risk assessment should be undertaken and pharmaceutical input must be sought in relation to compatibility of the drugs at the proposed doses and concentrations.

6.8 Specialised medicines

For Specialised injectables e.g. subcutaneous chemotherapy, administration must only be undertaken in clinical areas where a specific risk assessment has been completed, appropriate training given and/or relevant qualifications obtained and written procedures available to all relevant staff.

Injectable chemotherapy by any route other than subcutaneous must not be administered in any clinical area. Any requests for such therapy should be referred to the acute service provider.

6.9 Prescribing

Refer to Medicines Policy and SOPs for Injectable Medicines.

Medicines should be given by injection only when the practicality and appropriateness of other routes of administration have been excluded. The use of this route should be regularly reviewed in favour of switching to oral administration as soon as clinically appropriate.

Medicines to be given intravenously as discrete bolus injections should be prescribed on the standard prescription chart or green community medication chart, as appropriate, following the requirements detailed in the Standard Operating Procedures outlined in the appendices.

Abbreviations should be avoided.

The prescription of drugs for subcutaneous administration via a syringe driver in palliative care in the community should be on an approved syringe driver prescription sheet wherever possible. (Refer to section 6.5)

When two or more prescription charts are in use, it is essential that they are cross- referenced so that practitioners are aware of all prescribed medicines.

Prescribing of injectable medicines will be linked to the prescribing responsibility and guided by the Traffic Light Classification and pathways of care.

6.9.1 Prescribing for Administration in the Community

The range of injectable products stocked by community pharmacies is generally

limited so medicines may need to be ordered in advance by them for supply against FP10 prescriptions. Some products are not available to community pharmacies.

In 2 specific therapeutic areas a small number of pharmacies have been commissioned to provide enhanced services to improve access:

- For IV antibiotic therapy the FP10 supply route should only be used when in line with an agreed pathway. The only agreed pathway at the time of writing, is for community IV antibiotic treatment of cellulitis and soft tissue infections in Adults (>18yrs). Injectables for this pathway will be stocked at pharmacies that have been commissioned to provide the enhanced service "Access to Intravenous Antibiotics"

- For palliative care a range of injectable medicines may be obtained from pharmacies, in response to FP10 prescriptions, though may need to be ordered. For more details see Palliative Care resources on Medicines Management Intranet pages.

6.10 Supply and Storage

Injectable medicines must be stored, transported and destroyed in accordance with the medicines policy.

Ready-to-administer or ready-to-use products should always be used in preference to those needing preparation before use, or those which are classified as high-risk. Concentrates should only be used where safer alternatives are not available.

Use of Injectable cytotoxics and parenteral nutrition must be risk assessed by Pharmacy. (Refer also to section 6.8)

6.11 Preparation

Injections should be prepared only by healthcare staff who understand the risks involved; have been trained to use safe procedures; and have demonstrated their competence for the task. Preparation should only take place if: there is a valid prescription, a Patient Group Direction (PGD) or other written instruction; and essential information is available about the product(s) and processes needed for safe preparation and administration.

Injectable medicines prepared in clinical areas should always be administered immediately after preparation. They should not be stored for a period of time before use. Administration of infusions prepared in clinical areas should be completed within 24 hours of preparation. In exceptional circumstances where infusion from a single container is intended to continue for more than 24 hours, a risk assessment should be undertaken to determine the safest course of action. Every effort should be made to use a ready-to-administer product.

Unpreserved injectable medicine must only be used to prepare a single dose for a single patient on one occasion, i.e. single use. Most injectable medicines are only licensed for 'once-only' use. Multi-dose containers should be used in accordance with manufacturer's guidance and discarded after the indicated period once opened.

All syringes, including flushes and infusions, must be labelled immediately after preparation by the person who prepared them. 'Flag labelling' should be used to ensure that volume graduations on small syringes are not obscured. The only exception to this is in situations where preparation and bolus (push) administration is one uninterrupted process and the unlabelled product does not leave the hands or supervision of the person who prepared it. Only one unlabelled medicine must be handled at one time.

If two or more injections need to be prepared at the same time, for example in rapid tranquillisation or Electro-Convulsive therapy (ECT) situation, the syringes must be labelled at the time of drawing up the injection.

Pre-printed labels should be used where available, preferably 'Drugs added to this infusion' labels obtainable from NHS supplies, and completed in full. Labels may be white or green, but not yellow, as yellow labels are used only for spinal injections.

Only medical devices with luer connectors must be used for preparation and administration of injections.

6.12 Consent

Appropriate consent must be obtained wherever possible, or where not possible the procedures in the Consent Policy must be followed.

Some injectable medicines are unlicensed and some injectable medicines are administered in an unlicensed (off-label) procedure. Where this applies it is important that the patient/carer is made aware of this point as it forms part of the consent for the procedure. For vaccines refer to Vaccine Storage and Administration Procedures.

6.13 Administration

Injections should be administered only by healthcare staff or patients/carers who understand the risk involved, have been trained to use safe procedures, and who have demonstrated their competence for the task.

Injections should be checked by two qualified staff if available.

Refer to Medicines Policy for further details of single nurse administration.

6.14 Monitoring

All patients with an intravenous access device in place must have the site checked at least daily for signs of infusion phlebitis, using the Visual Infusion Phlebitis (VIP) Score and the observations recorded on Trust approved documentation.

Arrangements for monitoring clinical parameters must be in place, including fluid balance, where appropriate. Observations and measurements must be recorded on Trust-approved documentation.

Specific monitoring requirements, including frequency, should be specified in the patient's care plan, e.g. where blood levels are needed for therapeutic drug monitoring and/or blood tests for monitoring for adverse effects.

6.15 Community Administration

In the community setting the patient must consent and the GP responsible for their care must be informed about the treatment being carried out at home or as a day case patient in an Integrated care setting or community hospital. The environment must be assessed as suitable and have telephone access in case of an emergency/anaphylaxis.

The patient's condition must be assessed as stable and skilled staff be available throughout the treatment, with Adrenaline 1 in 1000 available for emergency use. Adrenaline packs for treatment of anaphylaxis should be carried by the nurse. (Refer to separate section for Depot Antipsychotic Injections).

6.15.1 Injectable Therapy in Community Settings

Refer to and use approved IV Pathway documents, including where appropriate the "Community Intravenous Therapy" pack.

Risk assessment using Medusa Injectable Medicines guide must be included.

6.15.2 Community IV therapy (general)

As part of the assessment, agreement must be reached as to who is competent and responsible for re-siting the cannula if required.

Patients and carers must be educated in the safe use and storage of these drugs. Patients should also receive written information such as the CPFT leaflet (code IV 2008-01): "Information for patients receiving intravenous medication"

Intravenous equipment should be carried by the registered nurse as specified in the checklist: "Intravenous Equipment Box Checklist"

For patients who require a central venous catheter to allow their treatment to be administered the relevant protocol must also be followed.

For patients referred from the acute hospitals in North Cumbria:

"Management of Central Venous Catheters", CPCT/001/046 (or successor document)

For patients referred from other Trusts the protocol issued by the referring hospital clinician should be followed.

6.16 Depot Antipsychotic Injections

Antipsychotic depots or long acting injections (LAIs) are formulated to allow the medications to be released over a period of days or weeks. These injections are given by deep intramuscular injection. Additional guidance is available on the medicines management intranet pages.

6.16.1 Test doses

Depots/LAIs are long acting and any adverse effects which result from injection are likely to be long lived. For this reason either a small test dose or pre-treatment with the respective oral medication is essential to avoid the risk of severe prolonged adverse effects. Advice regarding this is specific to the individual medication.

6.16.2 Adverse Reactions to Depot Antipsychotics

According to current evidence, (Paton, C 1999) community psychiatric nurses solely administering antipsychotic depot injections need not carry adrenaline or undergo training in recognising and treating anaphylaxis as recommended in the Royal College of Nursing guidance.

Further details in standard operating procedures for specific injections are included within the following publication, accessed via the CPFT Medicines Management webpage:

"Guidance on the Administration to Adults of Oil-based Depot and other Long-Acting Intramuscular Antipsychotic Injections 4th Edition"

http://cptportal.cumbria.nhs.uk/SiteDirectory/MedicinesManagement/Web%20Pages/Mental%20Health%20Resources.aspx?PageView=Shared

It is recognised that Registered Community Mental Health Nurses working in the community will usually be working alone, and it is accepted that they may administer depot antipsychotic injections without a check from a second person.

6.17 Subcutaneous Injections

Medusa does not assess subcutaneous injections, use the NPSA Risk Assessment tool. See Injectable Medicines SOP. Also refer to Palliative Care Guidance on the Medicines Management Intranet page.

6.18 Syringe Drivers

Syringe drivers are used for the continuous administration of drugs over time and are used to deliver analgesia, anti-emetics, sedatives and anti-secretory drugs via a subcutaneous route. The only indication for prescribing for administration by a syringe driver is the patient being unable to take oral medication, with no other appropriate route (e.g. sublingual, rectal, PEG tube) available

In palliative care, assessment of pain is key to the success of the treatment regimen. This should be a regular activity carried out in collaboration with patient, his/her carers and the patient's doctor or non-medical prescriber.

Drugs administered via syringe drivers usually include controlled drugs and practitioners must ensure compliance with the Trust Management of Controlled Drugs Policy.

Only registered nurses and medical practitioners who are competent in the use of a syringe driver may set up a syringe driver for a patient.

The McKinley T34 syringe driver is the equipment selected for use within the Trust, in line with the NPSA Patient safety alert (Safer ambulatory syringe drivers, NPSA/2010/RRR019). The practitioner should be familiar with the device and the calculation of the rate of delivery of the medication. Particular care should be taken if switching from an alternative device or alternative method/route of administration. The protocol for use of the McKinley T34 syringe driver is available on the Trusts Nursing webpages.

Infusions given by syringe driver must be labelled, with a white or green label, and should not run over greater than 24 hours unless suitable alternative advice has been obtained.

Education and information are essential for successful management of the patient at home and for compliance with the drug regimen. A patient leaflet (CPFT 0180) should be provided wherever possible.

Patients receiving analgesia via a syringe driver at home require as a minimum, daily visits from the practitioner to monitor treatment and change the syringe, with access to clinical support and advice between visits.

The following drugs should not be administered via a syringe driver since they are too irritant for subcutaneous use: Chlorpromazine, Diazepam, Prochlorperazine.

6.19.1 Mixing of Drugs for a Syringe Driver

The combination of drugs within a syringe driver results in an unlicensed medicine. In palliative care the use of certain medicines in an unlicensed (off-label) form is an established practice.

Only those drugs which are currently indicated by presence of symptoms should be prescribed and administered via syringe driver.

Standard references on syringe driver drug compatibility should be consulted; e.g Palliative Care guidelines and advice sought from pharmacy/medicines management team or specialist palliative care services when in doubt.

Up to three drugs may be used in combination. This is the maximum recommended since there is a lack of published data for 4 drug combinations with morphine or diamorphine.

If more than 3 drugs are required by the patient it is often possible to identify a drug that can be administered as a once daily bolus injection to avoid compatibility problems, e.g. levomepromazine.

6.19 Subcutaneous Infusions (Hypodermoclysis)

Hypodermoclysis is a technique used for subcutaneous administration of large volumes of fluids and electrolytes in order to achieve fluid maintenance or replacement in mildly dehydrated patients for whom intravenous access may be difficult or who cannot tolerate sufficient oral intake.

For information and local procedures please refer to:

“Guidelines and Care Pathway for: The Administration of Subcutaneous Fluid (Hypodermoclysis)

Subcutaneous infusion of solutions used for hypodermoclysis is an unlicensed (off- label) practice since the solutions are only licensed for use intravenously.

6.20 Community Administration of Insulin

Refer to Safe and Effective Use of Insulin in Community and Inpatient Settings Toolkit POL/001/013/007 and Health Care Support Worker Administration of Insulin, via Pen device, by Delegation – Training and competency Policy.

6.21 Injection of Vaccines & Immunisation

Refer to separate policy.

6.22 Waste Disposal

Refer to Trust Waste Management policy.

6.23 Information

The following information should be available for injectable medicines products used in clinical areas: Summary of Product Characteristics (SPC) for the product available on www.medicines.org.uk/emc/

Medusa Injectable Medicines guidance, no password is needed when accessed from the Trust Medicines Management Intranet pages.

If appropriate information for the product is not available on the ward/team base, pharmacy/medicines management advice must be obtained before the injection is administered. Contact details for CPFT Medicines Management team on Trust Medicines Management webpage.

7. TRAINING

7.1 All Healthcare Professionals

All Healthcare professionals and healthcare staff involved in the prescribing, preparation, administration and monitoring of injectable medicines for adults and children must have a knowledge and understanding of the NPSA Patient safety alert 20 - Promoting safer use of injectable medicines (2007) and comply with the associated NPSA multi-professional safer practice standard for injectable medicines. March 2007.

All Healthcare professionals and healthcare staff involved in the prescribing, preparation and administration of injectable medicines should have completed the BMJ e-learning module (1 hour):

“Injectable Medicines: prescribing, preparing and administering”

Healthcare professionals and staff involved in the preparation, administration and monitoring of injectable medicines should meet the training requirements for aseptic no-touch technique (ANTT), in line with the Trust Infection Control policy. Please refer to ANTT Procedures available via Trust Infection Prevention webpage.

Staff must also have a knowledge and understanding of the NPSA Rapid Response Report NPSA/2008/RRR002 – Risks with Heparin Flush Solutions.

<u>Intravenous (IV) Drug Therapy</u>

Registered nurses involved in the preparation, administration and monitoring of Intravenous drug therapy, for adults, must comply with the CPFT Scope of Professional Practice for Intravenous Drug Therapy.

Registered nurses involved in the preparation, administration and monitoring of intravenous drug therapy, for children, must meet training requirements in line with the framework used for adult IV drug therapy.

<u>Subcutaneous Administration via Syringe Driver</u>

Healthcare professionals involved in the preparation, administration and monitoring of medication via a syringe driver must have a knowledge and understanding of the NPSA alert NPSA/2010/RRR019, Safer ambulatory syringe

drivers.

Healthcare professionals involved in the preparation, administration and monitoring of medication via a syringe driver must have undertaken training on the use of the syringe driver (McKinley T34, at the time of writing) and procedures for setting up, maintaining and discontinuation of equipment.

Insulin Therapy

Healthcare professionals involved in the preparation, administration and monitoring of insulin therapy must have the appropriate knowledge and competence for the management of diabetes.

Refer to Safe and Effective Use of Insulin in Community and Inpatient Settings - Toolkit POL/001/013/007 and Health Care Support Worker Administration of Insulin, via Pen device, by Delegation – Training and competency toolkit POL/001/013/007b

For vaccines refer to Vaccine Storage and Administration Procedures

Low Molecular Weight Heparin – Non registered staff – Refer to Trust guidance.

8. MONITORING COMPLIANCE WITH THIS DOCUMENT

The table below outlines the Trusts' monitoring arrangements for this policy/document. The Trust reserves the right to commission additional work or change the monitoring arrangements to meet organisational needs.

Aspect of compliance or effectiveness being monitored	**Monitoring method**	**Individual responsible for the monitoring**	**Frequency of the monitoring activity**	**Group / committee which will receive the findings / monitoring report**	**Group / committee / individual responsible for ensuring that the actions are**
Risk assessment of injectable products	Inclusion of risk score in injectable medicines protocols	Team managers & Locality IV Operational Lead Care Groups and Pharmacy	All new products introduced into practice requiring protocols for use	Medicines Management Committee	Clinical Governance Committee

Aspect of compliance or effectiveness being monitored	**Monitoring method**	**Individual responsible for the monitoring**	**Frequency of the monitoring activity**	**Group / committee which will receive the findings / monitoring report**	**Group / committee / individual responsible for ensuring that the actions are**
Risk assessment of procedures in relevant clinical areas	Medicines policy audit	Team managers & Locality IV Operational Lead	Alternate years – inpatients /community services.	Injectables Strategy Group or Medicines Management Committee	Clinical Governance Committee
Incidents involving injectables	Incident reports	Care Groups	Reviewed by Safe Medicines Practice Group, sub-group of Medicines Management Committee	Injectables Strategy Group	Clinical Governance Committee
Prescribing, process & accuracy; Administra-tion; Safe & secure handling	Monitoring of compliance in accordance with Medicines Policy				
Completion of training associated with the policy in line with Training Needs Analysis	Compliance with training will be monitored in accordance with the Learning & Development Policy				

9. REFERENCES/BIBLIOGRAPHY

NPSA Patient safety alert 20- Promoting safer use of injectable medicines (2007)

NPSA Rapid response report NPSA/2008/RRR002, Risks with Heparin Flush Solutions

NPSA Rapid response report NPSA/2010/RRR019, Safer ambulatory syringe drivers

NPSA Rapid response report NPSA/2010/RRR013, Safer administration of insulin

BMJ learning: Injectable Medicines: Prescribing, preparing and administering, via http://n3.learning.bmj.com/learning/home.html

The Royal Marsden Manual of Clinical Nursing Procedures

Medusa Injectable medicines resource

National Prescribing Centre, May 2010. Mixing of medicines prior to administration in clinical practice – responding to legislative changes

Department of Health 2010. Mixing of medicines prior to administration in Clinical Practice: Medical and Non-Medical Prescribing. Gateway ref: 14330

Paton C and Morrison P (1999) Should Community mental health nurses be trained in recognising and treating anaphylaxis? Mental Health Practice 2(10) 18-20

NMC Standards of Medicines Management

10. RELATED TRUST POLICY/PROCEDURES

Medicines Management Policy POL/001/013 Management of Controlled Drugs

Policy POL/001/013/001 Rapid tranquillisation Protocol POL/001/020

Vaccine Storage and Administration Procedures POL/001/013/006

Infection Prevention and Control Policies

Waste Management Policy

Health Record Keeping Standards Procedure

Delegation Guidelines for Registered Nurses and Allied Health Professionals working with Non-registered clinical support staff POL/001/062

Scope of Professional Practice for Intravenous Drug Therapy, version 2, March 2012 (also referred to as Scope of Professional Practice & accessed via CPFT Community Nursing webpage)

Criteria for IV Drug Administration in the Home Environment following Discharge from Acute Hospital (also referred to as IV Referral Criteria v2, & accessed via CPFT Community Nursing webpage)

Community Intravenous Therapy (otherwise referred to as the IV documentation pack, & accessed via CPFT Community Nursing webpage)

Peripheral IV Cannula Observation Chart (included with Community Intravenous Therapy pack, listed above)

Community Injectables Assessment Tool (also referred to as IV Risk Assessment Tool, & accessed via CPFT Community Nursing webpage)

Management of Central Venous Catheters (v2 (3) (accessed via CPFT Community Nursing webpage)

Intravenous Equipment Box Checklist (also referred to as IV Box Checklist v2, & accessed via CPFT Community Nursing webpage)

Information for patients receiving intravenous medication (Leaflet code IV 2008-01) (also referred to as IV Therapy Patient Leaflet & accessed via CPFT Community Nursing webpage)

Guidelines and Care Pathway for: The Administration of Subcutaneous Fluid (Hypodermoclysis) (also referred to as Guidelines and care pathway sub cut fluids doc (2) & accessed via CPFT Community Nursing webpage)

Protocol for the use of McKinley T34 syringe drivers for subcutaneous use in palliative care (referred to as McKinley syringe driver protocol 0811, & accessed via CPFT Community Nursing webpage

Traffic Light Classification" - Guidelines on Prescribing Responsibility for Red/Amber/Green Medicines, accessed via the Cumbria Medicines Management webpage: http://medicines.necsu.nhs.uk/

Guidance on the Administration to Adults of Oil-based Depot and other Long-Acting Intramuscular Antipsychotic Injections, accessed via CPFT Medicines Management webpage: http://cptportal.cumbria.nhs.uk/SiteDirectory/MedicinesManagement/default.aspx

Safe and Effective Use of Insulin in Community and Inpatient Settings Toolkit POL/001/013/007

Health Care Support Worker Administration of Insulin, via Pen device, by Delegation – Training and competency Toolkit. POL/001/013/007b