POLICY AND PROCEDURES FOR THE PRESCRIBING AND ADMINISTRATION OF INJECTABLE MEDICINES

TO BE USED IN CONJUNCTION WITH W.A.H.T 'Medicines Policy'

Department /Service:	Trust-wide	
Originator:	Lead Nurse for Education and Workforce	
Accountable Director:	Chief Nursing Officer Chief Medical Officer	
Approved by:	Medicines Safety Committee Improving Safety Action Group	11th June 2026 7th June 2026
Revision Due:	7th June 2029	
Target Organisation(s):	Worcestershire Acute Hospitals NHS Trust	
Target Departments:	Trust wide	
Target staff categories	All Registered Health Care Professionals (HCPs), students and any other staff who are authorised by the Trust to administer injectable medicines.	

Policy Overview:

This Policy and Procedure describes how injectable medicines are to be prescribed and administered safely within the Trust.

Key amendments to this Document:

Date	Amendment	By:
Aug 2010	Change of Lead Nurse and reformatted into Trust Policy Template in line with Trust Policy for Key Documents. Reformat approved by Nick Hubbard, Chairman of Medicines Safety Committee 8/9/10	Alison Smith
Aug 2010	Clarification of advice on needle-free intravascular connectors and addition of MHRA Medical Device Alerts to References	Sallyanne Simpson
Nov 2010	Update of content and references	Sallyanne Simpson
Dec 2010	Addition of warning to Procedure 2 re drawing up of insulin	Alison Smith
Mar 2012	Extended unchanged for a period of 3 months to allow completion of the review process.	Alison Smith
June 2012	Policy updated in relation to checking of IV Drugs by agency nurses and the addition of procedures for IM and subcutaneous injection	Andrea Edwin

October 2012	Amendments to section 4 to ensure clarity in respect to staff roles and competencies required.	Martina Morris
October 2012	Amendments to section 5.2 to ensure that all the process for second checking is clearly described for all injectable medicines.	Martina Morris
September 2014	Change of Directors to reflect organisational changes	Phil Goode
September 2014	Amendment of section 4 to include Agency Nurse administration of intravenous medication.	Phil Goode
September 2014	Addition of agreement between ward manager and agency nurse to administer intravenous medication (Appendix 1)	Phil Goode
August 2016	Addition of intra-articular route	Emma Barnes/Tracey Mourino
August 2016	Addition of examples of subcutaneous medicines which must be checked	Emma Barnes/Tracey Mourino
August 2016	Medicines Safety Committee replaced by Medicines Optimisation Committee Director of Nursing replaced by Chief Nursing Officer	Alison Smith
November 2018	Complete review of policy Inclusion of Nurse Associates and students Definition of roles and responsibilities Sections included and redefined included: Preparation, Administration and labelling Updated appendices	Kate Knight
May 2019	Update to monitoring schedule Inclusion of process for first and second checking	Keith Hinton
Dec 2019	Further clarity added regarding Nurse Associate & students Review of section relating to sodium chloride flushes 0.9%	L Pearson
December 2021	1) Addition of Registered Nurse Associates who have attended the Trust IV Therapy Course to be authorised to administer medicines intravenously 2) Amendment to section 7.6 to include that sodium chloride 0.9% and glucose 5% flushes associated with medicines administration (whether ampoules are used, or Posiflush®/similar medical devices) are classed as an integral part of the intravenous administration process and can be administered without a prescription or PGD. Training requirements and situations where flushes do need to be prescribed are also set out.	Medicines Safety Committee

	3) Addition of wording to Appendices 2 & 3 to emphasise the push-pull technique for withdrawing a solution or suspension from a vial into a syringe 4) Update to 4.9 re medical students (by Angie Connell, Clinical Skills Trainer for Medical Students) 5) Update to 6.3 to include exception for critical care, theatres or accident and emergency when transferring a critically ill patient for further investigation or treatment. 6) Update to sections on higher risk injectable medicines including Never Events and signposts to relevant MedPolSOPs 7) Review/update to list of Key Documents section 2.5 and throughout 8) Updates to incorporate excerpts from and signposts to the latest version of the Medicines Policy WAHT-CG-580 9) Update/simplification of terminology use to describe staff groups 10) Removal of references to Medicines Information ext 45776 (replace with 'a pharmacist')	
July 2025	4.1 review of job title 4.4 removal of trust PDR process 4.8 removal of assistant practitioners and European band 4 awaiting PIN 7.2 reworded to support medical emergencies 7.3 72 hours changed to 7 days 8.3 bullet points and 8.4 removed – second checker required for all injectable medicines (rest of section renumbered) Appendix 1 – agreement between ward manager and agency nurse removed Other Appendices renumbered	Medicines Safety Committee
April 2026	1. Updated introduction NPSA updated patient safety alert 2. Scope updated 2.5 moved to section 17 3 definitions removed 4 responsibilities and duties updated 4.8 student section renewed 7 5 rights added in	ISAG and Medicines Safety Comittee

Contents

SECTION	PAGE
1. Introduction	5
2. Scope of this document	5
3 Training & Competence	6
4. Responsibility and Duties	7
5. Prescribing	8
6. Preparation	10
7. Administration	12
8. Checking of Injectable Medicines	14
9. Monitoring the Patient	15
10. General Principles	15
11. Medicine Calculations	15
12. Displacement Values	16
13. Supply and Storage	16
14. Treatment of anaphylaxis	16
15. Adverse reaction	17
16. Extravasation	17
17. Implementation of policy	18
18. Monitoring and compliance	19
19. Policy Review	19
20. References	20
21. Background	20
Appendices Appendix 1 – The procedure for administering intramuscular injection. Appendix 2 – The procedure for administering subcutaneous injection. Appendix 3 – The procedure for administering IV bolus injection Appendix 4 – The procedure for administering IV Infusion	22

1. Introduction – suggested intro below

Injectable medicines provide significant clinical benefits but carry higher risks than other routes due to the complexity of prescribing, preparation and administration. Weak systems increase the likelihood of harm, so robust and standardised safe systems of work are essential. Key risks include unclear or incomplete prescriptions, duplication of doses, complex calculations and dilutions, lack of accessible medicine information at the point of care, selection of incorrect medicines or diluents, use of expired products, calculation and infusion device errors, poor aseptic technique, incompatibilities, failures in patient identification and checking processes, equipment issues, health and safety risks, variable staff competence, and ineffective communication about loading and maintenance doses. Appropriate training, access to guidance, clear communication, and adherence to checking and safety procedures are critical to reducing these risks.

NPSA 20 as this latest guidance Feb 26 Assessing risks when reconstituting injectable medicines – NHS SPS - Specialist Pharmacy Service – The first stop for professional medicines advice

Never Events https://www.england.nhs.uk/publication/never-events/ are defined as Serious Incidents that are wholly preventable because guidance or safety recommendations that provide strong systemic protective barriers are available at a national level and should have been implemented by all healthcare providers. All five medication related Never Events involve injectable medicines/routes, and in addition to the relevant clinical guidelines, specific Medicines Policy procedures have been developed for these (see 2.5).

2. Scope of this document

2.1 This policy covers injectable medicine administration and applies to all healthcare professionals employed by the Trust and students on clinical placements who are involved in the prescribing, supply and storage, preparation, administration and monitoring of injectable medicines:

- Intramuscular injection
- Subcutaneous injection
- Subcutaneous infusion
- Intradermal Injection
- Intravenously by:
  - Direct intermittent injection (Bolus)
  - Intermittent infusion
    - Continuous infusion

Injectable routes not covered within this policy are:

- Intrathecal – refer to Intrathecal Chemotherapy - Policy and Guidelines for Adults WAHT-HAE-004 and Medicines Policy 5.3.20
- Epidural – refer to Acute Pain Guideline WAHT-KD-004, Epidural analgesia in labour WAHT-TP-094 and Medicines Policy 5.3.21
- Central venous access – refer to WAHT-INF-051 Infection Prevention Procedure and Practice Guidelines for Intravenous Access Devices (IVAD)

- Other routes such as intra-arterial, intraosseous, intraventricular, intravitreal, intrapleural and intraocular. If medication is to be administered via specified route, reference should be made to specific Policies and Guidelines used in specific clinical areas. The principles and basic preparation procedures covered in this policy will generally apply.

2.2 This policy does not apply to cytotoxic agents or agents being used in the treatment of malignant disease. Refer to Guideline for safe prescribing, handling and administration of Chemotherapy drugs - SACT and Management Policy for Adult Patients (WAHT-NUR-064)

2.3 This policy does not apply to neonate injectable administration. Refer to West Midlands Neonatal Network Guideline IV fluid therapy and Safe use of Gentamicin in neonate's guideline WAHT-KD-015

2.4 The policy is intended for use by:

- Medical / Dental Officers
- Registered Nurses / Midwives and Registered Nurse Associates
- Registered Allied Health Professionals e.g. Radiographers, Physiotherapists, Paramedics, Operating Department Practitioners
- Advanced Clinical Practitioners
- Students on clinical placements (under supervision by a registered health care professional)
- Any other suitably trained person authorised by the Trust to administer injectable medicines

3 Training and Competencies

The Trust Medicines Policy (section 5.3.4) states that:

'An appropriately trained and authorised member of trust staff who has been assessed as competent to do so safely may administer medicines that have been prescribed by an authorised prescriber to an individual patient. The medicines may only be administered to that named patient. This principle applies to trust staff at all levels'

This applies to medicines given by the injectable route, provided that:

- A training and competency assessment procedure for each staff group to prepare, administer and check injectable medication is approved by the Trust.
- Standard Operating Procedures are in place (see Medicines Policy section 5.3 Administration of Medicines for more details)

The Trust may approve different levels of training and levels of authorisation for different staff groups depending on the needs of the Trust. For example, to authorise Radiographers to administer contrast media or designated and appropriately trained staff to administer an intravenous sodium chloride 0.9% flush.

Registered Nurse Associates are not currently authorised to administer Controlled Drugs by injectable routes.

In order to administer injectable medicines, Registered Healthcare Professionals must have undergone theoretical and practical training as part of a competency assessment. An appropriately trained and competent HCP is able to administer all prescribed injectable medication appropriate to their scope of practice. All HCP will need to undertake a renewable injectable medicines course in line with NMC and HCPC requirements (3 Yearly)

4. Responsibility and Duties

4.1- Directors of Nursing are responsible for ensuring the policy is implemented and monitored safely, and for taking action with matrons and department managers to address and resolve any unsafe practice identified.

4.2- Matrons and Department Managers are responsible for ensuring staff comply with the policy and for investigating and addressing any issues or non-compliance identified.

4.3- Ward Managers, Charge Nurses, Department Leaders and Line Managers are responsible for leading and overseeing local implementation of the policy, ensuring staff (including agency and NHSP) are trained and competent, carrying out risk assessments related to injectable medicines use, providing local induction, and reviewing competency at least every six months.

4.4- Registered Healthcare Professionals are responsible and professionally accountable for managing injectable medicines within their scope of practice, working in line with professional codes and Trust policies, and maintaining validated competence through ongoing training, including the safe use of medical devices.

4.5- Consultants are responsible for ensuring themselves and their medical teams are competent to prescribe, prepare, administer and monitor injectable medicines, and are aware of the risks and responsibilities associated with intravenous therapy, including the use of infusion and syringe pumps

4.6 Agency/NHSP staff who are not employed by the Trust are permitted to administer injectable medicines with the exception of chemotherapy, epidurals and to paediatrics. The HCP must not administer intravenous medication unless they have received additional training and are required to produce evidence of training and competence in the administration of IV therapy. Agency and NHSP staff are accountable for following policy and within their scope of practice.

4.7 Healthcare Support Workers (HCSW) are permitted to administer a single 10ml 0.9% sodium chloride pre-filled syringe device (e.g. Posiflush®) immediately after peripheral cannulation to adults. HCSWs must have attended the Venepuncture & Cannulation course and successfully completed assessed competencies, also refer to WAHT-INF-051 Infection Prevention Procedure and Practice Guidelines for Intravenous Access Devices.

4.8 Student nurses/ midwives/ paramedics.
Students in these roles work under the direct supervision and support of registered practitioners and other allied healthcare professionals. Although student nurses, midwives, and paramedics are not yet professionally registered, they are expected to

meet the same standards of practice as a competent practitioner, within the agreed scope of their role.

Under this policy, students are permitted to:

- Prepare and administer intramuscular (IM) and subcutaneous (SC) injections.
- Prepare but not administer intravenous (IV) medications.

The preparation of IV medications allows students to develop the knowledge and skills necessary to competently undertake medication administration once professionally registered.

All student practitioners must:

- Take responsibility for their actions and maintain up-to-date knowledge and skills to ensure the safe and competent preparation and administration of medications.
- Be assessed and signed off against the Trust Medicines Management Competency Framework by a registered nurse before undertaking any medication administration in practice without a second checker.
- Undertake medicines management competencies as part of their learning, but will not administer medications unsupervised until they are registered practitioners.

Students will not be deemed competent to administer medications in any ward or department outside that in which their competency assessment was completed, unless they undergo further assessment of competence.

Student nurses, midwives, and paramedics may not administer:

- Controlled drugs
- Intravenous medications
-

4.9 Medical students must not perform any clinical skill in practice until they have received formal simulation-based teaching and the skill has been signed off in their PebblePad Clinical Skills Passport. All medical students must comply fully with the Trust Injectable Medication Policy.

When preparing or administering injectable medicines, medical students must be directly supervised by a practitioner who is competent in this skill. Medical students must not act as a second checker under any circumstances.

Medical students must not use medical devices unless both of the following conditions are met:

• they have received appropriate, device-specific training, and
• they are directly supervised by a practitioner who is competent in the use of that device.

.

5. Prescribing

5.1 Medicines should be given by injection only when the use of any other route is clinically inappropriate, practically impossible or unacceptable to the patient. The

necessity for repeated injections/infusions should be regularly reviewed in favour of switching to oral administration as soon as clinically appropriate.

It is the responsibility of all prescribers to:

- Ensure that medicines prescribed are appropriate for the injectable route and for the vehicle of administration, taking into account stability and incompatibility information.
- Chemical symbols must NOT be used e.g. KCl
- Specifiy the dose in approved units i.e. mg, micrograms, units, ml.
- Provide a legal, legible, signed prescription as stated below to enable the drug to be administered safely and correctly.
- Ensure the patient has appropriate intravenous access for intravenous medicines prescribed so they can be administered (refer to WAHT-INF-051 Infection Prevention Procedure and Practice Guidelines for Intravenous Access Devices)
- Be aware of departmental protocols and the role of designated healthcare professionals in the administration of injectable drugs.
- Ensure that no drug is added directly to any blood product.
- Ensure information has been handed over about any new prescriptions that have been written and that have not administered themselves (Medicines Policy 5.3.1.1). Effective communication is especially important with loading doses and subsequent maintenance dose regimens.
- If in doubt, prescribers should seek information from Pharmacy.

5.2 All prescriptions for injectable medicines (including injectables on TTOs) should be written clearly and in accordance with the Trust 'Medicines Policy'. Prescriptions must specify the following:

- Patient's name, date of birth, hospital number, NHS number and weight.
- Prescriber's signature and bleep number.
- The approved medicine name.
- The dose, route, frequency and rate of administration.
- The allergy status of the patient.

5.3 Additional information may be required including the following:

- Concentration or total quantity of the medicine in the final infusion container or syringe.
- Name and volume of diluent and/or infusion fluid.
- Specific route of administration e.g Central IV (CVC, Hickman or PICC)
- Duration of administration.
- The age and weight of any patient under 16 years of age.
- Date on which treatment should be reviewed.
- Arrangements for fluid balance or clinical monitoring should be made on an individual patient basis and according to local protocol and clinical need.

5.4 When two or more prescription charts are in use, it is essential that they be cross-referenced so that practitioners are aware of *all* prescribed medicines (e.g. extra drug charts, insulin, heparin, epidural charts)

5.5 To access technical information, the 'MEDUSA' Injectable Medicines Administration Guide is available at http://nww.worcsacute.nhs.uk/clinical-systems/ , as are the BNF and BNFc. If in doubt, contact a pharmacist for advice

6. Preparation

6.1 Injections should be prepared only by healthcare staff who understand the risks involved. They must have been trained using safe procedures and have demonstrated their competence for the task.

6.2 Preparation should only take place if there is a prescription, a Patient Group Direction or other written instruction available. Essential technical information must be available about the product(s) and processes needed for safe preparation and administration.

6.3 Staff must not prepare substances for injection in advance of their immediate use or administer medication drawn into a syringe or container by another practitioner when not in their presence. Exceptions to this include pharmacy aseptic unit, critical care, theatres or accident and emergency when transferring a critically ill patient for further investigation or treatment. The medications will be checked and prepared by two competent registered practitioners immediately prior to the transfer, during which the syringes will stay with the registered practitioner and must not be left unattended. The syringe must be fully labeled.

6.4 'Open systems' for injectable medicines, including gallipots or other types of open container such as molded plastic procedure trays must not be used. except where a specific procedure has been approved by the Medicines Safety Committee.

6.5 Aseptic Non-Touch Technique (ANTT) should be used during preparation.

6.6 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.

6.7 Administration of infusions prepared in clinical areas should be completed within 24 hours of preparation or sooner depending on the product (refer to preparation information).

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

6.9 Assessing risks when reconstituting injectable medicines – NHS SPS - Specialist Pharmacy Service – The first stop for professional medicines advice

6.11 **Labelling**

6.11.1 All injections, infusions and flushes 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 administration is one uninterrupted process and the unlabeled product does not leave the hands of the person who prepared it. In theatres a scrubbed nurse drawing up and handing a syringe to a surgeon is also considered to be undertaking one uninterrupted process providing the second checker process has been followed. Only one unlabeled medicine must be handled at one time.

6.12 Labelling of Bolus Injections

6.12.1 Critical Care and Theatres use an internationally recognised pre-printed and color coded system.

6.13 Labelling of Infusions

6.13.1 Any intravenous product prepared by adding to an infusion bag/syringe driver must be labelled with the following information, ensuring that no information details/graduation markings are obscured:

- Patient name and date of birth
- Ward/clinical area
- Date of preparation
- Time of preparation
- Medicine name, dose, batch number,
- Medicine Diluent, volume, batch number
- Initials of person preparing
- Initials of person checking
- Expiry date & time of infusion after reconstitution
- Route of administration

6.13.2 Where manufacturer labels are used, the following minimum information must be provided:

- Patient name
- Date of preparation
- Time of preparation
- Expiry time/date
- Drug name
- Concentration (total mass of drug in total volume of infusion)
- The initials of the person preparing
- The initials of the person checking
- Route
- Ward/Clinical area

6.14 Additional Checks

6.14.1 Checking the expiry dates of the medicines to be administered, including, diluents and infusion fluid where used.

6.14.2 Checking the container and fluid show no obvious faults or contamination, this check MUST take place immediately before use. The container should be examined for:

- Cracks
- Faults in the plastic
- Defects in the closure, or other damage.

The injectable medicine should be examined for unexpected:

- Particles
- Cloudiness
- Change in colour

Any suspicion that a medicine may be defective should be discussed with the most senior pharmacist on duty in the supplying pharmacy, or the on-call pharmacist (if urgent) out of pharmacy working hours. (Section 5.3.14 of the 'Medicines Policy').

7. Administration

7.1 Before administering an injectable medicine either a current prescription or PGD should be available.

7.1.1 Before administering any injection check all of the following: 5 rights of medication administration.

- Right Patient
- Right Drug
- Right Dose
- Right Route
- Right Time

Checking of the patient wrist band

- Patient's name,
- Date of Birth,
- Hospital Number or NHS number with the patient and against their wristband (Independent Positive Patient Identification)
- Prescription, including prescriber's signature, dose, time frequency, rate, and route and allergy status.
- *If a patient verbally states they are allergic to a medicine, this must trigger an immediate "stop and clarify" response before administration, unless there is a life-threatening emergency*

7.2 In circumstances where a doctor has prepared and is administering the injectable medicine, a prescription is not required prior to administration. Similarly, when a doctor is administering the medication, a second check is strongly recommended in all but the most time sensitive and emergent situations - this is at the discretion of the individual practitioner, but documentation of medicines given at the time of administration is an absolute minimum.

7.3 The patient's cannula site must be checked prior to intravenous administration and the phlebitis score documented and protocol followed (refer to WAHT-INF-051 Infection Prevention Procedure and Practice Guidelines for Intravenous Access Devices). The cannula should be removed and/or re-sited a as required as per VIP score unless earlier change is indicated by the phlebitis score or clinical need.

7.4 Needle-free devices should be used where possible to reduce the risk of hospital acquired infection. Exceptions may be made in areas such as theatres and endoscopy, where a new cannula is inserted and only used for a minimum length of time and using strict ANTT technique. Following the first stage recovery and where appropriate theatre staff should endeavour to return the patient to a ward area with a needle-free device in situ.

7.5 Aseptic Non-Touch Technique (ANTT) should be used during administration.

7.6 As part of the intravenous administration process, the peripheral cannula/vascular device must be flushed before and after (and between medicines if more than one is administered) with 5 ml of 0.9% sodium chloride. The same applies to central venous access devices, for details refer to WAHT-INF-051 Infection Prevention Procedure and Practice Guidelines for Intravenous Access Devices.

Within WAHT sodium chloride 0.9% and glucose 5% flushes associated with medicines administration (whether ampoules are used or Posiflush®/similar medical devices) are classed as an integral part of the intravenous administration process (in the same way as diluents for the reconstitution of vials/dilution of medicines before administration) and can be administered without a prescription or PGD, provided the person administering them has attended the Trust Injectable Medicines (IV Therapy) Course, completed the associated competency package and follows the procedures in the Injectable Medicines Policy. Signing for administration of the medicine therefore incorporates flushing before and after according to these procedures. Flushes associated with the insertion of a cannula do not need to be prescribed, but the person inserting the cannula must have attended the Trust Venepuncture & Cannulation training course and completed the associated competency package.

However, situations where flushes do need to be prescribed are:

- Where a flush is used containing heparin or any other medicine
- Where a flush needs to be supplied for discharge (NB must be ampoules not Posiflush® as these are not available in primary care)

7.7 The person administering the medicine must make a record of administration as soon as possible after the event. This is extremely important and the healthcare practitioner should exercise vigilance in areas such as theatres and out-patient clinics where the person administering the injectable medicine may also be the prescriber. Exceptions include medicines covered by a PGD or in life threatening situations e.g. for the administration of adrenaline.

7.7 Administration Sets

7.7.1 In all cases the integrity of the packaging and expiry must be checked before use.

7.7.2 The administration giving set should be labelled with the date and time of when it was set up

7.7.3 Set out below are the recommended maximum time limits before administration sets should be changed.

- Every 72 hours for clear fluids
- Every 12 hours colloid and blood products
- Every 24 hours for IV medicine infusions/Parenteral Nutrition (PN). This includes changing the infusion contents.

7.7.4 In all cases where contamination is suspected or the integrity of the product or system has been compromised the set shall be changed immediately.

7.7.5 If a giving set is disconnected from a patient, any remaining solution and giving set must be discarded following the Trust's policy on disposal of clinical waste and a new set attached.

7.7.6 Fluid prescription charts and fluid balance charts must be updated to record actual fluid administered.

7.7.7 Administration sets and unused fluids must be disposed of in accordance with the Trust's Waste Disposal Policy

7.8 It is recommended that all intravenous infusions containing Potassium Chloride are delivered via an infusion device. All potassium infusions with a concentration of more than 40mmol per litre MUST be given via a pump or syringe driver, using a non-return valve if more than one infusion is in progress. (see MedPolSOP23)

8. Checking of injectable medicines.

8.1 A two person check should be exercised during preparation and administration.

5 rights of medication administration.

- Right Patient
- Right Drug
- Right Dose
- Right Route
- Right Time

Checking of the patient wrist band

- Patient's name,
- Date of Birth,
- Hospital Number or NHS number with the patient and against their wristband (Independent Positive Patient Identification)
- Prescription, including prescriber's signature, dose, time frequency, rate, and route and allergy status.
- *If a patient verbally states they are allergic to a medicine, this must trigger an immediate "stop and clarify" response before administration, unless there is a life-threatening emergency*

The checks should be performed by both persons and incorporate positive patient identification. With both registrants' taking equal accountability for the preparing and checking of the patient. The second checker does not have to remain whilst the medication is administered.

8.2 The second checker must be someone who has been assessed as competent to administer injectable medicines, or a pharmacist to second check also at the bedside.

8.3 Second checking is required for all injectable medicines.

8.4 The exceptions to the second checking of administration requirement are:

- Prophylactic dose of a low molecular weight heparin from a single dose pre-filled syringe e.g. Enoxaparin.
- Vaccinations administered by occupational health nurses

- Injectable medicines administered by midwives in an emergency situation or during a home birth when a second person authorised to administer is not present
- Midwifery anti D this is part of blood track and is accepted as second check for blood

Injectable medicines administered by practitioners in an emergency

Any planned variations from this must be approved by Medicines Safety Committee.

8.5 If there are insufficient staff to administer and check according to this Policy, the Assigned Healthcare Professional-in-Charge must be informed at once who must escalate to the Matron or Nurse / Midwife bleep holder if the situation cannot be resolved, and complete a Datix incident report (with subcategory 'Medication issue').

9. Monitoring of the patient

9.1 After administration, if possible, ask the patient to report any soreness at the injection site or discomfort of any sort.

9.2. Sign the chart record on ePMA

9.3 Re-check the administration site for signs of leakage, infection or inflammation and continue to monitor the patient, contents of the infusion container and the rate of infusion according to local policy.

9.4 Check that the arrangements for monitoring fluid balance or clinical parameters have been made. Ensure that relevant documentation is made available for subsequent regular monitoring to take place.

9.5 Infusions should be monitored to ensure safe administration of prescribed treatment. A minimum standard for active infusions recommends monitoring of the patient, the cannula and infusion site, the administration set, and the infusion pump or device on an hourly basis.

10 General Principles

10.1 Most medicines licensed for injectable use are intended for single use only and should not be used more than once. Exceptions include vials of insulin, which contain antibacterial preservatives; even so each vial should be reserved for a single patient (see Medicines Policy SOP MedPolSOP9).

10.2 Two or more medicines should not be mixed together unless the compatibility has been confirmed, by pharmacy or other approved guidelines.

11.0 Medicine Calculations

11.1 The calculation of injectable medicine dosages is a potential source of error. All staff authorised to administer injectable medicines must be satisfied that they have the ability to calculate the medicine dose safely and accurately, using standard formulas where necessary.

11.2 When checking calculations all calculations must be conducted independently and the results of the calculations must correspond. If they do not, calculations must be repeated independently. If there is still a discrepancy between the two

calculations, assistance should be sought from a third authorised person, doctor or pharmacist.

11.3 If there is any doubt, or if the dose seems to require the administration of the contents of more than a stock medicine contact pharmacy to check this is correct.

12.0 Displacement Values

12.1 Where the dose of a medicine is less than a complete vial and the vial require reconstitution, e.g. for paediatrics, it is necessary to take into account the displacement value of the medicine (see MEDUSA at http://nww.worcsacute.nhs.uk/clinical-systems/)

13.0 Supply and Storage

13.1 It is good practice to undertake risk assessments of injectable medicines procedures and products to identify high risks and develop action plans to minimise them.

13.2 A 'Purchasing for Safety' Policy (see MedPolSOP19) is used to promote the procurement of injectable medicines with inherent safety features for example, the purchase of ready-to-administer presentations, where available and necessary to reduce risks.

13.3 Injectable cytotoxic and parenteral nutrition must be supplied to clinical areas only as ready-to-administer products (also see Medicines Policy 5.3.27)

13.4 Epidural infusions MUST be stored in a location separate to intravenous infusions

14.0 Treatment of anaphylaxis during/following injectable therapy

14.1 Anaphylaxis is a severe, life-threatening generalised or systemic hypersensitivity reaction.

14.2 It is characterised by rapidly developing life-threatening airway and/or breathing and/or circulation problems usually associated with skin or mucosal changes.

14.3 All staff must have completed their resuscitation training

14.4 Certain antibiotics, anaesthetic, NSAIDs, aspirin or other drugs have been implicated as triggers.

14.5 Staff should be aware of the signs and symptoms of anaphylaxis and how to access help quickly if required.

14.6 Signs and Symptoms of Anaphylactic Shock include:

- Angio-oedema/laryngeal oedema
- Rash – urticaria/erythema
- Hypotension
- Bronchoconstriction
- Rhinitis/conjunctivitis
- Abdominal pain, vomiting and diarrhoea
- Collapse

14.7 For the treatment of anaphylaxis see **Trust Anaphylaxis Policy WAHT-ANA-012** and www.resus.org.uk for further information.

15.0 Adverse reaction during administration of injectable medicines

15.1 If a patient exhibits any adverse reaction receiving an injectable medicine it must be stopped and the prescriber notified. It should only be continued on his/her decision.

15.2 The prescriber is responsible for taking a full clinical history. List signs, temperature, all medicines and the times and batch number of any infusions given.

15.3 Update the Adverse Medicine Reaction box on the front of the patient's medicine chart and follow Medicines Policy procedure MedPolSOP15- allergy status should also be recorded on EPMA

15.4 If a defect is suspected, ensure the infusion is stopped, retain the remaining infusion/batch and report to Pharmacy for further investigation.

15.5 All suspect containers and accessories should be labelled, quarantined and returned to pharmacy at the earliest opportunity.

15.6 The senior nurse and senior pharmacist on duty (or the on-call pharmacist) should be informed immediately and the procedure MedPolSOP15 followed

16.0 Extravasation

16.1 Extravasation is the inadvertent administration of vesicant drugs or solutions into the surrounding tissues instead of the intended vascular pathway (RCN 2010) Vesicant solutions have the potential to cause blistering and tissue damage which may lead to necrosis and damage to underlying nerves, tendons and blood vessels.

16.2 As the signs of extravasations can occur during or after administration this should be considered when an area of inflammation is identified in a patient who has had a venous access device in situ.

16.3 Extravasation should be suspected if one or more of the following are present:

- Patient complains of burning, stinging or any discomfort at the vascular access device's injection site.
- Inability to aspirate blood from the vascular access device
- Resistance is felt when the drug is given as a bolus.
- There is an obstruction to flow of fluid when an infusion is in progress.
- Swelling or leakage is observed at the injection site.

16.4 Reference should be made to the Extravasation Guidelines NHS England - Guidelines for the Management of Extravasation of a Systemic Anti-Cancer Therapy including Cytotoxic Agents. West Midlands Expert Advisory Group for Systemic Anti-Cancer Therapy (SACT)

16.5 If extravasation is suspected:

- Stop administration IMMEDIATELY leaving the cannula in place (for cytotoxics see relevant Cancer Network Policy
- Inform medical staff immediately
- Elevate limb
- Aspirate the residual medicine through the cannula (medical staff)

16.6 During the day (Mon-Fri) a pharmacist can also contact the medicine manufacturers to check if there is any further information on specific medicines.

16.7 In the case of a severe extravasation where surgical intervention may be needed (e.g. skin breakdown and/or tissue necrosis), the patient's consultant or registrar should be contacted, who may consider a referral to the plastics team at University Hospital Birmingham.

16.8 Document in the patient's notes: Medicine involved and approximate amount, appearance of site, date/time of incident, administration technique, needle size, type and insertion site, patient's symptoms, name of person administering and doctor notified, follow up procedure
16.9 Report as a patient safety incident/Medication issue on Datix.

17. Other Polices to be used in conjunction with

This policy must be used in conjunction with any other relevant Policies, Guidelines or Procedures which include injectable medicines, including:

WAHT Medicines Policy (WAHT- CG-580) and accompanying MedPolSOPs, which describe specific safety measures to be taken with certain higher risk injectable medicines identified locally and/or nationally (including Never Events):

MedPolSOP07 Controlled Drugs Procedure and MedPolSOP8 Controlled drug access list
MedPolSOP09 Supply, Administration, Storage and Transfer/TTOs of Insulin
MedPolSOP14 Policy for reducing the risk of overdose with midazolam in adults
MedPolSOP23 Supply, storage, prescribing and handling of strong potassium infusions and concentrated potassium solutions
MedPolSOP28 Safe management of ONCE WEEKLY Methotrexate (any route) for non-malignancy on acute admission

Other Key Documents:
WAHT Blood Transfusion Policy (WAHT-KD-001)
WAHT-INF-051 Infection Prevention Procedure and Practice Guidelines for Intravenous Access Devices (IVAD)
WAHT Medical Devices Policy (WAHT-CG-022)
WAHT Latex Policy (WAHT-CG-004)
WAHT Treatment of Acute Anaphylaxis Policy (WAHT-TP-108)
WAHT Guideline for the use and monitoring of intravenous unfractionated (UFH) Heparin in Adults (WAHT-HAE-010
WAHT Guideline for safe prescribing, handling and administration of Chemotherapy drugs (WAHT-NUR-064)
WAHT Safe use of Gentamicin in Neonates Guideline (WAHT-KD-015)
WAHT Policy to Identify All Patients (WAHT-CG-019)
WAHT-KD-004 Acute Pain Guideline

NHS England - Guidelines for the Management of Extravasation of a Systemic Anti-Cancer Therapy including Cytotoxic Agents. West Midlands Expert Advisory Group for Systemic Anti-Cancer Therapy (SACT)
Palliative Care Guidelines

Professional Standards:
NMC (2015) The Code: Standards for Conduct, Performance & Ethics for Nurses and Midwives.
NMC (2018) Standards of Proficiency for Nursing Associates
Health and Care Professions Council (2014) Standards of Proficiency for Operating Department Practitioners
Health and Care Professions Council (2014) Standards of Proficiency for Radiographers

18. Implementation of the Policy

18.1 Plan for implementation

This Policy is implemented via publication on the Trust intranet, the Trust Injectable Medicines (IV Therapy) Course and is included in medical staff induction.

18.2 Dissemination
This Policy is available on the Trust intranet.

18.3 Training and awareness

Essential to Role training for injectable medicines is provided for Registered Nurses, Midwives, ODPs and Nurse Associates. Training for medical staff is part of 'Practical skills and procedures' training.

19.0 Monitoring and compliance

Aspect to be monitored	Evidence	Frequency	Individual responsible	Reported to
Ensure all staff who prescribe, prepare, administer and monitor injectable medicines have received training and have the necessary work competencies to undertake their duties safely	**Healthcare professionals preparing and administering injectable medicines:** • Copy of training/competency assessment materials • Dates of training sessions • Evidence accessible through ESR	As per agreed process according to staff group and route of administration.	Line manager	Directorate governance lead
Training for administration of Intravenous therapy	• Records of staff who have received training. • Evidence of completion of post-registration IV training.	Annual	Professional development lead	MSC

	• Evidence of completion of relevant competencies			
Hand hygiene	Ward audits	Monthly	Ward/department managers	TIPCC
Adherence to policy	Monitoring of medicines incidents via review of Datix	Quarterly	Ward/department managers Medicines Safety Officer	Divisional governance and MSC

20. Policy Review

This Policy is reviewed by the Medicines Safety Committee every 3 years, as part of the Medicines Policy Review Process

21. References

DOH Saving Lives – High Impact Interventions nos. 1,2,3 (August 2007)

Dougherty, L and Lister, S (2008) The Royal Marsden Hospital Manual of Clinical Nursing Procedures 7th Edition Oxford: Blackwell Science Limited

Epic2: National Evidence-based Guidelines for preventing healthcare-associated infections in NHS Hospitals in England.

European Oncology Nursing Society 2007 Extravasation Guidelines

Hoctor B (2009) Nurse cannulation: introducing an advanced clinical skill. Nursing Management. 16, 6, 22-30

Ingram P, Lavery I (2007) Peripheral intravenous cannulation: safe insertion and removal technique. Nursing Standard. 22,1, 44-48

Injectable Medicines Administration Guide 2nd edition, Pharmacy department, University College London Hospitals, Blackwell Publishing

Lavery I, Ingram P (2006) Prevention of infection in peripheral intravenous devices. Nursing Standard. 20, 49, 49-56.

MHRA Medical Device Alert MDA/2005/030 All brands of needle-free intravascular connectors
MHRA Medical Device Alert MDA/2007/089 Intravenous (IV) infusion lines: all brands

MHRA Medical Device Alert MDA/2008/016 Needle-free intravascular connectors: all brands
National Patient Safety Agency Patient Safety Alert 'Promoting safer use of injectable medicines' March 2007
National Patient Safety Agency /2010/RRR013 Safer administration of insulin

NHS Improvement (2018) Never Events policy and Framework

NHS Improvement (2018) Never Events List 2018

NHS Improvement (2016) 'Restricted use of open systems for injectable medicines.'

NHS Pharmaceutical Quality Assurance Committee 'Multiple Use of Injections' 3rd edition November 2004

NMC (2018) Standards of Proficiency for Nursing Associates

NMC (2015) The Code: Professional standards of practice and behaviour for nurses, midwives and nursing associates London NMC

NMC (2010) *Standards for Medicines Management. London:NMC*

RCN (2016) *Royal College of Nursing Standards for Infusion Therapy. Fourth Edition*

Royal Marsden Manual

WAHT Medicines Policy WAHT-CG-580

WAHT Blood Transfusion Policy WAHT-KD-001

WAHT Treatment of Acute Anaphylactic Reactions in Adults Policy WAHT-TP-108

NPSA Rapid Response Report RRR018 -Preventing fatalities from medication loading doses (2010)

22. Background

21.1 Equality Requirements
This Policy and Procedures for administration of injectable medicines have been assessed by the Medicines Optimisation Committee as having NO IMPACT on equality and diversity on the grounds of race, religion/belief, or disability and NO IMPACT on Race Relations.

21.2 Financial Risk Assessment
This Policy and Procedures for administration of injectable medicines have been assessed by the Chief Nursing Officer and Medicines Safety Committee as requiring no financial support that is additional to that already in place.

21.3 Consultation Process
This Policy are reviewed and updated by the Medicine Safety Committee, which includes representatives of all professional groups administering injectable medicines are invited to participate.

21.4 Approval Process This Policy and Procedure is approved by the Medicines Safety Committee

Appendix 1

The Procedure for Administering an Intramuscular Injection

Intramuscular injections - Royal Mar

Appendix 2 Procedure for Subcutaneous Injection Administration

Medication_ subcutaneous injectio

Enoxaparin (Inhixa) is also administered via SC with a 90 degree angle as opposed to a 45 degree angle

Appendix 3 The Procedure for Administering Intravenous medication using Aseptic Non Touch Technique (ANTT) Via Direct Bolus.

Intravenous injections and infusions - Royal

Appendix 4 The Procedure for administering Intravenous Drugs using ANTT in an infusion form

Intravenous injections and infusions - Royal

Supporting Document 1 - Equality Impact Assessment Tool

Equality and Health Inequalities Impact Assessment (EHIA) Tool

Herefordshire & Worcestershire STP - Equality and Health Inequalities Impact Assessment (HEIA) Form
Please read HEIA guidelines when completing this form

Section 1 - Name of Organisation (please tick)

Herefordshire & Worcestershire STP		Herefordshire Council		Herefordshire CCG	
Worcestershire Acute Hospitals NHS Trust	x	Worcestershire County Council		Worcestershire CCGs	
Worcestershire Health and Care NHS Trust		Wye Valley NHS Trust		Other (please state)	

Name of Lead for Activity	

Details of individuals completing this assessment	**Name**	**Job title**	**e-mail contact**
	Louise Pearson	**Associate director of nursing workforce and education**	**Louise.pearson11@nhs.net**
Date assessment completed	**6/08/25**		

Section 2

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	**Title: injectable medicines**			
What is the aim, purpose and/or intended outcomes of this Activity?	Safe practice and administration			
Who will be affected by the development & implementation of this activity?	❑ x❑ ❑ ❑	Service User Patient Carers Visitors	❑x ❑ ❑ ❑	Staff Communities Other _____
Is this:	❑x Review of an existing activity ❑ New activity ❑ Planning to withdraw or reduce a service, activity or presence?			

What information and evidence have you reviewed to help inform this assessment? (Please name sources, e.g. demographic information for patients / services / staff groups affected, complaints etc.	Royal Marsden manual
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	Consultation with senior nurses and pharmacy
Summary of relevant findings	

Section 3

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale**. Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Age		x		
Disability		x		
Gender Reassignment		x		
Marriage & Civil Partnerships		x		
Pregnancy & Maternity		x		
Race including Traveling Communities		x		
Religion & Belief		x		
Sex		x		
Sexual Orientation		x		
Other Vulnerable and Disadvantaged Groups (e.g. carers; care leavers; homeless;		x		

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Social/Economic deprivation, travelling communities etc.)				
Health Inequalities (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)		X		

Section 4

What actions will you take to mitigate any potential negative impacts?	Risk identified	Actions required to reduce / eliminate negative impact	Who will lead on the action?	Timeframe
		.		
How will you monitor these actions?	**Training data, hand hygiene audits and datix**			
When will you review this EIA? (e.g. in a service redesign, this EIA should be revisited regularly throughout the design & implementation)	**12 months**			

Section 5 - Please read and agree to the following Equality Statement

1. Equality Statement

1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9 protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation

1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.

1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer's etc., and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

Signature of person completing EIA	Louise Pearson
Date signed	21/05/2026
Comments:	
Signature of person the Leader Person for this activity	
Date signed	
Comments:	

Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	N
2.	Does the implementation of this document require additional revenue	N
3.	Does the implementation of this document require additional manpower	N
4.	Does the implementation of this document release any manpower costs through a change in practice	N
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	N
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval.