Barts Health NHS
NHS Trust

TRUST CORPORATE POLICY
INJECTABLE MEDICINES POLICY

APPROVING COMMITTEE(S)	**Trust Policies Committee**	Date approved:	**3 February 2020**
EFFECTIVE FROM	**Date of approval**		
DISTRIBUTION	**All Clinical Staff**		
RELATED DOCUMENTS	Medicines Management Policy Controlled Drug Policy Patient Group Direction Policy Patient Specific Direction Policy Controlled Drug Policy for Barts Health NHS Staff Working in Operating Departments Adverse Incident Policy Safe Use of Insulin Policy Safe Handling and Management of Sharps Policy Peripheral Venous Cannulation Insertion and Management Policy		
STANDARDS	National Patient Safety Agency: *Promoting safer use of injectable medicines.* Patient Safety Alert 20, 2007; (March 28). The Human Medicines Regulations 2012. Professional Guidance on the Administration of Medicines in Healthcare Settings (RPS/RCN) January 2019. NHS Improvement: *Confirming removal or flushing of lines and cannulae after procedures*. Patient Safety Alert, 9 November 2017. NHS Improvement: *Restricted use of open systems for injectable medication*. Patient Safety Alert, 7 September 2016.		
OWNER	Group Chief Pharmacist		
AUTHOR/FURTHER INFORMATION	Pharmacy Medicines Safety and Governance team and [redacted] (Consultant Anaesthetist)		
SUPERCEDED DOCUMENTS	CLI/POL/097/2015-002		
REVIEW DUE	3 years		
KEYWORDS	Injections, Injectable, intravenous, controlled drugs, medicines,		
INTRANET LOCATION(S)	https://weshare.bartshealth.nhs.uk/trust-wide-policies		
CONSULTATION	*Barts Health*	Education Academy Perioperative Policies and Guidelines Group Nursing, Midwifery and AHP Board Pharmacy Governance Board Medicines Governance Board	

SCOPE OF APPLICATION AND EXEMPTIONS	**Included in policy:** *For the groups listed below, failure to follow the policy may result in investigation and management action, which may include formal action in line with the Trust's disciplinary or capability procedures for Trust employees, and other action in relation to organisations contracted to the Trust, which may result in the termination of a contract, assignment, placement, secondment or honorary arrangement.*
	All Trust staff, working in whatever capacity
	Other staff, students and contractors working within the Trust
	Exempted from policy: **"No staff groups are exempt from this policy".**

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INJECTABLE MEDICINES POLICY

1 INTRODUCTION

1.1 The use of injectable medicines has many healthcare benefits for patients. Injectable medicines are sterile medicines intended for administration by bolus injection or infusion by any route.

1.2 The complexities associated with the prescribing, preparation, and administration of injectable medicines means that there are greater potential risks for patients and staff 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.

2 PURPOSE

2.1 Injectable medicines should be prescribed, prepared, administered, and monitored only by healthcare staff that understand the risks involved, have been trained to use safe procedures, and have demonstrated their competence for the task.

2.2 This policy provides a framework that promotes the principles of the *National Patient Safety Agency (NPSA 2007): Patient Safety Alert 20 – Promoting the Safer Use of Injectable Medicines*, with the aim of reducing the risk to patients, whilst ensuring a consistent approach across the whole organisation.

2.3 The term '***practitioner'*** is used throughout this policy to denote Trust staff with authority to prepare and/or administer injectable medicines within their scope of competency (see Appendix 2).

3 SCOPE

3.1 This policy applies to all practitioners including bank and agency staff involved in the supply, prescribing, preparation, checking, administration and monitoring of injectable medicines in any clinical setting and should be read in conjunction with The Medicines Management Policy.

3.2 This policy excludes the management of the following:

- Cytotoxic Medicines
- Intrathecal Medicines
- Parenteral Nutrition
- Epidural, local anaesthetic infusions, or PCA administration of pain relief
- Intravenous strong potassium
  (See Section 10.5 for sources of information on these routes/ medicines)

3.3 For routes such as intra-arterial, intraventricular, intravitreal, intrapleural, intraosseous, and intraocular, refer to local policy and guidelines specific to the

clinical area. The principles and basic preparation procedures covered in this policy will generally apply.

4 ROLES AND RESPONSIBILITIES

Individual practitioners	• All practitioners should be aware of the Injectable Medicines Policy and where necessary, access the appropriate training and assessment. • All registered practitioners must always work according to their own professional code of practice and the Trust Medicines Management policy. • Every practitioner should take full responsibility for their actions in the preparation and administration of injectable medicines and rigorously apply self-checking. • Every practitioner should ensure incidents and near misses involving injectable medicines are reported via the Trust incident reporting and learning system (Datix).
Ward/Departmental Managers, Matrons, Clinical/Education Supervisors/Line managers	**Ward/Departmental Managers, Matrons and Clinical/Education Supervisors are responsible for:** • Ensuring this policy is implemented across their area of work • Ensuring practitioners in their team required to prescribe and/or administer medicines are competent to do so • Ensuring practitioners in their team are fully aware of the Injectable Medicines Policy and where necessary provide the appropriate training and assessment
Pharmacy staff	**Pharmacy staff will:** • Support and assist practitioners in ensuring the safe prescribing and administration of injectable medicines • Carry out a risk assessment of new injectable medicines prior to their introduction into a clinical area to determine the safest presentation, location for storage, preparation and any mitigating actions
Agency, Bank, and Locum Staff	• Individuals must work within their individual scope of professional practice and Trust policies in relation to medicines use and management.

5 RISK ASSESSMENT OF INJECTABLE MEDICINES

5.1 Monographs to specific medicines and their corresponding risk assessments are available through Medusa.

5.2 The following medicines are always defined as high risk and must not be manipulated outside of the Pharmacy Aseptic Unit:

- Parenteral Nutrition: seals may be broken on Multichamber bags **but additions must not be made on wards or departments.**
- Cytotoxic medicines: shall be provided in a ready to use form.

5.3 Refer to *Appendix 1* for further information on risk assessment of injectable medicines.

6 PRESCRIBING INJECTABLE MEDICINES

6.1 All medicines must be prescribed on Barts Health approved documentation, which may be generated electronically, in accordance with the Trust Medicines Management Policy (refer to Appendix 2 for authority to prepare and administer injectable medicines).

6.2 All prescriptions for injectable medicines must be written in accordance with the Medicines Management Policy. Further information which may be required includes the following:

- Name and volume of diluent and/or infusion fluid.
- Concentration or total quantity of medicine in the final infusion container or syringe.
- Rate, duration and route of administration.
- Stability information to determine the expiry date of the final product.
- Type of rate-control pump or device(s) to be used.
- The age and weight of any patient under 16 years of age, where relevant.
- Date on which treatment should be reviewed.

7 PREPARATION AND ADMINISTRATION OF INJECTABLE MEDICINES

(Refer to Medusa Injectable Medicines Guide – available on WeShare via 'Application')

7.1 **Preparation and administration should only take place if there is**: a ***Prescription***, a ***Patient Group Direction*** *(PGD)*, a ***Patient Specific Direction*** *(PSD)* or other ***written/verbal instruction***; essential information about the product(s) and processes needed for safe preparation and administration are available. In those circumstances where a medical practitioner is preparing and administering the injectable medicine, a prescription is not required (see Section 8.5.3).

7.2 Non-registered clinical support workers (e.g. Health Care Assistants, Assistant Practitioners) must not routinely prepare or administer any injectable medicine

(see Section 9.7 for exceptions). Where there are specific clinical circumstances that require the involvement of non-registered clinical support workers, the arrangement must be formally signed off by the Group Chief Nurse and Group Chief Pharmacist (or delegated authority), endorsed by Medicines Governance Board.

7.3 Practitioners should administer only those injectable preparations that are prepared or witnessed by them. Exceptions to this are:

- Injectable medicines prepared by Pharmacy Aseptic Unit;
- Where an established intravenous infusion is already in situ, provided all have valid prescriptions and appropriate labelling;
- In certain circumstances e.g. in emergency situations, where medicines may be prepared in advance by a suitably qualified practitioner for administration by a medical practitioner, as long as the medicine is appropriately labelled, dated and checked;
- **See Section 8.4.3 for exceptions in areas** where anaesthesia is provided.

7.4 'Open systems' (e.g. gallipots, plastic procedure trays) must not be used as a container for injectable medicines **- with the exception of embolisation procedures involving embolic agents that need to be prepared open[1].**

7.5 Practitioners must ensure that the area in which the medicine is to be prepared is as clean, uncluttered and free from interruption and distraction as possible. Ideally, preparation should take place in an area dedicated to this process.

7.6 Aseptic (non-touch) technique should be used during preparation and administration. Injectable medicines prepared in clinical areas should always be administered soon after preparation. Administration of infusions prepared in clinical areas should be completed within 24 hours of preparation or less depending on product stability (refer to the summary of product characteristics or contact Pharmacy for advice).

7.7 All injectable medicines required for an individual patient, must be prepared and administered before preparing injectable medicines for another patient. Prepared injectable medicines should never be left unattended at the patient's bedside.

7.8 If more than one injectable medicine is required for an individual patient, **all the injections may be prepared and labelled one after the other,** and then administered. The syringes and flushes must be appropriately labelled (see Section 7.11 regarding labelling).

7.9 Injectable medicines should be treated as 'single use' only products unless the product label/ package information indicates that it is for multiple dose use or is prepared in the Pharmacy Aseptic Unit.

7.10 Multi-dose vials are those that contain antimicrobial preservatives as stated on the label or product information and are licensed for multiple use. There has

[1] **Patient Safety Alert: Restricted use of open systems for injectable medication; 7 September 2016, NHS Improvement.**

been a case report of death following the cross-contamination of a multi-dose vial[2]. Preservatives used within the vials will not protect against cross contamination with blood borne infections; therefore the following conditions apply:

- Multi-dose vials/ampoules where used, should be restricted for the use of a single named patient.
- A new, sterile syringe and needle must be used to withdraw each dose.
- Each multi-dose vial/ampoule once opened should be kept refrigerated (unless stated otherwise in the product information) and labelled with the **patient's name, date opened and expiry date using the 'in-use storage' time.** The in-use storage time may be found on the label or in the product information sheet, but if unclear advice must be sought from Pharmacy or Medicines Information. **This 'in-use storage' time is not the same as the expiry date printed on the container.**
- If a container that has been used is not labelled with this information, or if there is doubt about how it has been stored, **it must be discarded**.

7.11 **Labelling**

7.12 All medicine-containing infusions and syringes must be clearly labelled immediately after preparation by the person who prepared them. The only exception to this in general clinical areas is where preparation and bolus (push) administration is one uninterrupted process, and the unlabelled product does not leave the hands of the person who prepared it. As intravenous bolus medicines are usually given using a flush-medication-flush technique, even when only one intravenous medicine is being administered, the flush must be labelled so that the person administering them does not confuse the flush with the medicine.

7.13 When application of the entire label to the syringe is impractical (e.g. small syringes), the label should be applied as a flag referred to as 'flag labelling'. This style of labelling ensures that volume graduations on syringes are not obscured.

7.14 Pre-printed, colour coded and blank drug labels are available via Procurement.

7.15 **Labelling of Bolus Injections**

- Critical Care and Theatres use the internationally recognised colour coded system.

- General wards and clinical areas should prepare blank labels as part of the preparation process and attach to the syringe for differentiation of preparations prior to administration to the patient. The purpose of the label here is simply to identify contents of syringe that are given immediately after preparation (unlike preparation for infusions), therefore information such as diluents used etc. are not required.

[2] **Cousins DH and Upton DR. Medication error report 125: Parenteral vial errors must stop. A patient dies following cross infection with falciparum malaria. Pharmacy in Practice 1999; 9: 220-222.**

7.16 **Labelling of Infusions**

- A white '*Drug Added'* Label must be completed and stuck to the infusion bag, or syringe in a position where it can be read easily. The '*Drug Added*' label **must NOT** be stuck to the infusion device itself.

8 DOUBLE CHECKING OF INJECTABLE MEDICINES

8.1 Provision of an injectable medicine can be divided into two parts: **preparation and administration.** An independent double check is an active process requiring **two people to separately check each component of the process.** It requires a second practitioner to conduct a verification of another practitioner's completed task. The independence of the double check must be maximised to reduce bias i.e. the first practitioner should not communicate what they expect the second practitioner to see.

8.2 It is essential that the second checker understands their role and has the necessary experience a**n**d competence to detect any problem, challenge and intervene as necessary. If this is not the case, the second checker may decline to carry out the task of second checking, stating their reasons.

8.3 The section below specifies the Trust requirements for the **independent double checking** of injectable medicines during the preparation and administration stages.

8.4 **Preparation Check**

8.4.1 Two practitioners working within their sphere of competence must double check preparation of all injectable medicines (**see Section 8.4.3 for exceptions).** The check is to confirm the correct preparation of the correct drug and not to confirm the administration**.**

8.4.2 The preparation check should include confirmation that the correct medicine has been selected, the medicine and all diluent / flushes are in date, the dose matches the prescription, and the correct dilution is performed. It should also include a check that the patient is not allergic to the medicine and any calculations made are correct.

8.4.3 The exception to this is areas where anaesthesia is provided e.g. in Theatres, as anaesthetists generally work single-handedly and practice does not allow for routine double checking of medicines. In such cases (unless specified by another policy e.g. intrathecal policy), preparation and administration by a single medical practitioner (e.g. anaesthetist) is acceptable. The individual however, must be satisfied with his or her competence and be mindful of his/her accountability. **The following conditions apply:**

a) The medicines are drawn up and labelled by the medical practitioner who will administer them. *The medical practitioner at their discretion can delegate the drawing up and labelling of injectable medicines to another competent medical practitioner.* Whilst the task can be delegated, accountability remains with the medical practitioner who administers the medicine.

b) Where a medical practitioner requires that a non-medical practitioner (e.g. ODP) draw up a medicine on their behalf, the medicine must be:

- Checked with the requesting medical practitioner before they are opened
- Drawn up in the presence of the requesting medical practitioner – and checked (medicine, route of administration, diluent, dose, and expiry date) against the original container (e.g. vials) prior to administration

c) All ampoules and syringes should be kept in a receiver (prior to disposal) until they have been recorded by the person who administered the drug or those delegated to do so.

8.5 **Administration Check**

8.5.1 The Trust does not require a second check of the administration of parenteral medicines **(see Section 8.5.4 for areas where it is mandated)** unless this is a legal or specific departmental requirement.

8.5.2 Where administration double check takes place this must include confirmation that:

- The correct patient has been identified for administration,
- The patient is not allergic to the medicine,
- The name of the medicine, form, strength and dose is correct,
- The route of administration is still appropriate,
- The rate is appropriate,
- The time is appropriate and arrangements are in place to monitor the patient and their response throughout the administration of the medicine,
- It must also include a check of any infusion device.

8.5.3 The practitioner administering the medicine should personally make a record of administration as soon as possible after the event. This is extremely important in circumstances such as theatres or outpatient clinics where the person administering the injectable may also be the prescriber and there may be no written prescription, or electronic prescription record.

8.5.4 **Second checks are mandatory at the point of administration of injectable medicines in the following circumstances:**

- Where the administering practitioner requests a second check.
- Where specified by another policy (such as Intrathecal Policy, Cytotoxic Policy etc.).
- All Controlled Drugs - *refer to the Trust Theatre Controlled Drugs Supplementary Policy for exceptions applicable in Operating Departments.*
- All Clinical Trials - *refer to the Medicines Management Policy*
- Administration of blood products.
- Neonates and Paediatrics.
- Where Agency or Bank Nurses are involved in administration, unless they have been assessed by the Trust to have the necessary knowledge and competence to undertake this task without a second check in accordance with Trust policy.
- Local circumstances may also make the involvement of two or more persons desirable in the interest of patient care e.g. complex infusion regimes and calculations, unfamiliarity with medicines/infusion device, new practitioner.

8.6 Areas challenged to adhere with these requirements need to raise concerns through their Clinical Director/Director of Nursing to the Chief Medical Officer and Chief Pharmacist. A risk assessment may need to be completed and acknowledged on the Divisional risk register and mitigating measures considered. A final decision for safe arrangements will be made by the Chief Medical Officer and Chief Pharmacist endorsed by Medicines Governance Board and/or Quality Board.

Emergency Administration of Intravenous Medicines

8.7 The same procedure for checking and preparing intravenous medicines should apply in the emergency and non-emergency situation. Most prescriptions however, will be verbal during these events but should be written up as soon as possible after the event; the prescriber should keep track of the medicines given to the patient. For further guidance see the Trust Medicines Management Policy.

9 STERILE FLUSH PREPARATIONS

9.1 The administration of an intravenous (IV) flush is a routine task associated with the care of patients who have an intravenous access device. The importance of flushing is highlighted in the context of procedural sedation, where residual anaesthetic or sedative drugs may be left in IV lines/cannulae and unless the IV lines or cannulae are effectively flushed or removed at the end of the procedure, there is a risk of inadvertent introduction into the patient's circulation with potentially serious consequence[3].

9.2 There are some circumstances where IV lines must be aspirated before flushing; for example, if a patient has had a suspected allergic reaction to an injection, or if further exposure to the medicine could lead to patient harm (such as an inadvertent sedative bolus following extubation). *See Medusa Injectable Medicines Guide – available on WeShare via 'Application'* for further information on when aspiration may be required before flushing.

9.3 *For a compatible flush, see Medusa Injectable Medicines Guide – available on WeShare via 'Application'.* The most common fluid administered as an IV flush is sodium chloride 0.9%. In some instances, glucose 5% may be used if it is more suitable for use due to compatibility with the IV medicine being administered.

9.4 Both sodium chloride 0.9% and glucose 5% injections are classified as Prescription Only Medicines (POMs) due to their intended IV route of administration. Within the Trust, these drugs are **ONLY** exempt from the POM requirements when:

- **An IV flush of sodium chloride 0.9%** is being used for routine flushing of IV giving sets following insertion of an intravenous access device and at routine time intervals thereafter to maintain patency.
- **An IV flush of sodium chloride 0.9% or glucose 5%** is being used for routine flushing of IV giving sets before and after the completed administration of any

[3] **NHS Improvement Patient Safety Alert: Confirming removal or flushing of lines and cannulae after procedures 9 November 2017**

individual IV medicine. **This flush should be undertaken by the same person that administers the medicine.** The volume of flush administered needs to be sufficient to flush all remaining medicine through the intravenous (IV) lines and cannulae. The minimum volume depends upon the type and size of giving set, type of patient (neonate/paediatric/adult), and type of infusion therapy being given

9.5 This process of not prescribing or recording the administration of IV flush solutions is an **authorised exemption** to the normal practice for all other POMs, as described in the Trust Medicines Management Policy.

9.6 Only IV competent practitioners may administer a sterile flush intravenously as part of medicines administration.

9.7 Non-registered clinical support workers authorised by the Trust to cannulate patients as part of their role can administer boluses of sodium chloride 0.9% to establish **initial** patency of a peripheral intravenous cannula (see Peripheral Venous Cannulation Insertion and Management Policy) if deemed competent to do so. They must undertake training and successfully complete a competency assessment in the administration of intravenous flushes. *Subsequent flushing of cannulae in situ by this group of staff is not permitted.*

9.8 A prescription is not required where pre-filled flush syringes containing sodium chloride 0.9% (with a **CE** mark) are used for its intended purpose. However, conditions still apply on who may administer the medical device (see section 9.6 and 9.7).

9.9 **In all cases, the requirements for double checking of injectable medicines detailed in Section 8 still apply irrespective of whether a pre-filled syringe is used.**

10 INJECTABLE MEDICINES WITH ADDITIONAL RESTRICTIONS

10.1 Inotropes and Vasoactive Drugs Used Outside Critical Care Areas

10.1.1 The use of vasoactive drugs is restricted to designated wards and departments where practitioners have received additional training in their use.

10.2 Radioisotopes

10.2.1 Radioisotopes must only be administered by practitioners in Nuclear Medicine who have competency in handling radiopharmaceuticals and follow regulations to protect themselves, the patient and others from ionising radiation.

10.3 Monoclonal Antibody (MAbs)

10.3.1 These drugs must only be administered by a staff accredited in their administration (*refer to Pan London Guidelines for Safe Prescribing, Handling and Administration of Systemic Anti-Cancer Therapy).*

10.3.2 The Chief Pharmacist supported by the Trust Medicines Safety Committee (MSC), is responsible for agreeing when a MAb product must be prepared in the Pharmacy Aseptic Unit and when it can be prepared on the ward/department.

10.3.3 This determination will be made in accordance with best practice guidance, and must take place before new MAbs are introduced to clinical practice.

10.4 Bolus Intravenous Opioids administration by RNs/RMs

10.4.1 The administration of bolus intravenous opioids by RNs/RMs must only be undertaken by RNs/RMs who have completed the competency framework for intravenous bolus dose administration. It is the responsibility of the RN/RM to ensure that have the necessary theoretical knowledge and skills to provide safe care for patients receiving manual intravenous opiates. This training can be provided by the Pain Management Service or as part of their extended local training programme.

10.4.2 Patients who require manual intravenous opioids on the wards to control their pain should be referred to the Pain Management Service for review.

10.5 Others

10.5.1 Certain groups of medicines or administration routes may not be administered/utilised by medical, nursing, midwifery or allied health professionals except under specific circumstances as per the respective policy. These are:

- Cytotoxic drugs - see *Pan London Guidelines for Safe Prescribing, Handling and Administration of Systemic Anti-Cancer Therapy.*
- Intrathecal drugs - see *Intrathecal Chemotherapy Injections Policy.*
- Patient controlled analgesia - see *Intravenous Patient Controlled Analgesia (PCA) for the Adult patient Acute Pain Clinical Policy* and *Intravenous Patient Controlled Analgesia (PCA) / Nurse Controlled Analgesia (NCA) for Paediatric Patient in Acute Pain – Clinical Practice Policy.*
- Epidurals - see *Clinical Guideline for Continuous Epidural Infusion Analgesia (pre and post operatively) in Adults.*
- Sedation - see *Policy. Local* anaesthetic infusions for peripheral nerve blocks – see *Clinical Guidelines for the Management of Continuous Peripheral Nerve Catheter Local Anaesthetic Infusions for Pain Relief in Adult Patients.*

11 MIXING OF MEDICINE

11.1 Medicines should never be mixed prior to administration or administered via the same line unless stated as compatible by local guidelines, the relevant Trust Preparation Guide, the UK Injectable Guide (Medusa) or local approved policy. Advice can be obtained from Medicines Information (MI) or a Pharmacist in cases of uncertainty.

11.2 The UK Injectable Guide (Medusa) with advice from MI/Pharmacy should be followed to ensure that the medicine is compatible with the infusion

container/administration set and to prevent the inactivation of the medicine by light/heat.

12 MONITORING THE EFFECTIVENESS OF THIS POLICY

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

Issue being monitored	Monitoring method	Responsibility	Frequency	Reviewed by and actions arising followed up by
Incidents involving injectable medicines	On-going review of Datix incidents within the Division and by Pharmacy.	Division Governance and Pharmacy	Findings/themes reviewed at the monthly Medicines Safety and Management Committee (MSMC) and the Division's Governance meetings.	The MSMC is expected to read and interrogate the reports and identify deficiencies in the system. Any deficiencies should be escalated to the Trust Medicines Safety Committee.
Organisational Learning from Medication Errors	Ongoing review of Datix incidents. Themes and findings to the Medicines Safety Committee (MSC). Ad hoc Trust publications (e.g. Medication Safety Alerts, Trust Newsletter). Activity reported to the Trust Medicines Safety Committee (MSC).	Patient Safety Team, Medicines Safety Officer (MSO) and Pharmacy Governance and Safety Team	Findings/themes reviewed at the bimonthly Trust Medicines Safety Committee (MSC).	MSC is expected to read and interrogate the report to identify deficiencies in the system and act upon them. Medicines Safety Committee to produce a highlight report to the Patient Safety Committee.

END

Policy Change Log

Change Log – Injectable Medicine Policy	
SIGNIFICANT CHANGE	**SECTION IN POLICY**
New text has been introduced clarifying the duties and responsibilities of staff groups involved with injectable medicines.	Page 4
Significant change has been made to the double checking requirements. The previous policy mandated the double checking of all injectable medicines during preparation and administration by all practitioners. The revised policy mandates **independent double checking** during preparation with specific exemptions as detailed in the policy and specifically what constitutes a preparation check clarified.	Page 8 to Page 10
Administration check is still mandated in some clinical areas, and these have been listed in the revised policy. Specifically what constitutes an administration check has also been clarified.	Page 9; section 8.5.
Policy update on the single checking of injectable medicines in areas	

where anaesthesia is provided by anaesthetists working single-handedly; clarification of process and conditions applicable.	Page 8
Exemptions have been made to the prescribing of sterile flushes. In the previous policy, practitioners were required to be signed off on a PGD before they were able to administer sterile flushes without a prescription. It is now permissible for sterile flushes to be administered without a formal prescription or administration record being made as part of the routine care of patients. Clarity has been provided around the use of pre-filled flush syringes containing sodium chloride 0.9%.	Page 10; Section 9
Clarification on the labelling of injectable medicines including flushes.	Page 7; Section 7.15
Policy update on practitioners with the authority to prepare and administer injectable medicines have been update	Appendix 2

Impact assessments

Equalities impact checklist - must be completed for all new policies

EQUALITIES IMPACT CHECKLIST

Which groups of the population do you think will be affected by this proposal? **Other groups : All groups**		
	• minority ethnic people (including gipsy/travellers, refugees & asylum seekers	• people of low income
	• women and men	• people with mental health problems
	• people in religious/faith groups	• homeless people
	• disabled people	• people involved in criminal justice system
	• older people, children & young people	• staff
	• lesbian, gay, bisexual & transgender people	• any other groups
	N.B. The word proposal is used below as shorthand for any policy, procedure, strategy or proposal that might be assessed.	What positive & negative impacts do you think there might be? Which groups will be affected by these impacts?
What impact will the proposal have on lifestyles? For example, will the changes affect:		
No impact		
• Diet and nutrition?		
• Exercise and physical activity?		
• Substance use: tobacco, alcohol or drugs?		
• Risk taking behaviour?		
• Education and learning or skills?		
Will the proposal have any impact on the social environment? Things that might be affected include:		
No impact		
• Social status		

• Employment (paid or unpaid)
• Social/family support
• Stress
• Income
Will the proposal have any impact on:
No impact
• Discrimination?
• Equality of opportunity?
• Relations between groups?
Will the proposal have any impact on the physical environment? For example, will there be impacts on:
No impact
• Living conditions?
• Working conditions?
• Pollution or climate change?
• Accidental injuries or public safety?
• Transmission of infectious disease?
Will the proposal affect access to and experience of services? For example:
No impact
• Health care
• Transport
• Social Services
• Housing services
• Education

Equalities Impact Checklist: Summary Sheet

1. Positive Impacts (Note the groups affected)	2. Negative Impacts (Note the groups affected)
Race Equality Does the policy take account of race equality legislation and the Trust's Race Equality Scheme?	See: Race Equality Scheme, Equal Opportunities Policy
Disability discrimination Does the policy take account of DDA legislation?	See: Equal Opportunities Policy, Employment of People with Disabilities Policy
Age discrimination Does the policy take account of relevant legislation?	See: Equal Opportunities Policy, Working beyond Retirement Age Policy
Gender discrimination Does the policy take account of relevant legislation?	See: Equal Opportunities Policy

3. Additional Information and Evidence Required
4. Recommendations
5. From the outcome of the Equalities Impact Assessment, have negative impacts been identified for race or other equality groups? Has a full EQIA process been recommended? If not, why not?

Manager's Signature: [redacted] **Date: 09/10/2019**

Barts Health NHS
NHS Trust

Organisational Impact Assessment

Name of policy	Injectable Medicines Policy				
Date of impact assessment	09/10/2019	**Completed by:**	[redacted]	**Position**	Governance Pharmacist

Area for consideration	**Description of issue**	**Trust contact**	**Policy author description of how issue has been taken into account in the policy/guideline**
Financial impact on Trust	Does the policy impose an additional direct or indirect financial cost on the Trust and how will this be managed?	[redacted]	None
Impact on PFI Service Providers: • Carillion • Synergy • SFS • Other (s5q530	How will the policy impact on the volume/cost of services provided by the Trust's PFI partner and how has this been addressed?	[redacted]	None
Impact on other partner organisations	How will the policy impact on other partners?	[redacted]	None

Additional guidance and information

1) **The following guidance is available via Medusa Injectable Medicines Guide – (No login is required if the direct links on WeShare applications carousel are used)**
https://medusa.wales.nhs.uk/Home.asp
   a. *Adult injectable monographs* (direct link on WeShare applications carousel)
   b. *Paediatric injectable monographs* (direct link on WeShare applications carousel)

2) **Trustwide Policy - Medicines Management Policy**
https://weshare.bartshealth.nhs.uk/download.cfm?doc=docm93jijm4n2148.pdf&ver=2780

3) **Trustwide Policy - Controlled Drugs Supplementary Policy for Staff Working in Operating Departments**
https://weshare.bartshealth.nhs.uk/download.cfm?doc=docm93jijm4n10839.pdf&ver=17664

4) **National Patient Safety Agency: Promoting safer use of injectable medicines. Patient Safety Alert 20, 2007; (March 28).**
https://www.sps.nhs.uk/articles/npsa-alert-promoting-safer-use-of-injection-medicines-npsa-20-2007/

5) **The Human Medicines Regulations 2012**
http://www.legislation.gov.uk/uksi/2012/1916/contents/made

6) **Professional Guidance on the Administration of Medicines in Healthcare Settings (RPS/RCN) January 2019.**
https://www.rpharms.com/Portals/0/RPS%20document%20library/Open%20access/Professional%20standards/SSHM%20and%20Admin/Admin%20of%20Meds%20prof%20guidance.pdf?ver=2019-01-23-145026-567

7) **NHS Improvement Patient Safety Alert: Confirming removal or flushing of lines and cannulae after procedures 9 November 2017**
https://improvement.nhs.uk/documents/1922/Patient_Safety_Alert_-_Confirming_removal_or_flushing_of_lines_and_cannulae_af_EVC1Yb2.pdf

8) **Patient Safety Alert: Restricted use of open systems for injectable medication; 7 September 2016, NHS Improvement.**
https://www.england.nhs.uk/2016/09/restricted-use-open-systems-injectable-medication/

The following guidance is available via BHFileshare > Shared Documents > All Trust >

9) **Intrathecal Chemotherapy Injections Policy**
http://rl1vmsps02/BHFileshare/Shared%20Documents/All%20Trust/Pharmacy%20Intranet/Chemotherapy/Policies%20and%20Guidelines/Intrathecal%20Chemotherapy%20Policy/Intrathecal-chemotherapy-injections-(adult).pdf

10) **Pan London Guidelines for Safe Prescribing, Handling and Administration of Systemic Anti-Cancer Therapy**
http://rl1vmsps02/BHFileshare/Shared%20Documents/All%20Trust/Pharmacy%20Intranet/Chemotherapy/Policies%20and%20Guidelines/Cytotoxic%20Policy/London%20Cytotoxic%20Policy%20July%202019%20V3.pdf

11) **Intravenous Patient Controlled Analgesia (PCA) for the Adult patient Acute Pain Clinical Policy**

http://rl1vmsps02/BHFileshare/Shared%20Documents/All%20Trust/Policies%20and%20Procedures/Surgery/Anaesthesia%20-%20RLH%20and%20Barts/Pain/Intravenous-Patient-Controlled-Analgesia-(PCA).pdf

12) **Intravenous Patient Controlled Analgesia (PCA) / Nurse Controlled Analgesia (NCA) for Paediatric Patient in Acute Pain – Clinical Practice Policy.**
http://rl1vmsps02/BHFileshare/Shared%20Documents/All%20Trust/Pharmacy%20Intranet/Paediatric%20Pharmacy/Guidelines/Pain%20+%20Anaesthetics/Pain/Intravenous-Patient-Controlled-Analgesia-(PCA)--NCA-Policy.pdf

13) **Clinical Guideline for Continuous Epidural Infusion Analgesia (pre and post operatively) in Adults**
http://rl1vmsps02/BHFileshare/Shared%20Documents/All%20Trust/Clinical%20Guidelines%20Hyperlinks/019-2018-001-Management-of-Continuous-Peripheral-nerve-catheter-anaesthetic-infusions-for-pain-in-adult-patients.pdf

14) **Clinical Guidelines for the Management of Continuous Peripheral Nerve Catheter Local Anaesthetic Infusions for Pain Relief in Adult Patients.**
http://rl1vmsps02/BHFileshare/Shared%20Documents/All%20Trust/Clinical%20Guidelines%20Hyperlinks/019-2018-001-Management-of-Continuous-Peripheral-nerve-catheter-anaesthetic-infusions-for-pain-in-adult-patients.pdf

13 APPENDIX 1 RISK ASSESSMENT OF INJECTABLE MEDICINES

13.1 A new risk assessment may be required for new injectable medicines and existing injectable medicines (for example, following review of clinical incidents, or in response to a national patient safety alert) to determine the safest presentation and location for storage and preparation in the clinical area. It is the responsibility of Pharmacy to complete this risk assessment (templates are available from Medicines Information or Pharmacy Formulary Lead).

13.1 Monographs to specific medicines and their corresponding risk assessments are available through Medusa.

13.2 Based upon risk assessments the preparation of medicines may be restricted to specified areas and accredited individuals. Ready-to-administer or ready-to-use products should be stocked in all clinical areas in preference to products *needing preparation for use and classified as high-risk.*

13.3 **Formulary applications for injectable medicines must be accompanied by a risk assessment. The Clinical Pharmacist supporting the formulary application is responsible for completing the risk assessment in conjunction with the Formulary Lead.**

13.4 The risks associated with an individual product will vary dependent upon a number of factors. These will include:

- Therapeutic Risk – significant risk of patient harm if the medication is not used as intended.
- Use of a concentrate – where further dilution after reconstitution is required before use (i.e. slow IV bolus not appropriate).
- Complex calculation – Any calculation with more than one step required for preparation or administration e.g. mcg/kg/hr, dose unit conversion e.g. mg to mmol.
- Complex method – More than 5 non- touch manipulations involved or others including syringe-to-syringe transfer, preparation of a burette, use of a filter.
- Reconstitution of a powder in a vial – where dry powder has to be reconstituted with a liquid.
- The use of part or multiple ampoules or vials.
- Use of a pump or syringe driver – all pumps and syringes require some calculation so can be a source of error, however this risk is less significant than the risks of not using a pump when indicated.
- Use of non-standard giving set – e.g. light protected, low adsorption, in-line filter or air inlet.

14 APPENDIX 2 AUTHORITY TO ADMINISTER INJECTABLE MEDICINES

The following practitioners are authorised by the Trust to prepare and administer injectable medicine (or a restricted range of medicines as specified below) against valid written instructions providing they have the relevant underpinning knowledge and competencies to do so and administration is in accordance with the standards set out in this policy.

STAFF GROUP	AUTHORITY TO ADMINISTER INJECTABLE MEDICINES
It is the responsibility of line managers to ensure that staff participating in administration of medicines, are competent to do so. All training and assessment of competency to administer intravenous medicines must include training and assessment of aseptic non-touch technique.	
Doctors (including locum doctors)	Foundation Year 2 and above can prescribe, prepare and administer injectable if the clinician feels they are competent to do so. Foundation Year 1 doctors by virtue of their training and qualification, are deemed competent to **administer** injectable medicines by any route when their competence has been demonstrated and assessed. However, all Foundation Year 1 doctor must undergo Trust approved IV training and assessment before administering any IV medicine.
Registered Nurses and Midwives	Registered nurses/midwives can administer injectable medicines via the subcutaneous and intramuscular routes, in accordance with current competency. Only registered nurses/midwives (including newly qualified) who have successfully completed the Trust IV training and assessment to the required level including requisite e-learning, may prepare and administer medicines via the peripheral intravenous route. Central line administration of injectable medicines is only permissible after completion of training and local competency assessment. Registered Staff Nurses/Midwives that have attended this training and had competency assessment carried out at different Trust need to present their competency assessments (Capital Nurse Passport) to their Practice Development Nurse/ Midwife (PDN/M) or their Line managers. Decisions will be made on an individual basis as to what training and assessment each practitioner will require. All agency and bank nurses/midwives **must be deemed** competent by a qualified, permanent registered nurse/midwife prior to preparing and administering IV drugs within the trust. Part of this assessment will include reviewing any evidence of previous education and training the nurse has already had prior to working for the trust.
Registered Operating Department Practitioner (RODPs)	RODPs are authorised to administer injectable medicines in accordance with the standards set out in this policy. Only RODPs who have successfully completed the Trust IV training and assessment to the required level including requisite e-learning, may prepare and administer IV medicines within their scope of practice and as defined by departmental protocol.
Student nurses and Student midwives	Student nurses or student midwives can participate in the preparation and administration of intramuscular and

STAFF GROUP	AUTHORITY TO ADMINISTER INJECTABLE MEDICINES
It is the responsibility of line managers to ensure that staff participating in administration of medicines, are competent to do so. All training and assessment of competency to administer intravenous medicines must include training and assessment of aseptic non-touch technique.	
	subcutaneous injections **under the direct and continuous supervision** of a designated registered nurse or midwife who is competent at this skill. ***This designated registered nurse or midwife is responsible for the correct preparation, administration and documentation of medicines administered.*** Student nurses or student midwives in the final year of their programme who successfully pass the theoretical medicine management module can prepare, and administer intravenous therapy **for peripheral use only under the direct supervision** of a designated registered nurse or midwife who is competent at this skill. ***This designated registered nurse or midwife is responsible for the correct preparation of medicines administered.*** A student nurses/midwives cannot participate in the administration of intramuscular injections (when it forms part of rapid tranquilisation) or cytotoxic medicines.
Trainee Nursing Associate	Trainee Nursing Associate can participate in the preparation and administration of subcutaneous and intramuscular injections **under the direct and continuous supervision** of a designated Registered Nurse who is competent at this skill. **This designated registered nurse is responsible for the correct administration and documentation of medicines administered.** A Trainee Nursing Associate cannot participate in the administration of intramuscular injections (when it forms part of rapid tranquilisation) or cytotoxic medicines.
Nursing Associates	Registered Nursing Associates can administer injectable medicines via the subcutaneous and intramuscular routes, in accordance with current competency.
Radiographers	Registered radiographers may administer a restricted range of intravenous injections as part of radiological procedures following successful completion of either • The in- House training pack and competency assessment for the preparation, administration and monitoring of peripheral intravenous drugs **OR** • The Society of Radiographers (SOR) nationally accredited course and holds the Certificate of IV Administration
Nuclear Medicine Technologists	• Appropriately trained and competent Nuclear Medicine Technologists Clinical Technologists (CTs) are authorised to administer a selected range of medicines and radiopharmaceuticals, and to double-check each other without the involvement of a registered member of staff in accordance with practice detailed in the Nuclear Medicine Department's protocols. • May administer intravenously as defined by departmental protocol, or otherwise prescribed by a holder of an Administration of Radioactive Substances Advisory Committee (ARSAC) certificate specific to the Trust (or someone working under his/her written direction) pre-prepared radio labelled pharmaceuticals and any

STAFF GROUP	AUTHORITY TO ADMINISTER INJECTABLE MEDICINES
It is the responsibility of line managers to ensure that staff participating in administration of medicines, are competent to do so. All training and assessment of competency to administer intravenous medicines must include training and assessment of aseptic non-touch technique.	
	other medicines required for nuclear medical imaging or therapeutic procedures.
Clinical Perfusion Scientists (Perfusionists)	• Clinical perfusion scientists (perfusionists) are specialist autonomous practitioners involved in the management of patients undergoing cardiac surgical procedures. • Qualified perfusionists employed by Barts Health NHS Trust must be registered with the College of Clinical Perfusion Scientists of Great Britain and Ireland. • Clinical perfusionists at Barts Health NHS Trust work under delegated authority from the Cardiology Clinical Director/Trust following detailed guidance and working to competencies as outlined in the local agreement and Clinical Perfusion Medicines Management Protocols for Patients Undergoing Cardiac Surgery. This trust-approved protocol stipulates the range of medicines, which can be administered, and in what circumstances.
Extended Scope Physiotherapists (ESP)	ESPs are authorised to administer injectable medicines: • in accordance with the standards set out in this policy, • must have completed an approved training course in injection therapy, • and have been assessed as competent to administer injections under locally ratified PGDs and PSDs.
Occupational Therapists	Occupational Therapists are authorised to administer injectable medicines: • in accordance with the standards set out in this policy, • must have completed an approved training course in injection therapy, • and have been assessed as competent to administer injections under locally ratified PGDs and PSDs.
Other Registered or Unregistered Health Care Professionals	If required for service delivery and quality care, it is permissible that other professional groups of registered or unregistered practitioners may be trained to administer intravenous medicines within an agreed protocol. **This can only be done after arrangement of relevant bespoke training and competency assessments endorsed by Medicines Governance Board.**