Kent and Medway
NHS and Social Care Partnership Trust

Safe Administration and Monitoring of Injections Policy (incorporating Standard Operating Procedures)

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DOCUMENT TRACKING SHEET

Safe Administration and Monitoring of Injections Policy (incorporating Standard Operating Procedures)

Version	Status	Date	Issued to/approved by	Comments
0.1	Draft	04/10/2022	Drugs and Therapeutics Committee	Approved
1.0	Final	03/11/2022	Trust Wide Patient Safety and Mortality Review Group (TWPSMRG)	Approved
1.1	Draft	07/02/2023	Drugs and Therapeutics Committee	Approved
2.0	Final	02/03/2023	Trust Wide Patient Safety and Mortality Review Group (TWPSMRG)	Approved

REFERENCES

RELATED POLICIES/PROCEDURES/protocols/forms/leaflets

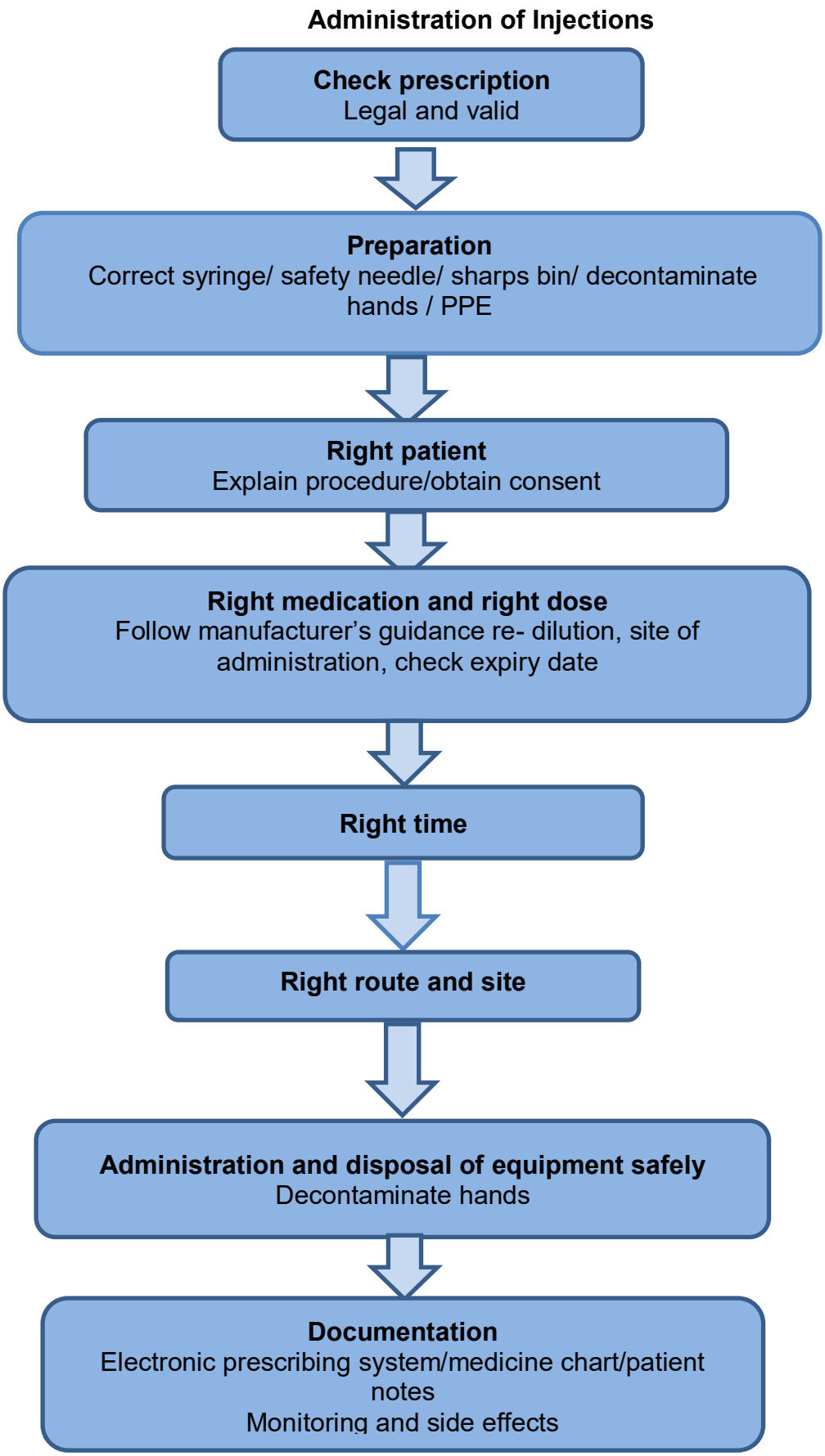
Safe Administration and Monitoring of Intra Muscular Injection (IMI) Medication within Community Settings Policy	KMPT.CliG.0123

SUMMARY OF CHANGES

Date	Author	Page	Changes (brief summary)
07/02/23	Jag Bahia Chief Pharmacist	17	New point 9.2- If the prescription is completed in word then it should be converted to PDF and then signed by the doctor using a handwritten signature or electronic signature which cannot be edited.
07/02/23	Jag Bahia Chief Pharmacist	24	Appendix D updated with the GASS score reflecting the national scoring system
June 2024	Medicines Quality and Safety Officer		Appendix F updated to current Appendix C updated (additional guidance added for community)

CONTENTS

1 POLICY AT A GLANCE



2 DEFINITIONS & KEY TERMS

Term	Definitions/Explanation
Deltoid Site	Situated on the lateral upper aspect of the arm
Dorsogluteal site	The injection is administered into the gluteus maximus muscle in the buttock and can be referred to as the gluteal region. The upper outer of the upper outer quadrant of this area must be used to avoid any damage to the sciatic nerve.
DTC	Drugs and Therapeutics Committee
Intramuscular injection	Introduction of medicine into a muscle using a needle and syringe. The four main sites are: ventrogluteal; dorsogluteal; vastus lateralis and deltoid.
LAIs	Long acting injections
Off-label use	Medicine that is being used in a way that is different to that described in the licence i.e. prescribed for a different illness to that stated in the licence, using a medicine in an age group outside the licensed range and medicine prescribed at a high dose then sated in the licence
Registered nursing staff	A nurse or nursing associate registered with the Nursing and Midwifery Council (NMC)
SOP	Standard Operating Procedure
Unlicensed use	Medicine has a license in other countries but not in the UK. i.e. preparing liquid for someone who has difficulty swallowing using the licensed tablets.
Vastus lateralis site	Situated on the lateral aspect of the outer thigh.
Ventrogluteal site	Situated on the gluteus medius muscle and referred to as the hip site
Z track method	Z-Track method of intramuscular injection is used to administer medication in a large muscle that prevents the leakage of the medicine into the subcutaneous tissue or being visible on the surface of the skin. It is called Z-track because during the techniques of this medication administration the target area is pulled taut to one side and is responsible for sealing the medication in the muscles.

3 INTRODUCTION

3.1 This guidance is intended for all practitioners, working within Kent and Medway NHS and Social Care Partnership Trust who undertake the administration of injections, and for nurses and nursing associates in training supervised by a registered practitioner. Guidance is given on issues such as injection preparation, consent, how to help prepare the patient, administration and the monitoring and evaluation of possible side effects.

4 DUTIES AND RESPONSIBILITIES

4.1 Injections must only be administered by a Registered Nurse, Registered Nursing Associate or Doctor who has been verified as competent in the administration of this medication. (Student nurses and trainee nursing associates may carry out this procedure under the direct supervision of a Registered Nurse).

4.2 Staff administering injections are responsible for ensuring that their knowledge is up to date with respect to this injectable medicine guidance and associated policies regarding the use of the medicines. Staff are legally accountable for administering the medication correctly. Staff administering injections are required to complete annual medication competency assessments.

4.3 Each profession's Code of Professional Conduct will indicate what is expected from practitioners to satisfy their continuous professional development requirements with regards to injectable medicines.

4.4 Any staff member who does not feel competent in any aspect of the administration of injectable medicines must not perform these tasks until they are confident about their competence.

5 PURPOSE & SCOPE

5.1 The purpose of this guidance is to ensure evidence-based practice is used in the administration of injections, minimising harm to patients and professionals involved and promoting safe practice. It offers clear guidance to practitioners about the appropriate techniques, endorsed by the Trust, in the light of recent research.

6 GUIDANCE

6.1 All injections are more invasive than oral medicines; there are greater potential risks with their use. Safe and consistent systems of working should help reduce those risks. This document offers guidance on intramuscular and subcutaneous injections' preparation, obtaining patient consent and how to help prepare the patient and medicines for administration. It will assist appropriate decision-making and reflects the degree of expertise the mental health practitioner requires in terms of clinical and decision-making skills. Intravenous injections may only be administered and monitored by competent medical staff.

6.2 Based on clinical judgement and in the best interests of an individual service user, there may be rare occasions when a practitioner considers it necessary to work outside these guidelines. There must first be a multidisciplinary review incorporating a robust risk assessment, which is fully documented and reviewed at regular intervals. Safe systems of working and effective medicines management are a shared responsibility. Weaknesses in the medicines management system and other medicines incidents must be reported, in accordance with the Trust's Incident Reporting Policy.

6.3 When prescribing an unlicensed medicine, clinicians must:

a) The legal responsibility for prescribing a non-licensed medication falls to the prescriber

b) The prescriber must be satisfied that there is sufficient evidence or experience of using the unlicensed medicine to demonstrate its safety and efficacy

c) The prescriber must take responsibility for prescribing the medicine and for overseeing the patient's care, monitoring and any follow up treatment, or make sure that arrangements are in place for another suitable prescriber/clinician to do so

d) clinicians/prescribers should make clear why a licensed medication is not used.

e) Patients (and carers) should receive sufficient information to allow them to make an informed decision whenever this is feasible.

f) The clinician/prescriber must communicate to GP and other clinicians responsible for that patient the rationale for using an off-label or unlicensed medication. (Note: off-label use means that the medicine is being used in a way that is different to that

described in the licence i.e. prescribed for a different illness to that stated in the licence, using a medicine in an age group outside the licensed range and medicine prescribed at a high dose then sated in the licence. Unlicensed use means a medicine has a license in other countries but not in the UK. An example of unlicensed medicine use will be clozapine IM.

6.4 The injectable medicines guide ('Medusa') should be used as a reference source for information on administering specific medicines. This is available on the KMPT pharmacy service homepage under external links Additional information can be obtained from the individual manufacturers via www.medicines.org.uk/emc.

6.5 The medication incidents groups and D&T group undertake an annual risk assessment of injectable medicines used within the Trust to identify high risk medicines and procedures, and put in place processes to minimise risk.

6.6 Maintain patient dignity by ensuring area is private when administering depot and consider the necessity for a hospital gown if required.

6.7 **Administration of Injections**

6.7.1 Administration of injected medicines must comply with the standards set out in this policy. Administration instructions specified by the manufacturer should be followed.

6.8 **Sites of administration of intramuscular injection**

6.8.1 All injections must be administered in accordance with the manufacturer's instructions and within the terms of the medication license. Where injections are administered outside these recommendations, refer to the Trust formulary.

Volume range for effective muscle absorption for aqueous/ water-based preparations		
Injection Sites	**Typical range and maximum volume cited in the nursing literature e.g.**	**Muscle Used**
Deltoid Injections into the mid deltoid muscle produce a quick uptake of the medicine. The maximum which can be safely injected is unknown and based on opinion. Common practice is to use this site for small-volume injections such as vaccinations.	0.5-2ml	Deltoid
Dorsogluteal The dorsogluteal site, colloquially called the 'upper outer quadrant' of the buttocks, targets the gluteus maximus muscle and is commonly used for high-volume injections. When this site is used, there is a risk that the medicine will not reach the target muscle, but instead will be injected into subcutaneous fat. As a result, delayed uptake of the medicine may occur and tissue irritation or the development of granulomas can result. The clinical significance of delayed uptake is currently	1 to 4 ml Exceptions include Pabrinex Intramuscular High Potency Injection which requires a 7 ml injection high into the gluteal muscle, 5cm below the iliac crest.	Gluteus maximus

unknown. 38 mm needles should generally be used but may not reach the gluteal muscle in overweight women (BMI ≥25) or obese (BMI ≥30) patients of any gender. If a patient is obese, a 51mm needle or alternative injection site should be considered if available within the product licence (and dose pack). Additionally, the system of visually bisecting the buttocks to landmark the site is flawed and can result in damage to the sciatic nerve or gluteal artery, both of which lie a few centimetres distal to the dorsogluteal injection site. There may also be modesty issues associated with the use of this site.		
Vastus lateralis (lateral thigh) This site sits on the lateral (vastus lateralis) aspect of the thigh, part of a group of large, well-defined muscles in non-atrophied patients, the quadriceps femoris. Injections into this muscle produce a slower uptake of the medicine compared to the deltoid, but faster than gluteal muscles. The site is easy to access. Femoral nerve injury due to inaccurate landmarking of the vastus lateralis site is rare but has been reported for analgesic injections post thigh surgery.	1 to 5 ml	Vastus lateralis
Ventrogluteal There are few disadvantages to using this site. It is relatively free of major nerves and blood vessels, the muscles are large and well defined, and the landmarks for administration are easy to locate. Although it was once believed an additional advantage of this site was consistency of fat depth, original studies were in cadavers and more recent ultrasound research into obese men and women have found significant differences in fat depth here. There may be modesty issues associated with the use of this site.	2.5 to 5 ml Exceptions include Pabrinex Intramuscular High Potency Injection which requires a 7 ml injection high into the gluteal muscle, 5cm below the iliac crest	Gluteus medius and minimus

From Guidance on the Administration to Adults of Oil-based Depot and other Long-acting Intramuscular Antipsychotic Injections 7th Edition (accessed August 2022)

Maximum Volume for Oil-based Depot Administration into a Single Site		
Generic Name	**Brand/Trade Name**	**Max Volume**
Flupentixol decanoate 20 mg in 1 ml	Depixol Injection	3 ml
Flupentixol decanoate 100 mg in 1 ml	Depixol Concentrate	2 ml
Flupentixol decanoate 200 mg in 1 ml	Depixol Low Volume Injection	2 ml
Haloperidol decanoate 50 mg in 1 ml	Haldol Decanoate 50 mg in 1 ml	3 ml
Haloperidol decanoate 100 mg in 1 ml	Haldol Decanoate 100 mg in 1 ml	3 ml
Zuclopenthixol decanoate 200 mg in 1 ml	Clopixol Injection	2 ml
Zuclopenthixol decanoate 500 mg in 1 ml	Clopixol Concentrate Injection	2 ml

From Summary of Product Characteristics. Available from www.medicines.org.uk (accessed August 2022

It is important to evaluate the injection site pre and post injection observing for any swelling, pain, inflammation, infection or tissue viability damage. If any of these are present this must be recorded in the patient's notes and discussed with the medical team.

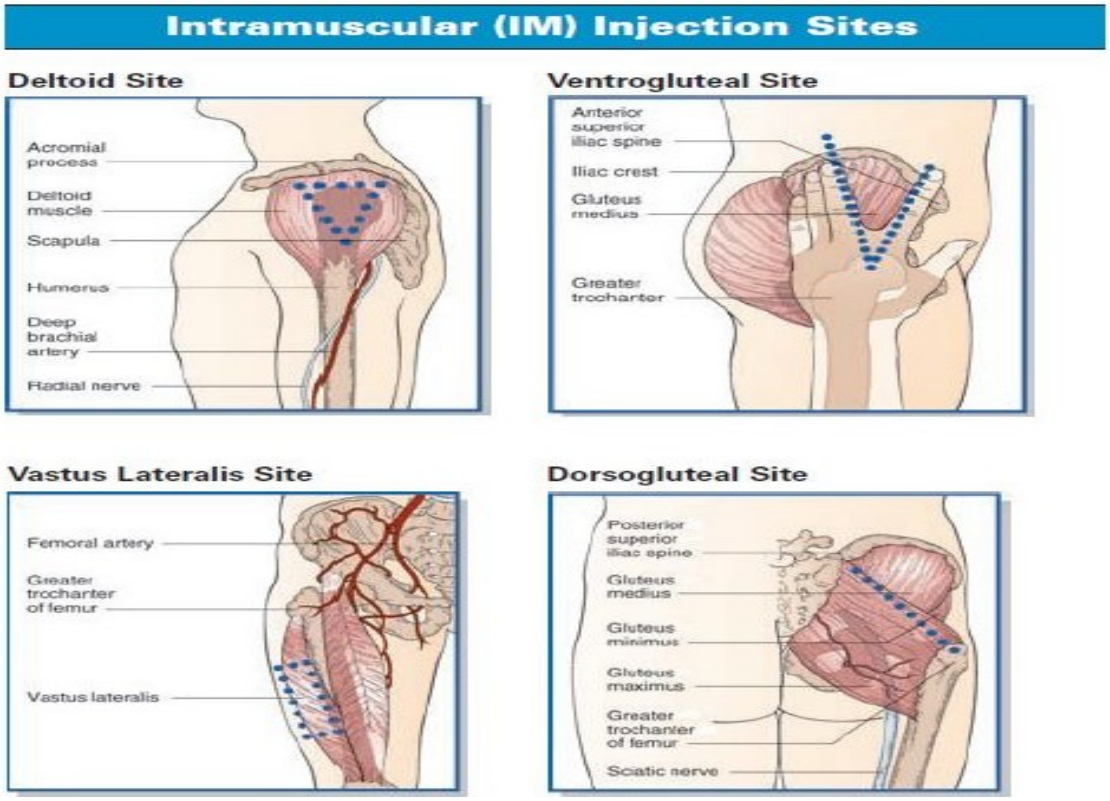


Figure 1a

Sites of administration for Rapid Tranquilisation

Medication and volume of Injection	Intramuscular site and volume range for effective muscle absorption			
	Dorsogluteal	Ventrogluteal	Deltoid	Vastus lateralis
Lorazepam See Summary of Product Characteristics (SPC) from the manufacturer as the volume will depend on the strength and brand of lorazepam				
Promethazine 25mg: 1ml 50mg: 2ml				
Aripiprazole 7.5mg: 1ml 9.75mg: 1.3ml				
Haloperidol 5mg: 1ml				
Olanzapine 5mg: 1ml 10mg: 2ml				

	Licensed administration site
	Unlicensed administration site – off label if utilised

Procyclidine injection can be administered into any of the above muscles (5mg = 1ml)

6.9 **(Depots /LAI)**

The main injection site for administration of most antipsychotic long acting injections (LAI/depots) has historically been predominantly the gluteal muscle. This can be the **Dorsogluteal (upper outer, upper outer quadrant of the buttock) However it is now important to ensure that the patient is offered choice of injection site based on the licence of the injection, also weight and BMI into consideration and** LAIs may be licenced for administration at other sites (Fig 1) such as **Deltoid (upper arm)** the **Vastus Lateralis (middle side aspect of the thigh) and ventrogluteal sites.**

The availability of a long-acting intramuscular antipsychotic injection which is licensed to be given at sites other than the gluteal sites requires both confidence and competence on the part of the registered practitioner.

Medicines	Trade Name (& other details)	Licenced injection site	Test dose requirements
Flupentixol decanoate	Depixol®	Dorsogluteal Vastus Lateralis	Test dose **20mg** **(**> 65 years test dose should be **10mg**) (allow 1 wk before re-administrating)
Zuclopenthixol decanoate	Clopixol®	Dorsogluteal Vastus Lateralis	Test dose **100 mg** (reduce to a quarter or half the normal dose in the frail or patients >65 years)
Haloperidol decanoate	Haldol®	Dorsogluteal Ventrogluteal	Test dose **25mg** (> 65 years test dose should be **12.5mg**) **A baseline ECG is recommended prior to treatment in all patients. During therapy, the need for ECG monitoring for QTc interval prolongation and for ventricular arrhythmias must be assessed in all patients. Whilst on therapy, it is recommended to reduce the dose if QTc is prolonged, but haloperidol must be discontinued if the QTc exceeds 500ms**.
Risperidone Microspheres	Risperdal Consta®	Dorsogluteal Deltoid	Patient should be stabilised on oral risperidone with evidence of efficacy and tolerability
Paliperidone Palmitate	Xeplion® (pre-filled syringe) Trevicta® (pre-filled syringe)	Dorsogluteal Deltoid	Patient should be stabilised on oral risperidone with evidence of efficacy and tolerability No IM Test dose

			Initially **Day 1** -150mg into deltoid muscle **Day 8** – 100mg into deltoid muscle **Day 36** – maintenance dose into deltoid or gluteal muscle (Doses should be reduced in renal impairment. Please consult Summary of. Product Characteristics (**SPC**) from the manufacturer before prescribing.)
Olanzapine pamoate	Zyphadera® (Powder & solvent)	Dorsogluteal	Patient should be stabilised on oral olanzapine with evidence of efficacy and tolerability. See SPC and trust guidance on Olanzapine long acting injection (LAI) as starting dose will depend on target oral dose
Aripiprazole	Abilify Maintena® (Powder & solvent)	Dorsogluteal Deltoid	Patient should be stabilised on oral aripiprazole with evidence of efficacy and tolerability No IM Test dose One injection start: Day 1: 400 mg and continue 10 mg to 20 mg oral aripiprazole per day for 14 consecutive days. Two injection start: Day 1; two separate injections of 400 mg at separate injection sites (i.e. different limbs) along with one 20 mg dose of oral aripiprazole.

For olanzapine pamoate long acting injection the patient should be monitored for 3 hours after the injection due to the risk of post injection syndrome. Only sufficiently trained staff who have completed the manufacturers online training can administer this injection.

If administering the first or second dose of a new antipsychotic depot/LAI medication the staff administering must ensure that there is adrenaline available, in case of anaphylaxis, and must have completed the anaphylaxis training.

In order to avoid breaks in efficacy with second generation antipsychotic injections, it is important to ensure that the adequate shaking time as part of the preparation process is performed as per manufacturer's guidelines.

6.10 **Neuroleptic-induced extrapyramidal symptoms**

First generation antipsychotics are more often associated with extrapyramidal side effects and a higher risk of tardive dyskinesia than second generation antipsychotics.

Dystonia Muscle spasm can occur in any part of the body, occurs in approximately 10% of patients, but more common in young males. Treated with anticholinergic drugs given orally or IM depending on the severity of symptoms. Review antipsychotic to reduce dose/switch to different drug.

Pseudo-parkinsonism (tremor and/or rigidity) Occurs in approximately 20% of patients, but more common in elderly females Treatment options are: - anticholinergic drugs -change to an antipsychotic less likely to cause this side effect -reduce the dose of the antipsychotic

Akathisia (restlessness) Occurs in approximately 25% of patients, unpleasant feeling of inner restlessness/urge to move/rocking/lifting feet. Treatment options are: - reduce the dose of the antipsychotic - change to an antipsychotic less likely to cause this side effect - propranolol 30 – 80mg daily may help.

Tardive dyskinesia (abnormal movements) Symptoms include lip smacking or chewing, tongue protrusion, choreiform hand movements, dystonic movements of limbs. Occurs in 5% of patients per year of antipsychotic exposure. Stop anticholinergic if prescribed · Reduce dose of antipsychotic and change to an antipsychotic less likely to cause this side effect e.g. clozapine, quetiapine– clozapine is the antipsychotic most likely to cause a resolution of the symptoms. Tetrabenazine (initial dose 12.5mg daily) – licensed for this indication in UK**.**

At KMPT procyclidine is the anticholinergic drug of choice and usually initiated at 2.5mg procyclidine three times per day increasing by 2.5 mg daily until symptoms are relieved. The effective maintenance dose is usually 10 to 30 mg **procyclidine** per day. After a period of 3 to 4 months of therapy, Procyclidine should be withdrawn and the patient observed to see whether the neuroleptic-induced extra-pyramidal symptoms recur.

6.11 **Adverse Event Reporting**

All staff should ensure they are familiar in understanding the definition of an adverse event, along with how to report it.

For those community patients suitable for transfer to Primary Care please see Appendix 9 for further guidance.

6.12 **Administration of Insulin via subcutaneous injection.**

This should be read in conjunction with the Trust's Medicines management Policy and KMPT guidelines for the safe prescribing, monitoring and administration of insulin. See Standard Operating Procedure 7.

6.12.1 **Insulin Safety**

Insulin (especially look-alike and sound-alike products) is identified by the National Patient Safety Agency (NPSA) as an important cause of harm to patients, mainly due to incorrect dosing resulting in severe hypoglycaemia.

When insulin is prescribed, dispensed or administered, healthcare professionals should cross reference the prescription with the patient's insulin passport. All patients that are prescribed insulin should have been issued with an insulin passport. If an inpatient does not have this, it can be obtained from pharmacy.

All patients should meet with the healthcare professional to discuss their insulin use including self-administration of insulin. The patient consent form should be scanned into the patient's electronic care record and a copy given to the patient.

6.12.2 Inpatient Nursing Staff

- Assess all admitted patients for insulin self-administration.
- Refer all patients admitted to inpatient services who are prescribed insulin to the registered nurse, to be reviewed by the prescribing doctor.
- Ensure insulin passports are kept in the clinic room in line with the record keeping policy guidelines.
- Highlight to pharmacy staff if a patient does not have an insulin passport.
- Cross check the prescription, product & insulin passport when administering insulin.
- Ensure the insulin passport is returned to the patient on discharge.

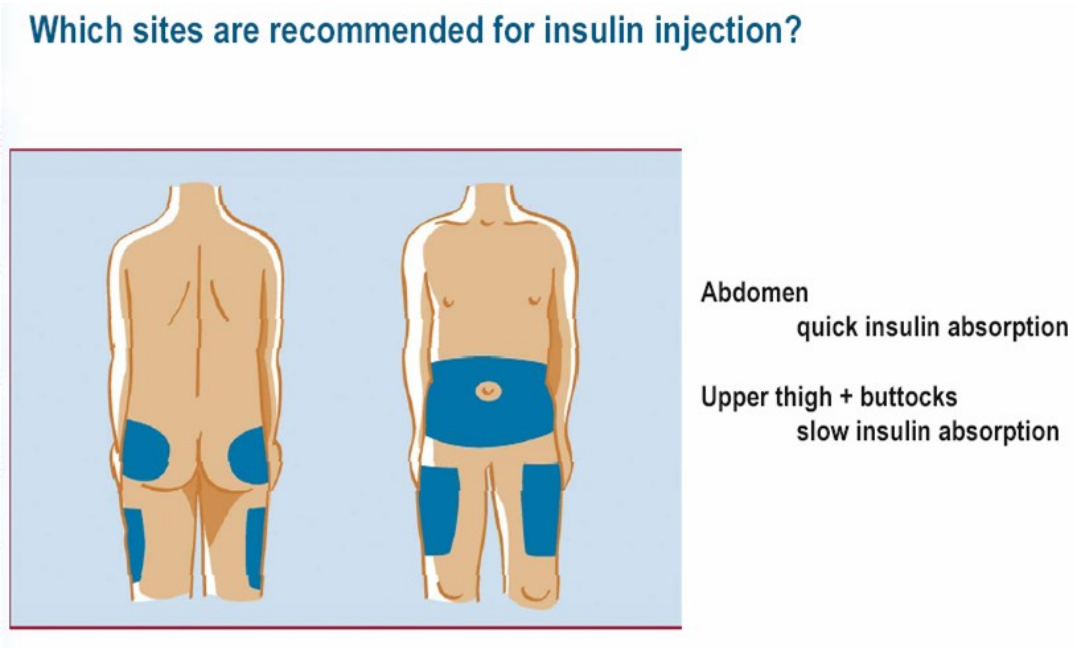


Figure 8

6.13 Safety Needles

All injections administered by nursing staff must only be given using safety needles. This is now a legal requirement under EU Law.

For those patients deemed suitable to self-administer their insulin safety needles must be used and nursing staff should ensure they provide adequate training to patients on the use of safety needles.

6.14 **Needle Choice for IM administration**

When administering intramuscular injections careful consideration should be given to the needle length and this will be dependent on the site of administration and the body mass index (BMI) of the patient, as excess subcutaneous tissue will make delivery to the muscle much harder.

Aripiprazole, Risperdal Consta and olanzapine pamoate, LAIs have needles supplied by the manufacturers and only these should be used, guidance is given in the information leaflet as to when each needle is appropriate.

Paliperidone LAIs also has needles supplied with guidance on when to use each. For those patients who are morbidly obese consideration should be given to the deltoid route.

For those medicines where a needle is not supplied the selection should be made according to BMI and injection site chosen. For those with a BMI of greater than 30 but less the 40 a 5cm (2") needle is recommended if the dorsogluteal site is chosen and, if available or in an alternative licenced site in the event of using a retractable needle, or BMI is 40 or greater.

When administering second generation antipsychotic injections, only the needles that are provided in the pack should be used.

We recommend BD eclipse safety needles over retractable needles for ALL injections where needle is not supplied. A blunt needle should be used for drawing up medication. It is recommended a BD eclipse needle is used for administration. A blunt needle with a filter should be used to draw up medication with a break top glass vial. Staff need to ensure they order the type of retractable needles with a drawing filter.

BD eclipse Blunt needle Blunt filter needle

6.15 **Post Administration of injections**

- Ask the patient to report any discomfort at the injection site.
- Record administration of the injection on the electronic prescribing system or sign the paper prescription documenting the site of administration immediately.
- Make a full entry in the electronic care record as soon as possible, including details of the injection site, batch number and expiry date, any deviation from usual practice and the rationale for doing so, and any side-effects observed or reported.
- For outpatient depot/LAI prescription charts complete the next due date on the prescription. The team should maintain effective communication and robust procedures to ensure there are no delays in administering the medication.
- Seek medical advice, if the injection site to be used or previously used appears to be red, swollen or oozing.
- If the patient develops hard areas at the injection site this could indicate that the depot/LAI is not reaching the muscle and it may only be reaching the subcutaneous tissue rendering the medicine less effective, this should be highlighted to the prescriber.

6.16 **Needlestick injuries**

Anticipate and take reasonable measures to prevent sudden movement by the client during and after injection.

The risk of needle stick injuries can be reduced by: -

- Immediately disposing of the used needle and syringe as one unit into the appropriate sharps bin, needle end down
- Never re-sheath a used needle
- Minimising handling of needles
- Not putting down a syringe attached to an unsheathed needle
- Not overfilling sharps bins
- Keeping sharps bins in a safe position (not on the floor)
- Sealing sharps bins when no more than 2/3 full. Label and sign the bin, store it in a locked area until collected for safe disposal, in accordance with the local waste policy.

Should a needle stick injury occur, it must immediately be managed in accordance with Trust policy. Gently encourage puncture wounds to bleed by pinching skin around the injury site (never suck the injury). Wash, dry and cover the injury. Inform your line manager and document the incident, with full details of the source.

6.17 **Incident or near-miss reporting**

Report any medicines incidents or near-misses in accordance with the Trust Incident Reporting and Management Policy. (Complete a Datix)

7 CLINICAL ENVIRONMENT/STORAGE OF IMI MEDICATION

7.1 Community Mental Health Centres must have a designated clinical room for physical health checks, examinations and the storage of and administration of medicines. If a clinic is provided outside the usual Trust buildings (i.e. GP practice, Community Hall, residential setting and home visits) then suitable arrangements need to be in place to offer the same expected standards of environment.

7.2 The clinic room must:

7.2.1 Have adequate illumination with space to move around and have sufficient surface areas to lay out the necessary equipment without risk of cluttering the area. It must also offer privacy.

7.2.2 Have cupboards within the room to store clinical equipment. A suitable clinical/examination couch must be available and positioned to ensure privacy is maintained i.e. away from windows and opening doors.

7.2.3 Have a hand washing area, suitable disposal bins must be available. Floors and work surfaces must be easily washable. Examination equipment should also be available within the room.

7.2.4 Have the medicines administered from a central storage point which is a locked medicine cupboard. Keys to medicines must be stored securely and only authorised members of staff may have access to them. Key must be signed in and out to show who has used the room.

7.2.5 Not all sites have the ability to store IMI medication. There needs to be a local agreement in place between locality/service managers to support the safe storage of IMI medication.

7.3 At sites where teams share the same medicine cupboard every effort should be made to ensure that service user named medicines are separated into specific teams to avoid confusion. Medicines labelled 'store in a refrigerator' i.e. Risperdal Consta, must be stored between 2º and 8º C. For the Risperdal Consta it is important to remove dose pack from the refrigerator and allow to sit at room temperature for at least **30 minutes** before reconstituting. If refrigeration is unavailable, Risperdal Consta can be stored at temperatures not exceeding 25°C for no more than 7 days prior to administration. The fridge, which should have an external reading thermometer, must be kept locked.

7.4 7.4It is the responsibility of the nurse in charge to ensure daily checks on the minimum and maximum temperatures are carried out and the thermometer reset with the results recorded. If reading is below 2^{O}c or above 8^{O}c then guidelines in appendix J should be followed. Completed monthly sheets recording min, max and current temperatures must be sent to pharmacy **(see Appendix J).**

7.5 Nominated nurses or the team leader must take responsibility for the up keep and operational standard of the clinical room and the availability and condition of the equipment.

7.6 If the clinical room is shared between different services a clear written agreement must be in place making clear who is responsible for what. This should be agreed by the service managers from the different areas.

7.7 As many community nurses provide IMI's in people homes and residential buildings, the clinical room will be the place to store all equipment that would be used for IMI administration. All cases used to hold medication and equipment must be kept locked in the clinical room which must also be locked.

7.8 Community nurses must use a recognised community nursing box for carrying disposable contaminated sharps boxes. The community nursing box (red rigid container) is designed to hold these sharps boxes in a safe manner so no clinical waste spillage can occur in the nurse's car.

7.9 There must be a minimum of two members of staff in each clinic when it is running. The first person must be a registered nurse or Nursing Associate, the second person can be a registered nurse, nursing associate or unregistered healthcare worker.

There must be an Operational Team Manager or Clinical Nurse Specialist available in the building while a clinic is running to consult if required.

The IMI Clinic must follow the structure below

Clinical Nurse Specialist / Operational Team Manager to be contactable for advice if required - they are NOT requred to be in the clinic.
Registered Nurse or Nursing Associate to lead the clinic on the day
Plus any one of the following: **Registered Nurse / Nursing Associate / STR Worker to support in the running of the clinic**
A medic is required to be available while clinic is running

7.10 All clients should be encouraged to attend IMI clinics on site. If this is not possible then telephone contact prior to visit with chaperone offered, as per chaperone policy (Appendix K).

7.11 For service users who cannot attend an IMI clinic, provisions for external IMI will be recorded in the service users care plan, risk assessment and progress note.

7.12 Access to all IMI community medication charts stored in a central, organised file within record of data security guidelines.

7.13 Correctly stored –

- Medication,
- Syringes,

- Needles,
- PPE etc. required for the administration of the IMI medication.
- Access to adrenaline shock packs for the treatment of anaphylaxis; staff should be adequately trained as per Trust protocol.

7.14 Access to a phone extension and a computer in the treatment room that can access RiO.

7.15 The time and date of the IMI clinic appointment should be clearly identified and service users who attend should be encouraged to attend at these times.

7.16 Stock medication – A list of stock medicines should be agreed between each IMI Clinic and KMPT Pharmacy. The Band 7 Lead must identify a registered nurse who should be responsible for ordering and maintaining stock medication within the IMI Clinics. (Lead HCP/RGN).

7.16.1 Medication stored in the IMI Clinics should be stored in a locked cupboard fixed to the wall in the Clinical Room. The cupboard must always be locked when unattended, as should the Clinical Room. Keys for the medicine cupboard are kept secure within the CMHT with access limited to nursing/pharmacy/medical staff only.

7.16.2 The temperature of the room where the medication is stored must be monitored on a daily basis via a digital thermometer, with the current, minimum and maximum recorded. The temperature monitoring form must then be submitted at the end of the month to the medicine's safety officer (kmpt.mso@nhs.net)

8 INITIATION OF TREATMENT

8.1 All service users should have baseline physical health checks as defined in the table below. The following provides a comprehensive test (based on Maudsley Prescribing Guidelines in Psychiatry; 14th ed.) 2020, NICE cg178 and trust physical health policy.

Test	**Frequency**
Urea and electrolytes (including creatinine or estimated GFR).	Baseline and Yearly
Full blood count	Baseline and Yearly
Blood Lipids (cholesterol, triglycerides), fasting sample if possible	Baseline, at three months, one year and then yearly
Plasma glucose, fasting sample if possible **AND glycosylated haemoglobin (HbA1c)**	Baseline, at three months, one year and then yearly
Creatine phosphokinase (CPK)	Baseline then if NMS (Neuroleptic Malignant Syndrome) suspected
Liver Function test (LFT's)	Baseline and Yearly
Prolactin	Baseline for all IMI antipsychotics and then yearly if service user is having risperidone or paliperidone IMI. (It is good practice at 3 months for all service users to be asked about prolactin related symptoms (sexual dysfunction, amenorrhoea etc.). If hyperprolactinaemia is suspected, another prolactin level should be obtained.

ECG	Baseline for all IMI antipsychotics. Annual ECG's for all service users prescribed IMI medication. ECG at the request of the Lead Clinician dependent on physical health assessment and/or outcomes.
Blood Pressure and pulse	Baseline, at three months, one year and then yearly. (It is good practice to check these parameters on a regular basis when service user attends the IMI clinic)
Smoking history	Baseline and as required then yearly.
Weight (including waist measurement and BMI)	Baseline, **weekly for 6 weeks, at three months, one year then yearly** (It is good practice to check weight on a regular basis when service user attends the IMI clinic)
Nutrition assessment	Baseline and as required then yearly.

8.2 Medicines should be given by injection if it is the patient's choice, when the use of other routes is clinically inappropriate or to increase adherence. It is necessary for repeated injections to have regular reviews with a doctor. Full treatment options including sites per LAT of IMI should be explained to the patient, demonstrating that choice is being offered. This should be recorded in patient notes (RiO) and on treatment card.

8.3 The results must be recorded on RiO in the Initial Physical Health form as a base line. The Nurse must ensure that the base line assessment is completed. Further recording can be done on the Ongoing Physical Monitoring form, which can be found under Core Assessment.

8.4 The commencement of treatment would be the 'test dose' of medication (if required) to be administered to the service user. The Psychiatrist would discuss the IMI medication following their medical and psychiatric assessment. The service user should be provided with the Medication information leaflets available from the KMPT Choice and Medication website.

8.5 Prior to the administration of any IMI medication the nurse must discuss the medication and its use; they must describe the procedure that will be undertaken to administer the medication, the possible side effects of medication as well as the expected benefits. A Physical health check must be undertaken and side effects rating at the commencement of new medication and thereafter physical health monitoring should place as a minimum six monthly. This should be at the very least, cardio metabolic health checks and diet and elimination (bowel habits should be monitored to reduce possible constipation that occurs with some medicines, (**see appendix B**). A record should be written in RiO progress notes and a care plan agreed that reflects the medication and physical health which is signed by the service user. A crisis contingency plan should be recorded that stipulates if the service user is engaged with the CRHT who will be providing the IMI. The care Coordinator must also clarify this point with when referring to the Crisis team and record this on RiO progress notes.

8.6 It is essential that a record of any known allergies is recorded and understood in relation to the prescribed drug that is to be administered. This should be recorded on the prescription card, allergies section on RiO and care plan.

8.7 If the nurse has any concern following the health checks they must consider withholding administration until further consultation has been done with the service users' Psychiatrist or General practitioner, depending on the nature of the health concern.

8.8 Once the nurse is satisfied to continue the service user must be asked if they are in agreement to accept the administration of the drug and show understanding in the purpose of the medication, its advantages and disadvantages and this must be documented. This would indicate that the service user has consented to treatment.

8.9 GASS will need to be recorded one month after service user commences IMI then recorded six monthly.

8.10 Where changes are made to doses of medication, a GASS should be **repeated after one month.**

9 PRESCRIBING OF IMI MEDICATION

9.1 Prescribing on the long acting injection prescription and administration sheet

9.1.1 All prescriptions must be legible and in black ink to facilitate safe administration and enable the pharmacy to accurately dispense medication.

9.1.2 Prescriptions must clearly identify the service user for whom the medication is intended.

9.1.3 The Prescription must have –

- drug name
- dose
- frequency
- route
- start date and stop date where applicable, ensuring that all dates reflect the period when the medication should be administered
- For inpatient services, a photograph of the service user must be included on the chart.
- Photographs must be renewed at a minimum of 6 months or whenever the prescription chart is renewed.
- It must be clearly documented on the chart if the service user is refusing to have their photograph taken.

9.2 If the prescription is completed in word then it should be converted to PDF and then signed by the doctor using a handwritten signature or electronic signature which cannot be edited.

9.3 The prescription must be reviewed at a minimum of six monthly by the prescriber.

9.4 No changes to be made to prescription without face to face consultation with prescriber, service user and carer (if carer input required).

9.5 No alterations should be made to current prescriptions, a new prescription should be written if any changes are made and any old prescription should be crossed through, uploaded to client documentation and archived at the earliest opportunity.

9.6 When a patient taking a depot in the community is admitted to a mental health inpatient ward, the ward staff should notify the community mental health team of the patient's admission as soon as possible. The IMI clinic staff in the community mental health team should archive the existing outpatient long acting injection prescription and administration sheet. A new prescription should be completed (if applicable) on discharge by the inpatient medical team and forwarded to the relevant community team.

9.7 It is the responsibility of the Prescriber to immediately notify the IMI clinic staff or the Community Mental Health Nurse (CPN) of any changes to medication by reflecting this on the long acting injection prescription & administration sheet and clearly and accurately document their rationale on RiO.

9.8 IMI Clinic Staff and CPN should seek clarification from the prescriber if unclear about any aspect of the long acting injection prescription, including information on allergies or potential drug interactions, before administering any medication.

9.9 The prescriber should ensure that all relevant paperwork relating to CTO (Community Treatment Order) is attached to the long acting injection prescription

9.10 Allergies or adverse drug reactions

9.10.1 The prescriber must ensure all allergies, adverse drug reactions and symptoms are recorded on the prescription sheet before the IMI medication is administered.

9.10.2 If there is a known allergy, it should be recorded in the appropriate section on RiO. Please see the allergy recording protocol for further details.

10 MEDICINES RECONCILIATION

10.1 Medicines reconciliation is the process of accurately listing a person's medicines and recognise and resolve any discrepancies and document any changes. The IMI clinic lead nurse or CPN and Responsible Clinician can seek support from the Pharmacy team to help with training with medicine reconciliation. Also, when they are experiencing difficulties to do a medicine reconciliation when a service user is transferred from an out of area provider or the Private Sector.

10.2 A complete list of current medications and allergies/adverse drug reactions (ADRs) should be obtained for all service users on IMIs. This medication list should be reviewed every 6 months by the Clinic Lead Nurse/ CPN. At each IMI clinic visit the nurse should check with the service user if there has been any change to current medication.

10.3 Sources may include:

10.3.1 GP summary - this can be obtained by contacting the service users GP which should be uploaded to the RiO documents. Alternatively, this information can also be derived from the service user's Summary Care Record (SCR) or Medical Interoperability Gateway (MIG) viewer and KMCR via RiO. Information from these sources should not be uploaded on to the service user's record.

10.3.2 GP referral letter

10.3.3 Hospital inpatient chart

10.3.4 Hospital discharge letter / EDN

10.3.5 Service users own medication

10.3.6 Compliance Aids

10.3.7 Care home records e.g. Medication Administration Record (MAR) Chart.

10.3.8 The service users' community pharmacy.

10.4 A minimum of two sources of reliable information should ideally be used to carry out the medication history process to ensure the information is as accurate as possible.

11 POST ADMINISTRATION CONSULTATION OF IMI

11.1 Following the administration of the IMI the service user should be encouraged to rest for 10 minutes to allow the service user to recover from the administration before leaving the centre. A longer period may be needed for certain IMI medicines. If specific rest time are indicated these would be provided in the medication leaflets.

11.2 The date and time of the next appointment should be provided.

11.3 The follow up appointment date and time must be recorded on Rio Progress

11.4 Notes and recorded in the RIO appointment diary.

12 PHYSICAL HEALTH MONITORING AND SIDE EFFECT MANAGEMENT

Minimum Monitoring Requirements for Antipsychotic Medications

Antipsychotics:		
Amisulpride **Aripiprazole** **Chlorpromazine** **Flupentixol (Depixol)** **Fluphenazine (Modecate)** **Lurasidone** **Olanzapine** **Paliperidone** **Quetiapine** **Risperidone** **Sulpiride** **Zuclopenthixol (Clopixol)**	BP & pulse ECG Fasting blood glucose and HbA1c Full blood count Lipids (fasting if possible) Liver function Prolactin Urea and electrolytes (including creatinine or estimated GFR) Waist circumference Weight (including BMI)	Baseline, at 3 months, 1 year then annually *See below Baseline, at 3 months, 1 year then annually Baseline & annually as part of physical health check Baseline, at 3 months, 1 year then annually Baseline & annually as part of physical health check Baseline, then if indicated Baseline & annually as part of physical health check Baseline & annually Baseline, weekly for 6 weeks, then at 3 months, 1 year then annually
Clozapine As for other antipsychotics PLUS:	BP & pulse Full blood count Weight (including waist measurement and BMI)	See clozapine policy Weekly for 18 weeks, fortnightly for up to one year then 4 weekly Baseline, weekly for 6 weeks, 3 monthly for 1 year then annually
Haloperidol As for other antipsychotics PLUS:	ECG	Recommended for all at baseline & annually

12.1 Doctor availability (Job planned) on site whilst clinics are running.

12.2 Prescribers must fully inform service users of possible side-effects/adverse drug reactions that could be caused by the IMI prior to prescribing it and should be offered Patient Information Leaflet (Choice and Medication Leaflet)

12.3 During every contact, the clinician must ask service users about side effect/adverse drug reaction that the service user may be experiencing.

12.4 If the clinician becomes aware of or observes any adverse drug reaction following the administration of IMI they need to contact the relevant doctor without delay for an urgent review. If the reaction is severe, such as anaphylaxis, follow the Resuscitation Council UK (RCUK) guidelines in Appendix M

12.5 If there are any immediate concerns with a service user's physical health (as highlighted in the NEWS 2 score – See Appendix H) then The Clinic Lead Nurse or CPN should consider contacting the doctor on duty and/or emergency services.

12.6 A referral should be done to the prescriber immediately if the patient has:

- pulse rate persistently above 100bpm (If associated with fever, hypotension or chest pain may indicate myocarditis urgent cardiology referral)
- postural BP drop of >30mmHg
- chest pain, dyspnoea (breathing difficulty), tachypnoea (abnormally rapid breathing)
- any other adverse effects that is intolerable
- changes in smoking habits if taking olanzapine depot or IM clozapine
- rapid weight gain (e.g. > 5kg) within the last 3 months and life-style interventions such as reviewing smoking, exercise and dietary counselling have not been helpful as preventative measures

12.7 Details of any serious adverse effects relating to or suspected to relate to the administration of IMI should be recorded in the service user's record and this information should be related to the prescriber.

12.8 All key physical health checks must be carried out prior to the administration of the IMI and recorded on the NEWS 2 chart and in the core assessment (ongoing physical health monitoring). Recordings should include;

12.8.1 Blood pressure

12.8.2 Pulse

12.8.3 Respiratory rate

12.8.4 O2

12.8.5 Glucose readings.

12.9 All IMI service users must have regular yearly face-to-face (CPA and non-CPA pathway) Medical Reviews to consist of:

12.9.1 Medication review (to include response to treatment)

12.9.2 Physical Health review/assessment

12.9.3 GASS/side effects review/assessment

12.9.4 Capacity/consent to treatment

12.9.5 Discussion of social and environmental factors.

12.10 GASS (Glasgow Antipsychotic Side Effects Scale) should be used to assess side effects and completed at one month after initiation of IMI and repeated six monthly as a minimum or more frequently if a service-user reports side effects.

12.11 There should be clear documentation provided within the clinical notes, care plan, medication review and risk assessment (if required) if any service user is refusing physical health monitoring or assessment.

12.12 Refusal of physical health intervention(s) should be reported to the clinic lead nurse, CPN, prescriber and GP for clinical review followed by a care plan describing plans to engaging in further physical health support.

12.13 Clinicians should discuss and document their risk-benefit analysis for continuing or stopping IMI within the medication review. There should be clear guidance on any measures of well-being that are used in place of physical health checks and recorded as above (in clinical notes, care planning and risk assessment).

13 RECORD KEEPING

13.1 A service user's record is a basic clinical tool used to give a clear and accurate picture of their care and treatment, and competent use is essential in ensuring that an individual's assessed needs are met comprehensively and in good time (General Medical Council Good Medical Practice 2020, the Royal College of Psychiatrists 2009 and Nursing and Midwifery Council The Code 2018 and NHS Records Management Code of Practice 2021).

13.2 All NHS Trusts are required to keep full, accurate and secure records (Data Protection Act 2018) demonstrate public value for money and manage risks (NHS Litigation Authority, Data Security and Protection Toolkit, Essential Standards). Compliance with this Policy and these legal and best practice requirements will be evidenced through information input into the electronic record, RiO.

13.3 For full details of the specific information needed to ensure compliance with this policy see the RiO training guides, the Health and Social Care Records Policy and your Care Group specific Standard Operating Procedures.

13.4 Standards for Progress Notes documentation within clinics and medication reviews are attached. For further guidance on standards around Progress Notes can be found in the Health and Social Care Records Policy **(See Appendix C)**

13.5 The service user's care plan must clearly document any provisions for the administration of IMI.

13.6 Note writing guidance must be adhered to in line with Trust Standards and professional bodies regulations.

13.7 Dose, expiry date, and batch number of the ampoules should be recorded every time.

14 COMMUNITY IMI PROVISION (INCLUDING CARE HOME)

14.1 Please refer to Point 11 for preparation, administration and monitoring.

14.2 Red Rigid Container to be used to carry medication and sharps, safely along with specimens.

14.3 Use of PPE e.g. gloves, apron is required for an IMI procedure.

14.4 Within Care Home settings, clinician should request with care home staff to use clinical room to prepare and administer IMI, if appropriate.

14.5 Member of care home staff can be asked to chaperone the service user.

14.6 Waste to be bagged in orange waste bag and placed in approved red rigid container and disposed of at base **(see Appendix G).**

15 DID NOT ATTEND (DNA)

15.1 Did Not Attend (DNA) is when a service user does not attend the appointment and does not contact to say they won't be attending.

15.2 The DNA Policy **(see Appendix I)** must be implemented immediately.

15.3 The Team Leader must be made aware of DNA service users and their names added to the red board meeting for MDT discussion.

16 AGGRESSIVE BEHAVIOUR / ILLICIT SUBSTANCE USE

16.1 If clinical staff suspects the patient is under the influence of illicit substances and/or alcohol, the Nurse / Nursing Associate should omit the medication and seek advice from the Consultant Psychiatrist and an Operational manager.

16.2

16.3 In event of aggressive behaviour towards staff and/or service users, use promoting safe services procedures (Alarms, de-escalation etc) , the patient should be asked to leave the building to maintain the safety of the staff and service users and where indicated for the police to be called.

16.4

16.5 Patient should be put on the Red board immediately for further review and risk management.

17 TRAINING

17.1 Medication competencies to be linked to training and to ensure staff are able to legally give IM injection to at least three out of the four sites

17.2 The training in the administration of IMI's is provided within the professional's pre-registration training and further training is therefore not required. However, for staff that require an update in this practice then they should contact either the training department or their Care Group Lead or Head of Nursing to provide this. KMPT should encourage pre-registration student to take advantage of the e-learning package for IMI training.

17.3 IMIs may only be administered by healthcare professionals that have the necessary knowledge and skills in preparing, administering and monitoring therapy and are confident and competent to carry out this practice.

17.4 Medicines Calculations Competency Assessment for Registered Staff in a Clinical Setting or Medicines Management Training for Community Mental Health Nurses is available for via iLearn. The training certificate should be printed and provided to the Team Leader who will maintain this record.

17.5 The Medicines Competencies Assessment of Qualified Nursing Staff should be completed by Line Manager/Team Leader/Supervising Nurse. This can be found in the Medicines Competency for Qualified Inpatient and Community Nursing Staff Policy **(See Appendix A).**

18 STAKEHOLDER, CARER AND USER INVOLVEMENT/CONSULTATION

18.1 Nurses were consulted through circulation and feedback as this policy will affect them in terms of expectation and standards in a positive way.

18.2 Service users were not consulted as it will not directly affect them but will offer equality of practice and this is positive.

18.3 Pharmacy services were consulted through circulation and feedback to ensure it meets the pharmacy services expectations and also their expertise in the area of medication and administration.

19 EQUALITY IMPACT ASSESSMENT

19.1 The Equality Act 2010 places a statutory duty on public bodies to have due regard in the exercise of their functions. The duty also requires public bodies to consider how the decisions they make, and the services they deliver, affect people who share equality protected 8 characteristics and those who do not. In KMPT the culture of Equality Impact Assessment will be pursued in order to provide assurance that the Trust has carefully considered any potential negative outcomes that can occur before implementation. The Trust will monitor the implementation of the various functions/policies and refresh them in a timely manner in order to incorporate any positive changes.

20 HUMAN RIGHTS

20.1 The Human Rights Act 1998 sets out fundamental provisions with respect to the protection of individual human rights. These include maintaining dignity, ensuring confidentiality and protecting individuals from abuse of various kinds. Employees and volunteers of the Trust must ensure that the trust does not breach the human rights of any individual the trust comes into contact with.

21 IMPLEMENTATION INCLUDING TRAINING AND AWARENESS

21.1 Standard Operating Procedure to be circulated within the trust to Heads of Service and Service Managers to then cascade to team members.

21.2 Discussion of policy within team meetings, Reflective Practice and Nursing Forums.

22 GLOSSARY

Abbreviation	Full Meaning
ANTT	Aseptic and Non-Touch Technique
BMI	Body Mass Index
BP	Blood Pressure
CPA	Care Programme Approach
CPN	Community Mental Health Nurse
CTO	Community Treatment Order
DNA	Did Not Attend
ECG	Electrocardiogram
GP	General Practitioner
HCA	Health Care Assistant
IMI	Intra Muscular Injection
KMPT	Kent and Medway Partnership Trust
MEWS2	Modified Early Warning Score 2
NEWS2	National Early Warning Score 2
STR	Support Time Recovery Worker

APPENDIX A MEDICATION COMPETENCIES

MedicationCompetencyPolicyKMPT.CliG

APPENDIX B PHYSICAL HEALTH (INCLUDING BOWEL MONITORING

PH Refusal Flow Chart

Physical Health Policy appendix

Bristol Stool Chart

PhysicalHealthPolicyKMPT.CliG.026.07.p

APPENDIX C HEALTH & SOCIAL CARE RECORD KEEPING POLICY

10-Golden-rules-for-Record-Keeping.pd

HealthSocialCareRecordsPolicyKMPT.CLi

ACG Progress Note Standards

Community Directorates Standarc

APPENDIX D GLASGOW ANTIPSYCHOTIC SIDE EFFECT SCALE (GASS)

GASS

APPENDIX E STANDARD OPERATING PROCEDURE (SOP)

IMI SOP

APPENDIX F PRESCRIPTION CHARTS

long-acting-injection-prescription-Mar-202

APPENDIX G WASTE DISPOSAL POSTER

Clinical Waste Poster

APPENDIX H NEWS 2

BC-Physical-Observation-Chart-NEWS2-

APPENDIX I DNA POLICY

DNAPolicyKMPT.pdf

Flow chart for patient who DNA de

APPENDIX J MONITORING GUIDELINES FOR FRIDGE AND ROOM TEMPERATURES

Temperature room and fridge guidance S

APPENDIX K CHAPERONE POLICY

ChaperonePolicyKMPT.CliG.062.05.pdf

APPENDIX L DECONTAMINATION PROCEDURE

DecontaminationProcedureKMPT.CliG.1

APPENDIX M ANAPHYLAXIS GUIDELINES

Anaphylaxis algorithm 2021.pdf

APPENDIX N COMMUNITY TREATMENT ORDERS (CTO)

COMMUNITY TREATMENT ORDER

APPENDIX 1: SOP 1 PREPARATION FOR DEEP IM INJECTION

SOP 1	**Standard Operating Procedure 1** **General Preparation for Deep Intramuscular (IM) Injection**
Applicable to:	Registered practitioners required to administer oil-based depots and other long-acting intramuscular antipsychotic injections in the course of their practice.
Process 1	Check to see if the patient's physical or mental health has changed since the previous contact, including the health of the injection sites.
Process 2	Ask about perceived benefit and any side-effects experienced since the last injection – if this is not the first.
Process 3	Check to ensure: • The prescription is legal and valid and allowed where there is a T2/T3/CTO11/12/Section 62. • The dose is due • The dose has not already been given • There are no contra-indications or allergies • The correct medication has been selected • The correct strength has been selected (this should be to administer a volume <2ml) • The injection is "in date"
Process 4	Confirm that the patient has the capacity to consent and gives their consent to the procedure, unless authorised on a T3, CTO11.
Process 5	Wash your hands according to accepted hand cleansing technique and put on disposable gloves.
Process 6	Prepare the injection making any necessary dose calculation and using the correct equipment. And set tray up with safety equipment required fig 1b.
Process 7	Get a second registered practitioner, if available, to double check all items in processes 3, 4 & 6.
Process 8	If a second registered practitioner is not available, ask the patient to check that the correct injection and dose is to be administered and that the injection is "in date".
Process 9	Choose the site of administration according to the licensed indication for the injection and in collaboration with the patient, proceed according to SOP3, SOP4 or SOP5, whichever is appropriate and licensed as per the manufacturers, guidance.
Process 10	Once the injection site has been chosen, ensure the site is clean. If the area is visibly dirty then clean using sterile gauze, soap and water and dry. The use of alcohol wipes to clean the area is not recommended. Unless the patient requests

	
Clean Tray, sterile wipe to clean skin, prescribed medicine. For doses up to 3mls use retracting BD PrecisionGlide™ Needle.	Do not administer doses greater than 3mls at one injection site.

Figure 1b

APPENDIX 2: SOP 2 Z-TRACK ADMINISTRATION TECHNIQUE

All LAIS should be given using the "Z Track" technique

SOP 2	**Standard Operating Procedure 2** **Z-Track Administration Technique (Fig 2)**
Applicable to:	Registered practitioners required to administer oil-based depots and other long-acting intramuscular antipsychotic injections in the course of their practice. This technique should be used for all intramuscular injections.
Process 1	Pull the skin in the target area taut and to one side with either the thumb or side of the non-dominant hand and maintain this firm traction of the skin throughout the procedure.
Process 2	Insert the needle with a darting motion at 90 degrees to the skin surface, leaving 2-3mm of the needle exposed at the surface so the needle can be more easily removed if it breaks. Keep the graduation markings on the syringe barrel visible at all times.
Process 3	**For dorsogluteal injections only** – for all other sites where there are no major blood vessels below the injection site, this is unnecessary so go to Process 4. Steady the barrel of the syringe with the remaining fingers of the non-dominant hand and pull back on the plunger with the dominant hand to aspirate. Should blood appear in the syringe all the equipment must be discarded and the whole procedure started again. If no blood appears, it is safe to continue.
Process 4	Depress the plunger slowly (1ml per 10 seconds) to allow the muscle fibres to expand to accommodate the medication.
Process 5	Wait a further 10 seconds before removing the needle and once it has been removed, only then release the traction on the skin.
Process 6	If necessary the injection site may be wiped with a dry gauze swab.
Process 7	A plaster may be applied if this is the patient's choice and if they have no known allergy to latex, iodine or elastoplast.

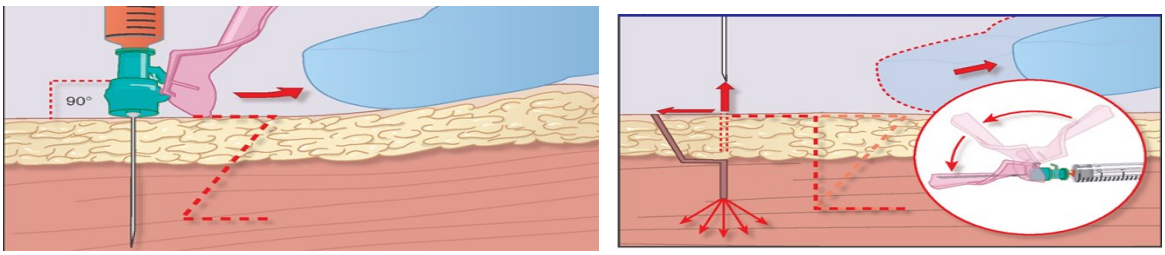
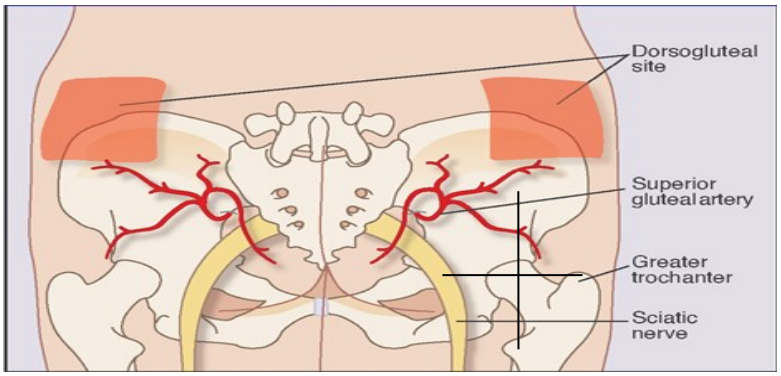


Figure 2. (Reference Clinical skill.net 2015)

APPENDIX 3: SOP DORSOGLUTEAL ADMINISTRATION TECHNIQUE

SOP 3	**Standard Operating Procedure 3** **Administration Technique for the Dorsogluteal Site**
Applicable to:	Registered practitioners required to administer a long-acting intramuscular antipsychotic injection at the dorsogluteal site in the course of their practice.
Process 1	Follow processes 1 – 9 in SOP1.
Process 2	Ask the patient to lie down and loosen their clothes so one buttock is exposed. Ask them to either lie on their front or side with the femur internally rotated to minimise pain on administration.
Process 3	If a syringe and/or needle is provided in the product pack by the manufacturer – this MUST be used. If not, select an appropriate needle length to reach the gluteus muscle, based on the Body Mass Index [BMI] of the patient. In obese patients with a BMI of 30 or more, a 5cm needle is required. (see image below)
Process 4	Draw an imaginary cross onto one buttock and identify the upper outer quadrant. Divide this first quadrant into quarters. The injection site is located within the upper outer quadrant of the upper outer quadrant, approximately 5cm to 7.5cm below the iliac crest (Fig 3a).
Process 5	Ensure injection site is clean. If the area is visibly dirty then clean with, soap and water and dry. The use of alcohol wipes to clean the area is not recommended.
Process 6	Administer the injection using a Z-track technique (SOP 2) (Figs 3b & 3c).
Process 7	Dispose of equipment immediately with safe disposal of sharps into appropriate, puncture proof, correctly labelled sharps bin. Do not re-sheath needle
Process 8	Remove gloves and wash your hands according to accepted hand cleansing technique.
Process 9	Document on the electronic prescription (JAC) or paper administration chart and in the electronic clinical notes. Record the date, time and dose of medication administered, injection site and side of the body plus any deviation from standard practice with a rationale for the clinical decision to do so.
Process 10	Explain to the patient about monitoring arrangements, how to manage common side effects and what to do if the patient experiences any change to their mental or physical health status before the next clinical contact.

An appropriate needle length must be selected to reach the gluteal muscle, based on the Body Mass Index [BMI] of the patient. In obese patients with a BMI of 30 or more, a 5cm needle is required and is available as a safety needle and if this cannot be sourced then an alternative licenced site much be chosen



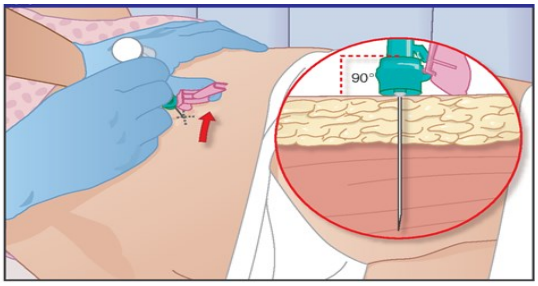


Figure 3a

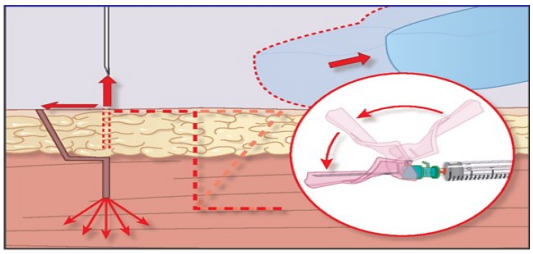
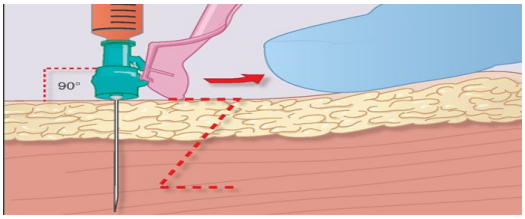


Figure 3b



Figure

(Reference Clinical skill.net 2015)

APPENDIX 4: SOP VENTROGLUTEAL ADMINISTRATION TECHNIQUE

SOP 4	**Standard Operating Procedure 4** **Administration Technique for the Ventrogluteal Site** (fig 4a)
Applicable to:	Registered practitioners required to administer a long-acting intramuscular antipsychotic injection at the ventrogluteal site in the course of their practice.
Process 1	Follow processes 1 – 9 in SOP1.
Process 2	Ask the patient to lie down on their side and expose their hip (Fig. 4b).
Process 3	An appropriate needle length must be selected to reach the gluteus muscle, based on the Body Mass Index [BMI] of the patient. In obese patients with a BMI of 30 or more, a 5cm needle is required.
Process 4	Locate and palpate the greater trochanter (Fig 4c). Place the heel of the opposite hand to the patient's leg on the greater trochanter (i.e. your left hand on their right leg or vice versa). Locate and place index finger on the anterior superior iliac spine and travel along it until your index finger is in line with the vertical axis of the body (fig 4d). Your thumb should be pointing towards the front of the leg. Spread the middle finger to form a 'V'. The injection site is in the middle of this 'V', level with the first knuckles of your fingers (i.e. proximal interphalangeal joints) (Fig 4e).
Process 5	Visualise the site and remove your hand to prevent needle stick injury.
Process 6	Ensure injection site is clean. If the area is visibly dirty then clean with, soap and water and dry. The use of alcohol wipes to clean the area is not recommended.
Process 7	Administer the injection (4f) using a Z-track technique (SOP 2) (Figs 3b & 3c).
Process 8	Dispose of equipment immediately with safe disposal of sharps into appropriate, puncture proof, correctly labelled sharps bin. Do not re-sheath needle.
Process 9	Remove gloves and wash your hands according to accepted hand cleansing technique.
Process 10	Document on the electronic prescription/ paper administration chart and in the electronic clinical notes. Record the date, time and dose of medication administered, injection site and side of the body plus any deviation from standard practice with a rationale for the clinical decision to do so.
Process 11	Explain to the patient about monitoring arrangements, how to manage common side effects and what to do if the patient experiences any change to their mental or physical health status before the next clinical contact.

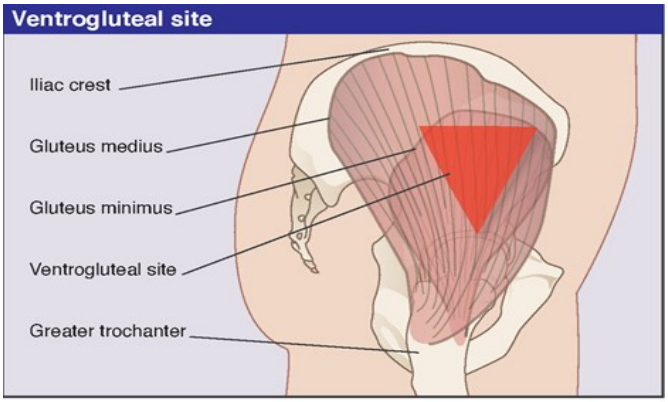


Fig 4a

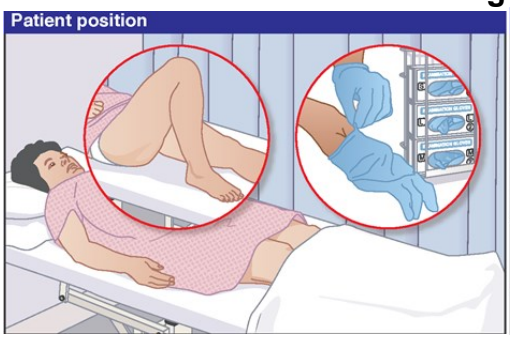


Fig 4b

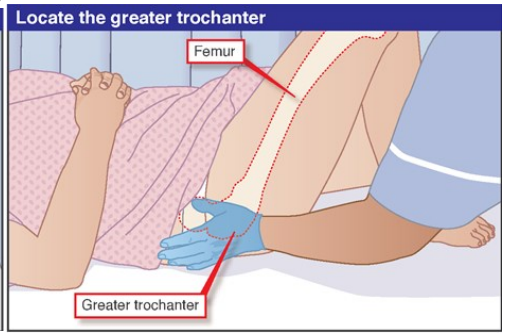


Fig 4c

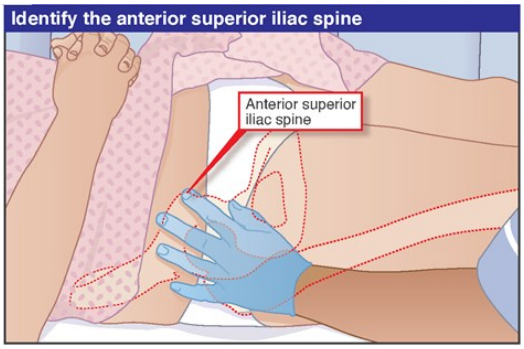


Fig 4c

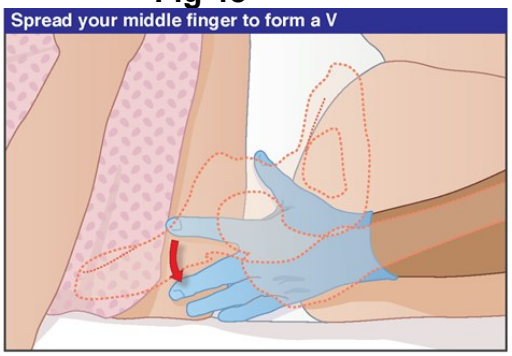


Fig 4d

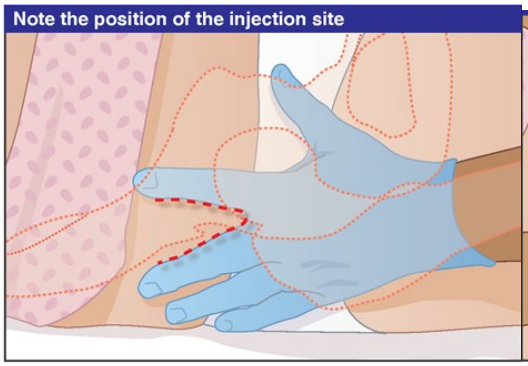


Fig 4e

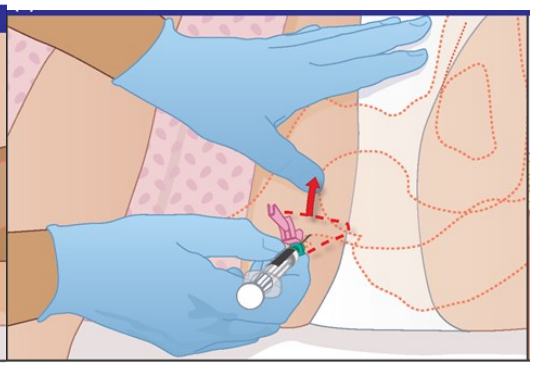
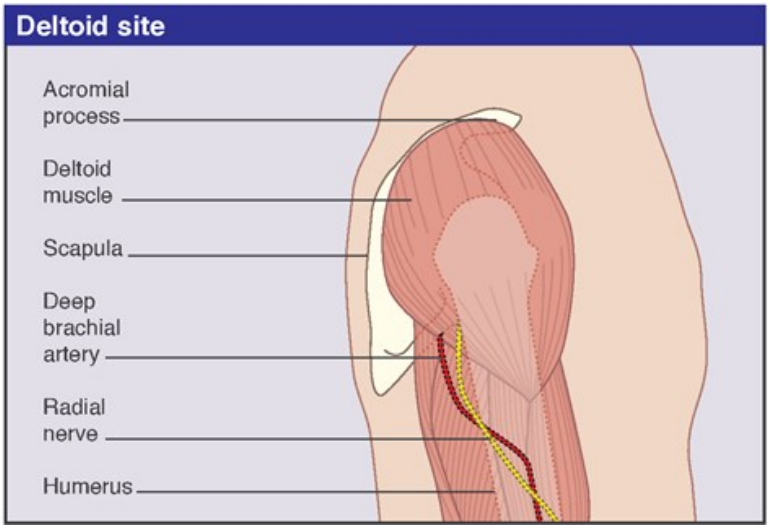


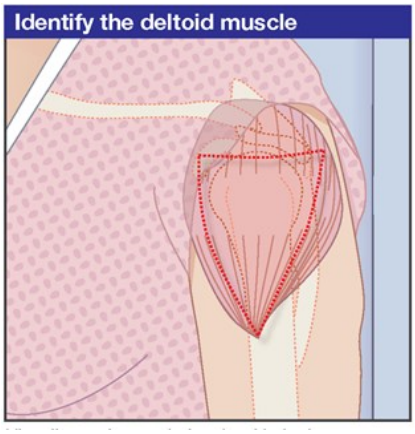
Fig 4f

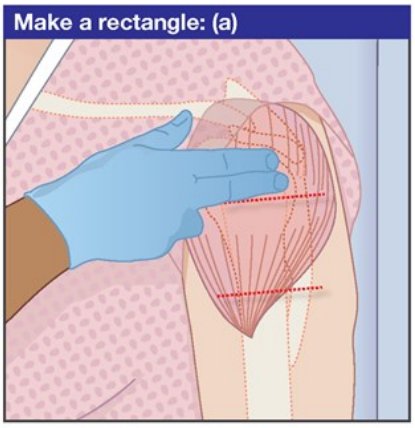
(Reference Clinical skill.net 2015)

APPENDIX 5: SOP DELTOID ADMINISTRATION TECHNIQUE

SOP 5	**Standard Operating Procedure 5** **Administration Technique for the Deltoid Site**
Applicable to:	Registered practitioners required to administer a long-acting intramuscular antipsychotic injection at the deltoid site in the course of their practice.
Process 1	Ask the patient to sit down and loosen their clothes so their arm and shoulder are exposed. Ask them to position their arm across their body to relax the muscles.
Process 2	Follow processes 1 – 9 in SOP1.
Process 3	Palpate the upper arm and find the landmarks of the acromion process and the axilla. The target injection site can be located by visualising an inverted triangle which extends from the base of the acromion process and extends down to a point level with the axilla. Now form a rectangle within the original triangle by placing two fingers below the acromion process to form the top edge of the rectangle and with the bottom edge level with the axilla. The side edges should be parallel to the arm. The injection site is in the middle of this visualised triangle (Figs 5, 5a & 5b).
Process 4	Ensure injection site is clean. If the area is visibly dirty then clean with soap and water and dry. The use of alcohol wipes to clean the area is not recommended.
Process 5	Administer the injection using a Z-track technique (SOP 2) (Fig.5c).
Process 6	Dispose of all equipment immediately with safe disposal of sharps into an appropriate, puncture proof, correctly labelled sharps bin. Do not re-sheath needle.
Process 7	Remove gloves and wash your hands according to accepted hand cleansing technique.
Process 8	Document on the electronic prescription/paper administration chart and in the clinical notes. Record the date, time and dose of medication administered, injection site, batch number and expiry date and side of the body plus any deviation from standard practice with a rationale for the clinical decision to do so.
Process 9	Explain to the patient about monitoring arrangements, how to manage common side effects and what to do if the patient experiences any change to their mental or physical health status before the next clinical contact.







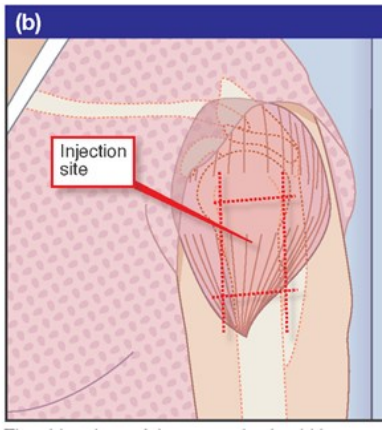
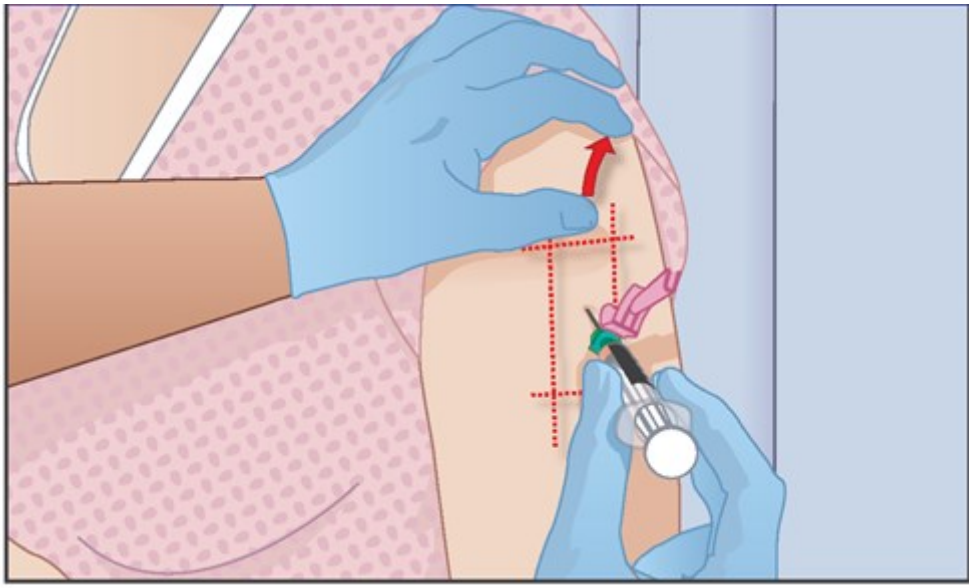


Figure 5 (a&b)



(Reference Clinical skill.net 2015)

APPENDIX 6: VASTUS LATERALIS ADMINISTRATION TECHNIQUES

	Appendix 6: SOP Vastus Lateralis Administration Techniques
SOP 6	**Standard Operating Procedure 6** **Administration Technique for the Vastus Lateralis Sites**
Applicable to:	Registered practitioners required to administer a long-acting intramuscular antipsychotic injection at the vastus lateralis and rectus femoris sites in the course of their practice.
Process 1	Follow processes 1 – 9 in SOP1.
Process 2	Ask the patient to either sit or lie down and expose their upper legs
Process 3	The **Vastus Lateralis** site targets the lateral side of quadriceps femoris group of muscles and is situated in the anterior lateral aspect of the thigh. It can be located by placing the little finger of one hand on the Lateral Femoral Condyle of the knee and the little finger of the other hand on the Greater Trochanter. Now try to touch both thumbs together. Both hands are then spanning the distance and the injection site is at the midpoint.
Process 4	Visualise the site and remove your hand to prevent needle stick injury (Fig. 6c &d).
Process 5	Ensure injection site is clean. If the area is visibly dirty then clean with soap and water and dry. The use of alcohol wipes to clean the area is not recommended.
Process 6	Administer the injection using a Z-track technique (SOP 2) (Fig. 6c).
Process 7	Dispose of equipment immediately with safe disposal of sharps into appropriate, puncture proof, correctly labelled sharps bin. Do not re-sheath needle.
Process 8	Remove gloves and wash your hands according to accepted hand cleansing technique.
Process 9	Document on the electronic prescription/ paper administration chart and in the electronic clinical notes. Record the date, time and dose of medication administered, injection site and side of the body plus any deviation from standard practice with a rationale for the clinical decision to do so.
Process 10	Explain to the patient about monitoring arrangements, how to manage common side effects and what to do if the patient experiences any change to their mental or physical health status before the next clinical contact.

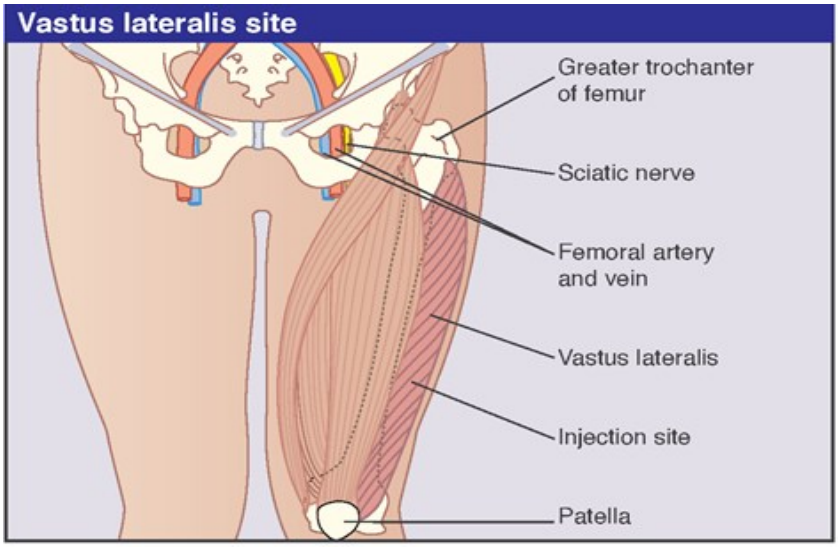


Fig 6a

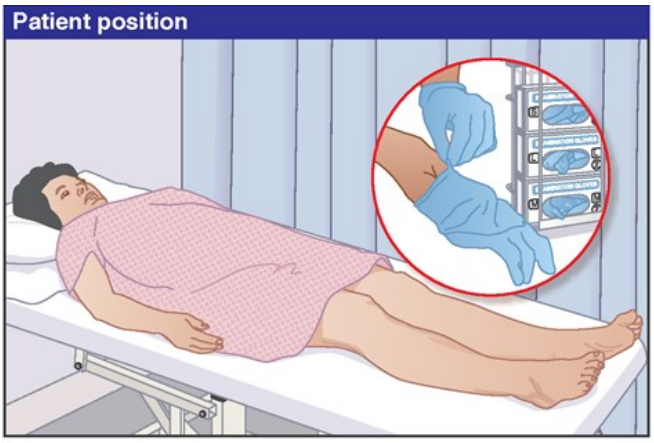


Fig 6b

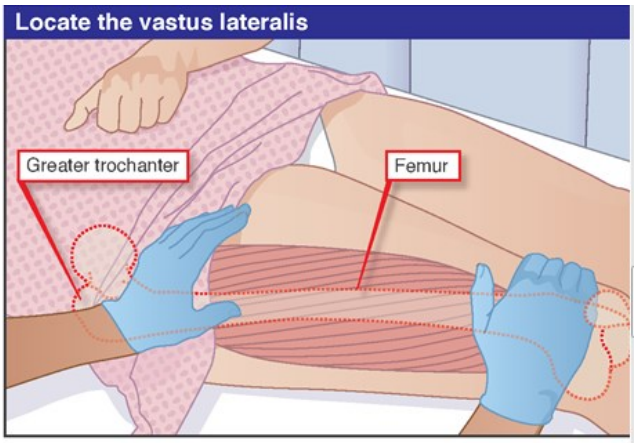


Fig 6c

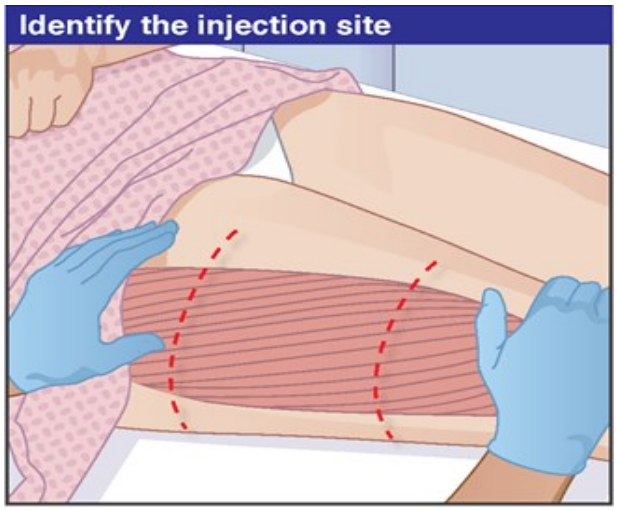


Fig 6d

(Reference Clinical skill.net 2015)

APPENDIX 7: SOP INSULIN INJECTION TECHNIQUE

SOP 7	Standard Operating Procedure 7 Administration Technique for subcutaneous injections (Insulin)
Applicable to:	Registered practitioners required to administer subcutaneous injections; some patients can self-administer insulin under supervision. Ensure the care plan reflects this. The self-administration guidance should be followed where patients self-administer on wards (see Medication management policy).
Process 1	Ask the patient to make themselves comfortable and loosen their clothes so that the injection can be given in the chosen site - the outer thigh, the abdomen, or the upper buttocks. Show the insulin (and device) to the patient before administering to ensure it is the correct insulin, device (where used) and dose. Cross check with the patient's prescription chart and insulin passport or a second nurse.
Process 2	Inpatients will be administered insulin via an insulin pen device using a safety needle. safe pen needle (Fig 7). If a patient has been assessed as safe to self- administer insulin and can safely dispose of the needle themselves, a non-safety needle can be used. All wards should have a supply of BD autoshield duo needles available for use with insulin pen The safety needle is single use. Dispose of in sharps box.
Process 3	Only in an emergency will Actrapid® be administrated from a vial using the BD safetyGlide™ Insulin syringe.
Process 4	The area of skin is held by the thumb and forefinger to tense and steady the injection site.
Process 5	The needle is inserted at an angle of 90 degrees, piercing the skin quickly.
Process 6	Dispose of the needle immediately with safe disposal of sharps into an appropriate, puncture proof, correctly labelled sharps bin. Click safety needle if BD safetyGlide™ Insulin syringe is used, before putting in the sharps bin.
Process 7	Remove gloves and wash your hands according to accepted hand cleansing technique.
Process 8	Document on the electronic prescription chart and in the electronic clinical record. Record the date, time and dose of medication administered, injection site and side of the body.
Process 9	Explain to the patient about monitoring arrangements, how to manage common side effects and what to do if the patient experiences any change to their mental or physical health status before the next clinical contact.

	
Clean Tray, insulin pen device with safety needle.	Clean Tray, Only in an emergency will Actrapid™ be administered from a vial using the BD safetyGlide™ Insulin syringe.