

Title: **Diabetes - Pre-loading of insulin syringes for adult patients to administer at home** Ref No: 1917 Version 2

Directorate: Operations Due for Review: 31/01/18

Responsible for review: Diabetes Lead Champion  
Interim Head of Medicines Optimisation

Ratified by: Care and Clinical Policies Sub Group

Applicability: All Registered Nurses and Prescribers

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### 1 Purpose

There are potential legal and safety complexities associated with the practice of pre-loading insulin syringes in order to enable people to self-administer in their own homes that health care practitioners **MUST** be aware of.

Firstly, the preparation of pre-loaded syringes represents a form of secondary dispensing which, under the terms of the Medicines Act (1968), is classified as an ‘unlicensed’ activity in all four UK countries. Consequently, health care organisations and practitioners must take full responsibility for the safety of this activity.

Secondly, the safety of individuals using pre-loaded insulin syringes, as well as the storage, stability and sterility of insulin once drawn up in the syringe, is of paramount importance (Rosindale, 2014).

For this reason Torbay & Southern Devon Health and care NHS Trust and the RCN (2015) recommends nurses should operate within the framework of this pre-loaded insulin syringe clinical policy which details the responsibilities of every individual involved in the practice (employing organisation/patient/GP/community nurse) and standardises how nurses perform the preparation of syringes (essential to assure vicarious liability protection for nurses undertaking this practice). Practitioners are also directed to review the recently updated NMC *Standards for medicines management* (NMC, 2014)

The purpose of this policy is to:

- 1.1 To promote patient safety.
- 1.2 To ensure that Registered Nurses (RN's) are aware of the potential risks of pre-loading insulin syringes for later use by a patient.
- 1.3 To provide a clear and consistent framework across Torbay & Southern Devon Health and Care NHS Trust for the appropriate assessment and management of a person with diabetes who cannot safely prepare their own insulin dose.
- 1.4 The Nursing & Midwifery Council (NMC) standards for medicines management 14 (2010) state that 'registrants must not prepare substances for injection in advance of their immediate use'.

The Department of Health (DoH)/Medicines & Healthcare products Regulatory Agency (MHRA) advise 'against pre-loading medication for injection at a later time' (Rosindale 2014).

- 1.5 To support RN's to provide insulin therapy as detailed in this policy which is classified as secondary dispensing (and thus not covered in the Medicines Act 1968), however takes note of Royal College of Nursing guidance (2015) 'Advance preparation of insulin syringes for adult patients to administer at home'.
- 1.6 The National Patient Safety Agency (NPSA) 'are unaware of any reports where insulin syringes prepared in advance by nurses in the community and given expiry dates of greater than 24 hours have caused serious harm due to infection and contamination issues' (Rosindale 2014). However a Rapid Response Report has been issued for the safer prescribing and administration of insulin (2010).

## 2 Introduction

- 2.1 This policy is supported by a risk assessment and Standard Operating Procedure (SOP) for the pre-loading of insulin for patients to self-administer later. It stresses the necessary principles of practice including patient assessment and review, ensures other methods of insulin administration have been considered, together with contra-indications, and details appropriate insulin storage requirements and record keeping.
- 2.2 Diabetes mellitus is a chronic condition. Patients require long-term medication to control blood glucose levels and reduce the risk of associated complications. For some patients the prescribed treatment is regular insulin injections.
- 2.3 There are a number of patients with diabetes who cannot convert to using an insulin pen for independent self-administration of insulin because of manual dexterity, lack of strength,

personal preference or reluctance to change. As a result many patients are unable to draw up their own insulin and need community nurse support, although they are able to inject independently using a syringe once or twice a day. The preparation of insulin injections by community nurses for patients to administer in their own homes at a later time has been the practice for many years. In this way each patient can administer their insulin at the correct time in relation to their meals. This preserves the individual's independence (Rosindale 2014).

- 2.4 The pre-loading of insulin into syringes is an unlicensed activity that falls outside of the Medicines Act (Rosindale 2014) and adherence to this policy protects the patient, and provides legal protection for the Registered Nurse and this organisation under vicarious liability. The Royal College of Nursing (RCN 2015) advises that this activity must be seen as the FINAL option, and only considered when all other options have been exhausted.
- 2.5 Within the context of this policy the definition of 'pre-loading an insulin syringe' refers to insulin that has been withdrawn from a 10ml vial, using an insulin syringe that is marked in one or two unit graduations. It is recommended that 8 mm needles be used when using an insulin syringe.
- 2.6 No other type of syringe should ever be used for insulin administration.

### **3 Roles and Responsibilities**

- 3.1 This policy covers all RN's employed by Torbay and Southern Devon Health & Care NHS Trust who are required to treat patients with diabetes mellitus within their own home.
- 3.2 It relates specifically to the patient who is able to safely administer the correct dose of insulin at the correct time, but is unable to draw up insulin or utilise standard commercially available insulin preparations.
- 3.3 It is the responsibility of every Trust employed RN who is required to treat patients with diabetes mellitus to be familiar with this policy and procedure.
- 3.4 RN to positively identify the patient (obtaining confirmation of name and DOB) and establish allergy status.
- 3.5 All RNs involved in the administration of insulin, as in all other areas of their practice, will be responsible for maintaining and updating their knowledge and practice. The e-learning module on the 'Safe use of Insulin' is a mandatory requirement every 2 years with a pass mark of 80%.
- 3.6 RNs are responsible for the initial and continued assessment of patients who are self-administering and have continued responsibility for recognising and acting upon changes in a patient's condition with regards to safety of the patient and others. The Nursing & Midwifery Council (NMC) & Mental Capacity Act 2005 state that for a patient to be able to self-administer the patient should be assessed as being at Level 3 which is defined as "the patient accepts full responsibility for the storage and administration of the medicinal products". The level should be documented in the patient's records (Standard 9 NMC Standards for medicines management 2010).
- 3.7 Patients must be allowed to decide whether they will agree to treatment in this way and this should be documented in the patient case notes.
- 3.8 RN's in administering any medicines, in assisting with administration or over-seeing any self-administration must assess the patient's suitability and understanding of how to use an appropriate compliance aid safely (Standard 16 NMC 2010).

- 3.9 RN's are accountable to ensure that the patient is competent to carry out the task (Standard 17 NMC 2010).
- 3.10 RN's are responsible for implementing this policy. Pre-loading insulin syringes must not be delegated to non-registered staff.
- 3.11 Pre-loaded syringes may not be prepared by one registered nurse for another health professional or skilled not registered to administer.
- 3.12 Under no circumstances may RN's mix and pre-load different insulins in the same syringe for administration at a later time (There is no longer a need to mix insulins due to the availability of suitable manufacturer's preparations).
- 3.13 Registered nurses are responsible for recognising any limitations in their knowledge and competence and declining any duties they do not feel able to perform in a skilled and safe manner (NMC 2015).

#### **4 Principles of practice for the pre-loading of insulin in syringes**

- 4.1 Pre-loading of insulin should only be recommended when alternative methods of delivery are not possible and after appropriate risk assessment as outlined in Appendices A, B & C.
- 4.2 RN's should be aware of the alternative injection devices available and discuss the patient's needs and preferred options with the Senior Diabetes Specialist Nurse (SDSN) and General Practitioner.
- 4.3 Pre-loading of insulin for injection must only begin following a full written risk assessment, involving the SDSN, and the ruling out of alternative methods of administration. A thorough assessment of the patients understanding of the insulin regime, their ability to manage it and the support available between community nurse visits, must be undertaken using: Appendix B: Standard Operating Procedure (SOP) for the assessment of a patient to have Insulin prepared in advance of administration. Followed by completion of Appendix C: 'Risk Assessment Form – Advanced Preparation of Insulin into syringes for a patient to administer at a later date'.
- 4.4 The risk assessment form in Appendix C should be undertaken every 3 months, or sooner if the patient's condition changes.
- 4.5 The patient should always be consulted about their insulin administration and informed consent obtained regarding the care provided.
- 4.6 On completion of the risk assessment the RN should decide on the appropriate number of days that the insulin syringes that can be prepared for and left with the patient. It is important that the RN considers all aspects of social and healthcare for their patient in this decision. This number and reason for the decision should be recorded in Appendix C. The maximum number of days that insulin syringes can be left pre-loaded is seven (RCN 2015, Rosindale 2014). Advice may be sought from the SDSN. Each time a nurse pre-loads syringes Appendix D 'Documentation Form for the advanced preparation of insulin in syringes' should be completed.
- 4.7 Pre-loaded insulin syringes must be labelled individually and stored in a wipe-able, labelled, sealable, hinge-lidded container (see Appendix B). If the patient is having a different type of insulin or dose at another time of the day a different storage container should be used. To prevent any confusion the containers should be either different colours or shapes.

- 4.8 The patient's fridge should be visibly clean and free of debris. The insulin should be stored in the fridge door or top shelf to prevent cross-contamination from other food items.
- 4.9 It is recommended that insulin is most stable when stored at a temperature of 2 and 8° Celsius. Never allow insulin to freeze.
- 4.10 Unopened insulin can be kept in these conditions until the expiry date. An opened vial of insulin kept in these conditions should be discarded after 28 days. The date that the vial was opened must be written on the vial and in Appendix D.
- 4.11 Patients in residential care must have their pre-loaded insulin syringes stored as outlined in 4.6 – 4.10 but in a locked fridge.
- 4.12 Arrangements must be made to ensure that the monitoring of diabetes control is undertaken. Capillary blood glucose monitoring may be undertaken by the patient themselves, a family member/friend using their own glucometer. A full written assessment should be undertaken to check patient or family member confident and competent to undertake this procedure. The meter should also be checked weekly with the relevant quality control solution that is provided by the relevant meter company to ensure that it is accurate. Accuracy can also be checked by comparing a capillary blood glucose result with a venous glucose sample on a weekly basis. An Hba1c every 3 months is also required to evaluate the level of diabetes control.
- 4.13 Liaise with SDSN as required for advice if circumstances change.
- 4.14 The SDSN will quality assure that the risk assessment & SOP are being completed as outlined in this policy in Appendices B,C and D using Appendix E every six months to ensure that this type of care remains appropriate for the individual.
- 4.15 An overview of the processes involved in points 4.1 – 4.14 is outlined in Appendix A.

## **5 Contraindications**

- 5.1 Insulin Lantus (Glargine) must not be pre-loaded into insulin syringes.
- 5.2 Very variable capillary blood sugar recordings.
- 5.3 Lack of satisfactory storage conditions in the patient's home.
- 5.4 Unpredictable mental state or declining cognitive ability.
- 5.5 Pre-filled insulin cartridges and commercially available pre-loaded pens must not be used to withdraw insulin in order to comply with this policy. Only 10ml vials are permissible to be used.
- 5.7 If any of the points 5.1 – 5.5 are found, then this is to be reported to the GP or Devon Doctors (when out of hours) and the advanced preparation of insulin in syringes should cease and arrangements made for the community nursing team to visit at the required intervals. A clinical incident form should be completed.

## **6 Training**

- 6.1 All staff involved with the care of these patients will receive a training session delivered through the SDSN. This session will cover a detailed presentation of the policy, the responsibilities of

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the RN completing the risk assessment and practical aspects of dispensing insulin into syringes. Support and advice may also be sought from the Medicines Optimisation Team.

- 6.2 There will be annual training offered to the staff concerned by the SDSN to update staff and feedback any observations from the 6 monthly Quality Assurance assessments.
- 6.3 All clinical staff should be made aware of this policy at induction (new staff) by their Zone Leads and specific medicines management training where appropriate.
- 6.4 All RNs involved in the administration of insulin, as in all other areas of their practice, will be responsible for maintaining and updating their knowledge and practice. The e-learning module on the 'Safe use of Insulin' is a mandatory requirement every 2 years with a pass mark of 80%.
- 6.4 All community nurses involved in this practice will insulin administration will undertake the MERIT 1 day module – 'helping people with diabetes to continue insulin therapy'.

## 7. Monitoring and Auditing

- 7.1 The SDSN will quality assure that the risk assessment & SOP are being completed as outlined in this policy in Appendices B,C and D using Appendix E every six months to ensure that this type of care remains appropriate for the individual.
- 7.2 All patients receiving insulin by this methodology will be recorded and held on a register by the SDSN. This should be available to the Provider Safety Group at their request.
- 7.3 This policy will be reviewed in two years through the Torbay and Southern Devon Health and Care NHS Trust Care and Clinical Policies Sub Group.

## 8 References

Nursing and Midwifery Council (NMC) (2010) Standards for medicines management. [www.nmc-uk.org/publications](http://www.nmc-uk.org/publications)

Nursing and Midwifery Council (2015) The Code. Professional standards of practice and behaviour for nurses and midwives. [www.nmc-uk.org](http://www.nmc-uk.org)

National Patient Safety Agency (2010) Rapid response Report. Safer Administration of Insulin. NPSA/2010/RRR013

Parliament (1968) *Medicines Act 1968*, London: Stationery Office.

Parliament (2005) *Mental Capacity Act 2005*, London: Stationery Office.

Rosindale S (2014) Pre-loading of insulin syringes for people with diabetes to administer at home: new solution to an old practice, *Diabetes and Primary Care*, 16 (3), pp.137-142.

Royal College of Nursing (2015) *Advance preparation of insulin syringes for adult patients to administer at home*. 2<sup>nd</sup> Edition. [www.rcn.org.uk/publications](http://www.rcn.org.uk/publications)

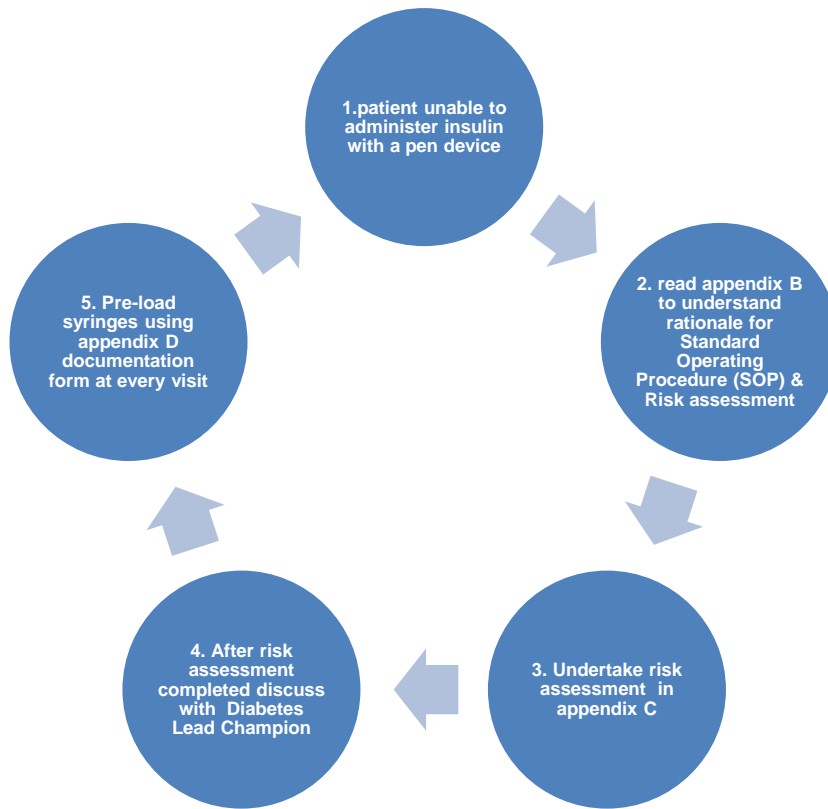
## **9 Equality and Diversity**

- 9.1 This document complies with the Torbay and South Devon's NHS Foundation Trust Equality and Diversity statement.

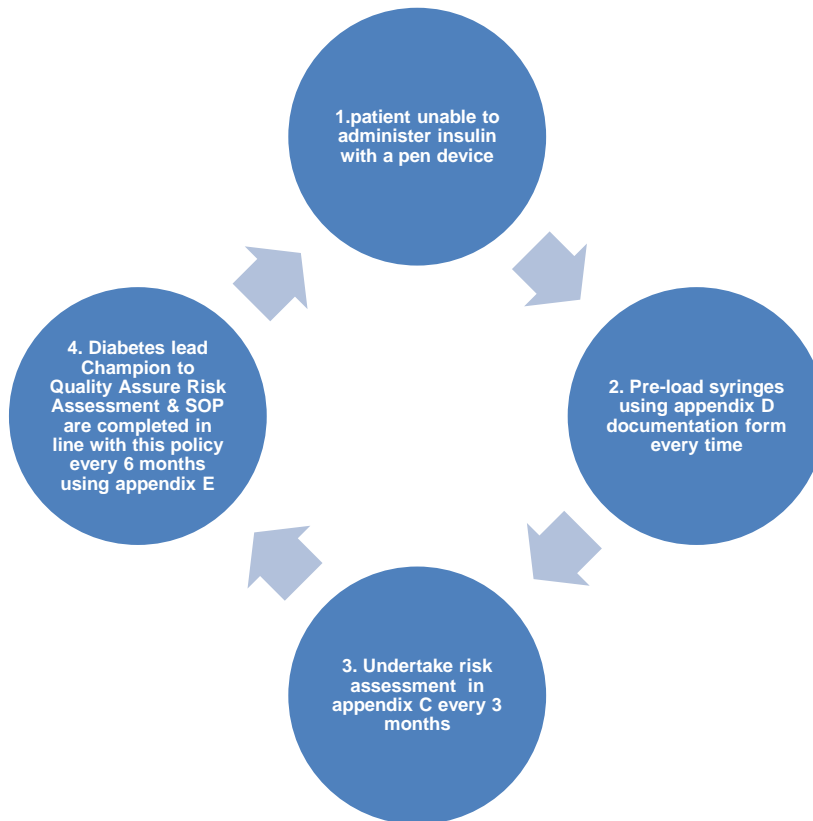
## **10 Further Information**

- 10.1 Links to Administration of Insulin policy.
- 10.2 This policy has referenced as an example of best practice in the RCN national guidance document 'Advance preparation of insulin syringes for adult patients to administer at home. 2<sup>nd</sup> Edition'. [www.rcn.org.uk/publications](http://www.rcn.org.uk/publications)

**Appendix A: Process of syringes being pre-loaded for the patient on the *first* occasion**



**On-going Process of syringes being pre-loaded for the patient**





## Appendix B

### Standard Operating Procedure (SOP) for the assessment of a patient to have insulin prepared in advance of administration

1. Mental capacity and physical capability		
Activity	Rationale	Responsibility
<p>Assess the mental capacity and physical capability of the patient / carers to self-administer insulin.</p> <p>The patient should be at Level 3 which is defined as "the patient accepts full responsibility for the storage and administration of the medicinal products".</p> <p>The level should be documented in the patient's records.</p> <p>Registered nurses should be aware that the Mental Capacity Act 2005 requires all those working with potentially incapacitated people to assess the individual's capacity at a particular moment about a particular decision.</p> <p>Any change in the patient's condition would necessitate a review of their self-administration status; for example, risk of self-harm.</p>	<p>Reduce risk of medication error NMC Standards for Medicines Management (2010)</p> <p>Care plan must be updated as a minimum every 3 months to meet needs of patient</p> <p>Reduce risk of medication error</p>	<p>Zone lead/registered nurse</p>
2. Consent		
Activity	Rationale	Responsibility
<p>Discuss risks and benefits of self-administration with the patient.</p> <p>Support available between community nurse visits.</p>	<p>To gain informed consent and document in patient's record</p>	<p>Zone lead/registered nurse</p>
<p>Where patients consent to self-administration of their medicines the following points must be considered:-</p> <p>Patients share the responsibility for their actions, relating to self- administration of their medicines. If children have access to the fridge that the patient ensures that the syringes are kept out of their reach and/or a child proof fridge lock is in situ. Patients can withdraw consent at any time.</p>	<p>Patients are empowered to make informed choices Safeguarding of Children</p> <p>Patient's retain right to withdraw consent</p>	<p>Zone lead/registered nurse</p>

3. Ensure most appropriate product has been prescribed		
Activity	Rationale	Responsibility
<p>Have you discussed a potential alternative insulin preparation/device with a Senior Diabetes Specialist Nurse (SDSN) in order to avoid this situation ?</p> <p><b>Note: this discussion must have taken place before the assessment can continue further to ensure only the most appropriate patients are involved with this way of insulin self-administration.</b></p>	<p>Unable to preload/use pen devices due to manual dexterity, poor vision, peripheral neuropathy, physical weakness to deliver insulin dose in insulin pen device, patient preference or reluctance to change</p>	<p>Zone lead/registered nurse</p>
4. Contra-indications		
Activity	Rationale	Responsibility
<p>Are there any contra-indications for the pre-loading of insulin syringes:-</p> <p>4.1 Lantus Insulin (Insulin Glargine) must not be pre-loaded up for later administration as it becomes cloudy.</p> <p>4.2 Only use 10ml vials to withdraw insulin into syringes. Do not withdraw from pre-loaded pens or 3ml cartridges.</p> <p>4.3 Is the fridge in working order?</p> <p>4.4 Is the fridge visibly clean?</p> <p>4.5 Is the fridge free from debris?</p> <p>4.6 Patient suffers from an unpredictable mental state or declining cognitive ability.</p> <p>4.7 Very variable capillary blood glucose readings.</p> <p>4.8 If any of the above points are found, then these need to be reported to the GP or Devon Doctors (when out of hours) and the advanced preparation of insulin in syringes should cease and arrangements made for the community nursing team to visit at the required intervals. Complete incident form.</p>	<p>Risk of deterioration of insulin</p> <p>To ensure appropriate storage conditions</p> <p>There would be a risk to patient safety</p>	<p>Zone lead/registered nurse</p>
5. Education of patient		
Activity	Rationale	Responsibility
<p>Information / education given and supervision should be tailored to meet individual patient need to enable the patient to administer the right dose, at the right time using the correct technique.</p>	<p>To ensure safe administration of insulin</p>	<p>Zone lead/ registered nurse</p>

<p>The following information should be provided to the patient <u>before</u> commencing self-administration:-</p> <p>5.1 The name of the medicine.</p> <p>5.2 Why they are taking it, dose and frequency.</p> <p>5.3 Re-suspending each pre-loaded syringe, between the hands to warm the insulin, at least 20 times prior to injection, if using a cloudy insulin.</p> <p>5.4 Inject at a 90° angle into sub-cutaneous tissue using a 'pinch-up' technique into abdomen, outer thigh or buttocks as decided in care plan.</p> <p>5.5 Rotation within an injection site or between different injection sites.</p> <p>5.6 Common side effects and what to do if they occur e.g. hypoglycaemia.</p> <p>5.7 Any special instructions.</p> <p>5.8 How to obtain further supplies.</p> <p>5.9 How to store the medication.</p> <p>5.10 Frequency of visits &amp; contact number for between visits.</p> <p>5.11 Recognition of error and procedure to follow.</p> <p>5.12 Correct disposal of sharps at the point of use.</p>	<p>To comply with NMC Standards for medicines management (2010)</p> <p>Injecting cold insulin can be painful and it is not absorbed so effectively</p>	<p>Zone lead/registered nurse</p>												
<p>Plan of care documented and agreed with patient and nurse to ensure adequate support, monitoring of diabetes control and wellbeing.</p>	<p>To demonstrate partnership working</p>	<p>One lead/registered nurse</p>												
<b>6. Preparation of insulin and pre-loading insulin into syringe</b>														
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: left;">Activity</th> <th style="width: 25%; text-align: left;">Rationale</th> <th style="width: 25%; text-align: left;">Responsibility</th> </tr> </thead> <tbody> <tr> <td data-bbox="145 1346 882 1509"> <p>Nurses must not mix different insulins in the same syringe for administration at a later time (There is no longer a need to mix insulins due to the availability of suitable manufacturer's preparations)</p> </td> <td data-bbox="882 1346 1225 1509"> <p>To reduce risk of administration errors</p> </td> <td data-bbox="1225 1346 1505 1509"> <p>All registered nurses</p> </td> </tr> <tr> <td data-bbox="145 1509 882 1588"> <p>Pre-loaded insulin should be left up to a maximum of seven days</p> </td> <td data-bbox="882 1509 1225 1588"> <p>RCN and NMC policy</p> </td> <td data-bbox="1225 1509 1505 1588"> <p>All registered nurses</p> </td> </tr> <tr> <td data-bbox="145 1588 882 1785"> <p>Document the advanced preparation of insulin on the PCT Community Nursing Record Sheets, ensuring full details are recorded, including batch number, type of insulin and expiry date are recorded</p> </td> <td data-bbox="882 1588 1225 1785"> <p>To comply with Torbay and Southern Devon Health and Care NHS Trust documentation record keeping</p> </td> <td data-bbox="1225 1588 1505 1785"> <p>All registered nurses</p> </td> </tr> </tbody> </table>			Activity	Rationale	Responsibility	<p>Nurses must not mix different insulins in the same syringe for administration at a later time (There is no longer a need to mix insulins due to the availability of suitable manufacturer's preparations)</p>	<p>To reduce risk of administration errors</p>	<p>All registered nurses</p>	<p>Pre-loaded insulin should be left up to a maximum of seven days</p>	<p>RCN and NMC policy</p>	<p>All registered nurses</p>	<p>Document the advanced preparation of insulin on the PCT Community Nursing Record Sheets, ensuring full details are recorded, including batch number, type of insulin and expiry date are recorded</p>	<p>To comply with Torbay and Southern Devon Health and Care NHS Trust documentation record keeping</p>	<p>All registered nurses</p>
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<p>6.23</p> <p>6.24</p> <p>6.25</p> <p>6.26</p> <p>6.27</p> <p>6.28</p>	<p>Label each syringe with patient name, insulin name, date of preparation, initials of RN</p> <p>Label each container with patient name, insulin name, insulin dose, time of administration, number of syringes, date, name and signature of registered nurse.</p> <p>Store pre-filled syringes with needles slightly elevated, within a labelled container as described earlier in main body of the fridge (away from freezer section or the back of the fridge).</p> <p>Dispose of clinical waste and wash hands.</p> <p>Complete nursing notes ensuring date, time, insulin type/dose, batch number and number of syringes pre-filled are recorded.</p> <p>If any pre-loaded syringes have not been used within the designated period, they must be disposed of.</p>	<p>To ensure best practice in the preparation of insulin prior to injection</p>	<p>All registered nurses</p>
<p><b>7. Safe storage of pre-drawn insulin</b></p>			
<p><b>Activity</b></p>		<p><b>Rationale</b></p>	<p><b>Responsibility</b></p>
<p>7.1</p> <p>7.2</p>	<p>The needle should be stored approximately at 45° to prevent blockage by suspended substances in the insulin.</p> <p>Pre-filled syringes should be labelled and stored in a protective container. If there are different doses then use more than one container. Store in the main body of the fridge (away from the freezer section or the back of the fridge) between 2 – 8 degrees°. The container should be clearly labelled with the following information:</p> <ul style="list-style-type: none"> <li>• Date</li> <li>• Name of patient</li> <li>• Pre-loaded dose</li> <li>• Number of syringes</li> <li>• Name of insulin preparation</li> <li>• Time of insulin administration e.g. before breakfast, before evening meal</li> <li>• Route (subcutaneous)</li> <li>• Instructions for administration e.g. just before or 30 minutes before food at times agreed with the patient and documented in the nursing notes</li> <li>• Who has prepared the syringes</li> </ul>	<p>Needle blockage by suspended insulin</p> <p>To promote safe storage of pre-loaded insulin</p> <p>To ensure best practice in the administration of medicines</p> <p>To reduce risk of medication errors</p> <p>To reduce medication error</p> <p>To meet patients individual needs</p>	<p>All registered nurses</p>



**Appendix C: RISK ASSESSMENT FORM – advanced preparation of insulin into syringes for a patient to administer at a later date.**

*To be completed every three months*

<b>Name of patient</b>	
<b>NHS number</b>	
<b>Date of birth</b>	
<b>GP</b>	
<b>Community nursing team</b>	
<b>Type of diabetes</b>	
<b>How long has the patient been insulin treated?</b>	
<b>Range of blood glucose readings:</b>	
<b>Last Hba1c result and date:</b>	
<b>Date risk assessment completed:</b>	
<b>Date of review for risk assessment</b>	
<b>Full name of nurse completing risk assessment form</b>	
<b>Signature</b>	

1. Assessment of patients' suitability for self-administration of insulin	Yes	No	Potential risk	Not known	Seek advice
<p>a) Have you assessed the mental and physical capability of the patient / carer to self-administer insulin?</p> <p>b) <b>Is the patient at Level 1? =</b> The registered nurse is responsible for the safe storage of the insulin and the supervision of the administration process ensuring that the patient understands the insulin product being administered.</p> <p>c) <b>Is the patient at level 2? =</b> The registered nurse is responsible for the storage of the insulin. At administration time the patient will ask the nurse to open the cabinet/locker. The patient will then self-administer the insulin under the supervision of the nurse.</p> <p>d) <b>Is the patient at level 3? =</b> The patient accepts full responsibility for the storage and administration of the medicinal products. <b>Note: the patient should be at Level 3 for this assessment to continue further.</b></p> <p>e) Is the level documented in the patient's records?</p> <p>f) Risk associated with disability – sensory and or physical?</p> <p>g) Risk of self-harm?</p>					
2. Consent	Yes	No	Potential risk	Not Known	Seek advice
<p>a) Have you discussed the risks and benefits of self-administration with the patient?</p> <p>b) Do children have access the fridge?</p>					



<p>c) If yes, have you advised the patient to ensure that the syringes are kept out of the reach of children?</p> <p>d) Has a fridge lock been purchased and in situ?</p> <p>e) Provided information about support available between community nurse visits?</p> <p>f) Is the patient happy to receive this service?</p>					
<p><b>3. Ensure the most appropriate product has been prescribed?</b></p>	<p><b>Yes</b></p>	<p><b>No</b></p>	<p><b>Potential risk</b></p>	<p><b>Not Known</b></p>	<p><b>Seek advice</b></p>
<p>Have you discussed a potential alternative insulin preparation/device with a Senior Diabetes Specialist Nurse (SDSN) in order to avoid this situation? <b>Note: this discussion must have taken place before the assessment can continue further.</b></p>					
<p><b>4. CONTRA-INDICATIONS</b> Are there any contra-indications for the pre-loading of insulin syringes:-</p> <p>a) Is the patient on Lantus Insulin (Insulin Glargine)?</p> <p>b) Is the fridge in working order?</p> <p>c) Is the fridge visibly clean?</p> <p>d) Is the fridge free from debris?</p> <p>e) Patient suffers from an unpredictable mental state or declining cognitive ability?</p> <p>f) Blood glucose showing wide variations?</p> <p>g) Is their current insulin in a pre-filled cartridge/pen?</p> <p>If any of the points a - g are found, then this needs to be reported to the SDSN, GP or Devon Doctors (when out of hours) and the advanced preparation of insulin in syringes should cease and arrangements made for the community nursing team to visit at the required intervals.</p>					

5. Education of patient	Yes	No	Potential risk	Not Known	Seek advice
<p>Has the patient received the following information <u>before</u> commencing self-administration:-</p> <ul style="list-style-type: none"> <li>a) The name of the insulin?</li> <li>b) Why they are taking it?</li> <li>c) Dose and frequency?</li> <li>d) Shown how to re-suspend each pre-loaded syringe, between their hands to warm the insulin, at least 20 times prior to injection, if using a cloudy insulin?</li> <li>e) Inject at a 90° angle into sub-cutaneous tissue using a 'pinch-up' technique into abdomen, outer thigh or buttocks as documented in the care plan?</li> <li>f) Shown how to rotate within an injection site or between different injection sites?</li> <li>g) Educated how to manage hypoglycaemia and what to do if it occurs?</li> <li>h) How to obtain further supplies?</li> <li>i) How to store the insulin?</li> <li>j) Frequency of visits &amp; contact number for between visits?</li> <li>k) Recognition of error and procedure to follow?</li> <li>l) Correct disposal of sharps at the point of use?</li> <li>m) Is the plan of care documented and agreed with patient?</li> <li>n) Nurse to ensure adequate support, monitoring of diabetes control and wellbeing.</li> </ul>					
<b>6. Summary of risks identified</b>					
Summarise risks identified, including intuition and patient's awareness and experience of risk factors.					
	Yes	No	Potential risk	Not known	Seek advice
<b>7. Would pre-loading of insulin promote independence and meet patient need?</b>					
<b>8. Is there a need for any further assessments?</b>					

<b>Appendix D: Documentation form for the advanced preparation of insulin in syringes</b>	
<p>The needle should be stored approximately at 45° to prevent blockage by suspended substances in the insulin</p> <p>Pre-filled syringes should be stored in a labeled protective container in the main body of the fridge (away from the freezer section or the back of the fridge) between 2 – 8 ° Celsius.</p>	
<b>Date</b>	
<b>Name of patient</b>	
<b>NHS number</b>	
<b>Date of birth</b>	
<b>GP</b>	
<b>Community nursing team</b>	
<b>Name of registered nurse who has prepared the syringes:</b>	
<b>Name of insulin preparation (morning):</b>	
<b>Name of insulin preparation (evening):</b>	
<b>Pre-loaded dose – before breakfast</b>	
<b>Pre-loaded dose – before evening meal</b>	
<b>Number of syringes (maximum 7 days to be pre-loaded)</b>	
<b>Syringes labelled with:</b> <ul style="list-style-type: none"> <li>• Patient name</li> <li>• insulin name</li> <li>• date of preparation</li> <li>• initials of registered nurse</li> </ul>	<b>Yes / no</b> <b>Yes / no</b> <b>Yes / no</b> <b>Yes / no</b>
<b>Number of containers</b> (separate containers should be used for insulin to be delivered at different times of day, particularly if the syringe contains a different dosage or type of insulin (RCN 2015))	
<b>Container labelled with:</b> <ul style="list-style-type: none"> <li>• patient name</li> <li>• insulin name</li> <li>• insulin dose</li> <li>• time of administration</li> <li>• number of syringes</li> <li>• Date</li> <li>• Name and signature of registered nurse.</li> </ul>	<b>Yes / no</b> <b>Yes / no</b> <b>Yes / no</b> <b>Yes / no</b> <b>Yes / no</b> <b>Yes / no</b> <b>Yes / no</b>

<b>Instructions for administration</b> – for example, just before or 30 minutes before food at times agreed with the patient?	
<b>Date vial of insulin opened</b> – discard any unused insulin in vial after 28 days	
<b>Batch number of insulin vial</b>	
<b>Expiry date of insulin</b>	
<b>Does the fridge appear to be in good working order?</b>	<b>Yes / no</b>
<b>Documented in the nursing notes?</b>	<b>Yes / no</b>
<b>Anymore insulin/supplies need re-ordering?</b> Patients should have a vial in use and a backup vial at all times to ensure that vials are used methodically.	<b>Yes / no</b>
<b>Signature of registered nurse</b>	
<b>Date and time</b>	
<b>Date of next visit</b>	

**Appendix E: Senior Diabetes Specialist Nurse 6 month quality assurance for policy Implementation**

<b>1. Assessment of patients' suitability for self-administration of insulin</b>	<b>Yes</b>	<b>No</b>	<b>Potential risk</b>	<b>Not known</b>	<b>Seek advice</b>
<p>Has an assessment of the mental and physical capability of the patient / carer to self-administer insulin been documented?  <b>Is the patient at level 3?</b> = The patient accepts full responsibility for the storage and administration of the medicinal products.                      Is the level documented in the patient's records?                      Risk associated with disability – sensory and or physical?</p>					
<b>2. Consent</b>	<b>Yes</b>	<b>No</b>	<b>Potential risk</b>	<b>Not known</b>	<b>Seek advice</b>
<p>Has the risks and benefits of self-administration been discussed with the patient?                      Provided information about support available between community nurse visits?                      Is the patient happy with this service?</p>					
<b>3. CONTR-INDICATIONS</b>	<b>Yes</b>	<b>No</b>	<b>Potential risk</b>	<b>Not known</b>	<b>Seek advice</b>
<p>Are there any contra-indications for the pre-loading of insulin syringes:-</p> <ul style="list-style-type: none"> <li>• Is the patient on Lantus Insulin (Insulin Glargine)?</li> <li>• Is the fridge in working order?</li> <li>• Is the fridge visibly clean?</li> <li>• Is the fridge free from debris?</li> <li>• Protective container/s to store syringes?</li> <li>• Blood glucose showing wide variations?</li> <li>• Is the insulin being drawn from a pre-filled cartridge/pen?</li> </ul>					
<b>Issues/ comments back to RN's involved</b>					
<b>Date of next 6 month quality assurance visit</b>					
<b>Signature of Senior Diabetes Specialist Nurse</b>					
<b>Date and time</b>					

## 11. Document Control Information

This is a controlled document and should not be altered in any way without the express permission of the author or their representative.

Please note this document is only valid from the date approved below, and checks should be made that it is the most up to date version available.

If printed, this document is only valid for the day of printing.

<b>Ref No:</b>	1917		
<b>Document title:</b>	<b>Pre-loading of insulin syringes for adult patients to administer at home</b>		
<b>Purpose of document:</b>	Safe professional practice		
<b>Date of issue:</b>	20 October 2017	<b>Next review date:</b>	31 January 2018
<b>Version:</b>	2.0	<b>Last review date:</b>	
<b>Author:</b>	Diabetes Lead Champion		
<b>Directorate:</b>	Operations		
<b>Equality Impact:</b>	The guidance contained in this document is intended to be inclusive for all patients within the clinical group specified, regardless of age, disability, gender, gender identity, sexual orientation, race and ethnicity & religion or belief		
<b>Committee(s) approving the document:</b>	Care & Clinical policies		
<b>Date approved:</b>	17 May 2017		
<b>Links or overlaps with other policies:</b>	All TSDFT Trust Strategies, policies and procedure documents		

	<i>Please select</i>	
	Yes	No
<b>Have you considered using Equality Impact Assessment?</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Does this document have implications regarding the Care Act?</b> <i>If yes please state:</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Does this document have training implications?</b> <i>If yes please state:</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Does this document have financial implications?</b> <i>If yes please state:</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Is this document a direct replacement for another?</b> <i>If yes please state which documents are being replaced:</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Document Amendment History

Date	Version no.	Amendment summary	Ratified by:
October 2010	1.0	new	Care & clinical policies
November 2012	1.0	Re-badged	Care & clinical policies
April 2015	2.0	updated	Care & clinical policies

30 June 2017	2	Review date extended	Care and Clinical Policies Group
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20 October 2017		Review date extended	Care and Clinical Policies Group
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## 12. The Mental Capacity Act 2005

The Mental Capacity Act provides a statutory framework for people who lack capacity to make decisions for themselves, or who have capacity and want to make preparations for a time when they lack capacity in the future. It sets out who can take decisions, in which situations, and how they should go about this. It covers a wide range of decision making from health and welfare decisions to finance and property decisions

Enshrined in the Mental Capacity Act is the principle that people must be assumed to have capacity unless it is established that they do not. This is an important aspect of law that all health and social care practitioners must implement when proposing to undertake any act in connection with care and treatment that requires consent. In circumstances where there is an element of doubt about a person's ability to make a decision due to 'an impairment of or disturbance in the functioning of the mind or brain' the practitioner must implement the Mental Capacity Act.

The legal framework provided by the Mental Capacity Act 2005 is supported by a Code of Practice, which provides guidance and information about how the Act works in practice. The Code of Practice has statutory force which means that health and social care practitioners have a legal duty to have regard to it when working with or caring for adults who may lack capacity to make decisions for themselves.

**“The Act is intended to assist and support people who may lack capacity and to discourage anyone who is involved in caring for someone who lacks capacity from being overly restrictive or controlling. It aims to balance an individual's right to make decisions for themselves with their right to be protected from harm if they lack the capacity to make decisions to protect themselves”. (3)**

All Trust workers can access the Code of Practice, Mental Capacity Act 2005 Policy, Mental Capacity Act 2005 Practice Guidance, information booklets and all assessment, checklists and Independent Mental Capacity Advocate referral forms on iCare

[http://icare/Operations/mental\\_capacity\\_act/Pages/default.aspx](http://icare/Operations/mental_capacity_act/Pages/default.aspx)

## Infection Control

All staff will have access to Infection Control Policies and comply with the standards within them in the work place. All staff will attend Infection Control Training annually as part of their mandatory training programme.

### 13. Quality Impact Assessment (QIA)

Who may be affected by this document?	Please select			
	Patient / Service Users	<input type="checkbox"/>	Visitors / Relatives	<input type="checkbox"/>
	General Public	<input type="checkbox"/>	Voluntary / Community Groups	<input type="checkbox"/>
	Trade Unions	<input type="checkbox"/>	GPs	<input checked="" type="checkbox"/>
	NHS Organisations	<input type="checkbox"/>	Police	<input type="checkbox"/>
	Councils	<input type="checkbox"/>	Carers	<input type="checkbox"/>
	Staff	<input checked="" type="checkbox"/>	Other Statutory Agencies	<input type="checkbox"/>
	Others (please state):			

Does this document require a service redesign, or substantial amendments to an existing process? <b>no</b>	<input type="checkbox"/>
<i>If you answer yes to this question, please complete a full Quality Impact Assessment.</i>	

Are there concerns that the document could adversely impact on people and aspects of the Trust under one of the nine strands of diversity?  <b>no</b>	Age	<input type="checkbox"/>	Disability	<input type="checkbox"/>
	Gender re-assignment	<input type="checkbox"/>	Marriage and Civil Partnership	<input type="checkbox"/>
	Pregnancy and maternity	<input type="checkbox"/>	Race, including nationality and ethnicity	<input type="checkbox"/>
	Religion or Belief	<input type="checkbox"/>	Sex	<input type="checkbox"/>
	Sexual orientation	<input type="checkbox"/>		
<i>If you answer yes to any of these strands, please complete a full Quality Impact Assessment.</i>				
If applicable, what action has been taken to mitigate any concerns?				

Who have you consulted with in the creation of this document?  <i>Note - It may not be sufficient to just speak to other health &amp; social care professionals.</i>	Patients / Service Users	<input checked="" type="checkbox"/>	Visitors / Relatives	<input type="checkbox"/>
	General Public	<input type="checkbox"/>	Voluntary / Community Groups	<input type="checkbox"/>
	Trade Unions	<input type="checkbox"/>	GPs	<input checked="" type="checkbox"/>
	NHS Organisations	<input type="checkbox"/>	Police	<input type="checkbox"/>
	Councils	<input type="checkbox"/>	Carers	<input type="checkbox"/>
	Staff	<input checked="" type="checkbox"/>	Other Statutory Agencies	<input type="checkbox"/>
	Details (please state):			