

Administration of insulin to adults with diabetes in the community by a Non Registered Practitioner and Nursing Associate

Lead executive	Associate Director of Nursing and Therapies Physical Health / Director of Infection Prevention and Control
Authors details	Professional Development Lead Physical Health Community CWP

Type of document	Policy for insulin administration by a Non Registered Practitioner (NRP) and Nursing Associate (NA) as part of diabetes care in the community.
Target audience	All community staff employed by CWP West Physical Health Services
Document purpose	To provide a framework that safely manages the risks associated with the administration of subcutaneous insulin doses by Non Registered Practitioner and Nursing Associate for patients with diabetes living in their own home or residential care settings and who are unable to self-administer their own insulin therapy.

Approving meeting	Clinical Patient and Standards Sub Committee	Date 23/08/2018
Implementation date	November 2018	

CWP documents to be read in conjunction with	
IC1	Trust wide infection prevention and control operational policy
CP24	Cardiopulmonary resuscitation policy
MP1	Medicines policy
HS1	Waste management policy
CP3	Health records policy
GR33	Lone worker policy
MP25	Administration and checking of medicines by Assistant Practitioner
MP16	Non- medical prescribing policy
CP59	Medical devices and equipment policy
CP64	Anaphylaxis treatment policy
	Guidance on the use of insulin passports
	End of life diabetes guidelines
	Hypoglycaemia management guideline

Document change history	
What is different?	Streamlined and simplified
Appendices / electronic forms	Streamlined and simplified
What is the impact of change?	Due to the rapid expansion in the number patients requiring insulin in the community this initiative will enable patient demand to be met and release capacity. This innovative approach will provide high quality care and continuity of care responsive to patients' needs.

Training requirements	<p>Yes - Training requirements for this policy are in accordance with the CWP Training Needs Analysis (TNA) with Education CWP.</p> <p>Diabetes education programme modules 1 and module 2: training in the administration of insulin delivered and assessed by Senior Diabetes Specialist Nurse Countess of Chester</p> <p>Non registered staff and Nursing Associates will be able to demonstrate attainment of mathematics of level 3 NVQ or alternatively complete an internal assessment by the pharmacy team. This forms baseline knowledge of the conversions of doses and volume delivered and assessed as competent by the pharmacy team. (This training can be re-attended as required).</p> <p>Mandatory training on basic life support and anaphylaxis.</p>
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Document consultation	
Clinical Services	Professional Development Lead Physical Health Community CWP Clinical lead District Nurse CWP Community Care Team Manager CWP Clinical lead District Nurse Princeway CCT Team Manager Ellesmere Port CCT NRP representative
Corporate services	Senior Clinical Pharmacist Physical Health CWP Clinical Pharmacy technician CWP
External agencies	Senior Diabetes Specialist Nurse Countess of Chester GP Clinical Lead for diabetes West Cheshire CCG Patient representative Royal College of Nursing.

Financial resource implications	Low - Staff training and teaching, clinical supervision, resources
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External references
<ol style="list-style-type: none"> 1. NMC (2015) The Code: Professional Standards of practice and behavior for nurses and midwives NMC: London https://www.nmc.org.uk/globalassets/sitedocuments/nmc-publications/nmc-code.pdf accessed 21 June 2018 2. NMC (2010) Standards for Medicines Management NMC: London https://www.nmc.org.uk/globalassets/sitedocuments/standards/nmc-standards-for-medicines-management.pdf accessed 21 June 2018 3. Skill for Care and Health (2013) Code of Conduct for Healthcare support workers and Adult social care workers in England Department of Health www.skillsforcare.org.uk accessed 21 June 2018 4. Skill for Care and Health (2013) The code of conduct employer guide Department of Health www.skillsforcare.org.uk 5. Diabetes National Workforce Competence Framework Guide 2014 https://www.diabetes.org.uk/resources-s3/2017-09/Diabetes%20UK_position%20statement%20Competency%20Frameworks%20in%20Diabetes.pdf accessed 21 June 2018

Equality Impact Assessment (EIA) - Initial assessment	Yes/No	Comments
Does this document affect one group less or more favourably than another on the basis of:		
- Race	No	
- Ethnic origins (including gypsies and travellers)	No	
- Nationality	No	
- Gender	No	

Equality Impact Assessment (EIA) - Initial assessment	Yes/No	Comments
- Culture	No	
- Religion or belief	No	
- Sexual orientation including lesbian, gay and bisexual people	No	
- Age	No	
- Disability - learning disabilities, physical disability, sensory impairment and mental health problems	No	
Is there any evidence that some groups are affected differently?	No	
If you have identified potential discrimination, are there any exceptions valid, legal and/or justifiable? N/A		
Is the impact of the document likely to be negative?	No	
- If so can the impact be avoided?	N/A	
- What alternatives are there to achieving the document without the impact?	N/A	
- Can we reduce the impact by taking different action?	N/A	
Where an adverse or negative impact on equality group(s) has been identified during the initial screening process a full EIA assessment should be conducted.		
If you have identified a potential discriminatory impact of this procedural document, please refer it to the human resource department together with any suggestions as to the action required to avoid / reduce this impact. For advice in respect of answering the above questions, please contact the human resource department.		
Was a full impact assessment required?	No	
What is the level of impact?	Low	

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1.0 Introduction

Insulin therapy is used in the management of type 1 and type 2 Diabetes and is administered via subcutaneous injection. People with Type 1 Diabetes require regular insulin injections to maintain life and to prevent the short and long term complications of diabetes. Type 2 Diabetes is a progressive condition and many people require insulin therapy either permanently or temporarily (e.g. during times of illness) to maintain blood glucose control and prevent the short and long term complications of diabetes.

The majority of individuals are able to self-administer their insulin but some patients require their insulin to be administered by a Registered Nurse (RN), Non Registered Practitioner (NRP), Nursing Associate (NA) or carer. The role of the NRP and NA is vital in supporting individual patients' management and enabling the multi-disciplinary teams to manage increasing numbers of patients requiring support with insulin administration. As recommended by the Nursing and Midwifery Council (NMC 2015) safe evidence based practice will be underpinned with local training.

2.0 Purpose

This policy describes the roles, responsibilities, and processes for ensuring that patients on insulin who require support are managed safely. The trust promotes patient independence within the **safe, effective** and **appropriate** use of resources, as guided by The Adult Patients Passport to the Safer Use of Insulin (National Patient Safety Agency/2011/PSA003).

The Safer use of insulin focuses on giving:

- The Right insulin
- The Right dose
- The Right way
- At the Right time

With the appropriate:

- Storage
- Safe disposal of sharps
- Hypoglycaemia prevention and management

The policy will outline the required training and development needs of Non Registered Practitioners and Nursing Associates to safely administer insulin.

3.0 Definition & Abbreviations

CWP	Cheshire and Wirral Partnership NHS Foundation Trust
RN	Registered Nurse (professionally accountable for the delegation of the task)
DSN	Diabetes Specialist Nurse
MDT	Multidisciplinary Team (Community nurses, Matrons, GPs, Occupational Therapist and Physiotherapists who work together to deliver community health services)
NMC	Nursing and Midwifery Council
RCN	Royal College of Nursing
NRP	Non Registered Practitioner
NA	Nursing Associate
Insulin Administration	An injection of insulin given subcutaneously via an insulin pen device

4.0 Duties

4.1 Head of Operations and Head of Clinical Services:

- Are responsible for ensuring the safe and effective delivery of services they manage; this includes securing and directing resources to support the implementation of this policy and therefore must ensure that all staff have access to this document.

4.2 Line Managers

- Are responsible for informing staff of this policy and raising awareness of associated policies, guidelines and documents.
- Must ensure that the appropriate education, supervision, and mechanisms are in place to ensure safe practice.
- Must identify training requirements at the earliest opportunity and addressed via appraisal or supervision and a record of competencies kept for audit purposes.
- Are responsible for ensuring that NRP's and NA's have access to a suitably competent registered nurse to enable NRP's and NA's to be mentored.

4.3 Diabetes Specialist Nursing Team Countess of Chester Hospital Foundation Trust

- The Diabetes Specialist Nursing Service will support the Community Care Teams (CCT) by providing education and training to staff as required.

4.4 Registered Nurse (RN's)

- Are responsible for appropriate delegation of administration of insulin by NRP or NA in accordance with NMC (2015, 2010).
- Are responsible for ensuring that patient assessments, care plans and authorisations are in place and reviewed.
- Are responsible for reviewing the suitability of the patients to be delegated to NRP and NA's.
- Are responsible for ensuring their own knowledge base and competency is maintained to an appropriate level for assessing the competency of others.
- Are responsible for mentoring and confirming demonstration of NRP's and NA's competency.
-

4.5 Non Registered Practitioners and Nursing Associates (NRP and NA):

- Must attend and meet requirements of the diabetes module, mathematics achievements, and practical competency prior to accepting delegation for the administration of insulin.
- Are responsible for their actions and to work within their scope of practice (Skills for Health, 2013).
- Completing all record keeping in accordance with Trust policy.
- Are responsible for ensuring that all documentation is in place in the patients' home.
- Are responsible for escalating and concerns, changes in patient condition, environment or circumstances, or in the event of a drug error.
- Must maintain their competency: seeking support and further training as needed, and reflect on their clinical practice at least annually during their appraisal process.

5.0 Procedure for the Safe Administration of Insulin by a NRP and NA

5.1 Assessment

The following actions must be completed by the RN when considering whether the patient is suitable to have their insulin administered by a NRP or NA, that the:

- NRP and NA has achieved the required confidence and competency in the administration of insulin in accordance with training requirements ([Appendix 4](#))
- Patient is unable to self-administer and does not have family or carers able to administer insulin.
- Patient has a comprehensive nursing assessment, written authorisation form, and care plan in place.
- Patient is suitable for a NRP or a NA to administer insulin; taking into account the patient's environment and diabetes history / stability.
- Patient has their own insulin, insulin administration pen device, insulin pen needle, needle clip and storage facilities.

5.2 Exclusions

- Patient assessed as not suitable for capillary blood glucose monitoring.
- Patient on a sliding scale insulin dose.
- If the patient's condition deteriorates; the suitability for the delegation of insulin administration must be reassessed by the RN.

For additional information for administration of insulin procedure refer to [appendix 3](#).

6.0 Training

The NRP and NA will:

- Be able to evidence mathematic achievement to level 3 NVQ or will attend for mathematic assessment by the pharmacy team.
 - Support can be provided by attending a mathematic training session provided by CWP Education.
- Complete Diabetes Education module 1; and progress to module 2.
 - A mentor agreement will be in place prior to module 2 ([appendix 1](#)).
 - Learning outcomes are detailed in ([appendix 2](#)).
- Attend in-house basic life support and anaphylaxis training and achieve required competency.

7.0 Competency Assessment

- The NRP and NA meet the competency requirements set out by the assessment form ([appendix 4](#)).
- A copy of the signed competency assessment must be retained within the NRP's or NA's personal file.

Appendix 1: Mentor Agreement

Mentor Agreement TO BE SIGNED PRIOR TO TRAINING

Name of Registered Nurse (please print)	
Work address	
Telephone number	
Email address	

I confirm that I am competent to delegate, supervise, support and assess the administration of insulin and blood glucose monitoring.

Name (print)	
Signature	
Date	

Name of Non Registered Practitioner / Nursing Associate	
Work address	
Telephone number	
Email address	

Note: This document needs to be produced by the NRP/NA at the time of booking for Module 2.

Appendix 2: Learning Outcomes for Diabetes Courses

Learning Outcomes for Diabetes Courses to support the administration of insulin for Non Registered Practitioner and Nursing Associates

Module 1

By the end of this Module, the NRP/NA should be able to:

- Define the term Diabetes
- Identify the main types of diabetes
- List the signs & symptoms of diabetes
- State diagnostic blood glucose levels & targets
- Identify screening opportunities for diagnosis of diabetes
- Briefly discuss the potential short & long term complications of diabetes
- Understand the Nutritional & Lifestyle Management of Diabetes
- Have an appreciation of the medication used to manage diabetes
- An awareness of the insulin pens devices used
- Understand the aims of treatment

Which Skills for Health /KSF Dimension will it cover?

- HA1 Assess the health care needs of individuals with diabetes and agree care plans (KSF HWB6)
- HA2 Work in Partnership with individuals to sustain care plans to manage their diabetes (KSF HWB7)
- HA5 Help an individual understand the effects of food, drink, and exercise on their diabetes (HWB4)
- HA6 Help individuals with diabetes to change their behavior to reduce the risk of complications and improve their quality of life (KSF HWB4 level 3)
- HA7 Develop agree and review a dietary plan for an individual with diabetes (HWB6)
- HA9 Help an individual with diabetes to improve blood glucose control (HWB6)

Additional Information

This competency document links with the following dimension within the NHS Knowledge and Skills Framework (2004)

Dimensions

- HWB6 Assessment and treatment planning
- HWB4 Enablement to address health & wellbeing

Diabetes Management Course (Module 2)

The **second Module** in a series of 2 modules which have been developed to increase an individual's knowledge and skills in Diabetes Management according to their job role. Applicants must have attended module 1 of the programme. In addition they must have passed the course assessment from module 1 and have a registered nurse who is diabetes mentor willing to undertake the summative assessment associated with the module.

By the end of this Module activity the NRP/NA should be able to:

- Define the term Diabetes and name the different types
- State normal blood glucose levels & targets for diabetes management
- Understand how oral blood glucose lowering agents and insulin regimes used in the management of type 1 and type 2 diabetes
- Explain the role of insulin therapy in the management of Type 1 and Type 2 diabetes
- Understand the role of blood glucose monitoring and how to perform this task in relation to insulin administration and be familiar with the Diabetes competency Frameworks used in the summative assessments of blood glucose monitoring and insulin administration
- Be familiar with the equipment used to administer insulin

- Receive training on the safe administration of insulin (to include practical training)
- Understand and define how to prevent and treat hypoglycaemia and hyperglycaemia
- Awareness of illness management for those patients with type 1 diabetes
- To be aware of the CQC requirement and legal responsibilities associated with the administration of insulin.
- Be aware of your roles and responsibilities pertaining to insulin administration
- To be aware of the patient consent documentation and care plans

Which Skills for Health /KSF Dimension will it cover?

- HA1 Assess the health care needs of individuals with diabetes and agree care plans (KSF HWB6)
- HA2 Work in Partnership with individuals to sustain care plans to manage their diabetes (KSF HWB7)
- HA5 Help an individual understand the effects of food, drink, and exercise on their diabetes (HWB4)
- HA6 Help individuals with diabetes to change their behavior to reduce the risk of complications and improve their quality of life (KSF HWB4)
- HD3 Help individuals with type 2 Diabetes continue Insulin Therapy (KSF HWB4)
- HA7 Develop agree and review a dietary plan for an individual with diabetes (HWB6)

Appendix 3: Procedure for the Administration of Insulin

Equipment

- Clean box in which to place equipment
- Patients Insulin Pen and needles
- Cotton wool/tissues
- Care Plan
- Patient medication authorisation sheet, signed.
- Personal Protective Equipment (PPE)
- Hand hygiene products including alcohol hand rub
- Blood Glucose Meter & Test Strips
- Single use lancet device
- Sharps Container
- Documentation of blood glucose on Patient EMIS records

Procedure

- Correct identification of patient, using patient unique identifier as necessary such as recall of name, date of birth. If the patient is in a residential care setting, ensure a carer confirms correct patient identity.
- Explain procedure to patient.
- If the person withholds consent and has the capacity to do so seek advice immediately from registered nurse/or General Practitioner.
- If the person is unable to give consent then a decision about treatment must have been made in their best interests with a registered nurse or General Practitioner.
- Read and perform care in line with plan and the written authorisation form, which includes client name, insulin dose written in units, date and time of administration, route and method of administration.
- Wash hands as per local policy and ensure patient's hands are clean.
- Perform capillary blood glucose test prior to procedure.
- Ensure patient's blood glucose level is within individual parameters as specified on care plan.
- Prepare patient and select site for injection
- Check expiry of date of insulin and ensure not been opened at room temperature for more than 4 weeks.
- Prepare insulin pen following correct procedure below (Figures 1 & 2)
- Attach pen needle, administer insulin, then clip off needle using safe clip before removing needle hub, then disposing in sharps bin (Both Safe clip and sharps bin obtained through GP prescription).
- Complete necessary records and document Insulin dose administration.

Administration Process

1. If the insulin is cloudy gently tip the pen backwards and forwards 10 times (B). If a new pen or pen straight from the fridge, roll the pen between the palms of your hands 10 times (A). If the insulin is clear there is no need to mix (Figure 1).

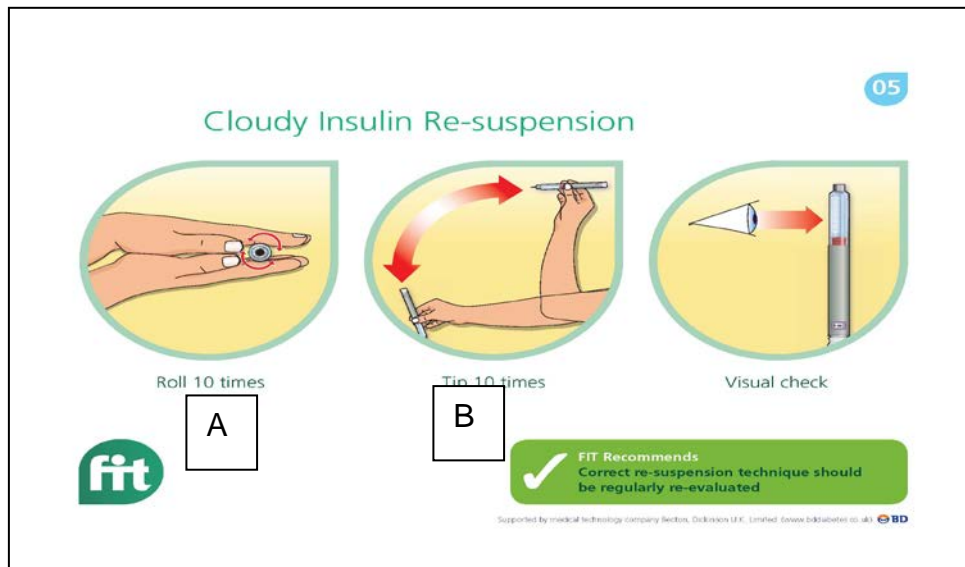


Figure 1

2. Take insulin needle from box, ensure it is sealed along the tabbed area (as demonstrated in module 1 and 2).
3. Take the insulin pen device and remove the protective lid so that rubber seal can be seen.
4. Take the needle by the hub and peel back foil lid to expose insertion area.
5. Ensure both the needle hub and pen are horizontally lined up, then push and screw the pen needle hub into the end of the pen device in a clockwise direction until it meets resistance. DO NOT OVERTIGHTEN (Figure 2)

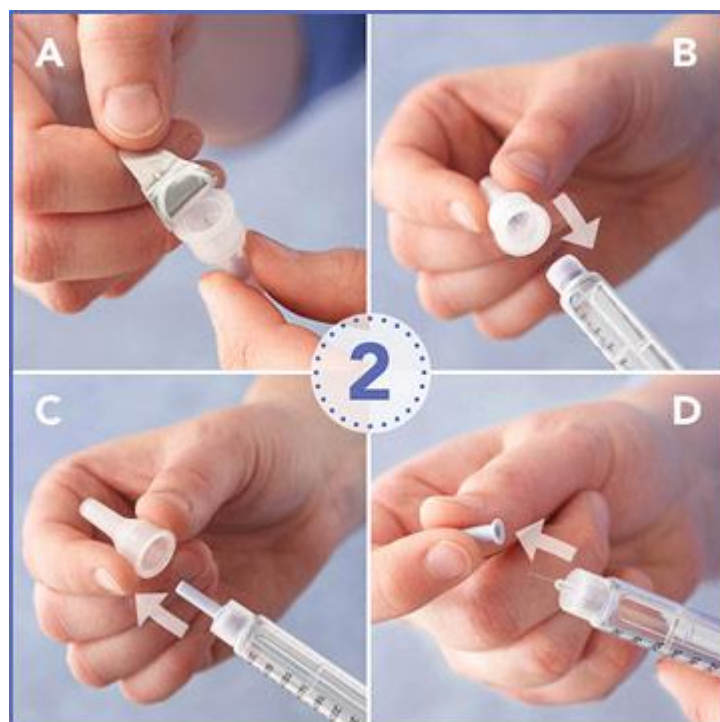


Figure 2

6. Remove the needle hub and safety cover from needle.

7. Prime the insulin pen by dialing 2 units of insulin and pointing the pen upright depress the plunger so that the insulin flows from the needle device. A drop of insulin should appear at the end of the device, do not repeat the process again until drop of insulin is seen. (Figure 3)



Figure 3

8. Dial the prescribed dose of insulin on the pen device (Figure 4).



Figure 4

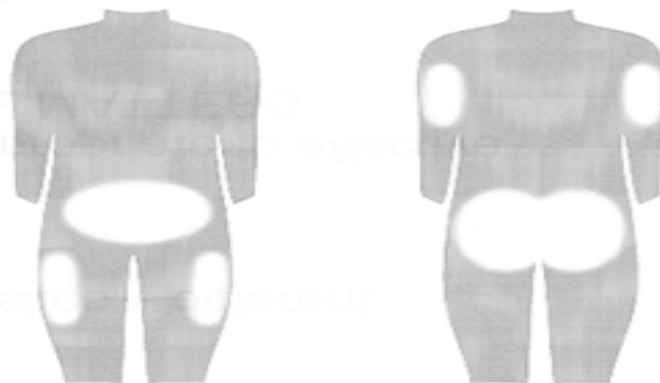
9. Select injection site ensuring it is a different area than previous injection (Figure 5)

Diabetes UK Injection guidance

There are three main areas where insulin is injected:

- stomach
- buttocks and
- thighs

Sometimes other sites are appropriate, such as upper arms. Remember, absorption rates differ between sites



Diabetes UK: About Injecting www.diabetes.org.uk (2009)

Figure 5

10. In one continuous motion insert the needle vertically (90 degree angle) into the skin. Your thumb should not be on the pen plunger at this stage. (Figure 6).

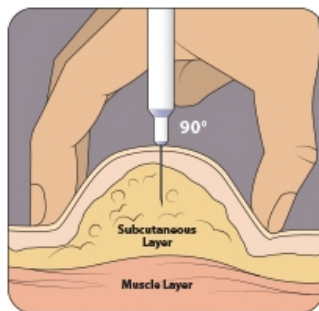


Figure 6

11. Once the needle has penetrated the skin when the clear plastic shield retracts maintain the pressure against the skin and deliver the insulin dose by pushing the pen plunger down with your thumb until the dose has been completely delivered.
12. Once the dose has been given, hold for 10 seconds and then lift the pen away from the skin.
13. First break needle off using the safe clip, then remove pen needle from the pen hold the hub and twist the pen anticlockwise. (REMEMBER THIS IS STILL A SHARP). (Figure 7)



14. Discard the needle in the sharps container (Figure 8).



Figure 8

15. Remove PPE and decontaminate hands
16. Complete documentation ensuring the name of insulin administered, the time it was administered, dose given written in units, expiry date and injection site used are recorded in patient notes.

Appendix 4: Practical Assessment and Demonstration Form for Subcutaneous Insulin Administration by NRP/NA

Name of NRP / NA

Name of Assessor.....

Date Assessed.....

The NRP/NA must be able to demonstrate understanding of:	Yes or No:
Describe the action insulin has on blood glucose levels.	
State how to correctly store insulin (in use) and (not in use)	
Identify 3 factors that may damage insulin	
State how prescribed insulin should appear prior to injection	
Identify the name and dose of the prescribed insulin preparation	
Name 2 potential side effects of insulin	
Identify how and who to contact in case of queries or untoward events	
Identify 2 potential problems with injection sites and their likely causes	
Describe course of action in the event of needlestick injury	
Describe procedure for obtaining insulin supplies	
Describe course of action in the event of needle-stick injury	
Name 4 symptoms of hypoglycaemia & possible causes	
Identify appropriate treatment/action in the event of hypoglycaemia (including fast & slow acting carbohydrate)	

The NRP/NA must be able to demonstrate in practice to a registered nurse:	Yes or No
Gain patient consent for administration of insulin	
Check expiry date on insulin pen (if expired or damaged-discard. If starting a new pen endorse with date opened)	
Check patient prescription for type & dose of insulin	
Prepare insulin pen as per Trust Guideline. (Insulin mixes rotated for 10 times)	
Correctly select insulin injection site & examine for lipohypertrophy/bruising/inflammation	
Perform insulin injection correctly as per Trust Guideline.	
Observe injection site following insulin administration for leakage and act accordingly	
Correctly record administration (dose & site) together with any untoward events which should be reported via Datix	
Correctly dispose of needle/ insulin pen as per Trust Sharps policy	

FOR SIGN OFF	
Signature of Mentor	Date.....
Signature of NRP / NA	Date.....
..	

Additional Information

This competency document links with the following dimension within the NHS Knowledge and Skills Framework (2012)

Dimensions

- HWB6 Assessment and treatment planning
- HWB4 Enablement to address health & wellbeing

The National Occupational Standards developed by Skills for Health (2004)

- Diab HD4 Identifying hypoglycaemic emergencies & help others manage them
- Diab HD3 Help Individual with type 2 Diabetes continue insulin therapy