Insulin Administration by Health Care Professionals in the Community

State whether the document is: ☐ **Business Group**	**State Document Type:** ☐ **Standard Operating Procedure**
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CONSULTATION	• Diabetes Specialist Nurses (Stockport Community Business Groups) • District Nursing Services (Stockport Community Business Groups) • Practice Educator Service
EQUALITY IMPACT ASSESSMENT	• Screening
RELATED APPROVED TRUST DOCUMENTS	• Safe use and Disposal of Sharps SOP • Standard Precautions, Infection Prevention SOP • Hand Decontamination SOP • Personal Protective Equipment SOP • Consent to Examination and Treatment • Record Keeping and Good Practice Standards and Audit SOP • SOP for Roche Hand Held Performa Glucose Meter • Medicines Management Policy Section 3. • Community Medicines Management Policy Version 1 • Community Competency Framework for Insulin Administration for Healthcare Professionals
FURTHER INFORMATION	• NMC -The Code for nurses and midwifes • NMC - Standards for Medicines Management www.nmc.org.uk/standards • British National Formulary www.bnf.org/bnf (2015) • Electronic Medicines Compendium www.medicines.org.uk/emc (2015)

	• Diabetes UK - Hypos and hypers • Diabetes UK - Nutritional Guidelines (2003) www.diabetes.org.uk (2015) • Trend Hypoglycaemia Leaflet • Forum for Injection technique. Diabetes Care in the UK • Trend An Integrated Career and Competency Framework for Diabetes Nursing (3rd Edition) • Trend Safe Driving and the DVLA Leaflet www.trend-uk.org (2015) • Diabetes UK Diabetes in Healthcare training Resource www.diabetesinhealthcare.co.uk (2013) • NHS Improvement https://improvement.nhs.uk/resources/patient-safety-alerts Reference NHS/PSA/W/2016/011
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THIS DOCUMENT REPLACES	Community Business Group Protocol for the Administration of Insulin by District Nurses

Document Change History:

Issue No	Page	Changes made (include rationale and impact on practice)	Date
Version 1: December 2011	Whole document	Revision of complete document Further Amendments	February 2015 May 2016

1. INTRODUCTION/PURPOSE OF THE DOCUMENT

This SOP is necessary to provide consistency for all health care professionals in the community setting involved in the management of diabetes for individuals requiring insulin administration and blood glucose monitoring.
The purpose of this policy is to ensure health care professionals adhere and comply with Trust guidance that will minimise risk to both the Health Care Professionals and Patient.
The SOP relates directly to other Standard Operating Procedures.

2. STATEMENT OF INTENT / SCOPE OF THE DOCUMENT

This SOP applies to all health care professionals who are responsible for administering insulin or who are responsible for monitoring blood glucose levels.
A failure to follow the requirements of the policy may result in investigation and management action being taken as considered appropriate. This may include formal action in line with the Trust's disciplinary or capability procedures for Trust employees; and other action in relation to other workers, which may result in the termination of an assignment, placement, secondment or honorary arrangement.

3. SUMMARY OF THE DOCUMENT

The policy aims to ensure all health care professionals responsible for administering insulin or monitoring blood glucose levels are able to identify the risks, causes, signs and symptoms of hypoglycaemia and are able to treat appropriate.

4. DEFINITIONS

Healthcare Professional (HCP) the appropriately trained clinician band 3 and above involved in the care of the individual needing care.

Diabetes Specialist Nurse (DSN)

General Practitioner (GP)

Unistix - single use blood glucose lancet device

Hypoglycaemia - Blood glucose level below 4.0 mmols

Hyperglycaemia - Blood glucose level above 15.0 mmols

Diabetes Care Provider - Healthcare professional managing patient's diabetes e.g. GP, DSN, Consultant and Mastercall

5. ROLES & RESPONSIBILITIES

- Implementation of document - Diabetes Specialist Nursing Team to disseminate electronic copies of the document to pathway leads and all Long Term Condition teams
- All community nurse team leads, long term condition team leads to ensure all members of staff who administer insulin or monitor blood glucose are familiar with the document

- Community team leads responsible for ongoing monitoring of implementation of the document
- All staff involved in administering insulin or monitoring blood glucose levels are responsible for ensuring they have read and understood the document and are able to implement it.
- Community nursing team leaders are responsible for following Trust policy for incident reporting
- Diabetes Nursing Services are responsible for the timely review of the document
- Health Care Assistants and Assistant Practitioners can administer insulin to individuals with stable diabetes once they have completed the appropriate training and have been deemed competent (Community Competency Framework for Insulin administration for Healthcare Professionals)
- Each patient must have had an assessment for their suitability carried out by a Band 6 Caseload Holder
- The unregistered HCP must be assessed against each individual patient by a competent registered practitioner
- The patient must be seen by a registered practitioner weekly.

For the purposes of this SOP an individual with stable diabetes patient must have the following:-

- Patient has mental capacity
- Patient has regular carbohydrate/nutritional intake, breakfast, lunch, evening meal and supper
- Stable blood glucose readings between 6-12 mmols
- No recent acute illness requiring hospital admission within the previous 3 months
- No recent history of hypoglycaemia or hyperglycaemia within the previous 3 months
- Once or twice daily long acting analogue insulins or medium and long acting insulins in a pen device (section 7)
- Once or twice daily mixed analogue insulins or mixed insulins in a pen device(section 7)

Discuss with Health Care Provider about suitability if necessary

6. STANDARD OPERATING PROCEDURE (SOP)

This SOP relates to the safe administration of insulin by community staff.

Documentation-Prescription

- A written prescription for the insulin must be obtained from the DSN/GP or hospital prescribing doctor prior to the first administration. The insulin should be prescribed on the signed Insulin Prescription/Authorisation Record (Appendix A)
- When a new or replacement Insulin prescription/Authorisation sheet has been obtained, then it is the responsibility of the health care professional to remove the previous prescription and clearly document in the case notes that a new prescription is in use.
- Prescriptions must be reviewed annually

Checking the Insulin

Use of the Medicines Policy – Level of HCP competence will be measured against the following;

- ✓ **Right patient**
- ✓ **Right medication**
- ✓ **Right dose**
- ✓ **Right route**

- ✓ **Right time**
- ✓ **Signature**
- ✓ **Dated**

Before any insulin administration the patient's care plan and insulin administration record MUST be checked to ensure insulin has not already been administered

- Before each administration staff must check the prescription and ensure all of the safety requirements of the medicines policy are present
- Blood glucose must be tested prior to any insulin administration. If the patient is hypoglycaemic do not administer insulin. See hypoglycaemia and hyperglycaemia guidance if necessary in Section 8.
- Check insulin against the prescription. If there is any discrepancy at this point do not administer before seeking advice from the DSN, patient's GP or Out of Hours service. If there is any reason why the insulin cannot be administered, staff should reassure the patient/family/carer of the reasons why and explain your actions to resolve the situation
- When replacing a disposable pen/cartridge or vial, the nurse must document the insulin type, whether a pen/cartridge or vial, batch number and expiry date. This should be documented as per the Device & Batch Number Expiry Date Document (Appendix B)
- If the prescription and the insulin are correct, the dose should be administered following administration guidelines
- All entries/documentation should be dated, timed, signed and staff should print name as per the Insulin Administration & Blood Glucose Monitoring Record. (Appendix C)

Documentation

- All insulin administrations must be recorded on the Insulin Administration & Blood Glucose Monitoring Record sheet. (Appendix C)
- Any insulin omissions must be documented on the Insulin Administration & Blood Glucose Monitoring Record Sheet and the relevant patient record.
- All Health Care Professionals must enter date, time, dose given and site of administration
- The Health Care Professional who has administered the insulin must print and sign their name and state their professional role against each episode of care
- Any blood glucose readings taken should be recorded on the Insulin Administration and Blood Glucose Monitoring Record (Appendix C) form so it can be easily reviewed and faxed to the GP or DSN for titration of insulin/review of management.
- Entries made on the district nursing evaluation slips must be filed in chronological order in both the patient held and base notes
- Staff must ensure that any spaces below the entry on the district nursing evaluation slip are struck through to prevent additional documentation being applied in line with the documentation policy

Reporting errors or incidents

- Any errors/omissions or incidents relating to the administration of insulin must be reported as per Trust Policy
- DSN/GP or care provider must also be informed immediately in order to manage the patient's care following any error or omission
- Any errors must be clearly documented and a Datix report done within 24 hours
- A line manager should be informed as soon as possible and the Staff Management Procedure following any Medication Administration Incident should be followed

- The patient and carer must be informed of the error ensuring reassurance is given explaining the steps taken to report the error and any actions required as a result, in line with the Duty of Candour policy

7. INSULIN PRODUCT AND TIMING OF ADMINISTRATION

All insulin's within this document are 100units/1ml strength unless otherwise indicated

Rapid-acting analogues can be injected just before, with or after food and have a peak action at between 0 and 3 hours. They tend to last between 2 and 5 hours and only last long enough for the meal at which they are taken. They are clear in appearance.

Novorapid (Insulin Aspart) 100units/1ml	Available in prefilled Flexpen and Flextouch device, Vial and Cartridge for use with NovoPen5 device
Humalog (Insulin Lispro) 100units/1ml	Available in prefilled Kwikpen device, Vial and Cartridge for use with Humapen Savvio device
Apidra (Insulin Glulisine) 100units/1ml	Available in prefilled pen Solostar device, Vial and Cartridge for use with Clikstar device

Long-acting analogues tend to be injected once a day to provide background insulin lasting approximately 24 hours. They don't need to be taken with food because they don't have a peak action. They are clear in appearance.

Lantus (Insulin Glargine100units/1ml	Available in prefilled pen Solostar device, Vial and Cartridge for use with Clikstar device
Levemir (Insulin Detemir)100units/1ml	Available in prefilled Flexpen device. Innolet device and Cartridge with NovoPen 5 device
Abasaglar (Biosimilar Insulin Glargine) 100units/1ml Must be prescribed as brand name Abasaglar	Available in prefilled Kwikpen device and Cartridge for use with Humapen Savvio device
Tresiba (Insulin Degludec)100units/1ml	Available in prefilled Flextouch device and Cartridge for use with NovoPen 5 device

Short-acting insulins should be injected 15–30 minutes before a meal to cover the rise in blood glucose levels that occurs after eating. They have a peak action of 2-6 hours and can last for up to 8 hours. They are clear in appearance.

Actrapid Insulin 100units/1ml	Available in Vial only
Humulin S Insulin 100units/1ml	Available in Vial and Cartridge for use with Humapen Savvio device
Insuman Rapid Insulin 100units/1ml	Available in Cartridge for use with Clikstar device

Medium- and long-acting insulins are taken once or twice a day to provide background insulin or in combination with short-acting insulins/rapid-acting analogues. Their peak activity is between 4 and 12 hours and can last up to 30 hours. They are cloudy in appearance.

Insulatard Insulin 100units/1ml	Available in prefilled Innolet device, Vial and Cartridge for use with NovoPen device
Humulin I Insulin 100units/1ml	Available in prefilled Kwikpen device, Vial and Cartridge for use with Autopen Classic and Humapen device.
Insuman Basal Insulin 100units/1ml	Available in prefilled pen Solostar device, Vial and Cartridge for use with Clikstar device

Mixed analogue insulin – a combination of medium and rapid-acting insulin

To be given just before or with food or immediately afterwards

Novomix 30 Insulin 100units/1ml	Available in prefilled FlexPen device and Cartridge for use with Novopen 5 device
Humalog Mix 25 Insulin 100units/1ml	Available in prefilled Kwikpen device, Vial and Cartridge for use with Humapen Savvio and Autopen classic device
Humalog Mix 50 Insulin 100units/1ml	Available in prefilled Kwikpen device, Vial and Cartridge for use with Humapen Savvio and Autopen Classic device

Mixed insulin – a combination of medium-acting insulin and short acting insulin

To be given 15-30 minutes before food

Humulin M3 Insulin 100units/ml	Available in prefilled Kwikpen device, Vial and Cartridge for use with Autopen Classic and Humapen Savvio device
Insuman Comb 15 Insulin 100units/1ml	Available in Cartridge for use with Clikstar device

Insuman Comb 25 Insulin 100units/1ml	Available in prefilled Solostar device, Vial and Cartridge for use with Autopen 24 and Clikstar device
Insuman Comb 50 Insulin 100units/1ml	Available in Cartridge for use with Clikstar device

Alternative Insulin's Requiring Guidance to Minimise Risk of Medication Error

TRESIBA (Insulin Degludec) **100units/1ml** **Must be prescribed as Tresiba**	Available in prefilled FlexTouch device LIME GREEN , and Cartridge for use with Novopen 5 device
TRESIBA (Insulin Degludec) **200units/1ml** **Must be prescribed asTresiba**	Available in prefilled FlexTouch device DARK GREEN **Dials up in 2 unit increments**
Abasaglar (Biosimilar Insulin Glargine) **100units/1ml** **Must be prescribed as Abasaglar**	Available in prefilled Kwikpen device and Cartridge for use with Humapen Savvio device
TOUJEO (Insulin Glargine) **300units/1ml** **Must be prescribed as Toujeo**	Available in prefilled Solostar Pen (1.5ml pen)
HUMALOG Insulin (Insulin Lispro) **200units/1ml**	Available in prefilled Kwikpen device

INSULIN SHOULD NEVER BE WITHDRAWN FROM A PEN DEVICE USING A SYRINGE & NEEDLE-THERE IS A SERIOUS RISK OF SEVERE HARM & DEATH ASSOCIATED WITH THIS PRACTICE

Blood Glucose Monitoring

- Wash your hands and use personal protective equipment
- Ensure all necessary equipment for the insulin administration is available
- For accuracy wash and dry the patient's finger prior to blood glucose testing using plain water, (Newspaper print, glycerine, alcohol wipes and food residue can affect blood glucose readings)
- Alternate fingers for testing/using the sides of fingers/avoiding tips of fingers
- Record blood glucose levels on the Insulin Administration and Blood Glucose Monitoring

  Record prior to insulin administrations

Please use prescribed disposable **Unistix** lancet device to obtain blood sample from patient unless the patient is becoming independent and then the patient may use a personal finger pricking device. The patient must then be responsible for removing the sharp lancet that has been used. The health care professional must not remove the lancet after use and must follow policy for safety of sharps.

Storage of Insulin

- Always inspect Insulin for physical changes, frosting, discolouration, precipitation and expiry date. Discard if any changes are identified

- Store unopened, unused insulin at refrigerated temperatures. Advise the patient to store away from the freezer compartment. Unused refrigerated Insulin will last until the manufacturers' expiry date
- All Insulin vials, cartridges and prefilled pens once opened are stable at room temperature (below 25°c) for 28 days when stored away from direct heat and light. However after this time if any insulin is left it should be discarded
- Staff must date a new vial/pen/cartridge with the 28 day expiry date
- A permanent marker pen must be used to show 28 day expiry date
- When replacing a prefilled pen/cartridge or vial this must be recorded on the Insulin Device & Batch Number Expiry Date Document. (Appendix B)
- When administering insulin in care home environments it may be appropriate to advise staff on Insulin storage. The family or care provider should be encouraged to provide a safe box or basket for the storage of the insulin currently in use
- If the case of residents within care homes, the care home has a responsibility to provide a safe area for the individual's insulin and equipment

Please ensure that any HCP has been assessed as competent in the use of pen devices.

- Pen device - Please ensure that the correct pen device is used for the individual product

  Check insulin cartridge in the pen device is correct at each administration
- Please refer to section 7 on Insulin Product and Timing of Administration
- Ensure that the pen device is in correct working order and that all of the casing is intact
- Ensure that the numbers on the insulin dial are clear and ensure that the device is discarded if dose numbers are not clearly visible
- Any malfunction of the pen device should be reported immediately to the GP/DSN for replacement
- Ensure that the patient has a replacement pen available as a spare to ensure on-going insulin administration in case of pen failure
- Please ensure that the pen device is on repeat prescription with the GP

Pen Device Preparation

- Check expiry date and type as per Appendix B
- Ensure there is sufficient insulin for dose
- Re-suspend insulin if required
- Attach new needle, 4, 5 and 6 mm needles are suitable for all people with diabetes regardless of BMI for insulin injections; they may not require a lifted skin fold; particularly if using 4 mm needles.
- Prime the device using 2-4 units of insulin, observing a drop of insulin at the needle tip
- Dial desired dose
- Choose the appropriate site for injection

- Push the needle through the skin at 90° angle
- Push thumb button down completely and count to 10 or follow Manufacturer's recommendations
- Remove needle from subcutaneous tissue
- Remove needle from pen
- Dispose of needle safely as per SOP Safe Use and Disposal of Sharps
- For prescribed doses of insulin that exceed the number of units delivered by the pen device please seek advice from a Diabetes Specialist Nurse

Insulin Syringes

Please ensure that all Health Care Professionals using syringe and needles have had appropriate training in their use.

- Ensure that (Beckton Dickinson) BD Micro-fine + Insulin Short needle Syringes with 8mm needle are prescribed on the prescription. This is the smallest available syringe & needle
- If the dose of insulin is less than 50 units a 0.5ml insulin syringe must be used
- If the dose of insulin is 51 units to 100 units a 1ml insulin syringe must be used
- Ensure that the syringe is single use only
- Ensure that the needle is no longer than 8mm
- Ensure safe disposal following single use

Using a Syringe – one insulin, one vial

- Check insulin vial against prescription and that the expiry date of 28 days after opening has not exceeded-as per Appendix B
- Mix cloudy insulin by rolling ten times and inverting 10 times
- When drawing up insulin, the air equivalent to the dose should be drawn up first and injected into the vial to facilitate easier withdrawal
- Withdraw insulin beyond dose required
- Push back excess insulin and air into vial
- Check dose required is drawn up accurately

Injection Sites

- To reduce the risk of intramuscular injections the most suitable injection sites are abdomen, thighs and buttocks
- Rotate sites within one area, e.g. mornings – abdomen, evenings – thigh. Rotation may involve administration within a designated site and should be clearly documented on the Insulin Administration & Blood Glucose Monitoring Record.
- To reduce risk of lipohypertrophy structures site rotation within the same anatomical region is recommended. Each injection should be at least 2-3cm from the last
- Examine sites for any signs of lipohypertrophy. If site appears swollen, loss of hair, feel lumpy to touch, discoloured you must inform the DSN/GP of these and avoid using this area until reassessed by DSN or GP

- Although there is no factual evidence base to support maximum dose recommendations, it may be appropriate to split doses (beyond the maximum dose delivered by the pen) for patient preference, injection comfort and to reduce insulin leakage from the injection site

Use of Preloaded Syringes/Pre-dialled pens

- This would be under exceptional circumstances
- The DSN or GP must be informed of this practice
- **A thorough individual risk assessment must be completed for every individual that may require preloaded insulin syringes/pre-dialled pens. The risk assessment must be regularly reviewed. The Service Team Leader needs to be informed**

8. TREATMENT OF HYPOGLYCAEMIA

- If the patient is HYPOGLYCAEMIC - Blood glucose level less than 4mmols

  Administer one of the following items from the list below:

  - 120 mls Lucozade
  - 4-5 jelly babies
  - 4-5 dextrose tablets
  - 2 tubes oral glucose gel
  - 150mls Coke or alternative full sugar soda
  - 3 -4 teaspoons of sugar in small glass of water

- Recheck blood glucose level after 15 minutes

Hypoglycaemia which occurs on 2 or more occasions within one week with no recognisable cause should be discussed with the lead clinician and warrants further investigation/medication review.

Following administration of oral glucose the blood glucose level should rise quickly, therefore:

- If blood glucose level still < 4mmols, 15 mins after administering glucose, you need to repeat the procedure
- Repeat cycle twice and call paramedics for assistance if blood glucose remains below 4mmols
- Ensure blood glucose level is > 4mmols then administer insulin as prescribed. Next meal should be taken as normal
- Contact family member/carer if possible and inform them of the situation
- If the patient is semi-conscious or unresponsive then ring an ambulance (999) clearly stating the patients details
- Ensure the patients airway and safety is maintained until 3rd party assistance arrives
- Ensure the DSN/GP is informed of the situation and clearly document in the notes
- In the event a patient has a Gastrostomy Tube, flush tube with 100mls of water and give one of the treatments above. Re-flush tube with water and reconnect feed once hypoglycaemic episode effectively treated
- Following ANY episode of hypoglycaemia the patient's blood glucose must be re-checked in 4 hours. If patient found to be hypoglycaemic again follow hypoglycaemia guidance above and contact care provider for support and advice

Refusal of hypoglycaemic treatment

- Hypoglycaemia may cause agitation in some individuals and can result in refusal to accept treatment for hypoglycaemia
- If the patient appears drowsy or confused and you are unable to administer oral treatment, seek help elsewhere. You may need to consider calling for paramedic assistance

- If patient is deemed lucid and competent to make the decision to refuse hypoglycaemia treatment, inform the GP/diabetes care provider.
- Do not administer the dose of insulin and encourage patient to eat carbohydrate rich foods
- Do not leave the patient unattended, alert family member or carer
- If blood glucose level remains <4mmols, attempt to follow the hypoglycaemia treatment guidelines again. Consider Paramedic assistance based on clinical assessment.
- Do not administer insulin
- Contact diabetes care provider to discuss on-going diabetes management
- The HCP must inform Team Leader
- Complete Datix Report
- Document in relevant patient record.

Refusal of Insulin

- HCP must inform Team Leader
- HCP must inform DSN/GP to determine subsequent management of care
- HCP must **not** return to administer insulin at a later time in the day
- Complete Datix report
- Contact DSN to discuss if necessary
- Document in relevant patient records

Patient Unavailable for Prescribed Insulin Administration

- Inform diabetes care provider for further guidance in respect of the missed insulin injection or the potential for a delayed insulin injection, as a further visit may be necessary to administer insulin
- Document in relevant patient records
- A new prescription may be issued as required. This will then be prescribed using the ONCE ONLY dose authorisation sheet (Appendix E). Once administered it should be documented within the insulin record sheet and then removed and filed in the patient's notes
- Under **exceptional** circumstances e.g. where a dose is to be altered, and with the agreement of both parties, a registered nurse may accept a telephone message from a doctor or specialist nurse/HCP for an insulin prescription **(excluding controlled drugs)** to be administered in a patient's home, **which must** be subsequently confirmed in writing or by fax by the doctor or specialist nurse within 24 hours
- Ideally two persons must acknowledge the message e.g. nursing staff that have received training and been assessed as competent. The nurse receiving the call must repeat the prescription to the prescriber to ensure accuracy. A record must be made in the notes in the patient's own home and in the clinic notes stating the nature of the message, date, time, name of the doctor and both parties receiving the instruction must sign and date the records. (Community Medicines Management Policy Version 1)

Hypoglycaemia

Hypoglycaemia which occurs on 2 or more occasions within one week with no recognisable cause should be discussed with the diabetes care provider and warrants further investigation/medication review.

9. HYPERGLYCAEMIA

- Acute alterations in blood glucose levels resulting in hyperglycaemia must be reported to the diabetes care provider and documented in nursing notes
- Hyperglycaemia above 15.0mmols in the presence of illness must be reported immediately to GP or out of hours GP service
- Hyperglycaemia above 15.0mmols in the absence of illness does not necessitate further blood glucose check by the evening service unless otherwise instructed by diabetes care provider
- Recurrent hyperglycaemia above 15.0mmols in the absence of illness necessitates review of diabetes management by diabetes care provider.
- Target blood glucose levels need to be negotiated with the patient and diabetes care provider
- Named patient's identified as having variable blood glucose levels may require the introduction of a corrective bolus insulin regime prescribed by diabetes care provider (Appendix D)
- Named patient's identified as having hyperglycaemia above 15.0mmols in the presence of illness may require the introduction of a once only or a corrective bolus insulin regime prescribed by diabetes care provider (Appendix D) (Appendix E)
- See Flowchart (Appendix F)

10. QUALITY CONTROL TESTING FOR BLOOD GLUCOSE METERS

In accordance with Department of Health Regulations

In accordance with individual manufacturers Standard Operating Procedure

It is the responsibility of meter users to ensure Quality Control Testing is adhered to and recorded in the relevant documentation

Cleaning of Meters
As per individual manufacturers Standard Operating Procedure

11. IMPLEMENTATION

The policy will be implemented by community clinicians/healthcare professional's band 4 and above

12. MONITORING

The policy will be monitored by Datix reporting system audit

APPENDIX A

INSULIN PRESCRIPTION / AUTHORISATION RECORD

TO:	**FAX NO:**

PATIENT NAME & ADDRESS	
NHS NO	
DOB	

NEW Prescribed Insulin and Prescribed Units

Prescription must be clearly documented in full words, e.g. Novomix 30, Twenty Four Units

Date/Time to Start	Product	Pre-Breakfast	Pre-Lunch	Pre-Evening Meal	Bedtime

Comments:

Insulin and Prescribed Units Discontinued

Product	Pre-Breakfast	Pre-Lunch	Pre-Evening Meal	Bedtime

Prescription Discontinued Date:		Discontinued By:		**All prescriptions must be reviewed annually**

DSN/DOCTOR/GP completing form (print name): ORGANISATION/PRACTICE	**Date/Time:**
Signed:	**Telephone/pager no:**

DISCONTINUED PRESCRIPTION IS TO BE REMOVED FROM PATIENT'S NOTES AND REPLACED WITH NEW PRESCRIPTION

APPENDIX B

Insulin Device Batch Number & Date of Expiry Record

28 day expiry date to be written on product in permanent marker pen

NAME:	NHS:	DOB:

Name of Insulin and Device	Batch Number	Expiry date of Insulin	Date Insulin Product First Used	Expiry Date 28 days	Sign

COM/302/0816

INSULIN ADMINISTRATION & BLOOD GLUCOSE MONITORING RECORD

Stockport NHS
NHS Foundation Trust

APPENDIX C

Name:	**NHS NO:**	**DOB:**

Date & Time	Pre Breakfast BG	Pre Lunch BG	Pre Tea BG	Bedtime BG	Name of Insulin Given	Prescribed Units Given	Site Insulin Given	Print Name	Sign Name	Comments

Abbreviation BG =Blood Glucose **If BG recorded after a meal please indicate in relevant column** COM/301/0816

INSULIN ADMINISTRATION & BLOOD GLUCOSE MONITORING RECORD

Stockport NHS
NHS Foundation Trust

APPENDIX C

Treatment of Hypoglycaemia

- If the patient is HYPOGLYCAEMIC - Blood glucose level < 4mmols with or without symptoms
  Administer one of the following items from the list below:
  - 120 mls Lucozade
  - 4-5 jelly babies
  - 4-5 dextrose tablets
  - 2 tubes Oral Glucose Gel
  - 150mls Coke or alternative full sugar soda
  - 3 -4 teaspoons of sugar in small glass of water

- Recheck blood glucose level after 15 minutes.

Hypoglycaemia which occurs on **2** or more occasions within one week with no recognisable cause should be discussed with the lead clinician and warrants further investigation/medication review.

<u>Following administration of oral glucose the blood glucose level should rise quickly, therefore</u> -

- If blood glucose level still < 4mmols, 15 mins after administering glucose, you need to repeat the procedure
- Repeat cycle twice and call paramedics for assistance if blood glucose remains below 4.0mmols
- Ensure blood glucose level is > 4mmols then administer insulin as prescribed. Next meal should be taken as normal
- Contact family member/carer if possible and inform of situation
- Following ANY episode of hypoglycaemia the patient's blood glucose must be re-checked in 4 hours.
- If patient found to be hypoglycaemic again follow hypoglycaemia guidance above and contact care provider for support and advice.
- If the patient is semi-conscious or unresponsive then ring an ambulance, 999 clearly stating the patient's details
- Ensure the patients airway and safety is maintained until 3rd party assistance arrives
- Ensure the DSN/GP is informed of the situation and clearly document in the notes

Hyperglycaemia

- Acute alterations in blood glucose levels resulting in hyperglycaemia must be reported to the diabetes care provider and documented in nursing notes
- Hyperglycaemia above 15.0mmols in the presence of illness must be reported immediately to care provider or out of hours service
- Hyperglycaemia in the absence of illness above 15.0mmols it is not necessary for further blood glucose check by the evening service unless otherwise instructed by diabetes care provider
- Recurrent and persistent Hyperglycaemia above 15.0mmols in the absence of illness necessitates review of diabetes management by diabetes care provider
- Target Blood glucose levels need to be negotiated with the patient and diabetes care provider (Flowchart Appendix F)

Appendix D
Pages 1 of 2

INSULIN PRESCRIPTION / AUTHORISATION RECORD & CORRECTIVE BOLUS REGIME

TO: District Nurses	**FAX NO:**

PATIENT NAME & ADDRESS	
NHS NO	
DOB	

NEW Prescribed Insulin and Prescribed Units (In Words)

Date/Time to Start	Product	Pre-Breakfast	Pre-Lunch	Pre-Evening Meal	Bedtime

COMMENTS:

Insulin and Prescribed Units Discontinued (To be written in words)

Product	Pre-Breakfast	Pre-Lunch	Pre-Evening Meal	Bedtime

Prescription Discontinued DATE:		Discontinued By:	DSN:

Diabetes Specialist Nurse (completing form print name):	**Date/Time:**
Signed:	**Telephone:**

COM/364/0816

CORRECTIVE BOLUS REGIME PRESCRIPTION /AUTHORISATION RECORD

TO: District Nurses	**FAX NO:**

PATIENT NAME & ADDRESS	
NHS NO	
DOB	

Corrective Bolus Regime

Prescribed bolus insulin to be used in addition to regular insulin regimen

Before Breakfast - Example Only

If Blood Glucose 15.0 - 18.0 mmols	Bolus Insulin	TWO UNITS
If Blood Glucose 18.1 - 21.9 mmols	Bolus Insulin	THREE UNITS
If Blood Glucose 22mmols and above	Bolus Insulin	FOUR UNITS

Before Lunch - Example Only

If Blood Glucose 15.0 – 18.0 mmols	Bolus Insulin	TWO UNITS
If Blood Glucose 18.1 – 21.9mmols	Bolus Insulin	THREE UNITS
If Blood Glucose 22mmols and above	Bolus Insulin	FOUR UNITS

Before Evening Meal - Example Only

If Blood Glucose 15.0 – 18.0 mmols	Bolus Insulin	TWO UNITS
If Blood Glucose 18.1 – 21.9mmols	Bolus Insulin	THREE UNITS
If Blood Glucose 22mmols and above	Bolus Insulin	FOUR UNITS

COMMENTS:

Diabetes Specialist Nurse (completing form print name):	**Date/Time:**
Signed:	**Telephone:**

PLEASE FILE IN PATIENTS NOTES

Appendix E

INSULIN PRESCRIPTION / AUTHORISATION RECORD

TO: District Nurses	**FAX NO:**

PATIENT NAME & ADDRESS	
NHS NO:	
DOB	

ONCE ONLY Dose of Prescribed Insulin (IN WORDS)

Prescribed Units for this One Intervention Only

Date/Time to Start	Product	Pre-Breakfast	Pre-Lunch	Pre-Evening Meal	Bedtime

Comments:

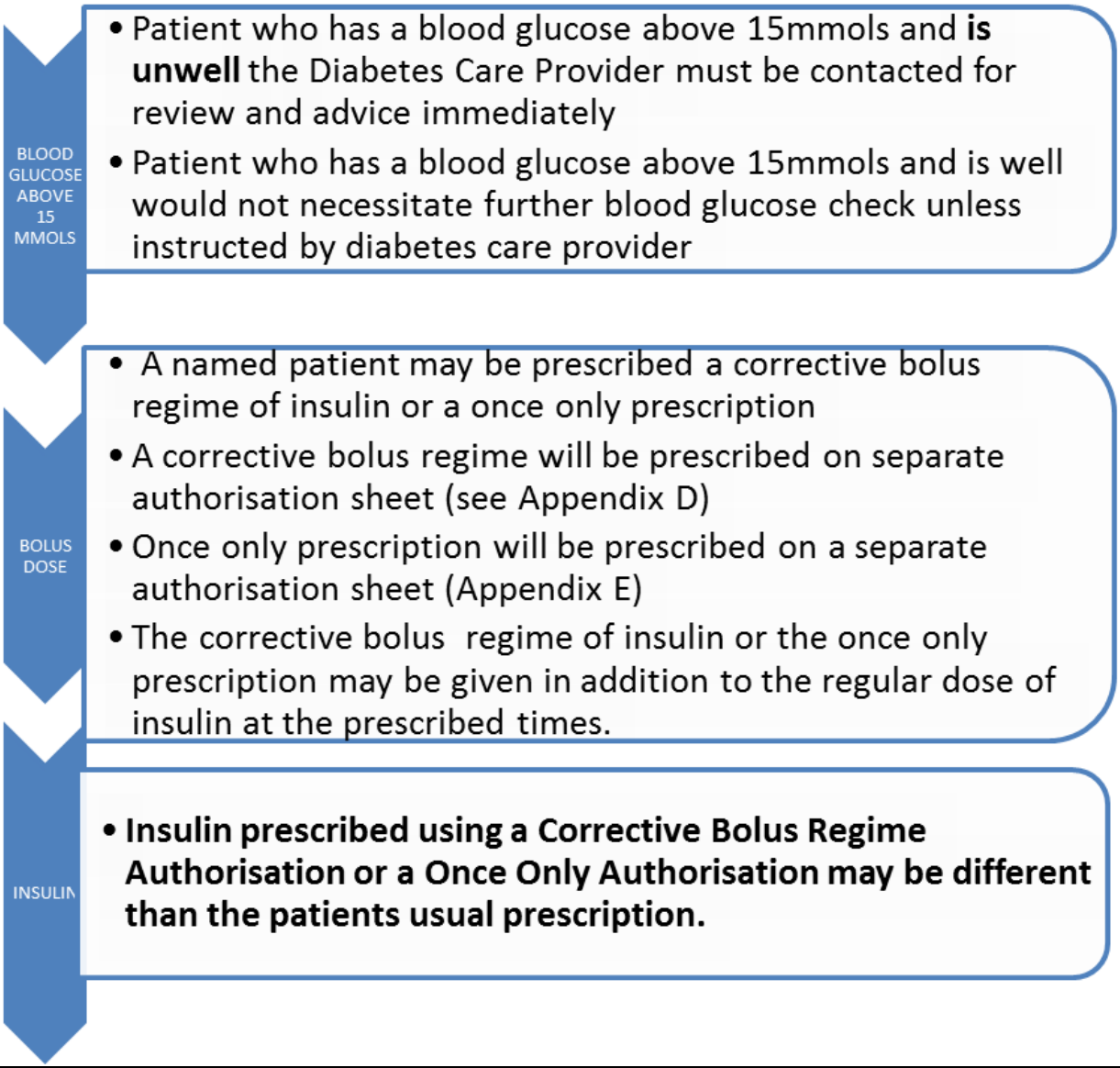
DSN/Doctor/GP (completing form print name):	**Date/Time:**
Signed:	**Telephone**

PLEASE FILE IN PATIENT'S NOTES

COM/365/0816

Appendix F

Flowchart for a named patient with blood glucose levels above 15mmols/mol who may require a Corrective Bolus regime or a Once Only Prescription



A corrective bolus dose regime is used in accordance with regular prescription until discontinued by the diabetes care provider

Monitoring Template for Trust Approved Documents

Process for monitoring e.g. audit	Responsible individual/ group/ committee	Frequency of monitoring	Responsible individual/ group/ committee for review of results	Responsible individual/ group/ committee for development of action plan	Responsible individual/ group/ committee for monitoring of action plan
Datix	Risk & Governance Department	On-going			

If you would like this leaflet in a different format, for example, in large print, or on audiotape, or for people with learning disabilities, please contact:
Patient and Customer Services, Poplar Suite, Stepping Hill Hospital. Tel: 0161 419 5678
Information Leaflet. Email: PCS@stockport.nhs.uk.

A free interpreting Service is available if you need help with this information. Please telephone the Lips Service on 0161 922 5149 or E-mail: tam-pct.lips@nhs.net	English
هناك خدمة مجانية للمترجمين متوفرة اذا أردت مساعدة بخصوص هذه المعلومات. الرجاء الاتصال بخدمة ليبس أو LIPS على الرقم 0161 922 5149 أو عن طريق الايميل tam-pct.LIPS@nhs.net	Arabic
এই তথ্য বুঝতে সাহায্যের প্রয়োজন হলে বিনামূল্যে দোভাষী বা ইন্টারপ্রিটার সার্ভিস রয়েছে, আপনাকে সাহায্য করার জন্য। দয়া করে লিপ্স সার্ভিসকে টেলিফোন করুন 0161 922 5149 এই নম্বরে অথবা ই-মেইল করুন: tam-pct.LIPS@nhs.net এই ঠিকানায়।	Bengali
如果你需要幫助來瞭解這份資料的內容，我們可以提供免費的翻譯服務。請致電 0161 922 5149 聯絡語言翻譯及病人支持服務(LIPS)，電子郵件：tam-pct.LIPS@nhs.net	Chinese
اگر برای فهمیدن این اطلاعات به کمک احتیاج دارید می توانید از خدمات ترجمه بصورت مجانی استفاده کنید. لطفا با LIPS از طریق شماره تلفن 0161 922 5149 یا ایمیل tam-pct.LIPS@nhs.net تماس بگیرید.	Farsi
Bezpłatna Serwis tłumaczenia jest dostępny, jeśli potrzebujesz pomocy z tą informacją. Proszę zadzwonić do Obsługi usta na 0161 922 5149 lub E-mail: tam-pct.LIPS @ nhs.net	Polish
اگر آپ کو یہ معلومات سمجھنے میں مدد کی ضرورت ہو تو مترجم کی مفت سروس موجود ہے۔ براہ کرم ایل آئی پی ایس LIPS کو 0161 922 5149 پر فون کریں۔ ای میل: tam-pct.LIPS@nhs.net	Urdu

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