

Good Practice Guideline for Residents with Diabetes in Care Homes

For: G.P's, nurses, care staff, care home managers, chefs and other staff working within care homes

Aim: To set standards and provide guidance to support high quality and safe care for residents with diabetes living in care homes.

These standards should be used to develop new and review current procedures and should act as a guide to develop and sustain good practice in key areas of diabetic care.

Background: All residents living with diabetes should have access to the same level of high quality care, whether they live at home or in a care home. Up to 25% of residents living in care homes may have diabetes and good quality care can help prevent complications and prevent hospital admissions.

Standards for Good Diabetes Care in Care Homes

1. All care homes should have a diabetes policy.
2. Residents with diabetes must have a personalised diabetes care plan in their notes (in addition to other standard care plans). This must include key roles, responsibilities, targets, outcome measures and any arrangements for specialist review.
3. There should be a 'Diabetes Champion' or 'Diabetes Key Worker' within each care home who has attended locally recognised accredited training.
4. All care staff must have basic knowledge of diabetes and care homes should ensure staff supporting residents with diabetes are competent to care for these residents.
5. Care staff who deliver personal care to residents living with diabetes must be aware of the diabetes care plan relating to 'foot care' and the need for feet to be inspected every day.
6. Care home should have a fully stocked 'Hypo box' which contains fast acting glucose to treat hypos. Some nursing homes may choose to have individual 'hypo boxes' for residents with more complex needs.
7. Residents who are at risk of hypoglycaemia should have their blood glucose monitored by care staff as agreed with the GP/Diabetic Specialist Nurse/District Nurse/ACHT/Care Home and in line with local CCG Protocol for blood glucose monitoring for patients with diabetes in care homes.
8. There must be a nutrition care plan based on both the resident's MUST score and best practice guidance on nutrition for residents with diabetes.
9. All residents with diabetes should have an annual diabetes review in line with NICE Guideline 28 www.nice.org.uk/guidance/ng28.
10. Each care home should develop an audit tool to assess the quality and extent of diabetes care within their care homes.
11. All residents should be screened for diabetes by the GP on admission to the care home and this should be documented in the residents care plan ².

Key Roles and Responsibilities for Providing Care for Residents with Diabetes:

Residential Care Homes

- Every resident with diabetes should have a detailed diabetes care plan which has been agreed with the resident and GP. (See [Appendix 2: Example of Diabetes Care Plan](#))
- Good diabetes care starts with a diabetes policy and all staff must read and be aware of the care home diabetes policy.
- There should be a diabetes champion or key worker in each care home - this person should attend the locally recognised diabetes training and will be responsible for making sure each resident with diabetes has a diabetes care plan with all the relevant sections completed. They can support all other care staff to provide high standards of diabetes care especially regarding good foot care, nutrition and other elements of care depending upon each individual.
- The annual review for diabetes will be the responsibility of the GP who may delegate part of this to the District Nurses/Adult Community Health Team Nurse if the resident is classified as being housebound.

Nursing Homes

- Every resident with diabetes should have a detailed diabetes care plan which has been agreed with the resident and GP. (See [Appendix 2: Example of Diabetes Care Plan](#))
- Good diabetes care starts with a diabetes policy and all staff must read and be aware of the policy.
- There should be a diabetes champion or key worker in each care home - this person should attend the locally recognised diabetes training and will be responsible for making sure each resident has a diabetes care plan with all the relevant sections completed. They can support all other care staff to provide high standards of diabetes care especially regarding foot care, nutrition and other elements of care depending upon each individual
- The annual foot review should be completed by the GP, the care home nurse or other nurse (with required competencies) or a Health and Care Professions Council (HCPC) registered Chiropodist or Podiatrist.
- The Annual review will be the overall responsibility of the GP who may request that nurses within homes undertake some of the required checks. Nurses should ensure that they have the skills and competency to complete these when requested.

GP

- The resident's GP is responsible for the diabetes annual review and reviewing medication at least every year.
- The resident's GP is responsible for offering pre-diabetes reviews in line with the Buckinghamshire pre-diabetes protocol.

The following documents can support The Diabetes Care Plan and can be used to implement the minimum standards required for good diabetes care.

[Appendix 1](#) – Diabetes policy for care homes

[Appendix 2](#) – Example of a care plan

[Appendix 3](#) – Diabetes annual review

[Appendix 4](#) – How to treat hypoglycaemia in care homes

[Appendix 5](#) – Hypo box for care homes

[Appendix 6](#) – Hypoglycaemia care plan

[Appendix 7](#) – Hyperglycaemia care plan

[Appendix 8](#) – Nutrition in diabetes information

[Appendix 9](#) – Foot care risk assessment

[Appendix 10](#) – Protocol for blood glucose monitoring (BGM) for patients with diabetes in care homes

References:

1. Good clinical practice guidelines for care home residents with diabetes - A revision document prepared by a Task and Finish Group of Diabetes UK 2010
<https://www.diabetes.org.uk/Documents/About%20Us/Our%20views/Care%20recs/Care-homes-0110.pdf>
2. Guidance for CQC staff: Inspecting the quality of care for residents with diabetes mellitus living in care homes
<http://diabetestimes.co.uk/resources/guidance-for-cqc-staff-inspecting-the-quality-of-care-for-residents-with-diabetes-mellitus-living-in-care-homes/>
3. Passport for Diabetes in Care Settings – Independent Diabetes Trust in partnership with the Institute of Diabetes for Older People www.iddtinternational.org

Appendix 1: Diabetes Policy for Care Homes

Aim: Every care home should have a detailed diabetes policy that all staff caring for residents with diabetes should comply with. The diabetes policy should meet the minimum standards set out within this document; in addition care homes may consider including the following information depending upon on their specific local circumstances. The care home should ensure that their own diabetes policy meets the needs of their residents

What to include in a diabetes policy:

Both the Diabetes UK ¹ and the Care Quality Commission (CQC)² have clinical practice guidance for care home residents.

Clinical practice guidelines - to include:	
Dealing with illness	https://www.diabetes.org.uk/Guide-to-diabetes/Living_with_diabetes/Illness/ See Appendix 7
Diabetes and Dementia	www.trend-uk.org/documents/Diabetes_And_Dementia_Guidance.pdf
A screening programme for diabetes	
Resident's care plan	
Treatment goal setting	
Management of hypoglycaemia	See Appendix 4 and Appendix 6
Availability of hypoglycaemia kit (hypo box)	See Appendix 5
Blood glucose monitoring	See Appendix 10
Administration of treatments including insulin	
Annual review arrangements to include eye screening	See Appendix 3
Dietary and nutritional policy	See Appendix 8
Liaison with community diabetes services	
Daily foot care and access to services	See Appendix 9
Regular audit of services which could include referral to hospital	
Supporting staff to deliver effective diabetes care- access to education and training	

Appendix 2: Example of a Diabetes Care Plan

Patients Name:	
Date of Birth:	
Diabetes – Type 1 or Type 2	
Diabetes Champion in Care Home name:	
These health professionals are involved in my diabetes care e.g. Diabetes Specialist Nurse, Practice Nurse, Consultant, Podiatrist, Dietitian, Ophthalmologist?	Name: Job title: Contact Number: Name: Job title: Contact Number: Name: Job title: Contact Number:

* Care homes can either use the above template or their own diabetes/standard care plans as long as all relevant sections are included

As part of my diabetes care I have targets and need care plans for the following:	
Nutrition	Mobility
Foot care	Skin Care
Other	Continence
Important Dates	
I need a diabetes annual review every year – please arrange this with my GP	Dates of diabetes annual review:

<p>Managing my diabetes:</p> <p>I have type_____ diabetes. This is managed by:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Insulin and Diet <input type="checkbox"/> Insulin, Tablets and Diet <input type="checkbox"/> Diet and Tablets <input type="checkbox"/> Diet Only <input type="checkbox"/> Other (please state) _____ <p>Please refer to my Medication Administration Record (MAR) sheet for further details of my diabetes medication</p> <p>At times my blood sugar levels may be too low (hypoglycaemia or Hypo) or too high (hyperglycaemia or Hyper).</p> <p>If I am on insulin or sulphonylureas (e.g. gliclazide), my blood glucose levels may need to be monitored. Please refer to the local CCG Protocol for blood glucose monitoring. I need additional care plans if I am at risk of either of these – ask my GP/Diabetic Specialist Nurse/Nurse/ Pharmacist if in doubt.</p>

	Blood glucose range for individual resident as agreed by GP/Diabetic Specialist Nurse
Individual target range:	

(Acknowledgements go to the Independent Diabetes Trust in partnership with the Institute of Diabetes for Older People who provided the basis for this template)

Appendix 3: Annual Review for Every Resident Living with Diabetes

Aim:

- Every resident living with diabetes should have an annual medical review of their diabetes in either their GP surgery or in their care home
- The residents GP practice is responsible for providing their diabetes annual review
- The date of the review and where the review will take place must be recorded in the resident's diabetes care plan

Information required for an annual diabetes review:

At or before the annual review the GP will need the following information:-

Diet	Weight record, current Malnutrition Universal Screening Tool (MUST) risk (score) and Nutrition care plan
Monitoring results	BP readings A record of all blood and urine tests A urine specimen (ACR urine test) should be requested and a special container will be required. The GP practice will be able to advise on these requirements. A blood test may be requested 1-2 weeks prior to the review
Medication	A copy of the current Medication Administration Record (MAR) sheet
Foot Check	The Annual foot check is an essential part of the annual review. More information is available at: www.diabetes.org.uk/Documents/Guide%20to%20diabetes/monitoring/What-to-expect-at-annual-foot-check.pdf
General Condition	Information about any change in resident's medical condition since their last review

Consider asking the GP for an additional review and/or medication review if:

- Resident is losing weight and MUST score is 2 or above (high risk)
- Resident has episodes of hypoglycaemia or hyperglycaemia
- Resident's health has declined
(other changes that may also require a review)

More information regarding diabetes treatment in older people can be found at:

www.chilternccg.nhs.uk/practices/bpcc/Chiltern_CCG_Diabetes_Bulletin_Issue21_Oct2015.pdf

Diabetes and End of life:

Information regarding the care of residents with diabetes at end of life can be found below. Early referral to the resident's GP or Diabetic Specialist Nurse (DSN) is an important consideration:

www.diabetes.org.uk/upload/Position%20statements/End-of-life-care-Clinical-recs111113.pdf

www.trend-uk.org/documents/End_of_Life%20clinical%20recommendations.pdf

Ensure that the date of the annual review is recorded within the care plan.

Appendix 4: How to Treat Hypoglycaemia (Hypo's) in Care Homes

How to avoid hypos

- Eat regularly and have a small portion of carbohydrate at each meal.
- You may need to eat more carbohydrate before and after physical activity.
- Keep to sensible alcohol limits and do not drink on an empty stomach.
- Take your medication at the recommended dose and times.
- If you are testing your blood glucose levels, and notice your readings are regularly dropping, discuss this with your diabetes team as you may need a change in medication or your insulin regimen adjusted.
- Always carry glucose with you to treat hypos quickly.

Remember ...

- Having a hypo means that your blood glucose level is too low.
- Act **IMMEDIATELY** by eating or drinking something that will raise your blood glucose quickly.
- Never ignore the warning signs.
- Make sure other people know what to do when you are having a hypo.
- Always carry glucose and diabetes identification.

Consequences of frequent hypos:

- You may not recognise future hypos.
- Fear and anxiety of getting further hypos.
- Effects on employment and driving.

If you are concerned about anything within this leaflet please discuss this with your healthcare professional.

Driving and hypos

- Keep glucose treatments in the car at all times.
- Check your blood glucose before driving.
- Do not drive if your blood glucose level is less than 5 mmol/L.

If you have a hypo while driving, stop the car as soon as possible. Remove the keys to demonstrate you are not in charge of the car, and move into the passenger seat. If safe to do so, treat the hypo as advised.

You should not drive for at least 45 minutes after recovery because your response rates will be slower.

The DVLA has guidance in place for reporting episodes of hypoglycaemia. It is important you notify them in line with this guidance. The latest Medical Standards of Fitness to Drive can be found on the DVLA website: www.gov.uk/diabetes-driving



Further information

- Diabetes UK careline: 0845 120 2960
- Diabetes UK: www.diabetes.org.uk
- Driver and Vehicle Licensing Agency: www.gov.uk

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Diabetes: Understanding Diabetes | friend uk

Why do I sometimes feel shaky, dizzy and sweaty?

- What is a "hypo"?
- Who gets a hypo?
- How do I treat my hypo?
- How do I avoid a hypo?
- What else do I need to know?

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What is a "hypo"?

Glucose is a sugar carried in the bloodstream that your body uses for energy. If you have diabetes, your blood glucose levels can be erratic, sometimes becoming very low – this is called hypoglycaemia (or a "hypo"), and can happen when your blood glucose levels drop below 4 mmol/L.

Symptoms

Early signs and symptoms of a hypo include:

- Sweating heavily.
- Feeling anxious.
- Trembling and shaking.
- Tingling of the lips.
- Hunger.
- Going pale.
- Palpitations.



Symptoms may vary from person to person, but you will feel "different" very quickly. If you miss these early signs, the symptoms may get worse and include:

- Slurring your words.
 - Behaving oddly
 - Being unusually aggressive or tearful.
 - Having difficulty in concentrating.
- If you do not treat your hypo at this stage, you may become unconscious.**

Who gets a hypo?

- If you are injecting insulin or taking diabetes tablets that make your body produce more insulin, then you may be at risk of hypos.
- If you are not sure how your diabetes tablets work, discuss this with your local pharmacist.

Symptoms may vary from person to person, but you will feel 'different' very quickly.

What causes hypos?

A number of situations can cause a hypo:

- Too much insulin or too many diabetes tablets.
- Delayed or missed meals.
- Eating less starchy foods than usual.
- Unplanned or strenuous activity.
- Drinking too much alcohol or drinking alcohol without food.
- Incorrect insulin injection technique.

Sometimes there is no obvious cause, but treatment should always be carried out immediately, as advised.

How to treat hypos

If you recognise that you are having a hypo, you should treat it immediately with something that will raise your blood glucose quickly. Suitable treatments are:

- **Lucozade™**: Since April 1st 2017, the glucose content in Lucozade™ has been reduced. It varies significantly and may be insufficient in a reasonable volume to treat a hypo.
- 150 mL (a small can) of non-diet fizzy drink, OR
- 200 mL (a small carton) of smooth orange juice, OR
- 4-5 GlucoTabs®, 5-6 dextrose tablets, or 4 large jelly babies.

If you do not feel better (or your blood glucose level is still less than 4 mmol/L after 5-10 minutes), repeat ONE of these treatments.

When you start to feel better, and if you are not due to eat a meal, eat some starchy food, like 2 plain biscuits or a small banana.

If you are not able to treat your hypo yourself, but you are still conscious and able to swallow, someone can give you glucose gel if you have this available.

If you become unconscious, you will need immediate emergency treatment. Someone should dial 999 for an ambulance. You should be put on your side with your head tilted back. Glucose treatments should NOT be put in your mouth.

Appendix 5: Hypo Box (Kit) - Guidance for Care Homes

Aim:

All care homes that care for residents living with diabetes should keep a fully stocked 'hypo' box that is available to treat residents who experience low blood glucose (hypo).

All staff should know the location of the hypo box and it should be easily accessible to trained staff at all times.

What is a hypo box?

A hypo box is a box containing several suitable sources of fast acting glucose which is available to be given to residents* who are experiencing an episode of low blood glucose (hypo). This should be used in line with the 'hypoglycaemia in care homes guideline' and the individual resident's diabetes care plan.

(* Residents with diagnosed dysphagia (swallowing difficulties) who require thickened drinks and/or a soft or pureed diet will need a specialist care plan regarding treatment of hypos)

Contents of the Hypo Box

It is the responsibility of the care home to purchase a plastic box and the required glucose products to make their own 'Hypo Box'. These items are available at large supermarkets and /or local pharmacies. It may be useful to have a liquid measure available with the box.

Suggested products to include in a hypo box include:

Non-diet fizzy drink, carton of smooth orange juice, GlucoTabs[®], Dextrose tablets, jelly babies. Follow the hypoglycaemia guideline for actual amounts of glucose to be given.

Maintenance of the hypo box:

There must be a process within the care home to:

- Check that each item within the box is in date on a monthly basis or more often if applicable
- Any item that has been opened for use must then be discarded and replaced
- Ensure that each care plan states the resident's preference of product, e.g. would they prefer a glucose drink or sweets?
- Expiry dates should be clearly marked on the exterior of the hypo box
- Depending upon the size of the home it may be useful to have more than one Hypo Box e.g. one hypo box per floor

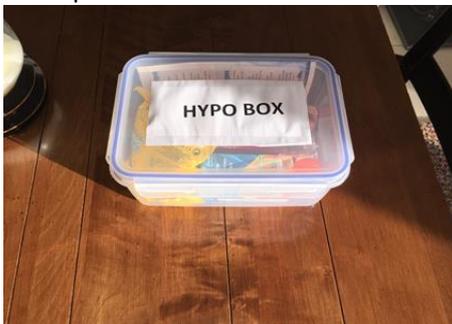


Image of a 'hypo' box

Appendix 6: Hypoglycaemia (Hypo) Care Plan*

Patients Name:	
Date of Birth:	
Diabetes Key Worker:	
When to contact the GP	

* Care homes can either use the above template or their own diabetes/standard care plans as long as all relevant sections are included

What is a hypo? *(Name)* _____ has diabetes and his/her blood glucose levels can sometimes become very low – this is called hypoglycaemia (hypo). This means that his/her blood glucose levels have dropped **below 4 mmol/L**.

A number of things can cause a hypo:

- Too much insulin
- Too many diabetes tablets
- Delayed or missed meals
- Eating less starchy foods than usual
- Increased activity
- Drinking too much alcohol or drinking alcohol without food

Sometimes there is no obvious cause, but treatment should always be given immediately, as advised below.

Does the resident have diagnosed dysphagia (swallowing difficulties) and need thickened drinks

Signs and symptoms of a 'hypo' in *(Name)* _____

and/or a soft or pureed diet? Products in the Hypo Box may not be suitable - request specialist advice from Speech and Language Therapist and/or Dietitian and record this advice in this care plan.

Which glucose source would *(Name)* _____ prefer?

In the event of a hypo follow the guidance in the hypo care plan and for further advice see: <https://www.diabetes.org.uk/Documents/catalogue/Hypoglycaemia%20new.pdf>

If a resident is unable to swallow safely and/or if they become drowsy and unconscious, they will need immediate emergency treatment - **someone should dial 999 for an ambulance**. The resident should be put in the recovery position (on their side with their head tilted back). Do not give anything orally - glucose treatments should **NOT** be put in their mouth

When a hypo has been treated, tell the care home diabetes lead and also the resident's GP or Diabetes Specialist Nurse (DSN) who may review the resident's diabetes treatment to prevent further hypos.

Appendix 7: Hyperglycaemia Care Plan*

Patients Name:	
Date of Birth:	
Diabetes key worker:	
When to contact the GP:	

* Care homes can either use the above template or their own diabetes/standard care plans as long as all relevant sections are included

Hyperglycaemia (hyper) is the medical term for high blood glucose levels. It is a common problem for people with diabetes. It can affect people with type 1 diabetes and type 2 diabetes who are at increased risk of hyperglycaemia when they are unwell, have an infection and/or start steroid therapy. It may be that increased blood glucose monitoring is required at these times – the resident’s GP can advise on this.

Symptoms of hyperglycaemia (high blood glucose)

Symptoms for people with diabetes tend to develop slowly over a few days or weeks. In some cases, there may be no symptoms until the blood sugar level is very high. Symptoms of hyperglycaemia include:

- increased [thirst](#) and a [dry mouth](#)
- needing to urinate (frequently)
- tiredness
- blurred vision
- [unplanned weight loss](#)
- recurrent infections, such as thrush, [bladder infections \(cystitis\)](#) and skin infections

Very high blood sugar levels can cause life-threatening complications, such as:

- [Diabetic Ketoacidosis \(DKA\)](#) – a condition caused by the body needing to break down fat as a source of energy, which can lead to a diabetic coma. This tends to affect people with type 1 diabetes.
- [Hyperosmolar Hyperglycaemic State \(HHS\)](#) – severe [dehydration](#) caused by the body trying to get rid of excess sugar. This tends to affect people with type 2 diabetes.

When to ask for urgent medical attention

Contact the diabetes care team or GP immediately if *(Name)* _____ has a high blood sugar level and has the following symptoms:

- feeling or being sick
- [abdominal \(tummy\) pain](#)
- rapid, deep breathing
- [signs of dehydration](#), such as a [headache](#), dry skin and a weak, rapid heartbeat
- difficulty staying awake

These symptoms could be a sign of DKA or HHS (see above) and *(Name)* _____ may need to be looked after in hospital.

Appendix 8: Nutrition Advice in Diabetes

There is not one 'diabetic diet' which is suitable for everyone and as with all care, diet for diabetes must be patient-centred.

Nutrition advice for people with diabetes has changed over time because of new research and evidence. This means that people with diabetes, their carers, family and friends may have heard or been given lots of different advice in the past, and because of this there are many myths and misunderstandings about diet for diabetes.

It is very important that residents with diabetes and all care home staff are up to date with current evidence-based advice about diet and diabetes.

Current Nutrition Advice and Care Homes

The Health and Social Care Act 2008 Regulations 2014: Regulation 14 states "People must have their nutritional needs assessed and food must be provided to meet those needs". This includes care home residents who have diabetes.

Nutrition advice for older people and care home residents with diabetes may be different to general nutrition advice for other people with diabetes. Older people in care homes are more likely to be underweight rather than overweight and are also more likely to be at risk of malnutrition. Therefore it may not be helpful to reduce fat, sugar and salt for every older person with diabetes.

Restricting food for care home residents with diabetes is not helpful, and terms such as "needs diabetic diet" or "needs sugar free diet" should not be included in nutrition or diabetes care plans.

Remember that reducing the fat and/or sugar content of all recipes (for residents who do not have diabetes as well as for those who do) is unlikely to be helpful either because this could put other residents at greater risk of malnutrition.

Sugar and Sugary Foods

Care home residents with diabetes do not need to eat a sugar-free diet. Sugar can be used in foods, including in cakes and baking, as part of a healthy diet.

For residents with diabetes, offering sugar-free, no added sugar or diet squash/fizzy drinks, instead of sugary versions or instead of a lot of fruit juice is a good idea, but be aware that these may not be appropriate to be given to residents who do not have diabetes too.

Residents with Diabetes who are at Risk of Malnutrition

Food first advice (to increase energy and protein intake) to treat malnutrition should be used for people who have diabetes as well as for those who do not.

If a resident with diabetes who has malnutrition has high blood glucose levels, it may be better to adjust their diabetes medication to manage blood glucose levels instead of restricting their food intake. It is important to work with the resident's GP, diabetes specialist nurse and/or dietitian to manage high blood glucose levels in this way.

Appendix 9: Foot Care in diabetes

(Adapted from Hampshire County Council foot care advice sheet)

People with diabetes may develop damage to the nerve endings in their feet (neuropathy) or to the circulation in their legs. This makes developing foot problems more likely. The aim of foot care is to prevent skin damage and foot ulcers.

- Foot ulcers cause many diabetes related admissions to hospital
- Many leg amputations are for people with diabetes
- Having a foot ulcer makes amputation more likely

The risk of foot ulcers is increased for those with:

- increasing age
- loss of sensation
- blood vessel disease
- immobility
- poor eyesight
- other chronic states

Accurate assessment and identification of risk by a podiatrist (chiropodist) can prevent foot ulcers.

Foot Care Advice Sheet for Staff Working with Older People

The majority of serious damage begins with injury to the toes. It is important to look after the toes well and protect them from friction, pressure and other damage. However, it is also important to remember to check the whole foot, as areas such as the heel can be particularly vulnerable to blistering and pressure sores if the person has poor mobility.

- **Wash feet daily and dry very carefully**, especially between the toes
- **Inspect feet daily**
Look for blisters, scratches and areas of possible infection (such as areas which are hot or red).
Look between the toes.
Contact the podiatrist, doctor or registered nurse if there are any changes.
Ensure accurate documentation of this daily check.
- **Inspect shoes / slippers daily** especially before they are put on
Ensure shoes/slippers fit correctly to avoid friction and reduce risk of falls.
Check for foreign objects, e.g. drawing pins in shoe soles, stones in shoes, torn linings or other problems that might damage feet.
All shoes / slippers should be well fitted. Bear in mind that some residents may be unable to feel if their shoes are comfortable.
Shoes/slippers should not be too tight and should allow toes room to wiggle.
Avoid pointed shoes and those with seams at the front.
If feet are misshapen / of a non-conventional shape, the resident may need to be referred to an orthotist (through their GP) for foot wear advice and possible provision of specialist footwear.

- **It is important to change socks daily**
Ensure that stockings / socks fit properly and take them off daily.
Avoid socks/stockings with seams or those that have been mended or have tight elastic around the tops.
Ensure shoes are not worn without socks or stockings because this increases risk of damaging the skin
- **Avoid extreme temperatures**
Do not use hot water bottles or heating pads.
If feet feel cold at night, wear good fitting bed socks.
- **Minor infection** can cause significant problems for people with diabetes
It is very important to contact the podiatrist / chiropodist, doctor or nurse at the first sign of infection.
Common signs of infections are:
 - Redness or any other discolouration of a toe or an area of the foot
 - Swelling
 - Discharge of pus / fluid from a toe or other part of the foot
 - Discoloration
- **Pain** may indicate a problem, but remember the resident may not feel pain if they have lost sensation in their feet
- **Avoid walking with bare feet**
- **Do not use chemical agents** such as corn pads or hard skin remover
- **If there is any concern, seek advice from a registered chiropodist or podiatrist**

Useful information on what to expect from an annual foot check can also be found within the Diabetes UK leaflet.

<https://www.diabetes.org.uk/Documents/Guide%20to%20diabetes/monitoring/What-to-expect-at-annual-foot-check.pdf>

If there is any concern, seek advice from a HCPC (Health and Care Profession Council) registered Chiropodist or Podiatrist.

Appendix 10:

Protocol for Blood Glucose Monitoring (BGM) for Residents with Diabetes in Care Homes

Contents:
Summary
1. Introduction
2. Purpose
3. Responsibilities
4. Blood Glucose Monitoring 4.1 Who to Test 4.2 Self-Testing 4.3 Frequency of Testing 4.4 Targets 4.5 Reporting & Recording Results 4.6 Interpreting & Actioning Results 4.7 Consent
5. Health and Safety
6. Operating a Blood Glucose Meter
7. Adverse Event Reporting
8. Training and Competency
9. References
10. Resources
11. Appendix A - Competency Assessment for Obtaining a Capillary Blood Sample and Using a Blood Glucose Meter (Unregistered Practitioner)
12. Appendix B - Guidance notes on how to assess competency

Summary:

- Only perform BGM where there is a clinical need or testing has been requested by a registered practitioner (such as a GP or Nurse) and documented in the care plan.
- It is the responsibility of the registered practitioner to set targets, interpret the results and take action. The exception to this is in an emergency e.g. hypoglycaemia (hypo)
- Consent should be obtained prior to BGM as it is an invasive procedure.
- It is the responsibility of the operator to ensure the blood glucose meter is being used according to the manufacturer's recommendations and in line with Health and Safety procedures relating to safe disposal of sharps and infection control.
- It is recommended that any member of staff undertaking BGM must have completed training and been assessed by a designated registered practitioner.

1. Introduction

BGM is recognised as playing an important role in the effective management of people with diabetes. It can provide information for the on-going assessment of diabetes and in the detection and management of hyperglycaemia (high blood glucose) and hypoglycaemia (low blood glucose)

2. Purpose:

The purpose of this protocol is to provide a framework for direction and guidance for safe BGM in care homes.

3. Responsibilities:

3.1 Registered Practitioner (RP)

Any registered Nurse / Diabetes Specialist Nurse / GP / Pharmacist

- Must have evidence of annual training when using a blood glucose meter and be competent and confident in the procedure.
- Is professionally accountable for the delegation of the task and ensuring that anyone delegated to, is competent and confident to carry out the task at the time of the assessment. (NMC2008)¹

3.2 Non-Registered practitioner (NRP)

Any Healthcare Assistant / Support Worker / Carer

- Is responsible for their actions/omissions and work within their scope of practice.
- Has responsibility to undertake the task only if they feel competent and confident to do so.
- Must receive approved training, demonstrate competence and have annual reassessment of competence by a registered practitioner ([Appendix A](#))

3.3 It is best practice for each care home to have its own BGM policy, reflecting the needs of its residents.

3.4 It is recommended that each care home has a designated person to take overall responsibility for the ongoing care and maintenance of the blood glucose meter/s used in the care home.

4. Blood Glucose Monitoring:

4.1 BGM provides instant information about the effectiveness of a person's diabetes management and should form part of the resident's care plan. Not all residents with diabetes will need to have their blood glucose levels monitored but in the following circumstances it may be recommended by a RP.

- If they are treated with a medication that can increase the risk of a hypo e.g. sulphonylureas (gliclazide) or insulin
- To detect hypoglycaemia(Hypo)
- To detect and assess poor glycaemic control, especially in times of illness or if steroids are prescribed

The RP may also review medication and consider whether any medication should be reduced or discontinued. Alternative therapies can also be considered that may not require blood glucose monitoring.

4.2 Residents should always be encouraged to self-test when able to do so.

4.3 **Frequency of Testing:** This will depend on the needs of the individual resident and should only be done following written or verbal request from a RP and as agreed in the resident's care plan. The exception to this is in an emergency where there are concerns about a resident's condition e.g. suspected hypo.

4.4 **Blood Glucose Targets:** Should be agreed by the RP and recorded in the care plan. This should be assessed at regular intervals but at least annually.

4.5 **Reporting and Recording Results:** Everyone must be aware of documentation requirements and reporting procedure.

4.6 **Interpreting and Actioning Results:** Only the RP is responsible for interpreting and taking action based on the results.
The NRP should report any result out of the expected range to the manager in charge/RP. In the event of an emergency where a RP is not available the NRP should contact the GP/Out of Hours service for advice and guidance.

4.7 **Consent:** It should be remembered that BGM is an invasive procedure and verbal/written consent should be obtained. If there is doubt over the person's ability to provide valid consent then The Mental Capacity Act (2005) and code of practice should be followed.

See CQC Regulations for service providers and managers²

5. Health and Safety:

5.1 All users must recognise the potential hazards of handling and disposing of body fluids and sharps³. *See also - CQC Regulations for service providers and managers²*

5.2 Non sterile gloves should be worn during the blood glucose testing procedure

5.3 Use only **single-use safety lancets** for obtaining blood samples. These have a concealed needle that will help to prevent needle-stick injury and transmission of infection³.

6. Operating a Blood Glucose Meter:

All monitoring equipment must meet recognised standards for infection control, quality control and health and safety. All staff using the equipment must be aware of the correct and safe use of the meter.

- 6.1 All users must have received training and annual updates on the operation of the meter that is being used.
- 6.2 The meter should be used in accordance with the manufacturer's recommendations.
- 6.3 The manufacture's guidance on storage should be used.
- 6.4 Cleaning should be done and recorded as per manufacturer's recommendations.
- 6.5 Quality Control procedures as recommended by the manufacturer should be followed and recorded:
 - Staff must be aware that it is a legal requirement that Quality Control results are recorded. This is essential if there is a product recall or adverse event.
 - Records should be kept for 10 years in line with Royal College of Pathologists guidelines www.rcpath.org
 - Document when machine first used. Record maintenance, battery changes.
 - Always have manufacturer's instructions to hand.

An example of what to record:

Date/Time	Test Strip LOT number	Control Solution Batch Number: When Opened:	Range Expected:	Result:	Signature:

- 6.6 The care home should be aware of how to order Quality Control solution and new meters from the manufacturer.
- 6.7 A copy of the meter instructions should always be kept with each meter for reference.

7. Adverse Incident Reporting:

- Always report any fault or malfunction of the blood glucose meter to the manufacturer.
- Any adverse event can also be reported to the Medicines and Healthcare Products Regulatory Agency (MHRA). This can be done online: www.mhra.gov.uk

8. Training and Competency:

The use of monitoring equipment requires training and annual updates. It is recommended that any member of staff undertaking BGM must have completed training and been assessed by a designated registered practitioner.

(See 3.1 above using the competencies in [Appendix A](#))

9. References:

1. NMC 2008: The Code: <https://www.nmc.org.uk/standards/code/>
2. CQC: Regulations for service providers and managers:
<http://www.cqc.org.uk/content/regulations-service-providers-and-managers>
3. Health and Safety Executive document.
<http://www.hse.gov.uk/healthservices/needlesticks/actions.htm>

10. Resources:

Blood Glucose Record Sheet: (can be downloaded and printed)
<http://www.diabetes.co.uk/downloads/blood-glucose-monitoring-diary/monthly-blood-glucose-diary.pdf>

MHRA: Point of Care Testing: Blood Glucose Meters – Advice for healthcare professionals.
www.mhra.gov.uk

**Appendix A: Competency Assessment for Obtaining a Capillary Blood Sample and Using a Blood Glucose Meter
(Unregistered Practitioner)**

Element	Performance criteria	Activity observed in training (Date/Sign)	Activity performed under supervision (Date/Sign)	Competence achieved (Date/sign)
1.	<p>Demonstrates a clear understanding of the procedure for blood glucose monitoring.</p> <ul style="list-style-type: none"> • Is able to state what the normal blood glucose range is • Is able to identify when blood glucose monitoring may need to be done • Carries out test only when requested by a manager/registered practitioner or in an emergency 			
2.	<p>Understands the need for patient consent</p>			
3.	<p>Is able to identify all equipment required for the test: gloves, single-use safety lancet, meter, strips and sharps container.</p>			

4.	<p>Demonstrates an understanding of infection prevention and control by washing their hands and those of the resident.</p> <p>Can explain which puncture sites on the fingers are recommended to obtain a capillary blood sample.</p>			
5.	<p>Demonstrates how to do the test according to blood glucose meter manufacturers' instructions at the request of a manager/Registered Practitioner</p>			
6.	<p>Demonstrates how to use and maintain equipment including:</p> <p>Quality control procedures Cleaning</p> <p>How to report a faulty machine</p>			
7.	<p>Is aware of and follows the blood glucose protocol specifically relating to:</p> <ul style="list-style-type: none"> • Responsibilities 			
8.	<p>Documents result in patients care plan and reports any readings outside expected range to manager/RP (GP/DSN/DN)</p>			
9.	<p>Can demonstrate understanding of hypoglycaemia: recognising symptoms, how to treat and who to contact or report to</p>			

Date that relevant training was completed:

Date of final sign off:

Date of Next Assessment:

CARER STATEMENT OF VERIFICATION

I have received an appropriate level of training and supervision and have achieved all of the components in the Competency Assessment for Obtaining a Capillary Blood Sample and Using a Blood Glucose Meter.

I understand that it is my responsibility to adhere to relevant policies and procedure guidelines when undertaking this skill in accordance with guidance from professional bodies and Department of Health.

I understand that this training will need to be updated annually or sooner if I do not feel competent or confident.

Carer name: **Signature:** **Date:**

I have supervised the Carer named above and I am assured that they have completed the necessary training and have the competence to undertake blood glucose monitoring at the time of this assessment.

Manager or Registered Practitioner Name: **Signature:** **Date:**

Appendix B: Guidance notes on how to assess competency:

What is competence?

- Competence can be defined as ‘the state of having the knowledge, judgement and skills required to perform a task’

Why is it important to assess competence?

- Anyone performing a task needs to be able to demonstrate that they are confident and competent in performing the task and that they have had the relevant training and assessment. The process of competency assessment contributes to greater patient safety. It is also a useful tool to enable relevant training to be identified for staff.

Who should assess competence?

- Someone who has the knowledge, skills and experience of completing the task to be assessed.
- Someone who is appropriate to assess the competence of another (i.e. the person assessing is an expert)
- When delegating a task it is the responsibility of the delegator to ensure that the person is competent to complete the task.

When should competence be assessed?

- Competence should be assessed before someone takes on a new task or care role.
- Competency should be reviewed at least annually or sooner if there are any changes to the task.

What should be included in the assessment?

- An accurate description of the task required, which relates to local policy/procedure or guidelines.
- An understanding of why the task is being carried out and the actions to be taken depending on the results of the task.
- For blood glucose monitoring, the assessment can include observation of the task, performing the task under supervision and performing the task independently.
- Record keeping and documentation also need to be assessed.
- The outcome of the assessment should also be recorded and can be kept as a portfolio of evidence.

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