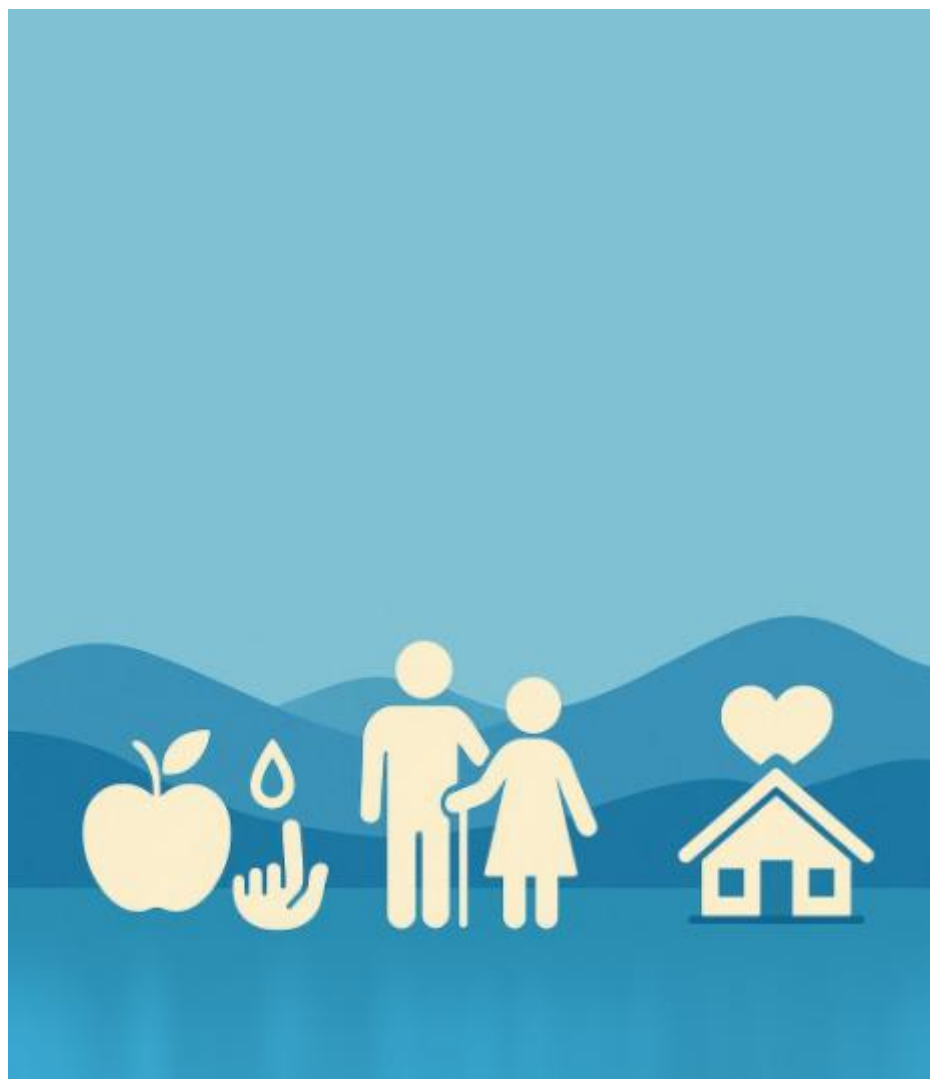


Diabetes Framework

Information for Care Home Staff

Published June 2026



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Section 1: Introduction

The aim of the Diabetes Framework for Care Home Staff is to support care home staff to optimise the care provided to people living with diabetes who live in care homes. This framework will equip staff with improved knowledge and skills to recognise the symptoms of diabetes, prevent complications and manage signs and symptoms associated with diabetes. The framework also signposts staff to further diabetes education and resources.

Diabetes is a complicated condition with many different types of diabetes and many different signs, symptoms and treatments. It is estimated that 1 in 3 people over the age of 65 in the United Kingdom has diabetes. There is a growing number of residents living in care homes who are living with diabetes.

The aims of the Healthcare framework for adults living in care homes - My Health, My Care, My Home (Scottish Government, June 2022) relevant to this Diabetes Framework for Care Home Staff are:

- To enhance the health of people living within a care home.
- Improve the way we assess, monitor and respond to healthcare needs.
- Promote a consistent approach to support people to remain as healthy as possible.
- Enable the provision of seamless, personalised care always.

This is a supportive Framework to assist care home staff in the routine management of residents living with diabetes. The information provided is supported by evidence-based literature and best practice.

Section 2: What is Diabetes?

Diabetes mellitus is a long-term condition where the body cannot regulate blood glucose effectively. This is because of problems with insulin production, insulin action, or both.

Anatomy & Physiology of Diabetes:

1. Anatomy

To understand diabetes, we should first look at the hormones, organs and cells involved:

Hormones:

Insulin is a vitally important hormone.

- It controls your blood glucose (sugar)
- Glucose is the body's main energy source.

Insulin helps your cells get energy.

- Your muscles, brain, and organs need glucose to function.
- When you eat, your blood glucose rises. Insulin tells the cells that there is fuel there and to take what it needs.

It stores extra energy for later.

- Insulin tells the liver to store excess glucose as glycogen.
- This is what keeps you going between meals, overnight, or during exercise.
- It keeps other body systems balanced.

Insulin influences:

- Fat storage
- Protein building
- Healing and growth
- Hormone balance

Even small insulin problems can disrupt these processes. If glucose remains too high or drops too low, serious complications can occur.

- Without insulin, glucose stays in your bloodstream, causing high blood sugar, which is dangerous over time.
- Insulin is the delivery system that makes sure the right amount of glucose gets inside each cell.

Organs and Cells

The Pancreas



- A gland located behind the stomach.
- Contains clusters of cells called *islets of Langerhans*.
- Within the Islets of Langerhans lie *Beta cells*, which make and release insulin, the key hormone to diabetes.
- They also contain *Alpha cells*, which release *glucagon*, which raises blood glucose.

Image by brgfx on Freepik 1

The Liver

- Stores glucose in the form of glycogen
- Releases glucose into the bloodstream when needed.
- Responds to both insulin (to store glucose) and glucagon (to release glucose).

Muscle Tissue

- A major consumer of glucose.
- Insulin helps muscles absorb glucose to use for energy or store as glycogen.

Adipose (Fat) Tissue

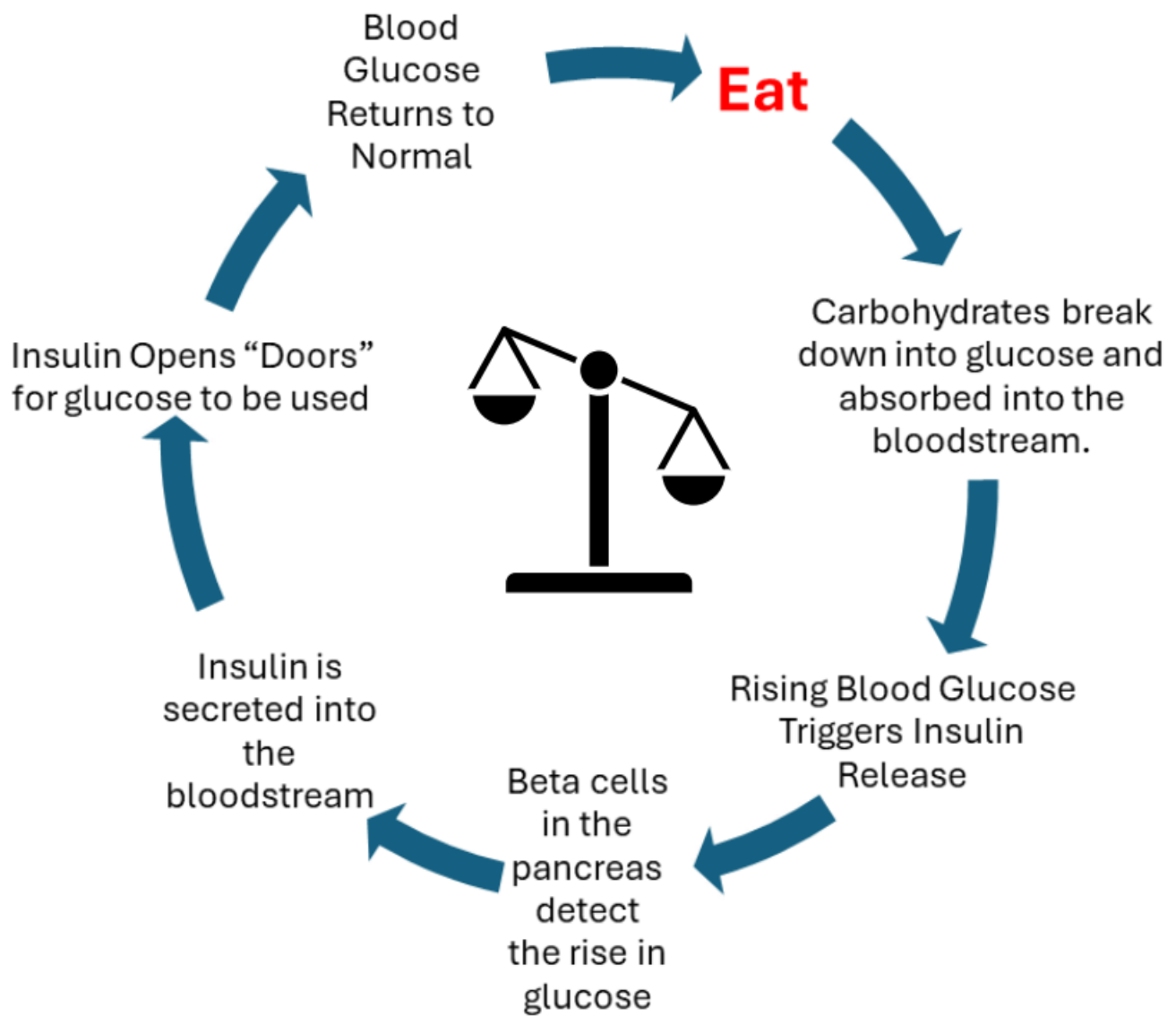
- Stores excess glucose as fat.
- Releases fatty acids during fasting.
- Is affected heavily by insulin resistance.

The Circulatory System

- Transports glucose and hormones.
- Blood vessels are vulnerable to long-term high glucose levels, leading to complications.

2. Physiology

How Glucose Regulation Normally Works



This balanced system is disrupted in diabetes

Type 1 Diabetes

- Auto immune disease causes destruction of pancreatic beta cells.
- Little or no insulin is produced.
- Glucose cannot enter cells effectively.
- Blood glucose rises quickly.
- Requires lifelong insulin therapy.

Common Signs or Presentation:

- Frequent urination
- Increased thirst
- Increased hunger
- Unintentional weight loss
- Fatigue
- Blurred vision

Type 2 Diabetes

- The body becomes resistant to insulin and/or the pancreas cannot produce enough insulin.
- Muscle, fat, and liver cells stop responding properly to insulin.
- Glucose can't enter cells efficiently.
- Over time, the pancreas can't keep up and Insulin production decreases.
- Strongly linked to lifestyle factors, age, and genetics.
- Chronically high blood glucose
- Managed with lifestyle changes, oral medications, and sometimes insulin.

Common Signs or Presentation:

- Weight loss
- Increased urine production
- Excessive or increased thirst
- Change in eyesight

- Genital or oral thrush
- Lethargy
- Change in mood

The diagram below demonstrates how **Type 1 Diabetes** is caused by **NO INSULIN** whereas Type 2 Diabetes is the body's cells being unable to use the insulin.

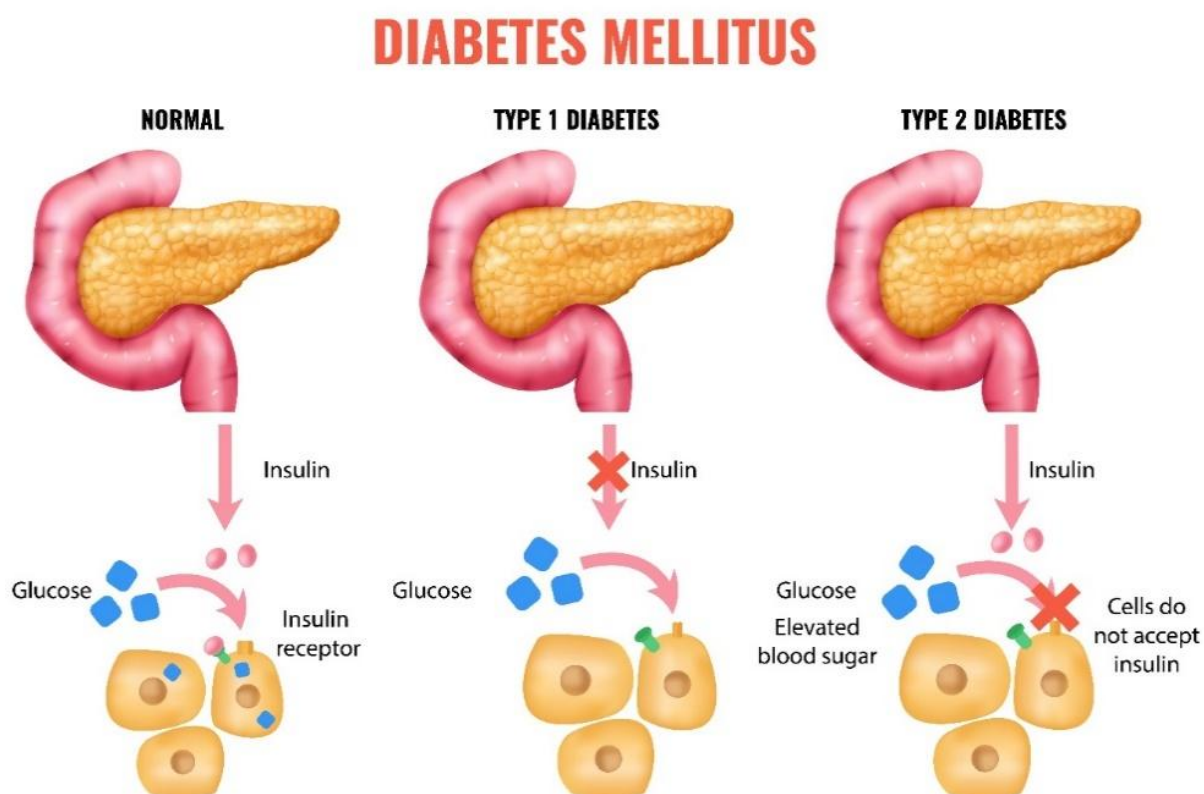


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Feature	Type 1	Type 2
Insulin production	✗ None/very low	⚠ Normal → declining
Insulin resistance	✗ No	✓ Yes
Cause	Autoimmune	Lifestyle + genetics
Treatment	Insulin	Diet, exercise, tablets, ± insulin

Why is it important to manage Diabetes well?

People with Diabetes have:

- Higher levels of physical and cognitive disability
- Increased rates of hospital admission
- Increased risk of pressure ulcer development
- High rates of complications
- Increased susceptibility to infection

3. Aims of Treatment

The primary aim of diabetes treatment is to maintain blood glucose within a safe range while preventing both short-term and long-term complications by:

- Relieving acute symptoms
- Avoiding extremes of hypoglycaemia and ketoacidosis
- Reducing risk of micro and macrovascular complications:
 - Maintain near-normal control of blood glucose levels
 - Blood pressure control
 - Weight loss in overweight/obese or weight maintenance
- Maintain quality of life

4. Complications of Diabetes

Chronically high blood glucose causes issues for the entire body, including:

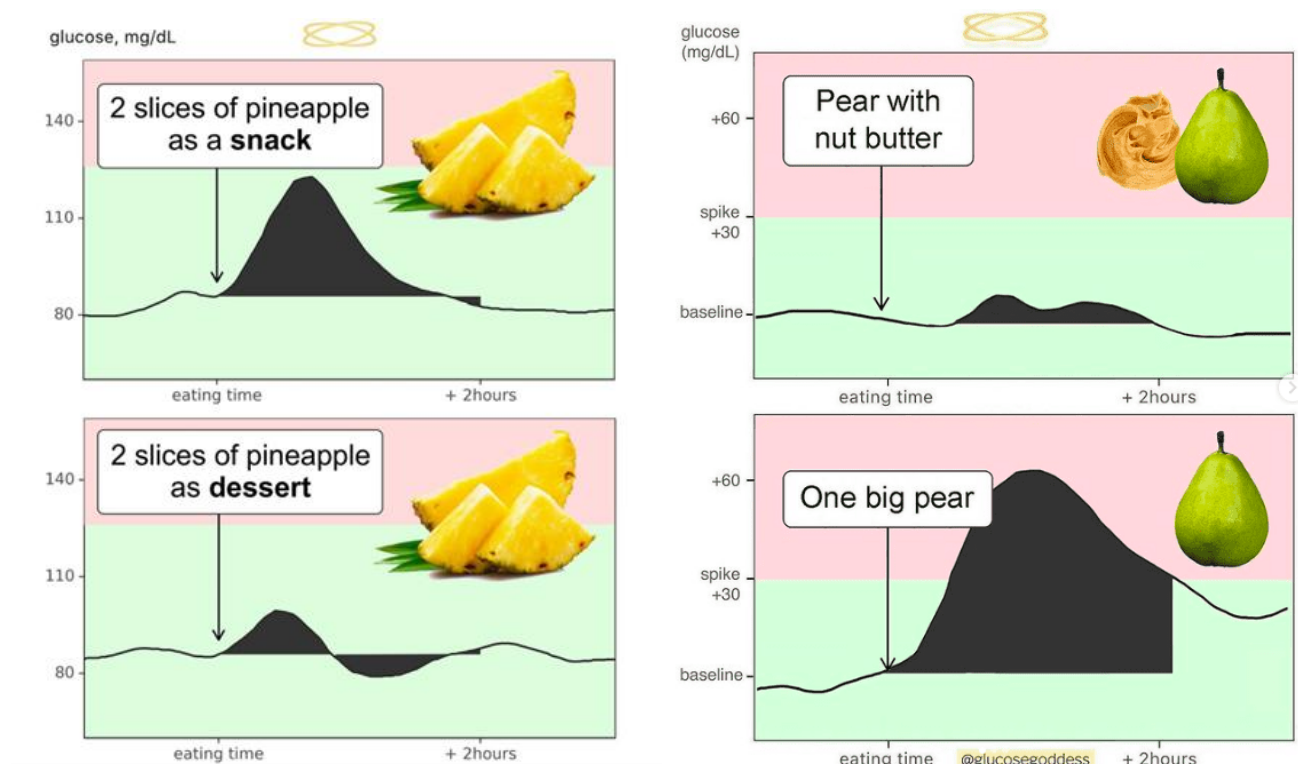
- Blood vessels → heart disease, stroke, poor circulation
- Eyes (retinopathy) → vision loss
- Kidneys (nephropathy) → kidney failure
- Nerves (neuropathy) → pain, numbness, foot ulcers
- Immune system → increased infections

Section 3: Lifestyle for Diabetes Management

Person centred approach to promote supported self-management is the aim.

A. Healthy Diet

- Low in refined sugars and saturated fats.
- High in fibre: whole grains, vegetables, fruit.
- Balanced carbohydrate intake—spread throughout the day.
- Encourage portion control.
- Serving fruit as part of a meal or with protein helps to prevent spikes in glucose levels.
- Absorption and combination and timing of foods are important as indicated in the graphs.



Images from @GlucoseGoddess

B. Physical Activity

- Aim for 150 minutes of moderate activity per week, e.g. walking, chair exercises
- Include muscle strengthening activities twice weekly.
- Avoid prolonged sitting—encourage movement breaks.
- Monitor for Hypoglycaemia (Low Blood Glucose) when exercising, especially if on insulin.

C. Weight Management

- Even a 5–10% weight loss can significantly improve glucose control in Type 2 diabetes.
- Support referrals to dietitians, weight management services, or structured education.

D. Foot Care for People with Diabetes

Why Foot Care Matters

Reduced circulation and nerve damage increase risk of:

- Ulcers
- Infections
- Amputations

Daily Foot Checks for residents

- Inspect for cuts, redness, swelling, blisters, or changes in skin.
- Check between toes for moisture or fungal infection.
- Moisturise dry skin but avoid between toes.
- Wear well-fitting shoes and cotton socks.

Refer urgently if:

- Ulcer present.
- Signs of infection.
- Sudden foot colour change.
- Loss of sensation or severe pain

Section 4: Hypo & Hypers & Measuring Blood Glucose

Hypo

Recognising Hypoglycaemia (Low Blood Glucose)

Definition: low blood sugar: less than 4 mmol/L

Symptoms

- Sweating, shaking, hunger.
- Irritability, confusion
- Poor communication
- Headache, dizziness
- **Severe:** seizures, unconsciousness
- **Possible life-threatening complications:**
 - Diabetic Ketoacidosis (DKA)
 - Hyperosmolar Hyperglycaemic State (HHS)

Causes

- Missed or delayed meals
- Less carbohydrate than normal
- Incorrect or inappropriate insulin or oral medication doses
- Unable to monitor blood glucose adequately.
- Vomiting
- Exercise

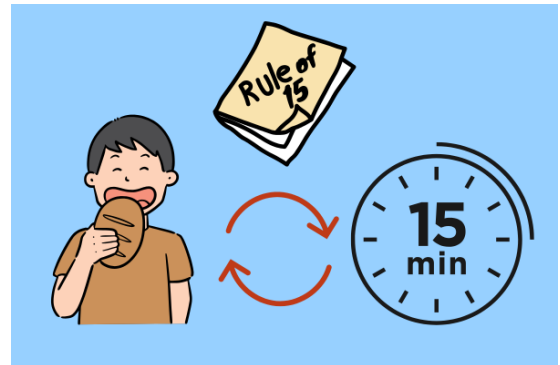
Immediate Treatment/First Aid for Hypo

The 15-15 Rule:

is a guideline for treating low blood glucose levels in individuals with diabetes. It involves the following steps:

“15–15 Rule” if blood sugar less than 4

1. Give 15g fast acting carbohydrate: 4–5 glucose tablets or 150 ml sugary drink.
2. Recheck in 15 minutes.
3. Repeat if still less than 4 mmol/L.
4. Follow with a starchy snack 15g if next meal more than 1 hour away.



If unconscious:

- Do NOT give anything orally.
- **Seek urgent help. Call 999**

Hyper

Recognising Hyperglycaemia (High Blood Glucose)

Definition: blood sugar greater than 15 mmol/L

Symptoms

- Thirst, frequent urination.
- Fatigue
- Blurred vision
- **Severe:** nausea, vomiting, abdominal pain, drowsiness
- **Possible life-threatening complications:**
 - Diabetic Ketoacidosis (DKA)
 - Hyperosmolar Hyperglycaemic State (HHS)

Causes

- Illness e.g. infection
- Dietary factors – Sugary drinks, extra snacking, large amount of carbohydrate
- Stress
- Insufficient treatment
- Certain medications e.g. steroids
- Injection site issues
- Problems with insulin e.g. inappropriate storage

Immediate Treatment/First Aid for Hyper

- Encourage hydration.
- Give prescribed 'correction insulin' (if able to do so)
- Check Ketones (if able to do so via urine dip test) if glucose persistently high or patient unwell.
- **Seek urgent help – Call 999**

Management of Hypoglycaemia in the Care Home setting

- Care home responsibilities:
 - Treatment availability is based on individual care plans
 - Maintain up-to-date, person-centred diabetes care plans
 - Ensure appropriate treatments are available and accessible
 - Where required provide /access staff training in recognition and management of hypoglycaemia
 - Treatment availability is based on individual care plans

Lothian Guidelines

- [Hypoglycaemia in Adults in the Community: Recognition, Management and Prevention](#)
- [Hypoglycaemia | Right Decisions](#) local guidelines
- If you require support with any aspect of hypoglycaemic management for residents please discuss with GP in the first instance.

- GP then has the opportunity to discuss with Diabetes Teams

Diabetes Teams Contact Details:

Area	Team	Working Hours	Contact details
RIE	Diabetes Registrar	On-Call	M - 07870 158298
WGH	Diabetes Registrar	On-Call	M - 07976 977402
Edinburgh, East and Mid Lothian	Diabetes Specialist Nurses	(Monday to Friday) 09:00-17:00 Hours	T - 0131 242 1471 T - 0131 537 1746 Bleep 3008
West Lothian	Community Diabetes Specialist Nurses	Monday to Friday 09:00-20:00, Weekends/PH 09:00-17:00	M – 07811711048 T - 01506 522238

Blood Glucose monitoring:

Methods

- Finger-prick testing: capillary readings for daily management.
- Real Time Glucose Monitoring (RTGM): sensors measure glucose in interstitial (fluid under the skin) every few minutes (image below).



www.freestyle.abbott

Target Blood Glucose Ranges (general guidance)

- Pre meal: 4–7 mmol/L
- Two hours after meals: less than 9 mmol/L

Always follow the individual resident care plan, as targets vary.

Blood glucose monitoring is a priority in patients with diabetes.

- Frequency will vary depending on individual – if in doubt, 4 x daily
- Must be done before food and insulin/oral medication.
- If blood glucose not checked at the right time, this will have a negative impact on treatment and management.
- Regular monitoring is important for early identification of low glucose or hyperglycaemia.

Monitoring Tips

- Correct use of glucometers/sensors.
- Check patterns and trends rather than single results.

- Document results clearly for review.
- During illness check more frequently.
- Ensure monitoring device has an annual calibration check
- Ensure staff education is up to date.

Summary Checklist for Staff

- ✓ Understand diabetes types and symptoms
- ✓ Recognise hypo and hyper glycaemia
- ✓ Act promptly using correct treatment steps
- ✓ Promote lifestyle changes and support self-management when possible
- ✓ Support regular blood glucose monitoring
- ✓ Prioritise foot care to prevent serious complications

NOT TO BE IGNORED

If the patient is unwell and you are concerned, seek medical advice	Inability to swallow/not able to keep fluids down	Vomiting
Persistent Diarrhoea	Persistently high glucose	Underlying infection

9 Processes of Diabetes Care

Measurements for people living with diabetes.

 <p>Blood Pressure</p> <p>Target <130/80mmHg Adults 80yr+: <150/90mmHg</p>	 <p>Urine albumin:creatinine</p> <p>ACR <3mg/mmol</p>	 <p>Smoking Status</p> <p>Refer to Quit Your Way cessation service</p>
 <p>HbA1c</p> <p>Target <48mmol/mol 53mmol/mol - insulin and/or sulphonylureas 64mmol/mol - frail (moderate-severe) 70mmol/mol - frail (very severe)</p>	 <p>Serum Creatinine</p> <p>Assess for CKD, manage risk factors</p>	 <p>Serum Cholesterol</p> <p>Refer to lipid guidance in Lothian Hypertension Guidelines</p>
 <p>Weight & BMI</p> <p>Consider referral to weight management programmes (if appropriate)</p>	 <p>Foot Risk</p> <p>Every 2 years if low risk RefHelp: Management of the Diabetic Foot</p>	 <p>Retinopathy screening</p> <p>Every 2 years if low risk 0131 536 4145 loth.diabeticeyescreening @nhslothian.scot.nhs.uk (internal)</p>

Approved by Diabetes MCN 2023 Review 2026

Section 6: Medications for Diabetes



Treatment of type 2 diabetes

The most common treatment used for type 2 diabetes are tablets called metformin.

Biguanides: Metformin

Metformin

What is metformin?

It belongs to a group of drugs called biguanides. Metformin is the only biguanide available.

How does metformin work?

Metformin works by:

- Reducing the amount of sugar or glucose the liver releases into the body, helping the insulin in the body work better.
- This means that metformin improves insulin resistance so that the insulin produced works better. Insulin resistance is when the insulin doesn't work properly, so the blood sugar levels can become too high.

Who can take metformin?

Children over 10 years old and adults over 18 with type 2 diabetes can take metformin.

It can be used on its own to treat type 2 diabetes or with other diabetes medications including insulin.

Who can't take metformin?

Some medications might not be suitable for some people, which might be because of medical conditions or other reasons such as diabetic ketoacidosis or kidney or liver disease.

How do you take metformin?

Metformin is available as slow-release or standard-release tablets.

It's also possible to get metformin as a liquid or a powder if residents can't swallow tablets.

Metformin side effects

Metformin is often started at a low dose and built up over a few weeks to reduce the chances of side effects and allow the body to get used to it.

The most common side effects from metformin are:

- Stomach-ache or no appetite
- Metallic taste in the mouth
- Longer term side effect – Low vitamin B12 levels

These aren't all the side effects. You will find a full list of known side effects in the Patient Information Leaflet.

The information about side effects is based on the likelihood of people having them. For example, if a side effect is very common then it can affect more than one in ten people, and if a side effect is very rare then it affects fewer than one in 10,000 people.

There are some symptoms that are more common when first starting to take metformin - these include digestive problems such as feeling sick, being sick, diarrhoea and tummy pain. These side effects will often go away within a few weeks.

Sulphonylureas: Gliclazide, Glipizide, Tolbutamide and Glimepiride

How do sulphonylureas work?

Sulphonylureas work by helping your pancreas to make more insulin. They also help insulin to work more effectively in the body. This all helps to lower blood sugar levels.



Different types of sulphonylureas

There are four types of sulphonylureas that people living with type 2 diabetes in the UK can be prescribed. Gliclazide, glipizide, tolbutamide and glimepiride are the types available of which gliclazide is the most used.

Gliclazide

Gliclazide comes as standard-release or slow-release tablets which are taken at the same time once a day before breakfast.

Sulphonylureas side effects

Common side effects can include:

- Stomach-ache,
- Sickness,
- Diarrhoea
- Weight gain - some people find that they gain weight while taking a sulphonylurea.

Risk of low blood sugar:

- One of the most common side effects of sulphonylureas is low blood sugar, also called hypoglycaemia, or a hypo. This is where the level of sugar in the blood drops too low, below 4mmol/l.
- Sulphonylureas can increase the risk of hypos while driving.

GLP-1 agonists: Mounjaro, Ozempic, Rybelsus, Trulicity, Semaglutide

What are GLP-1 agonists?

These drugs can be prescribed to lower blood sugar levels in people living with type 2 diabetes. They can also be prescribed to support some people with weight loss.

How do GLP-1 agonists work?

This medication works by increasing the levels of hormones – which help the body produce more insulin when needed and lowers blood sugar levels.

GLP-1 agonists and weight loss

Some people lose weight when they take a GLP-1 agonist as part of their type 2 diabetes treatment. This is because these drugs slow down how quickly food is digested and can reduce appetite, so you eat less.

Different types of GLP-1 agonists

There are many GLP-1 agonists that can be prescribed as a treatment for type 2 diabetes in the UK, which have a variety of brand names:

- Mounjaro is injected once a week. It's the brand name for tirzepatide. Mounjaro is a new class of medicine and is a dual GLP-1/GIP (gastric inhibitory polypeptide).
- Ozempic (semaglutide) is injected once a week.
- Rybelsus (semaglutide) is a tablet taken once a day.
- Trulicity (dulaglutide) is injected once a week.
- Ozempic and Rybelsus are both brand names for the drug semaglutide.

Although some GLP-1 medications are given via injection, they are different medications to insulin.

There are also some GLP-1 agonists that can be prescribed to help with weight loss:

Mounjaro can be used to treat type 2 diabetes, and it is being rolled out as a medication for weight loss on the NHS.

Wegovy, a brand name for semaglutide, can be prescribed to people living with type 2 diabetes or prediabetes as an option for weight management.

Who can take GLP-1 agonists?

Adults over the age of 18 with type 2 diabetes can take GLP-1 agonists.

Guidelines from NICE and the NHS Lothian East Region Formulary recommend that GLP-1 agonists can be prescribed to adults with type 2 diabetes when:

- Using three medications has not been effective in managing diabetes.
- Or patients have not been able to take the medications. This might be because of side effects or because of other medical conditions.

BMI guidelines:

GLP-1 agonists are only prescribed when someone has a Body Mass Index, or BMI, of 35kg/m² or higher, and has additional psychological or other medical conditions that are related to obesity.

However, someone with type 2 diabetes can be prescribed a GLP-1 agonist if they have a BMI below 35kg/m² and:

- Using insulin would affect their job due to the risk of hypoglycemia.
- Weight loss would lead to improvements in other obesity-related health issues.

NICE recommends that due to their risk from obesity-related health problems at a lower BMI – people from Black African, African-Caribbean, Asian, South Asian, Chinese, and Middle Eastern backgrounds take a GLP-1 agonist at a lower BMI.

Managing overweight and obesity

Adults over 18 years might be prescribed a GLP-1 agonist for managing overweight and obesity alongside a reduced-calorie diet and physical activity.

There are two GLP-1 agonists that can be used for managing overweight and obesity. One is called Wegovy and the other is called Saxenda.

Adults with prediabetes or type 2 diabetes can only be prescribed Wegovy and Saxenda within specialist weight management services.

GLP-1 agonists side effects

Common side effects can include:

- Nausea
- Constipation
- Diarrhoea
- Risk of low or high blood sugar
- Risk of retinopathy
- Risk of acute pancreatitis.

Risk of low blood sugar

This medication does not usually cause blood sugar levels to become too low, also known as hypoglycaemia, or hypos, when taken on their own. But hypos can happen when GLP-1 agonists are taken with other diabetes medications such as insulin or a sulphonylurea.

Risk of high blood sugar

If you take a GLP-1 agonist with insulin and your insulin dose is reduced too quickly it can cause high blood sugar levels, this is also called hyperglycaemia, and there is an increased risk of diabetic ketoacidosis (also known as DKA)

Risk of acute pancreatitis

Acute pancreatitis is a condition where the pancreas becomes inflamed (swollen) over a short period of time.

Although uncommon, there have been reports of acute pancreatitis in people taking GLP-1 medications. While it is infrequent, it can be serious.

SGLT2 inhibitors

What are SGLT2 inhibitors?

Sodium-glucose co-transporter-2 inhibitors, often called SGLT2 inhibitors, are used to manage blood sugar levels.

They can be taken on their own or with other diabetes medications such as metformin, sulphonylureas or insulin.

How do SGLT2 inhibitors work?

SGLT2 inhibitors reduce blood sugar levels as they help the kidneys to remove excess glucose or sugar, which is passed out through your urine.

For someone with heart failure, some SGLT2 inhibitors can also improve the symptoms, such as breathlessness, and reduce the risk of their heart becoming weaker.

They can also slow down chronic kidney disease, or CKD, by reducing pressure and swelling in the kidneys.

Who can take SGLT2 inhibitors?

Adults over the age of 18 years with type 2 diabetes can take SGLT2 inhibitors.

SGLT2 side-effects

Risk of low blood sugar

SGLT2 inhibitors do not usually cause low blood sugar, also known as hypoglycaemia or hypos, when taken on their own. However, hypos can happen when you take an SGLT2 inhibitor with other diabetes medications such as insulin or a sulphonylurea.

Risk of high blood sugar

There have been reports of some people developing diabetic ketoacidosis (DKA) if they take SGLT2 inhibitors, although this is a rare side effect.

Who can't take SGT2 inhibitors?

Some medications might not be suitable for some people, which might be because of medical conditions or other reasons such as kidney or liver disease.

Insulin

Everyone with type 1 diabetes needs to take insulin as a medication. And so do some people with type 2 diabetes, some people with gestational diabetes and some people with other types of diabetes.



Insulin helps manage patients' blood sugar levels and helps prevent short-term or long-term serious health problems known as diabetes complications.

Insulin is used as a treatment for type 2 diabetes because the insulin the body makes either is not working properly, which is called insulin resistance, or in some cases insulin resistance means the pancreas initially produces more and more insulin to help, but over time the pancreas can become worn out and start to produce less insulin.

Section 7: Palliative Care for Residents with Diabetes

This Section will support you to care for people living with diabetes and their families during the last months, days or hours of life.

Background

People with diabetes are at greater risk of dying earlier than those without but only a minority of these deaths can be attributable to a diabetes diagnosis. Most can be attributed to other conditions, such as cardio-vascular disease including heart failure, chronic kidney disease, dementia, and cancers (Diabetes UK., 2024).

Across society the care of people with diabetes in their last year, month or days, falls to Health and Social care staff. Therefore, it is important that clear education, advice and support is available.

Palliative Care

Palliative care focuses on living the best way residents' can in the days, months, or years remaining. Optimising an individual's wellbeing at this time is very important and care should centre on avoiding uncomfortable symptoms and in the case of residents with Diabetes hyperglycaemia and hypoglycaemia, rather than keeping blood sugars under control.

Future Care Planning (FCP)

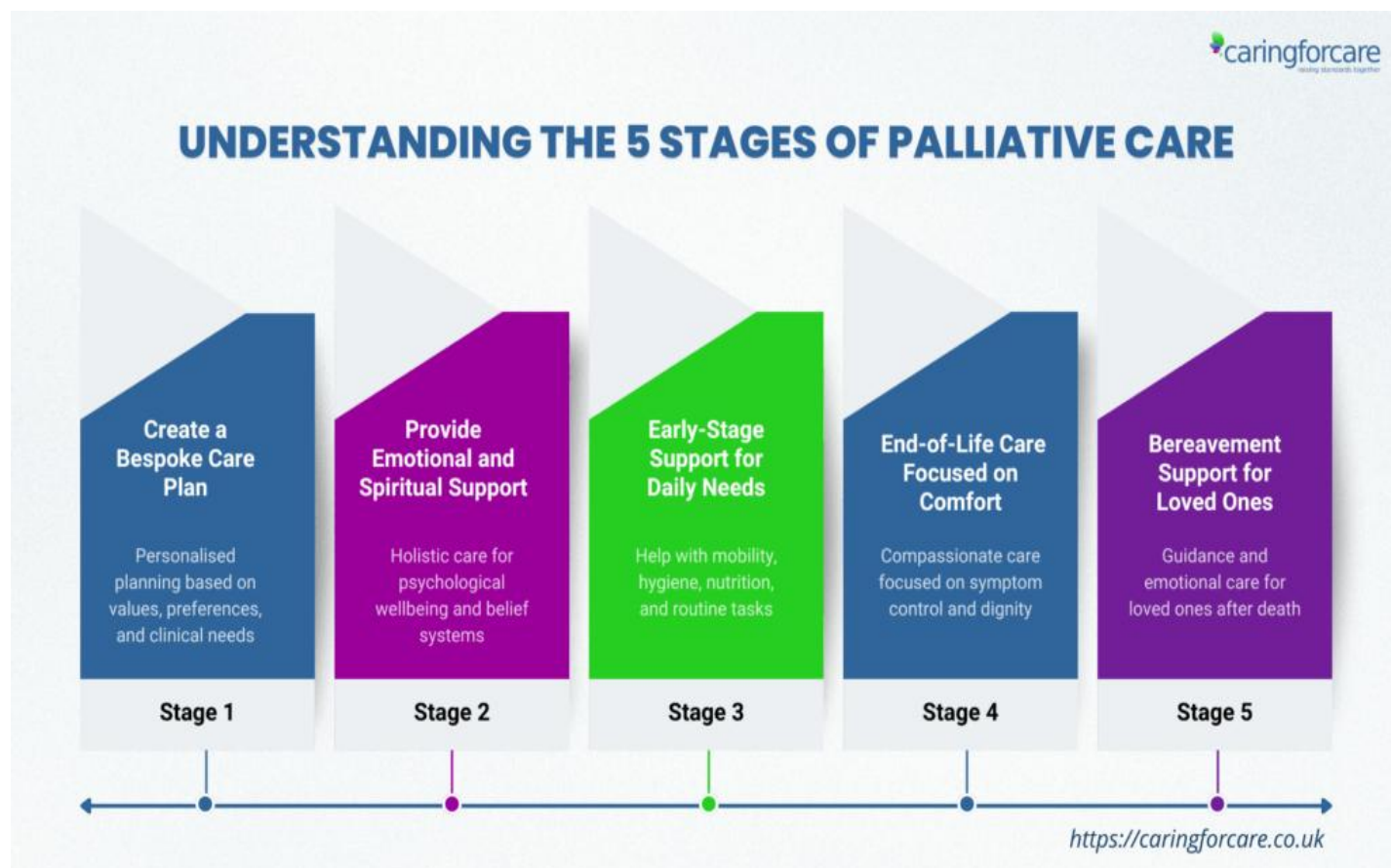
Key to achieving residents wishes in their last year, months days and hours of their life is a Future Care Planning conversation. It is important that we ask people what they want before there is a crisis as:

- It reduces the chance that someone receives care or treatment they do not want.
- They may be more likely to die in their preferred place of death.
- It can lessen the burden on people close to the person, who may otherwise need to be involved in decision making without knowing what the person wanted.

- It can allow the person to think about who's important to them and who they'd like to help them make decisions.

Therefore, Future care Planning is essential to good care at the end of a resident's life (Scottish Government, 2025).

Phases of dying (in relation to Diabetes)



To afford people the care and dignity they deserve, it is important we try to recognise which phase someone is in. This is not easy as this is a time of uncertainty. and should be undertaken in discussion with the resident, their family or relevant others and the extended care team. It should be reviewed in terms of months, weeks days and hours with a focus on days and hours as it is at this phase that the most potentially complex and distressing changes are made.

There are resources below that should be helpful in assessing a resident's condition and where they might be on their path.

Psychosocial aspects of dying with Diabetes.

Having spent many years monitoring and keeping blood sugars under control, there might be concerns around changes in this. It is important that both the resident and their family participate in conversations that might result in a change of diabetic medication, as well as other aspects of the dying process. It is therefore important to have had conversations with the resident and family before this emotional point, during Future care planning for example.

The management of diabetes towards end of life

The care of the dying person with diabetes is challenging and includes:

- Reducing risk of hyperglycaemia and hypoglycaemia. No specific glucose or HbA1c range is recommended; targets should be individualized based on the patient's condition.
- Recommendations include maintaining glucose levels between 6 mmol/l and 15 mmol/l, with adjustments based on individual needs.
- Resident and carer expectation and understanding.
- Managing the effects of other changes to other medications

Tailoring of diabetes medications.

This will depend on the phase of illness. Planning for end-of-life care in people with diabetes is often seen as a direct choice between treating or withdrawal of treatment for diabetes; in practice caring for the dying individual is more complex (Diabetes UK., 2024). It is important to have expert opinion and guidance.

When the resident with diabetes is entering End of Life (Days and Hours)

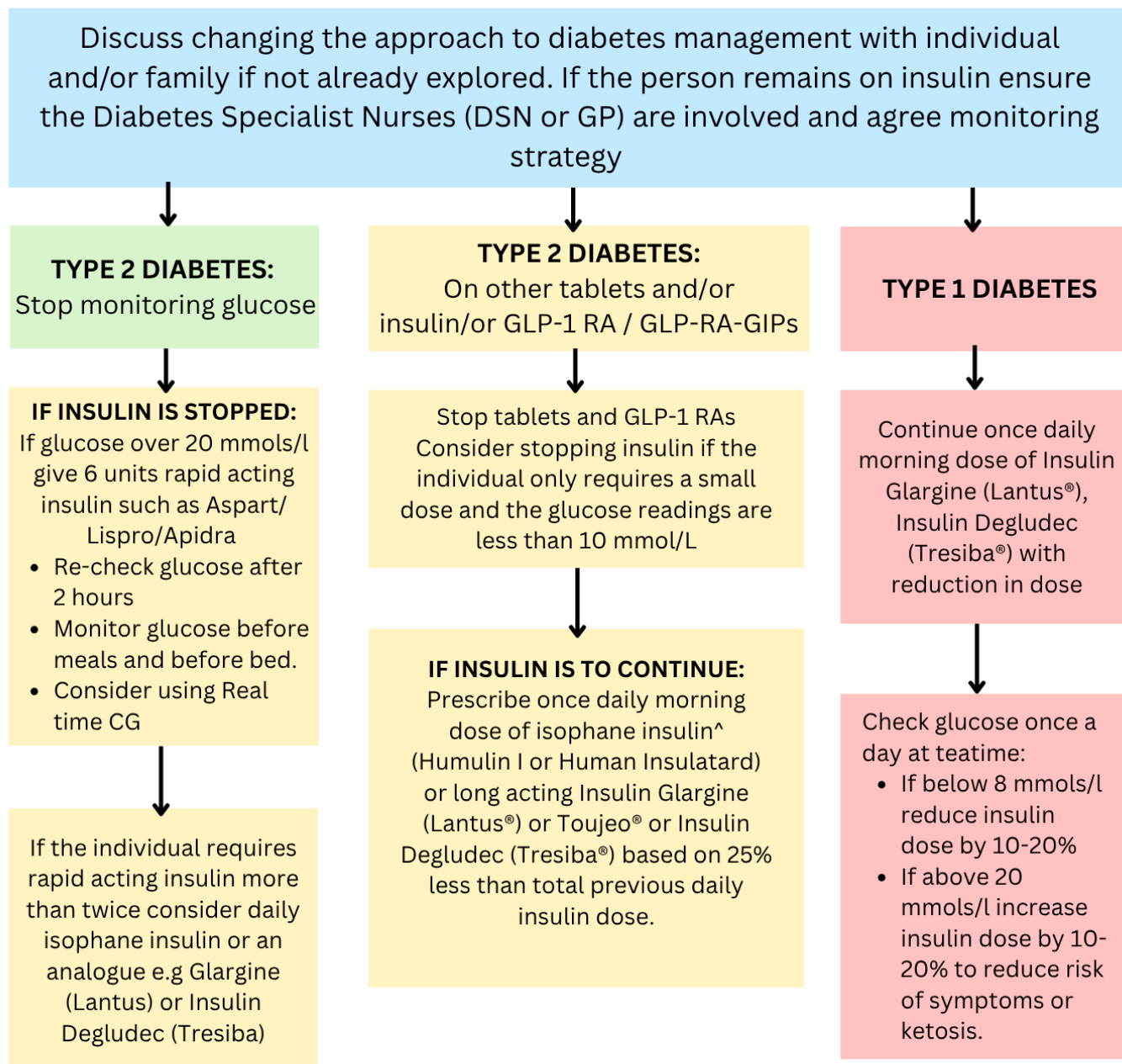
Consideration should be taken of the following when the withdrawal of treatment is being discussed:

- Where frequent treatment-related hypoglycaemia is causing distress and significant management difficulties.

- Where the benefits of stricter glucose control cannot be justified on the evidence available to a clinician.
- Where continued use of blood pressure or lipid lowering therapy cannot be justified on cardiovascular or cerebrovascular health benefit considerations.
- Where continued food or fluids are causing distress and are not the choice of the individual.
- Where continued treatment with insulin in someone with type 2 diabetes poses an unacceptable risk of hypoglycaemia.

Multiple factors may influence this process:

- Individual's wishes
- Dealing with concerns by family of a 'euthanasia' approach
- Presence of an Advance Directive
- Nasogastric (NG) feeding may be warranted for a brief spell but close liaison with the individual, family and GP is warranted.

**IMPORTANT INFORMATION:**

- Aim for glucose readings of 6-15 mmol/L q Keep tests to a minimum. It may be necessary to perform some tests to ensure unpleasant symptoms do not occur due to low or high glucose levels
- It is difficult to identify symptoms due to “hypo” or hyperglycaemia in a dying person
- If symptoms are observed it could be due to abnormal glucose levels
- Test blood for glucose if the person is symptomatic
- Observe for symptoms in previously insulin treated individual where insulin has been discontinued
- rtCGMS or isCGM glucose monitoring may be useful in these individuals to avoid finger prick testing
- Be aware when adjusting insulin doses to address hyperglycaemia in individuals at risk of insulin sensitivity such as those with CKD, cancer or frailty that dose adjustment will need to be in line with their specific clinical needs

Palliative Care Resources

End of Life Guidance for Diabetes Care

The most comprehensive source of information around dying with Diabetes can be found here

[End of Life Guidance for Diabetes Care](#)



For Healthcare Professionals:

END OF LIFE GUIDANCE FOR DIABETES CARE

Main guidance including comorbidities endorsed by:

June 2024

DIABETES UK
KNOW DIABETES. FIGHT DIABETES.

Association of
**British Clinical
Diabetologists**

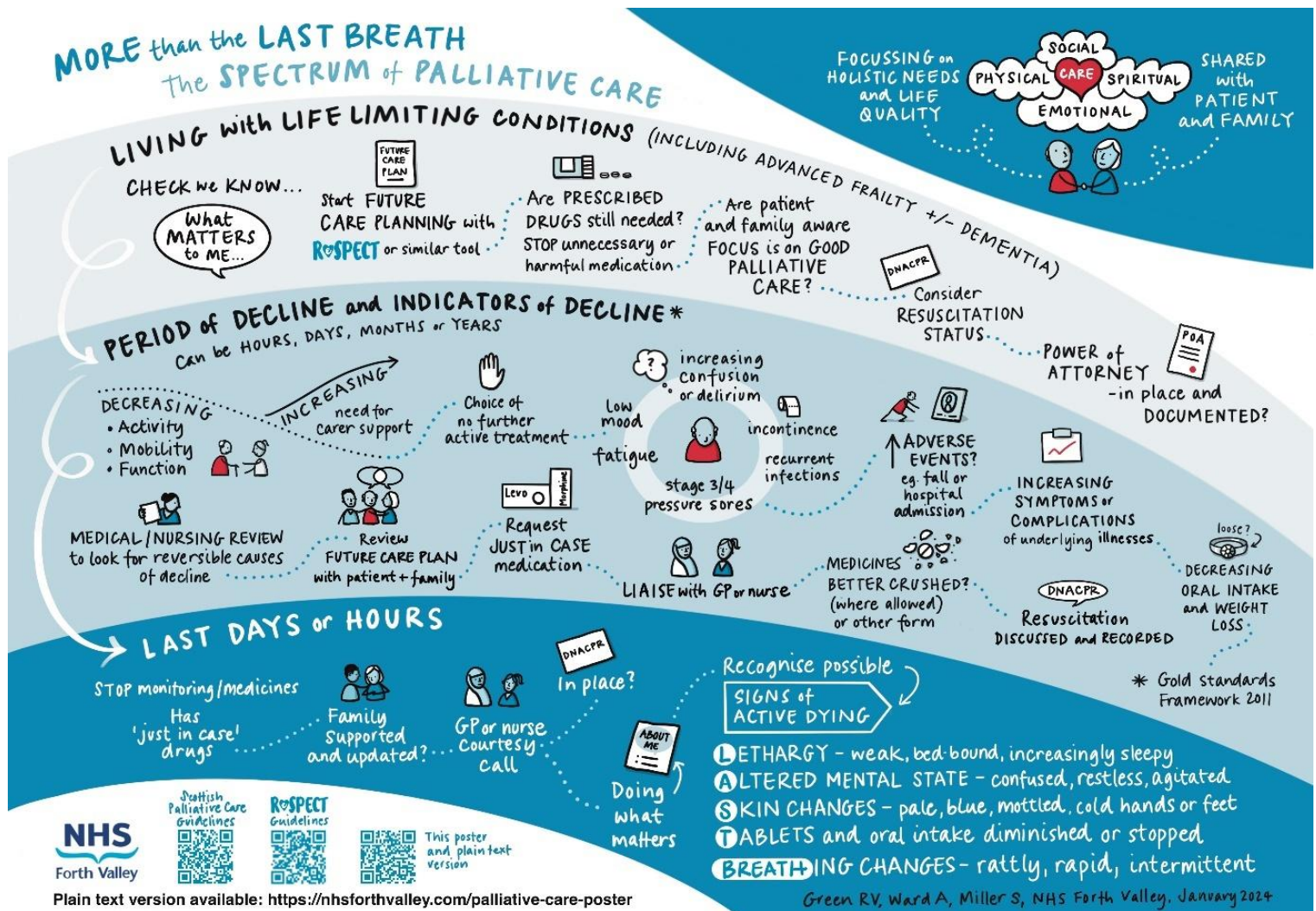
f D R O P
Foundation for Diabetes
Research in Older People

PCDS
Primary Care Diabetes Society



Phases of Dying

Phases of Dying Infographic; available at: [Palliative Care Poster – NHS Forth Valley](https://palliative-care-poster-nhs-forth-valley.com)



Supportive and Palliative Care Indicators Tool

Available at:

[SPICT-4ALL | Supportive and Palliative Care Tool](#)



Supportive and Palliative Care Indicators Tool (SPICT-4ALL)



The SPICT helps us to look for people who have life shortening health conditions and are less well. These people need more help and care now, and a plan for care in the future. Ask these questions:

Does this person have signs of poor health or health problems that are getting worse?

- Urgent or emergency hospital admission(s) or visits.
- Less able to manage usual activities; not as well as they used to be. (The person often stays in bed or in a chair for more than half the day).
- Needs more help and care from others due to increasing physical and/ or mental health problems. The person's carer needs more help and support.
- Has clearly lost weight over the last few months; or stays too thin.
- Has troublesome symptoms most of the time despite good treatment of their health problems.
- The person (or family) asks for palliative care; chooses to reduce, stop or not have treatment; or wishes to focus on quality of life.

Does this person have any of these health problems?

Cancer

Less able to manage usual activities; health is getting poorer.

Not well enough for cancer treatment or treatment is to help with symptoms.

Dementia or frailty

Unable to dress, walk or eat without help.

Eating and drinking less; difficulty with swallowing.

Has poor control of bladder and bowels.

Not able to communicate by speaking; not responding much to other people.

Frequent falls; fractured hip.

Frequent infections; pneumonia.

Nervous system problems

(e.g., Parkinson's disease, stroke, motor neurone disease)

Physical and mental health are getting worse.

More problems with speaking and communicating; swallowing is getting worse.

Chest infections or pneumonia; breathing problems.

Ongoing disability with increasing physical and/or mental health problems after one or more strokes.

Heart or circulation problems

Heart failure or heart blood vessel disease. Short of breath when resting, moving or walking a few steps.

Leg problems due to poor blood circulation; surgery is not possible.

Lung problems

More unwell with long term lung problems. Short of breath when resting, moving or walking a few steps even when the chest is at its best.

Needs to use oxygen for most of the day and night.

Has needed treatment with a breathing machine in hospital.

Other conditions

People who are less well with other life shortening physical or mental illnesses or health conditions. There is no treatment available or it will not work well.

Kidney problems

Kidneys are not working well; general health is getting poorer.

Stopping kidney dialysis or choosing palliative care instead of starting dialysis.

Liver problems

Worsening liver problems in the past year with complications like:

- fluid building up in the belly
- being confused at times
- kidneys not working well
- infections
- bleeding from the gullet

A liver transplant is not possible.

What we can do to help this person and their family.

- Start talking with the person and their family or carer about help needed now and why making plans is important in case things change.
- Ask for help and advice from a nurse, doctor, social worker or other staff if the person or family needs a review of their care and support.
- We look at the person's medicines and other treatments to give the best care. Holistic care includes symptoms, emotional, social, financial, or spiritual problems.
- Ask for specialist help if symptoms or problems are difficult to manage.
- Care plans are shared with staff who need to see them and kept up to date.

Please register on the SPICT website (www.spict.org.uk) for information and updates.

SPICT 2025

Further Diabetes Care and Palliative Care Resources

Marie Curie - Final moments of life – the last minutes before death and when someone dies, available at:

[Pre death signs | last moments before dying | Marie Curie](#)

Signs that someone is in their last days or hours of life, available at:

[Signs that someone is dying | Marie Curie](#)

Marie Curie Knowledge Zone Caring for someone with diabetes who is near the end of life, available at:

[Diabetes care at the end of life | For professionals | Marie Curie](#)

Diabetes in adults in palliative care (Guidelines), available at:

[Diabetes in adults in palliative care \(Guidelines\)](#)

General Palliative Care Resources

Palliative Care for Care Homes and Care at Home available at:

[Palliative Care – Care Homes](#)

NHS Lothian Our Services available at:

[Care Homes – NHS Lothian | Our Services](#)

These sites also offer links to education and the Marie Curie Knowledge zone and support and wellbeing for staff.

7 Steps to Future Care Planning available at:

[7 steps to future care planning \(previously known as anticipatory care planning\) in care homes \(care homes & care at home\)](#)

Palliative Care (Guidelines) available at:

[Palliative care guidelines](#)

Hospice UK. Death and dying what to expect, available at:

[Death and dying: what to expect | Hospice UK](#)

Section 8: Where to Get Support

If you require support with any aspect of diabetes management for residents please discuss with GP in the first instance. GP then has the opportunity to discuss with Diabetes Teams

Diabetes Team Contact Details:

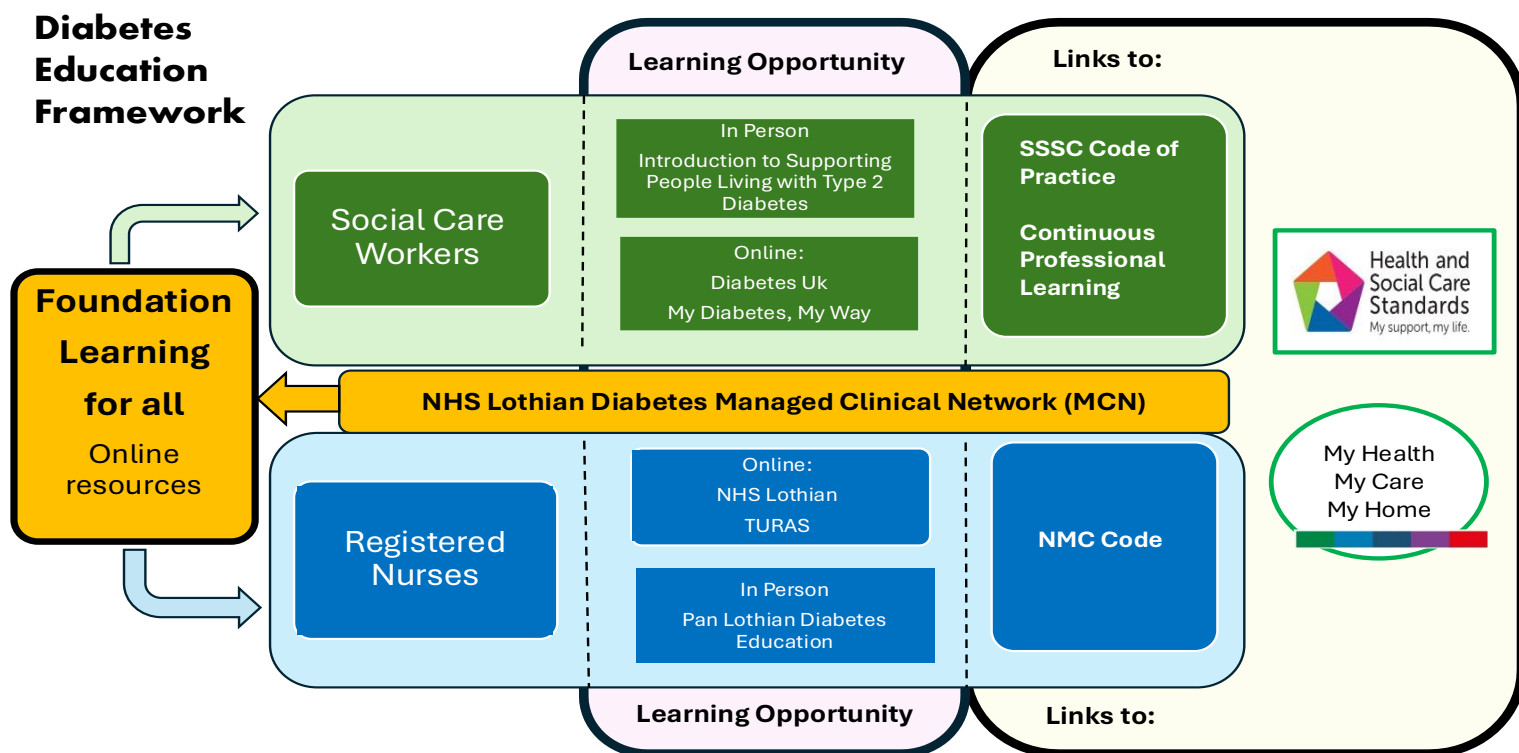
Area	Team	Working Hours	Contact details
RIE	Diabetes Registrar	On-Call	M - 07870 158298
WGH	Diabetes Registrar	On-Call	M - 07976 977402
Edinburgh, East and Mid Lothian	Diabetes Specialist Nurses	(Monday to Friday) 09:00-17:00 Hours	T - 0131 242 1471 T -0131 537 1746 Bleep 3008
West Lothian	Community Diabetes Specialist Nurses	Monday to Friday 09:00-16.30, Weekends/PH 09:00-16.30	M – 07811711048 T - 01506 522238

Further Information, Education & Resources

Remember – all learning undertaken, no matter what role you are in could be used towards continuous professional learning, revalidation, registration or national awards such as SVQs.

Reflection on Learning

See below for suggestions on how to use your reflection on learning:



Further Information and Resources: Apps, Websites, Guides

Right Decisions Service: supporting decisions for Scotland's health and care

www.rightdecisions.scot.nhs.uk/

Your Guide to Type 2 Diabetes

Download a copy of the Diabetes Scotland guide to type two diabetes using the link below.

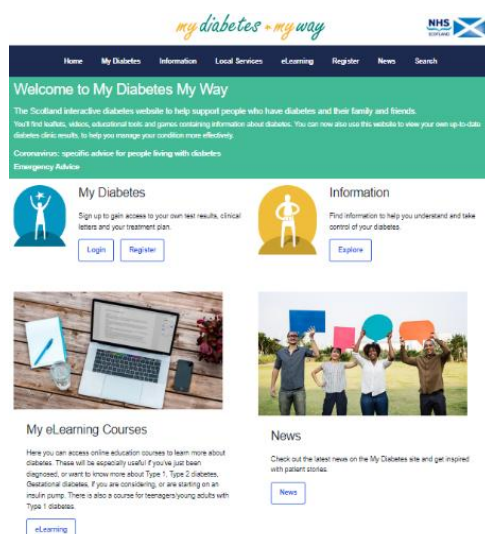
[Your Guide to Type2 Diabetes](#) (Diabetes UK)



My Diabetes My Way

Information about what Type 2 Diabetes is, what it might mean for your health and what you can do to manage it.

www.mydiabetesmyway.scot.nhs.uk



Diabetes UK

Training and improvement programmes including a range of free resources and information for healthcare professionals.

Information for people who are newly diagnosed, including a learning zone with videos, quizzes, food ideas and tips for managing diabetes.

[DiABETES UK Learning Zone: Discover more about your diabetes](https://learningzone.diabetes.org.uk)



Footcare Resource

Diabetic foot screening may be carried out by any health care professional/worker involved in the care of an individual with diabetes.

[Diabetes Foot Screening – Foot Risk Awareness and Management Education \(FRAME\)](#)

Support Groups

DESMOND (Diabetes Education & Self-Management for Ongoing and Newly Diagnosed) Learns from experts and other people with Type 2 diabetes within the first 12 months of diagnosis. Sessions are interactive and informed by trained facilitators. They run throughout Lothian, either in-person (9am – 4pm) or online (3x2 hour or 2x3 hour sessions). Interpreters can be arranged.

Call: 0131 537 9169

Email: loth.desmond@nhsllothian.scot.nhs.uk

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The Scottish Government (2022) '6. Palliative and End of Life Care', in The Scottish Government. *My Health, My Care, My Home – healthcare framework for adults living in care homes*. Edinburgh: The Scottish Government, pp. 35-38. Available at: <https://www.gov.scot/publications/health-care-home-healthcare-framework-adults-living-care-homes/pages/10/>

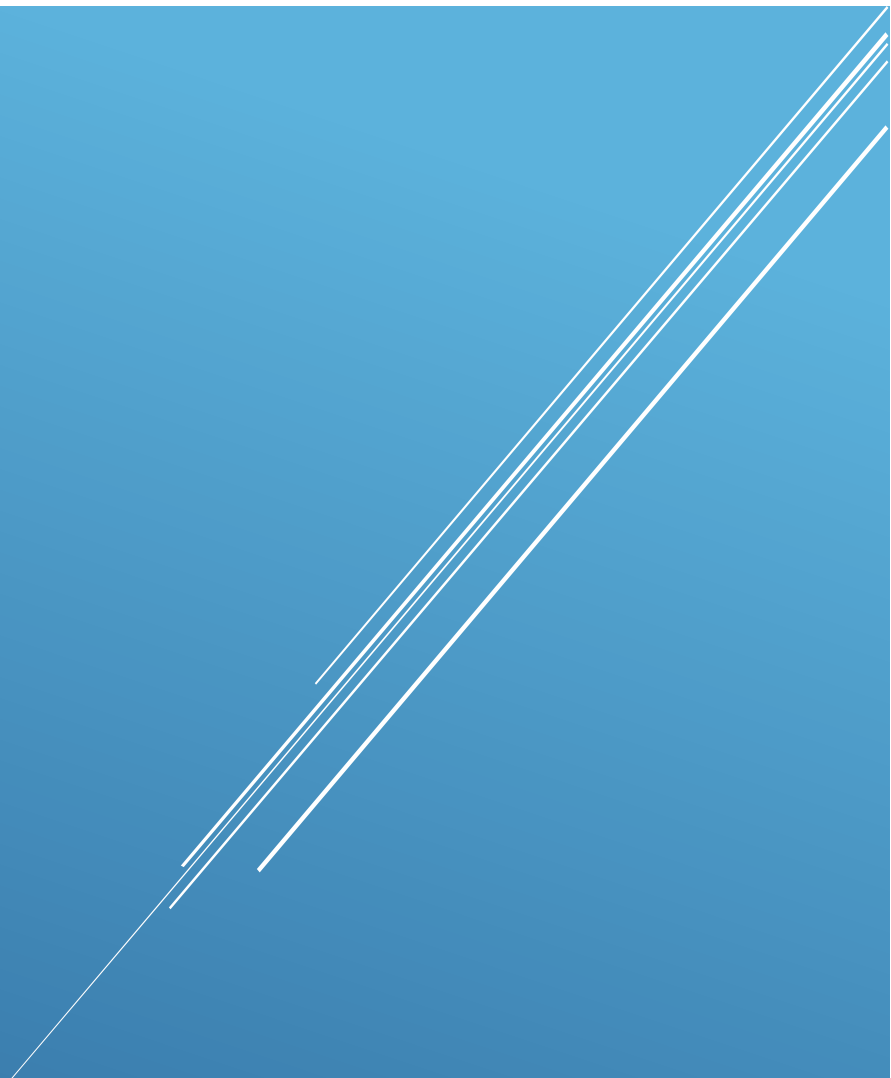
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University of St Andrews (2025) *SPiCT-4ALL*. Available at: <https://www.spict.org.uk/spict-4all/>

Glossary

Term	Definition
Anatomy	The scientific study of the body and how its parts are arranged.
Body Mass Index (BMI)	A measurement of a person's weight in relation to their height, used to find out if they are too fat.
Diabetes mellitus	A severe form of diabetes in which the body cannot use glucose (sugar) as it is normally used in the body.
Future Care Planning	Sometimes also known as anticipatory care planning, is the process of documenting the preferred actions, interventions and responses that need to happen should you no longer be able to provide your current level of care for your friend or family member.
GLP-1 agonists	GLP-1 agonists are medications that help lower blood sugar levels and promote weight loss. There are many different types. And they're just one part of your treatment plan if you have Type 2 diabetes or obesity. Your healthcare provider can help you decide if they're right for you.
Glucose	A type of sugar that is found in plants, especially fruit, and supplies an important part of the energy that animals need.
Hypoglycaemia	A condition in which there is too much glucose in the blood.
Hypoglycaemia	A medical condition resulting from dangerously low levels of sugar in the blood.
Insulin	A hormone in the body that controls the amount of sugar in the blood.
Ketones	A type of chemical compound containing carbon, produced in the body when it burns fat.
Palliative Care	Medical treatment that reduces pain but does not cure the cause of the pain, especially for someone who is very ill and unlikely to get better.
Physiology	The scientific study of the way in which the bodies of living things work.
Psychosocial	Having both psychological and social parts.
SGLT2 inhibitors	SGLT2 inhibitors are a class of medications that lower blood sugar by preventing the kidneys from reabsorbing glucose, promoting its excretion in urine.
Sulphonylureas	Sulphonylureas are oral medications used to lower blood sugar in type 2 diabetes by stimulating the pancreas to produce more insulin.

Type 1 Diabetes	Type 1 diabetes mellitus is a chronic autoimmune condition where the body's immune system attacks and destroys insulin-producing beta cells in the pancreas. This results in little or no insulin production, leading to high blood sugar levels.
Type 2 Diabetes	Type 2 diabetes mellitus is a chronic condition characterised by insulin resistance and high blood sugar levels, often manageable through lifestyle changes and medication.



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*For further information about this document, please
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