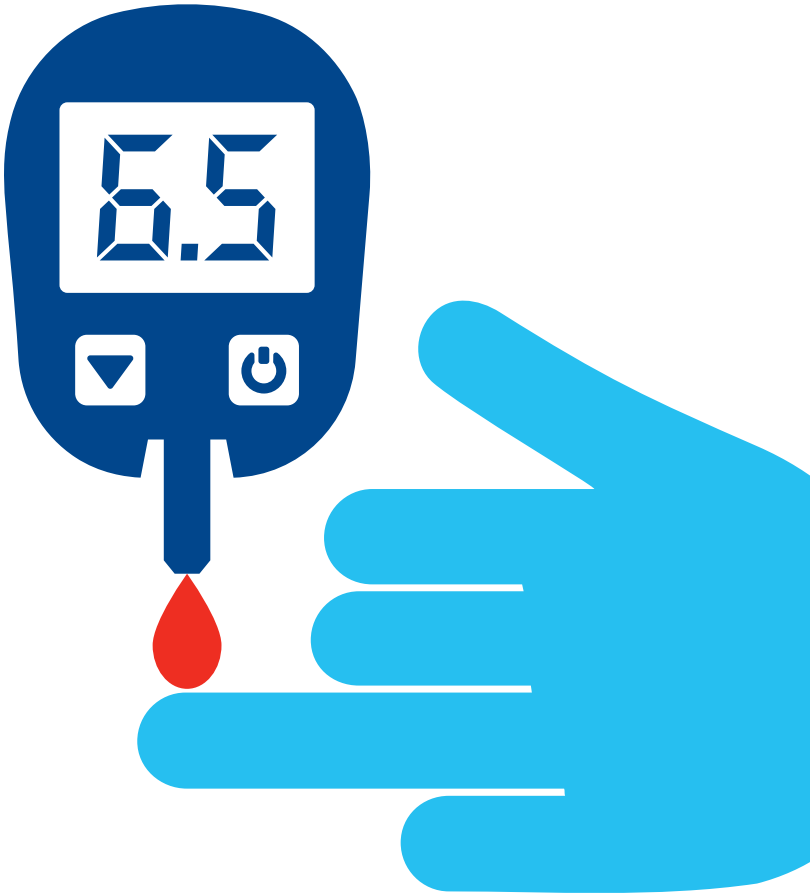
10 Diabetes Training POINT

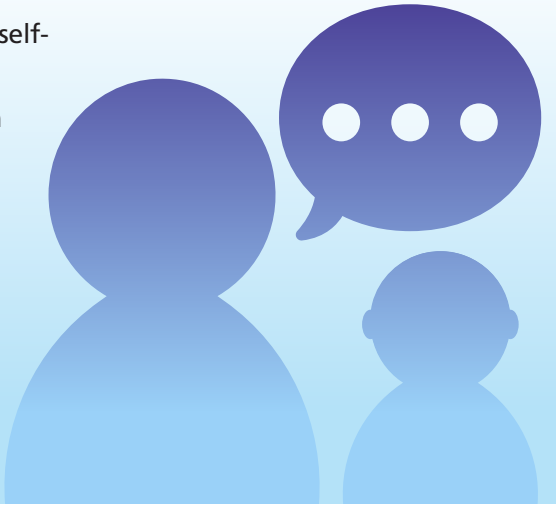
NHS

Adult Inpatient Teams



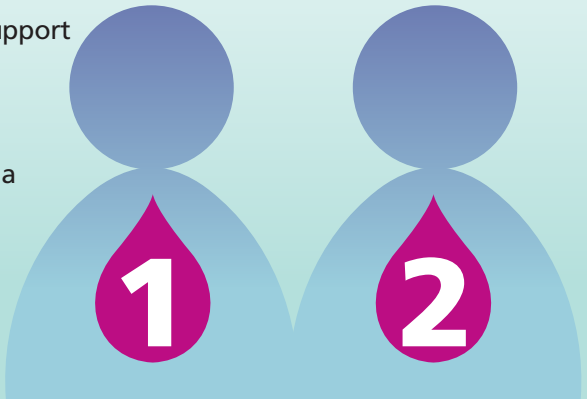
1 The Person

- Listen to the person: they live with their diabetes 365 days a year.
- It is often safer for patients to self-manage diabetes.
- What is the self-administration policy in your hospital?
- Diabetes is a challenging condition which can impact wellbeing.



2 Know the difference between the types of diabetes

- People with type 1 diabetes need insulin for life: even in the last days of life to prevent diabetic keto-acidosis.
- People with type 2 diabetes may be on diet alone, diet plus tablets, injectable therapies, insulin or a combination of these.
- Stopping insulin without review can seriously harm your patient.
- Serious mental illness and learning disability are linked to high rates of type 2 diabetes and reduced life expectancy with up to 70% unaware of their diabetes diagnosis.
  Enable access to specialist support and screen for undiagnosed diabetes.
- People with diabetes have an increased risk of dementia and those with dementia an increased risk of diabetes.
  Screen for cognitive decline and for diabetes where indicated.

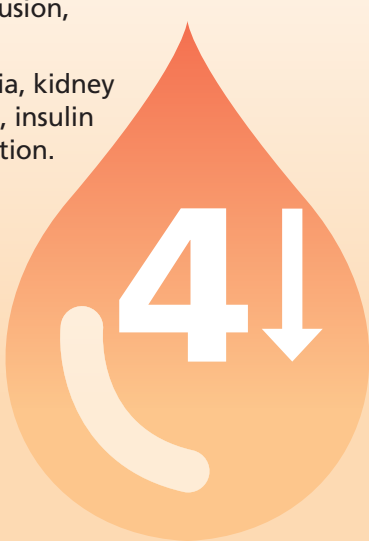


3 Feet (see 'Touch the toes test')

- Within 24 hours of admission all people with diabetes must have a foot check documented.
- Always remove dressings.
- If you identify a problem: find out how and where to refer in your locality.
- Referrals are usually made to:
  The Diabetes Specialist Team,
  Podiatry or Vascular on-call.
  Know how to refer where you work.

4 Hypoglycaemia or low blood glucose ('4 is the floor')

- Hypoglycaemia can kill and must be treated immediately: know your local treatment pathway.
- **Patients conscious and able to swallow:**
  Step 1: fast acting glucose
  Step 2: carbohydrate snack.
- Patients unable to safely swallow or unconscious:
  - See local treatment pathway.
- **Symptoms:** sweating, pale, shaky, sleepy, confusion, aggression, unconscious.
- **Risk factors:** frailty, reduced appetite, dementia, kidney or liver disease, haemodialysis, terminal illness, insulin or sulphonylureas treatment alcohol consumption.
- Hypoglycaemia can be caused by insulin and medication prescription errors: **always check correct time and dose.**
- Refer to the diabetes team if severe or recurrent.
- Hypoglycaemia requiring IM glucagon or IV Dextrose should be reported to the National Diabetes in-patient Harms Audit.



5 Hyperglycaemia (high blood glucose consistently in double figures)

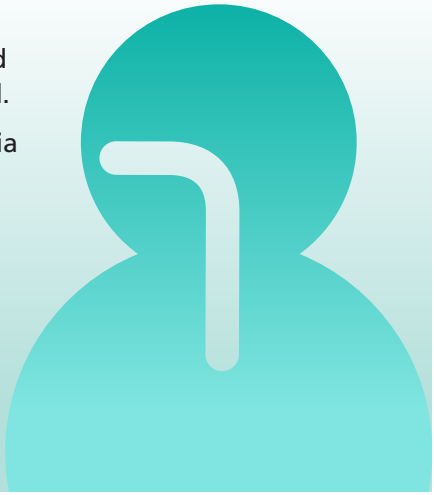
- Hyperglycaemia can kill if left untreated, especially in type 1 diabetes.
- Avoid PRN insulin and request diabetes review if blood glucose consistently in double figures.
- **Symptoms:** thirst, polyuria, blurred vision, very sleepy, infections, weight loss, incontinence.
- **Causes:** infection, other illnesses, missed medication or insulin, surgery, undiagnosed diabetes.
  Risk Factors: steroids (including dexamethasone), anti-psychotics, artificial nutrition can increase glucose levels even without diabetes – patients on these treatments need glucose monitoring.
- **Ketones:** check ketones (blood or urine) in patients with type 1 diabetes if blood glucose is more than 14mmol/L.
  Check ketones in patients with type 1 diabetes regardless of blood glucose if unwell.
  Check ketones in patients if on an SGLT2 inhibitor (Cana-/Dapa-/Empa or Ertu-gliflozin) if unwell.

6 How do I prescribe and administer insulin safely?

- Insulin is a high risk drug.
- Ensure the right person, right insulin, right dose, right time, right device every time.
- Be aware that insulin names are often similar and can be confused such as "Humalog, Humalog mix 25, or Humalog Mix 50, etc.
- Be familiar with the common insulin profiles.
- Never omit long acting insulin: ask if unsure.
- Be familiar with local prescribing guidelines.

7 How do I manage a tube fed person on insulin?

- Give insulin at the start of the feed.
- Remember to review the insulin dose or regimen when feed is increased, reduced or stopped OR if the timing has changed.
- Monitor blood glucose for hypoglycaemia if feed is interrupted.
- Look at local guidance on your intranet.
- Refer to the diabetes team if unsure.

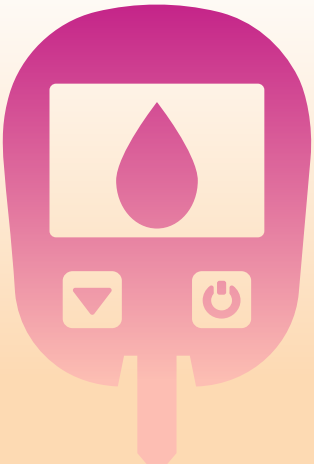


8 Does my patient need IV insulin? (not DKA or HHS)

- Not if eating and drinking.
- Only in: nil by mouth/peri-operatively/ acutely ill patients.
- Always continue subcutaneous long acting insulin alongside intravenous (IV) insulin.
- Check blood glucose hourly.
- Always use Trust variable rate intravenous insulin infusion (VRIII) guidelines.
- All patients receiving IV insulin must be prescribed IV dextrose.

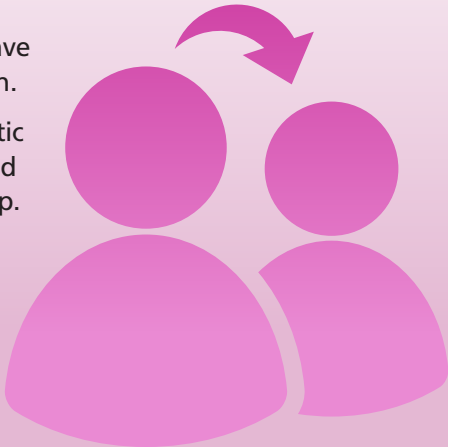
9 Diabetic ketoacidosis (DKA) and hyperosmolar hyperglycaemic state (HHS)

- DKA and HHS are diabetes emergencies.
- Seek senior advice and follow hospital guidelines.
- Always refer to the diabetes specialist team.
- Patients with DKA will require fixed rate intravenous insulin infusion (FRIII) until ketones are resolved.
- Know how to diagnose HHS.
- It can be harmful to lower blood glucose too quickly in HHS.



10 Know how to refer to the diabetes team and how to discharge safely

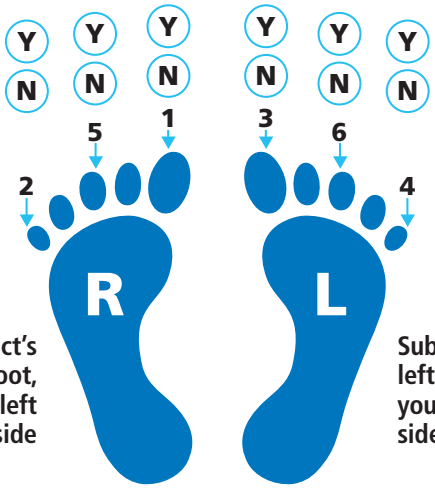
- Ensure patients with **type 1** and **type 2** diabetes know what to do when they are ill at home (sick day rules).
- Start discharge planning from the moment of admission.
- Ensure you know how to refer your patient to the diabetes specialist team, podiatry, medical and vascular doctor on-call in your locality. Many patients will be followed up by the GP or community team on discharge.
- Speak to the ward pharmacist if you have queries about your patient's medication.
- **Urgent referrals:** DKA, HHS, acute diabetic foot, severe recurrent hypoglycaemia and hyperglycaemia, pregnancy, insulin pump.
- For more information, see your local clinical guidelines and **Joint British Diabetes Society (JBDS)** inpatient guidelines.



Touch the toes test

Does your patient with diabetes have reduced sensation?

- Ask them to close their eyes.
- Tell them you are going to touch their toes.
- Ask them to tell you which foot you touched, left or right.
- Touch toe number 1 for two seconds gently. ***Do not repeat.***
- Continue until you have assessed 6 toes as marked on the diagram.
- If they cannot feel 2 or more toes they have ***reduced sensation*** for their foot check.



(The Ipswich Touch Test reproduced with permission from Diabetes UK)

All people with diabetes must have a foot check within 24 hours of admission to hospital.

CHECK

- Remove socks/dressings/bandages.
- Is there an active foot problem – ulcer, gangrene, black necrotic tissue or toes? Exposed bone?
- Is there reduced sensation? Follow 'Touch the toes test'.
- Document your foot check according to local documentation policy.

PROTECT

- Apply new dressings/bandages (use wound management guideline or patient's care plan).
- Ensure heels are offloaded as per Trust policy.
- Check feet daily for any new problems.

REFER

- Active foot problem? Know how and where to make an urgent podiatry referral in your locality.

See **www.knowdiabetes.org.uk** for more information on diabetes foot care.

know diabetes

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See **www.knowdiabetes.org.uk**

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