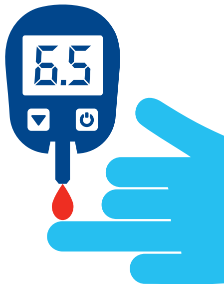
Diabetes Training

NHS

Adult inpatient teams



1 The Person

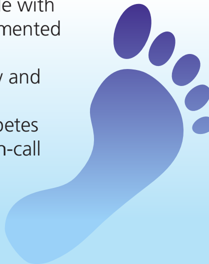
- It is often safer for patients to self-manage diabetes
- What is the self-administration policy in your hospital?
- Listen to the person: they live with their diabetes 365 days a year
- Diabetes is a challenging condition which can impact wellbeing

2 Know the difference between 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
- 20% of people with serious mental illness develop type 2 diabetes but up to 70% are unaware of the diagnosis and die 20 years earlier due to heart disease

3 **Feet** (see 'Touch the toes test' overleaf)

- 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



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
- Patients at risk: frailty, dementia, renal impairment, insulin or sulfonylurea treatment, poor appetite
- Refer to the diabetes team if severe or recurrent
- Hypoglycaemia requiring IM glucagon should be reported to the National Diabetes In-patient Harms Audit

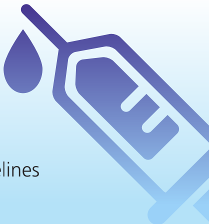
4

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, tired infections, weight loss, incontinence
- **Causes:** **virus eg COVID-19**, bacterial infection, insulin or medication omission, being unwell, stress, newly prescribed or increased steroids or antipsychotics, enteral feeding, diet related, undiagnosed diabetes
- Check blood ketones in patients with Type 1 diabetes regardless of blood glucose 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
- 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
- Look at local guidance on your intranet
- Refer to the diabetes team if unsure

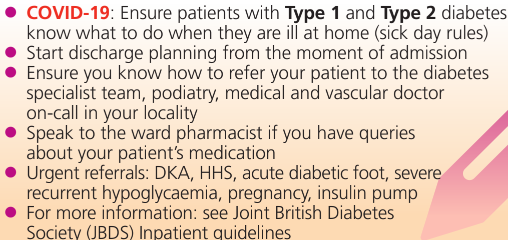
8 Does my patient need IV insulin? (not DKA or HHS)

- Not if eating and drinking
- Only in: NBM/peri-operatively/acutely ill patients
- Always continue sub cutaneous long acting insulin alongside 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 diabetic 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) when unwell
- Know how to diagnose HHS
- It can be harmful to lower blood glucose too quickly in HHS

10 Know how to refer to diabetes team and podiatry

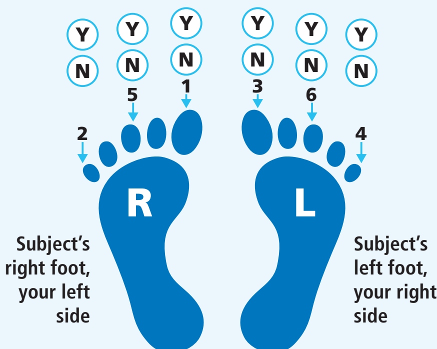


- **COVID-19**: Ensure patients with **Type 1** and **Type 2** diabetes know what to do when they are ill at home (sick day rules)
- Start discharge planning from the moment of admission
- Ensure you know how to refer your patient to the diabetes specialist team, podiatry, medical and vascular doctor on-call in your locality
- Speak to the ward pharmacist if you have queries about your patient's medication
- Urgent referrals: DKA, HHS, acute diabetic foot, severe recurrent hypoglycaemia, pregnancy, insulin pump
- For more information: see Joint British Diabetes Society (JBDS) Inpatient guidelines

Touch the toes test

Does your patient with diabetes have reduced sensation?

- Ask the patient to close their eyes
- Tell the patient 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 your patient 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 patients 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? Black 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

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