



**The House of Discovery:
work out what matters**

To the patient



Were they expecting this? What does the word 'diabetes' mean to them? It could be anything from almost nonchalantly expecting it would happen as everyone else in the family has it, to a real wake up call, or a diagnosis that conjures fear of terrible complications or perhaps an assumption that diabetes always means insulin.

Do they have symptoms that they may put down to diabetes? Are they likely to be due to their diabetes? Patients sometimes wrongly assume that feeling hypo is a symptom of diabetes.

How will a diagnosis of diabetes fit in to their life? Are they worried it will affect work? (eg as an HGV driver they might worry about future insulin and driving). Will their work make it difficult to change their lifestyle, eg if they travel a lot or have to eat out when entertaining clients.

Diabetes can involve a lot more appointments, how do they feel about this? Will they be able to attend? How do they feel about lifestyle adjustments? How does exercise fit in to their life? How could it?

To the doctor



Do you have enough evidence to formally diagnose diabetes today, or do you need a second blood test? (See Foundations).

Are there any reasons to think it might not be Type 2 diabetes? Remember that Type 1 can present at any age.

Are there any red flags to be concerned about? Pancreatic cancer can present as diabetes, so patients with weight loss or epigastric symptoms at presentation should cause concern. Can you rely on HbA1c to diagnose, or might there be an issue with Hb levels (see Foundations).

What to look out for in the *House of Discovery*



Finding Dry Rot

Diabetes is a lifelong and life-changing diagnosis. There are rarely any symptoms at diagnosis and so it will usually come as a shock, or at least a disappointment, that someone has crossed the threshold into the diagnosis. Remember that diagnostic cut offs are an arbitrary line in the sand and so a patient who wants to resist the diagnosis may benefit from a trial of lifestyle before committing to the formal diagnostic label. It can be helpful to emphasise that with good lifestyle changes there may be no need for medication.

Tools for the toolbox



“How much do you know about diabetes?” (avoid “what do you know” as it sounds like a quiz!)

“How do you feel about managing this diabetes by making changes to your diet?”

“It is hard work, but it is possible to cure diabetes by changing your diet.”

“You can drink alcohol with diabetes, but there is a lot of sugar in beer.”

Tending the Garden

Diabetes is all about the garden! As a cardiovascular risk factor it will be important to do a full CVD risk assessment - lipids, BP, smoking, BMI. If possible, start to explore diet, focusing on carbohydrates (including calorific content of alcohol), but don't push hard if you meet resistance.

It can help to describe how weight and diabetes control go hand-in-glove, so weight loss invariably improves control (much more so than the link with BP for instance). This can be empowering as diabetes can be 'cured'

Foundations

Based on [NICE CKS Sept 2019](#)

Diagnosis: The diagnosis should be based on either HbA1c 48mmol/mol or more, or fasting glucose > 7 mmol/L, **either** on a single reading in a person with symptoms of diabetes, or (more usually) on more than one occasion – so usually arrange a repeat test, possibly after a 3m trial of lifestyle if there is no urgency.

When not to use HbA1c (use fasting glucose to diagnose or consider fructosamine to monitor instead):

- When type 1 diabetes is suspected (as type 1 can be a very short illness, so the HbA1c may not have had time to rise) – so use fasting glucose to diagnose in children and young people.
- Where sugar levels may have risen rapidly – eg acutely unwell, pancreatic disease/surgery or high dose steroids.

- When there may be an issue with Hb levels, eg in any form of anaemia or faster RBC turnover (including HIV infection) or with a recent transfusion, consider fructosamine to monitor and fasting glucose to diagnose.

HbA1c is influenced by the last 3 months' of blood glucose levels, so repeating before 3 months may help to prove that the test was valid, but will not give time for any lifestyle measures to have taken effect.



The House of Decision: decide together what to do

Rooms to look out for

Locked Rooms

Patients may be keen to monitor their own blood or urine sugars, but, unless they are on insulin or a sulphonylurea or are pregnant/planning a pregnancy, it is not recommended and should not be done on the NHS – testing strips are very expensive and the evidence is that it makes little meaningful difference to diabetes control.

Room 101

Many patients will be glad to be referred to an educational programme, or to a dietician, to help them understand their diabetes, but there can be surprising levels of resistance to this. Patients may worry about being lectured to, or patronised by a ‘know-all’, or they may feel they do not have the time to go. Clearly they do not have to do either, but then it is important to consider how they will make any lifestyle changes.

Key decisions in the *House of Decision*

Is there a need for a second blood test to confirm the diagnosis, and, if so, should it be straight away or after a 3 months’ trial of lifestyle?

Referrals may be helpful to:

- A structured educational programme (DESMOND)
- Dietician
- Retinopathy screening service
- Foot screening.
- Smoking cessation.

What is the next step in follow up? A second appointment to cover other aspects of what the diagnosis means? An appointment in the practice diabetes clinic?

Initial Management

This is usually lifestyle change in the first instance, but if HbA1c or blood sugar levels are very high, and especially with symptoms, then drug treatment may be warranted at presentation.

Metformin is always first line treatment (standard release). There are treatment targets (see Foundations), but no guideline on when to start treatment at presentation and when to use a trial of lifestyle, so use common sense and the patient’s preferences to guide you.

Are they on medication that could raise blood sugar? eg steroids, thiazides, statins. If so, should these be stopped?

The High Tech Room

There is a lot to explain with diabetes and often it is too much for one consultation. Consider breaking it down over two appointments. Areas to cover include:

- That diabetes means sugar levels go too high
- That this can make you feel unwell if they go very high, but usually this does not cause symptoms
- That the main reason to control blood sugars is the risk of complications
- The positive impact of lifestyle

Tools for the toolbox

“What would you like to know about diabetes?”

“There is a lot to take on board with diabetes so I wonder if it would be helpful to talk about some of it now and then meet again soon.”

“I would like to ask a dietician to see you, how would you feel about that?”

- That complications include eyes, kidneys, cardiovascular and feet
- That BP control is as important as sugar control
- That managing carbohydrates and weight are key to good control
- How diabetes is monitored in your practice – the practicalities of the diabetes clinic

The two main areas of management of blood sugars and monitoring for complications can divide naturally over two consultations.

Foundations

Treatment targets: NICE recommends a treatment target for HbA1c of 48mmol/mol, but 53mmol/mol if on drugs that can cause hypoglycaemia. These are tight targets and NICE recommends that patients ‘should be involved in the decisions about treatment targets’.

Targets are set to reduce long-term complications, so in the frail elderly or in those with a short life expectancy the emphasis may be better placed on avoiding symptomatic hyperglycaemia rather than tight control to avoid microvascular complications.

The 9 Processes of Care for Diabetes:

There are 9 factors that are felt to be good markers of diabetes care and should be looked at: 1) BMI 2) Blood Pressure (<140/80) 3) Smoking status 4) HbA1c control 5) Urine Albumin 6) Renal function 7) Cholesterol (<4.0mmol/l, LDL <2.0 mmol/l) 8) Retinal screening 9) Footcare