



**Rotherham Doncaster  
and South Humber**  
NHS Foundation Trust

# **The Management of Diabetes in Primary Care**

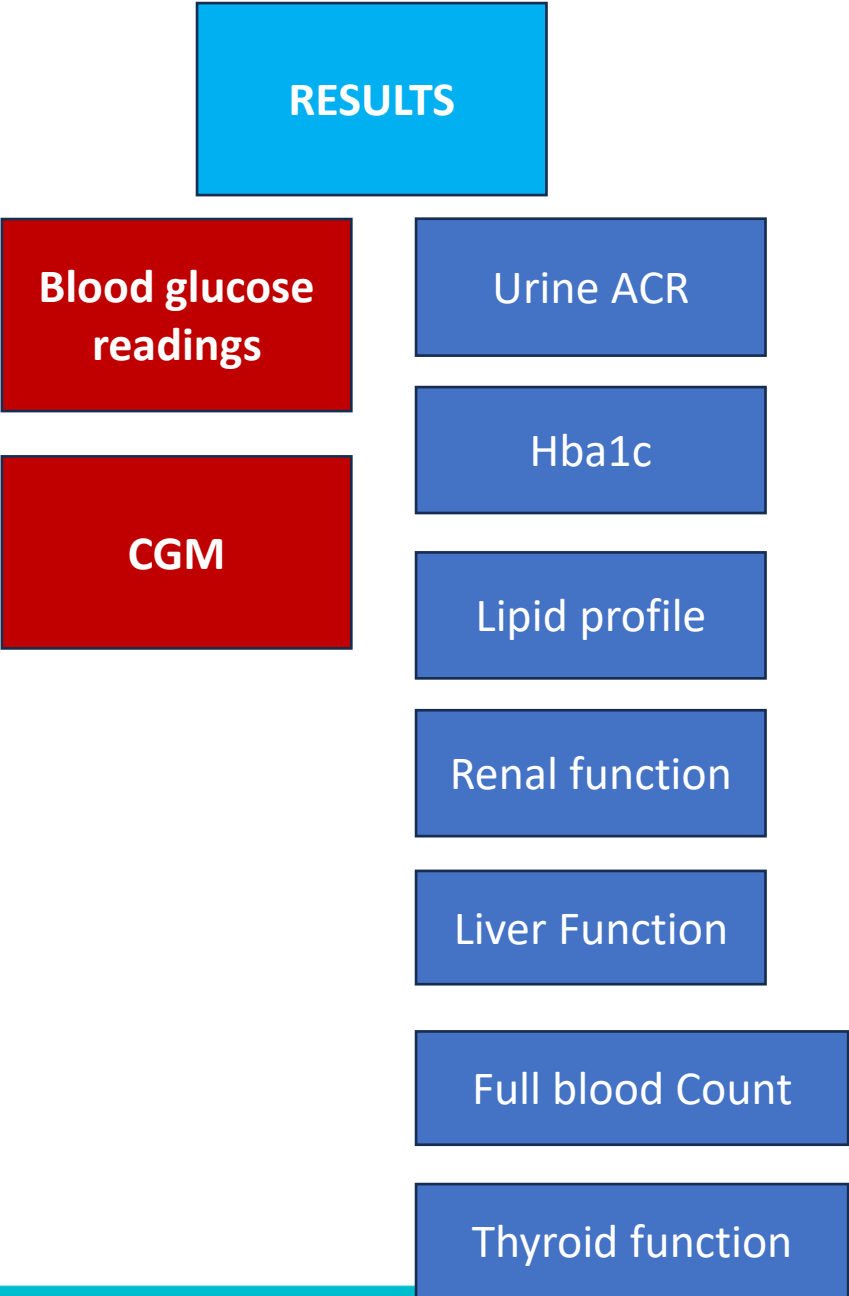
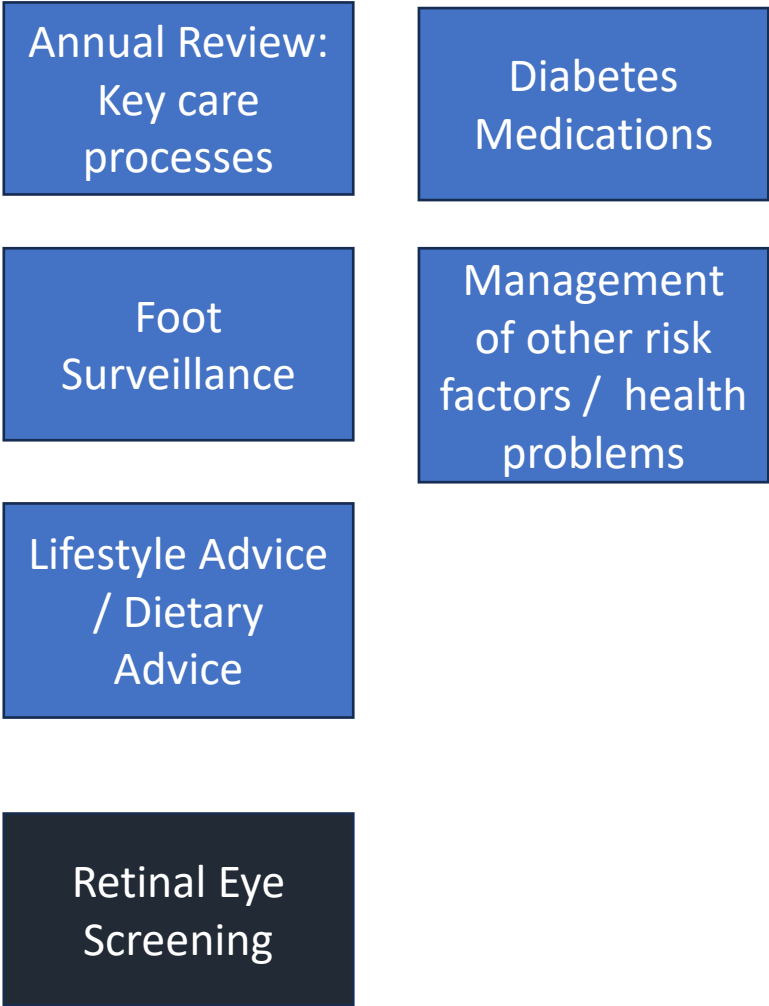
**Leander Parkinson  
Diabetes Specialist Nurse**

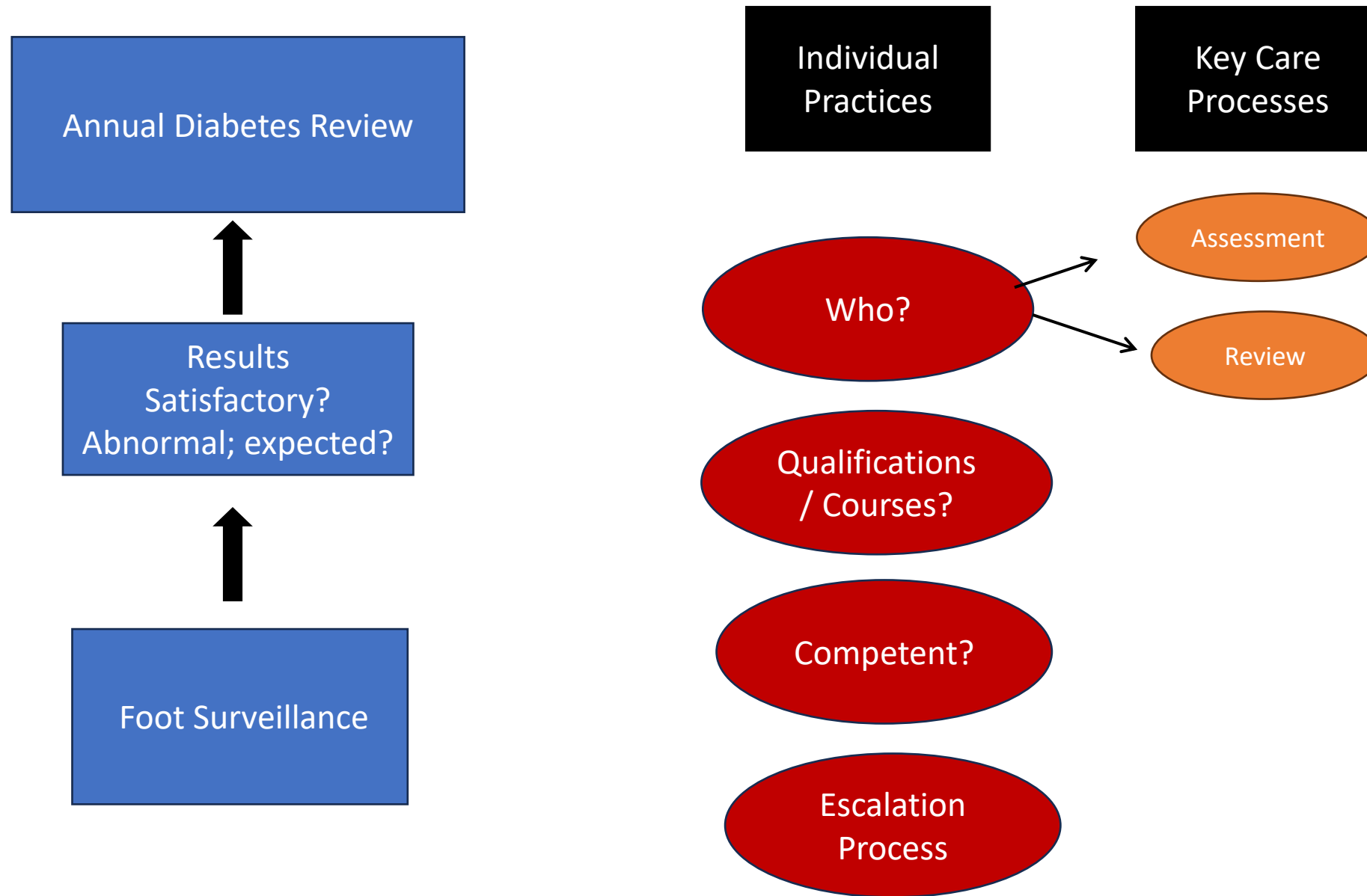
**[leander.parkinson@nhs.net](mailto:leander.parkinson@nhs.net)**

**RDaSH** nurturing the  
power in our  
communities

- Diabetes Management in Primary Care
- Diabetes Medication Optimisation
- Key care processes in Diabetes Care
- XPERT Type 2 Diabetes Structured Education Programme

# Diabetes Management in Primary Care





## Diabetes Medications used for Hyperglycaemia



**Rescue therapy**

For symptomatic hyperglycaemia, consider insulin or a sulfonylurea and review when blood glucose control has been achieved.

**First-line treatment**

Assess HbA1c, cardiovascular risk and kidney function

For information on using SGLT2 inhibitors for people with type 2 diabetes and chronic kidney disease see the [section on diabetic kidney disease in the guideline](#).

**Consider**

- DPP-4 inhibitor ('gliptin') or
- Pioglitazone or
- Sulfonylurea

An SGLT2 inhibitor ('flozin') for some people:

- TA 390 [Canagliflozin](#)
- TA 390 [Dapagliflozin](#)
- TA 390 [Empagliflozin](#)
- TA 572 [Ertugliflozin](#)

NICE technology appraisals recommend SGLT2 inhibitors as monotherapy options in people:

- who cannot have metformin
- for whom diet and exercise alone do not provide adequate glycaemic control.

The SGLT2 inhibitors are recommended only if a dipeptidyl peptidase-4 (DPP-4) inhibitor would otherwise be prescribed and a sulfonylurea or pioglitazone is not appropriate. In February 2022, using ertugliflozin to reduce cardiovascular risk when blood glucose is well controlled was off label. See [NICE's information on prescribing medicines](#).

Not at high CVD risk

**Offer**

- Metformin
- Or if GI disturbance
- Metformin MR

If metformin contraindicated

**Offer**

- SGLT2 inhibitor alone

Chronic heart failure or established atherosclerotic CVD

**Offer**

- Metformin
- or if GI disturbance
- Metformin MR
- and as soon as metformin tolerability is confirmed, offer
- SGLT2 inhibitor ('flozin') with proven cardiovascular benefit

If metformin contraindicated

Start metformin alone to assess tolerability before adding an SGLT2 inhibitor

High risk of CVD  
QRISK2 of 10% or higher or elevated lifetime risk

**Offer**

- Metformin
- or if GI disturbance
- Metformin MR
- and as soon as metformin tolerability is confirmed, consider
- SGLT2 inhibitor ('flozin') with proven cardiovascular benefit

If metformin contraindicated

**Consider**

- SGLT2 inhibitor alone

Person's HbA1c not controlled below individually agreed threshold, or the person develops CVD or a high risk of CVD

See [treatment options if further interventions are needed](#)

Established atherosclerotic CVD includes coronary heart disease, acute coronary syndrome, previous myocardial infarction, stable angina, prior coronary or other revascularisation, cerebrovascular disease (ischaemic stroke and transient ischaemic attack) and peripheral arterial disease.

Published date: February 2022. Last updated: August 2022. This is a summary of the advice in the [NICE guideline on type 2 diabetes in adults: management](#). © NICE 2022. All rights reserved. Subject to [Notice of rights](#).




**Rescue therapy**

For symptomatic hyperglycaemia, consider insulin or a sulfonylurea and review when blood glucose control has been achieved.

**Treatment options if further interventions are needed****At any point**

HbA1c not controlled below individually agreed threshold

**Switching or adding treatments****Consider:**

 DPP-4 inhibitor  Pioglitazone  
or  
 Sulfonylurea

SGLT2 inhibitors may also be an option in dual therapy:

 TA 315 Canagliflozin  TA 288 Dapagliflozin

 TA 336 Empagliflozin  TA 572 Ertugliflozin

Or in triple therapy:

 TA 315 Canagliflozin  TA 418 Dapagliflozin

 TA 336 Empagliflozin  TA 583 Ertugliflozin

**At any point**

Cardiovascular risk or status change

If the person has or develops chronic heart failure or established atherosclerotic CVD

**Switching or adding treatments****Offer**

An SGLT2 inhibitor  
(if not already prescribed)

If the person has or develops a high risk of CVD (QRISK2 of 10% or higher, or elevated lifetime risk)

**Switching or adding treatments****Consider**

An SGLT2 inhibitor  
(if not already prescribed)

Established atherosclerotic CVD includes coronary heart disease, acute coronary syndrome, previous myocardial infarction, stable angina, prior coronary or other revascularisation, cerebrovascular disease (ischaemic stroke and transient ischaemic attack) and peripheral arterial disease.

At each point follow the prescribing guidance.

Switch or add treatments from different drug classes up to triple therapy (dual therapy if metformin is contraindicated).

In February 2022, using ertugliflozin to reduce cardiovascular risk when blood glucose is well controlled was off label. See [NICE's information on prescribing medicines](#).

**Insulin therapy**

When dual therapy has not continued to control HbA1c to below the person's individually agreed threshold, also consider insulin-based therapy (with or without other drugs).

 TA 288 Dapagliflozin  TA 336 Empagliflozin

 TA 315 Canagliflozin

**GLP-1 mimetic treatments**

If triple therapy with metformin and 2 other oral drugs is not effective, not tolerated or contraindicated, consider triple therapy by switching one drug for a GLP-1 mimetic for adults with type 2 diabetes who:

- have a body mass index (BMI) of 35 kg/m<sup>2</sup> or higher (adjust accordingly for people from Black, Asian and other minority ethnic groups) and specific psychological or other medical problems associated with obesity **or**
- have a BMI lower than 35 kg/m<sup>2</sup> **and**:
  - for whom insulin therapy would have significant occupational implications **or**
  - weight loss would benefit other significant obesity related comorbidities.

Published date: February 2022. Last updated: August 2022. This is a summary of the advice in the [NICE guideline on type 2 diabetes in adults: management](#).

© NICE 2022. All rights reserved. Subject to [Notice of rights](#).

## 1. Metformin

**Titrate slowly over at least 1 week per dose increase**

**Advise to take up to 20 mins after food**

**Switch to MR**

**Ask specific questions: how taking and at what times**

- If somebody presents with gastric related problems – check first to see if they are taking Metformin and consider a trial without this.
- Consider screening for B12 deficiency in people taking Metformin long term.



## 2. SGLT2i

Bloods  
Medical history  
Diet / Alcohol  
history

Fluid intake  
sufficient?

Sick day rules  
advice

Symptomatic of  
hyperglycaemia



Consider  
Rescue therapy  
first

### 3. Triple Therapy

#### Pioglitazone

Titration: Start low and increase up

- Effective at increasing sensitivity to insulin
- Appropriate for small group of patients
- Risk of weight gain
- Risk of fluid retention
- Can exacerbate heart failure symptoms

#### Gliclazide / Glimepiride

Titration: Start low and increase up

- Good response to lowering of glucose levels if symptomatic
- Risk of hypoglycaemia
- Glucose monitoring may be needed
- Risk of weight gain

Essential to check on eating patterns

Timing and compliance

#### DPP4

Titration: Start high and reduce according to renal function

- Generally well tolerated
- Minimal risk of hypoglycaemia
- Small reduction in Hba1c

GLP1 agonist

# GLP1 agonists

**Bydureon /  
Exenatide**

**Ozempic (Weekly):**  
0.25mg  
0.5mg  
1mg

**Rybelsus**  
3mg  
7mg  
14mg

**Victoza(Daily):**  
0.6mg  
1.2mg  
1.8mg

**Trulicity (Weekly):**  
1.5mg  
3mg  
4.5mg

When triple therapy:

1. Not effective
2. Not tolerated
3. Contraindicated

1. Add in as 3<sup>rd</sup> agent
2. Consider BMI
3. STOP DPP4
4. Don't prescribe with a history of pancreatitis / gallstones

**Mounjaro (Weekly):**  
2.5mg  
5mg  
7.5mg  
10mg  
12.5mg  
15mg

**Xultophy**

# Insulins:

## Basal

## Pre mixed

## Basal Bolus

### Group Titration Support:

- Insulin user
- Carers / families / friends
- Health professionals

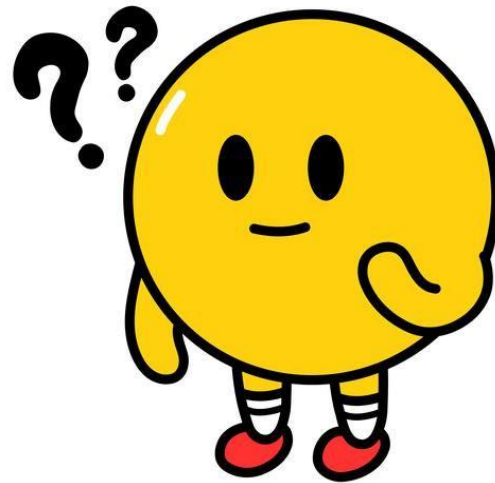


Self adjustment of insulin  
regime



Support from GP practice  
with ongoing titration

9 Key Care Processes in  
Diabetes Care



1. Hba1c

2. Blood  
pressure

3. BMI

9. Foot  
Surveillance

8. UACR

## 9 Key Care Processes

4. Serum  
Cholesterol

7. Smoking  
Status

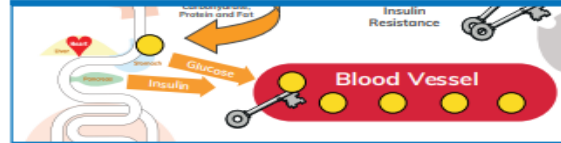
6. Retinal  
Screen

5. Renal  
function/  
Serum  
Creatinine

## Programme Summary

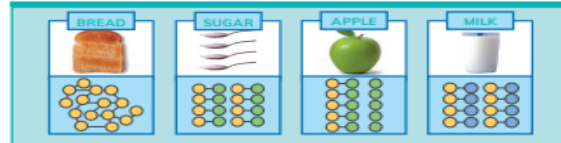


The X-PERT Diabetes programme is delivered over six sessions, which are outlined below. If you have bought or been given this handbook but are not attending a programme, all of the key messages from these sessions are still covered. If you require additional support, our free online forum (accessible at [www.xperthealth.org.uk/forums](http://www.xperthealth.org.uk/forums)) is open to everyone.



### Session 1: What is Diabetes?

What happens to food when we eat it?  
What is Diabetes?  
Insulin and insulin resistance.  
Health results: what do they mean?  
The 7 lifestyle factors for optimal health.  
Setting a goal: what do I want to get from the programme?



### Session 3: Carbohydrate Awareness.

Importance of carbohydrate AMOUNT.  
Considering the TYPE of carbohydrate.  
Fibre and how it protects us.  
Estimating carbohydrate content.  
How much carbohydrate am I having?



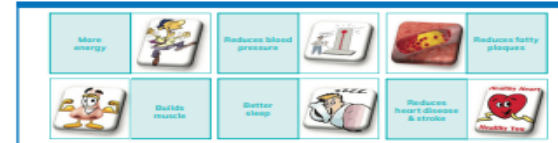
### Session 5: Possible Complications.

Low and high blood glucose levels.  
How diabetes can affect long-term health.  
Reducing risk of long-term complications.  
Managing stress and sleep.  
Living with diabetes.



### Session 2: Nutrition for Health and Fat Awareness.

Weight management: eat less, move more.  
Nutrition for Health: food groups & portions.  
Dietary approaches: low fat, Mediterranean, low carb, and intermittent fasting.  
Fat awareness.  
Dietary self-assessment.



### Session 4: Psychology of Eating, Food Shopping, and Physical Activity.

Psychology of eating, and causes of hunger.  
Challenges when food shopping.  
Reading and understanding food labels.  
Benefits of physical activity.  
How to increase physical activity levels.



### Session 6: Recapping and the Way Forward.

Recapping key messages and "Are you an X-PERT?" game (group programme only).  
What's Next?  
Meal ideas and recipes.  
Setting goals: the way forwards.

**1. Anyone newly diagnosed with type 2 diabetes**

**2. Anyone who has had type 2 diabetes for a while and never attended structured education**

**3. As a refresher for someone with type 2 diabetes**

Please refer using the XPERT referral form  
to:

Diabetes Specialist Nursing Service

**[RDASH.DiabetesYASReferrals@nhs.net](mailto:RDASH.DiabetesYASReferrals@nhs.net)**



**Thank you for listening**

**Any Questions?**

**Email: [leander.parkinson@nhs.net](mailto:leander.parkinson@nhs.net)**