Diabetes, what I wish I had known when I started working in diabetes!

Dr Julia Hempenstall

GP (who does some diabetes)

Learning outcomes

- To improve your confidence in primary care management of type 2 diabetes
- Tips on how to manage your consultations, coding and templates
- Hopefully a better understanding of some treatments available
- To appreciate diabetes as a cardiovascular condition
- A better understanding of our role in QOF and process attainment
- Quick tips to help you in diabetes care

- **BOLD AND THIS SCRIPT ARE TIPS TO TRY AND REMEMBER**

“One in 15 people in the UK have diabetes, including one million people who have type 2, but haven't been diagnosed.”

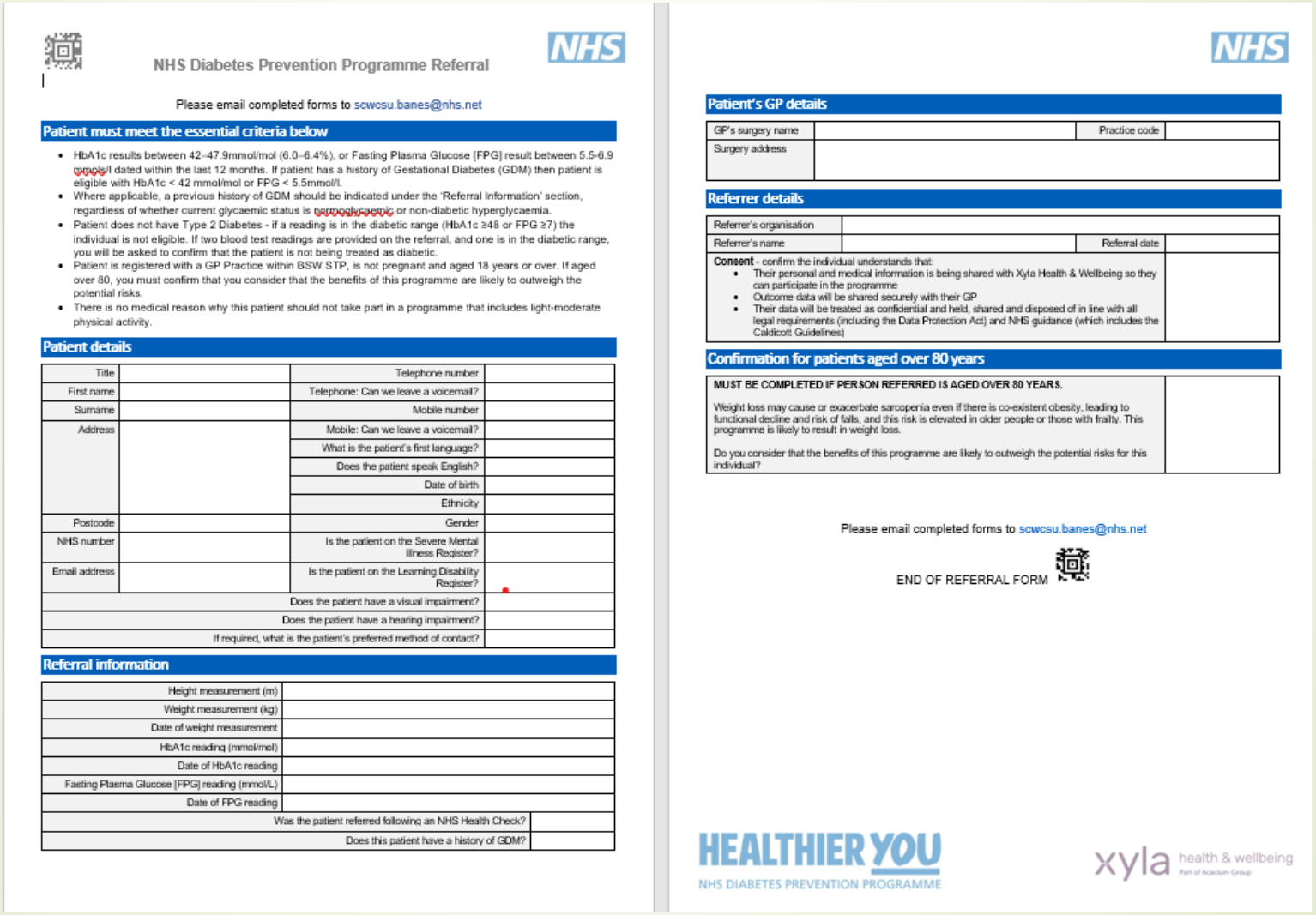
Prediabetes is "non-diabetic hyperglycaemia"

- HbA1c 42-47
- **CODE IT CORRECTLY**
- Invite to NDPP
  - Launched in 2016
  - By 2018 1.1m were on it, around 20k per month pre-covid
  - It cuts the risk of developing type 2 diabetes by more than a thirds in those who complete the programme
- Do a Qrisk assessment on all new diagnoses
- Added to QoF registers so will be offered annual HbA1c
- Important conversation opportunity – **LIFESTYLE MEDICINE INTERVENTION OPPORTUNITY**

- What is the process in your practice, who informs the patient of the results

Bath and North East Somerset, Swindon and Wiltshire | Xyla

info@preventing-diabetes.co.uk | 0333 577 3010 | preventing-diabetes.co.uk



NHS Diabetes Prevention Programme Referral

NHS

Please email completed forms to scwcsu.banes@nhs.net

Patient must meet the essential criteria below

- HbA1c results between 42–47.9mmol/mol (6.0–6.4%), or Fasting Plasma Glucose [FPG] result between 5.5-6.9 mmol/l dated within the last 12 months. If patient has a history of Gestational Diabetes (GDM) then patient is eligible with HbA1c < 42 mmol/mol or FPG < 5.5mmol/l.
- Where applicable, a previous history of GDM should be indicated under the 'Referral Information' section, regardless of whether current glycaemic status is normoglycaemic or non-diabetic hyperglycaemia.
- Patient does not have Type 2 Diabetes - if a reading is in the diabetic range (HbA1c ≥48 or FPG ≥7) the individual is not eligible. If two blood test readings are provided on the referral, and one is in the diabetic range, you will be asked to confirm that the patient is not being treated as diabetic.
- Patient is registered with a GP Practice within BSW STP, is not pregnant and aged 18 years or over. If aged over 80, you must confirm that you consider that the benefits of this programme are likely to outweigh the potential risks.
- There is no medical reason why this patient should not take part in a programme that includes light-moderate physical activity.

Patient details

Title		Telephone number	
First name		Telephone: Can we leave a voicemail?	
Surname		Mobile number	
Address		Mobile: Can we leave a voicemail?	
		What is the patient's first language?	
		Does the patient speak English?	
		Date of birth	
		Ethnicity	
Postcode		Gender	
NHS number		Is the patient on the Severe Mental Illness Register?	
Email address		Is the patient on the Learning Disability Register?	
		Does the patient have a visual impairment?	
		Does the patient have a hearing impairment?	
		If required, what is the patient's preferred method of contact?	

Referral information

Height measurement (m)	
Weight measurement (kg)	
Date of weight measurement	
HbA1c reading (mmol/mol)	
Date of HbA1c reading	
Fasting Plasma Glucose [FPG] reading (mmol/L)	
Date of FPG reading	
Was the patient referred following an NHS Health Check?	
Does this patient have a history of GDM?	

NHS

Patient's GP details

GP's surgery name		Practice code	
Surgery address			

Referrer details

Referrer's organisation			
Referrer's name		Referral date	
Consent - confirm the individual understands that: • Their personal and medical information is being shared with Xyla Health & Wellbeing so they can participate in the programme • Outcome data will be shared securely with their GP • Their data will be treated as confidential and held, shared and disposed of in line with all legal requirements (including the Data Protection Act) and NHS guidance (which includes the Caldicott Guidelines)			

Confirmation for patients aged over 80 years

MUST BE COMPLETED IF PERSON REFERRED IS AGED OVER 80 YEARS. Weight loss may cause or exacerbate sarcopenia even if there is co-existent obesity, leading to functional decline and risk of falls, and this risk is elevated in older people or those with frailty. This programme is likely to result in weight loss. Do you consider that the benefits of this programme are likely to outweigh the potential risks for this individual?	

Please email completed forms to scwcsu.banes@nhs.net

END OF REFERRAL FORM

HEALTHIER YOU
NHS DIABETES PREVENTION PROGRAMME

xyla health & wellbeing
Part of Acacium Group

Gestational diabetes

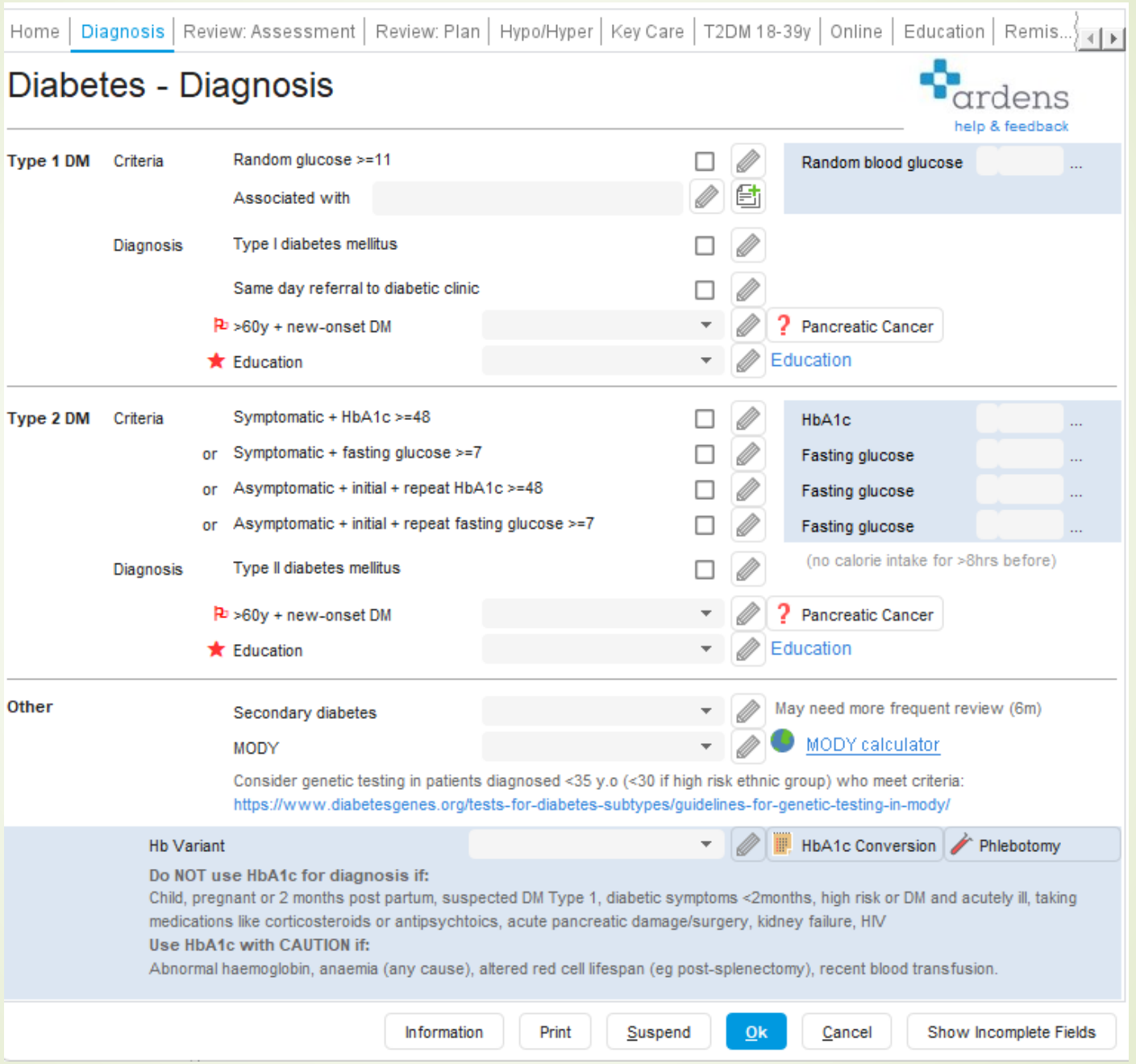
- Diagnosed with oral glucose tolerance test generally between 24-28 weeks
- Approximately 1 in 2 women with gestational diabetes will go on to develop Type 2 diabetes within 5-10 years
- Counsel and support women
- Women with GDM can self refer to Xyla = https://preventing-diabetes.co.uk/gestational-diabetes/#register
- Course specifically tailored to meet this population's needs
- **PLEASE CODE CORRECTLY SO PATIENTS ARE INVITED FOR AN ANNUAL HbA1C AT THE PRACTICE**

Types of diabetes

- Type 1 – autoimmune, makes up about 8%
- Type 2 – increasing steadily but about 90%
  - Increasing dramatically in younger patients & the phenotype of the younger patient is of a much more aggressive disease
- Other types – make up the rest
  - Gestational diabetes
  - Type 3c – secondary to trauma/Whipples/cancer/alcoholism/steroids/CF etc
  - Latent Autoimmune Diabetes in Adults (LADA)
  - MODY genetic forms

Diagnosis of Type 2 Diabetes

- Opportunistic screening
  - High BMI
  - Family History
  - Ethnicity
- **Fasting plasma glucose ≥ 7mmol/l on 2 separate occasions**
- **HbA1c ≥ 48 on 2 separate occasions**
- Symptomatic patients
  - Weight loss
  - Polydipsia
  - Polyuria
  - Tiredness
- When not to use HbA1c:
  - In children, in pregnancy, in some haemoglobinopathies, in severe anaemia, in suspected type 1, acute infection/trauma, recent transfusion


Home
Diagnosis
Review: Assessment
Review: Plan
Hypo/Hyper
Key Care
T2DM 18-39y
Online
Education
Remis...
Diabetes - Diagnosis
ardens
help & feedback
Type 1 DM
Criteria
Random glucose >=11
Associated with
Random blood glucose
Diagnosis
Type I diabetes mellitus
Same day referral to diabetic clinic
>60y + new-onset DM
Pancreatic Cancer
Education
Education
Type 2 DM
Criteria
Symptomatic + HbA1c >=48
HbA1c
or
Symptomatic + fasting glucose >=7
Fasting glucose
or
Asymptomatic + initial + repeat HbA1c >=48
Fasting glucose
or
Asymptomatic + initial + repeat fasting glucose >=7
Fasting glucose
(no calorie intake for >8hrs before)
Diagnosis
Type II diabetes mellitus
>60y + new-onset DM
Pancreatic Cancer
Education
Education
Other
Secondary diabetes
May need more frequent review (6m)
MODY
MODY calculator
Consider genetic testing in patients diagnosed <35 y.o (<30 if high risk ethnic group) who meet criteria:
https://www.diabetesgenes.org/tests-for-diabetes-subtypes/guidelines-for-genetic-testing-in-mody/
Hb Variant
HbA1c Conversion
Phlebotomy
Do NOT use HbA1c for diagnosis if:
Child, pregnant or 2 months post partum, suspected DM Type 1, diabetic symptoms <2months, high risk or DM and acutely ill, taking medications like corticosteroids or antipsychtoics, acute pancreatic damage/surgery, kidney failure, HIV
Use HbA1c with CAUTION if:
Abnormal haemoglobin, anaemia (any cause), altered red cell lifespan (eg post-splenectomy), recent blood transfusion.
Information
Print
Suspend
Ok
Cancel
Show Incomplete Fields

Options at diagnosis of Type 2 diabetes

- Remember your language and how this might feel
- Lifestyle discussions – Metabolic clinic interventions
- Education is key, please spend time explaining options - https://www.healthyliving.nhs.uk/
- Support and ongoing management of chronic disease is our responsibility
- Dietary advice confusing, one option is low carb https://lowcarbfreshwell.com/
- The NHS Type 2 Diabetes Path to Remission
  - 18-65 yrs, recent diagnosis in last 6 years & BMI over 27 if White or 25 if Black, Asian and other ethnic groups
  - Based on the Diabetes UK funded "DiRECT" trial where almost 50% who went on LCD achieved remission and 25% achieved ≥ 15kg weight loss & 86% put their diabetes into remission
  - Fully funded
- Medications and prevention
- **PLEASE BE PATIENT FOCUSED IN YOUR TARGET SETTING**

NHS Type 2 Diabetes Path to Remission Programme Referral

Referrals can be made by health care professionals including GPs, nurses, pharmacists, dietitians and other approved individuals. Clinical responsibility remains with the patient's GP and medications adjustment guidance must be signed off by an appropriate professional.

Actions required by referring practitioner BEFORE referral into the programme:

1. Review the patient in a telephone appointment or in person, to support completion of the referral and medication adjustment forms below for all patients. If no medications need adjusting simply select 'No' in the first row.
2. Discuss medication changes with the patient. Instruct them NOT to make changes immediately and to adjust their medications only on the day they start the meal replacements (TDR products)
3. Give or send a copy of the Medication Adjustment Form to the patient whether medications need adjusting or not **even if the patient is NOT taking any relevant medications**
   a. *Please note that SGLT2 inhibitors, Meglitinides and sulfonylureas MUST be stopped on the first day of TDR products*
4. Submit the completed Referral and Medication Adjustment Form to the provider (Momenta) *by email to* momenta.t2dr-bsw@nhs.net

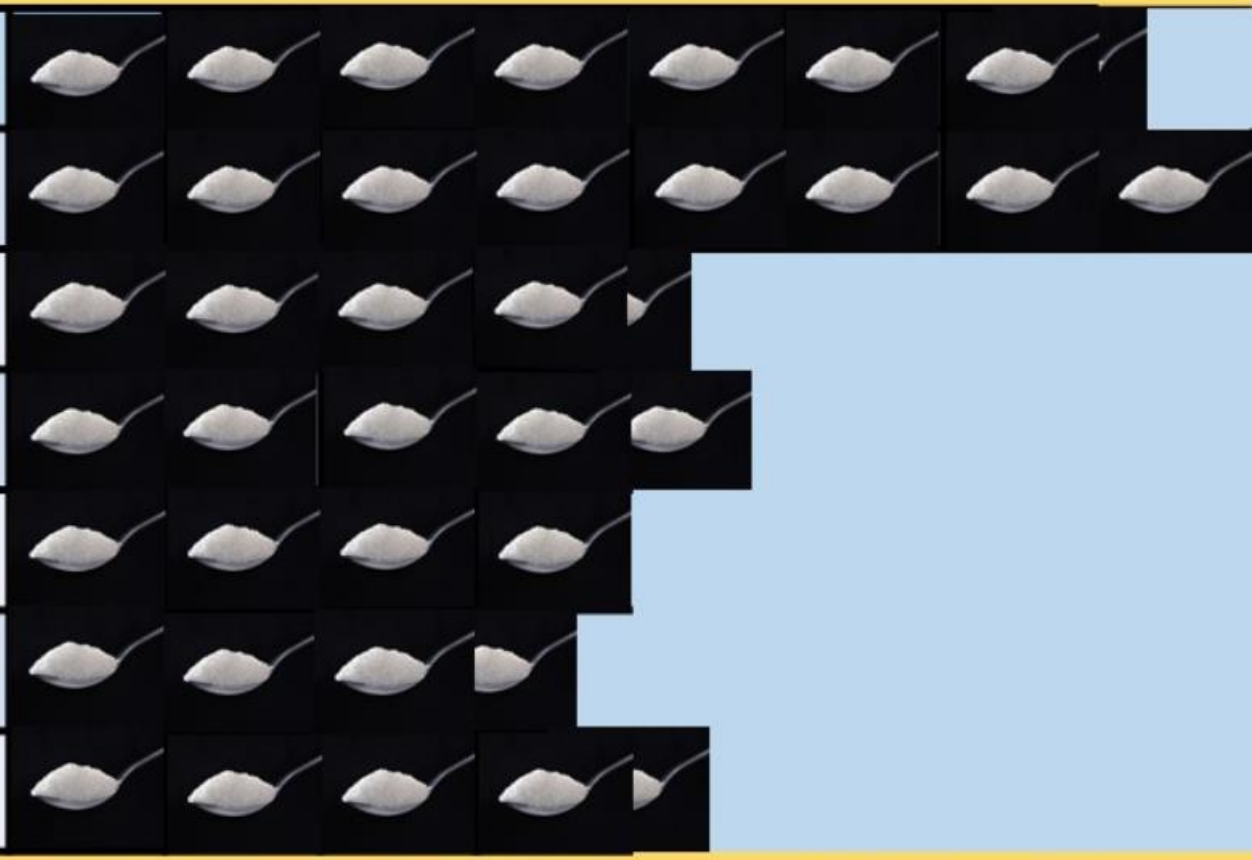
	Patient Name*: Miss Golden Phoenix test-TestPatient	**Date of Birth*:** 01 Feb 2003	
Declaration*	By entering my name below I confirm that this patient: - Meets the inclusion criteria and does not meet the exclusion criteria for this programme (***see below***); - Understands the context and meaning of Type 2 diabetes 'remission'; - Understands that the NHS T2DR programme is one year long, with 21 coached in-person or digital sessions; - Understands that this programme involves an initial 12 weeks of consuming formula diet with a fibre supplement where appropriate instead of their normal food; - Has discussed and agreed their medication changes to be undertaken on the first day of TDR and has been given a written copy of this; - Agrees that, if they proceed on the NHS T2DR Programme, they will: Continue attending yearly diabetes review appointments at their GP practice, regardless of whether remission is achieved; notify their GP practice of any unexpected or concerning symptoms considered urgent; and notify their GP practice if they disengage or drop out before the end of their intervention; and - Understands and consents to their data being shared as outlined in 'Consent' below.		
Referrer's organisation	**Name of GP practice:** The Old School Surgery		
	Registered Practice Code: J83615		
	GP practice email address – *this must be monitored regularly for patient safety purposes*:		
Referrer's name*	Dr Julia Hempenstall	Referral date*	02 June 2025

Diabetes in Remission

- This refers to maintenance of non-diabetic glycaemic levels off all glucose-lowering medication.
- For type 2 diabetes, this may be achieved through lifestyle interventions or bariatric surgery.
- However, people with remission of diabetes may still experience the macrovascular & microvascular complications of diabetes & therefore need continued monitoring.
- **DO NOT USE “diabetes resolved”**

The Glycaemic Index helps predict how these breakfasts might affect blood glucose, important information if you have type 2 diabetes

Cereal	Glycaemic Index	Serve size	How does each cereal affect blood glucose compared to 4g teaspoons of table sugar?
Coco Pops	77	30g	7.3
Cornflakes	93	30g	8.4
Mini Wheats	59	30g	4.4
Shredded Wheat	67	30g	4.8
Special K	54	30g	4.0
Bran Flakes	74	30g	3.7
Oat porridge	63	150ml	4.4



As per calculations to be found in: It is the glycaemic response to, not the carbohydrate content of food that matters in diabetes and obesity: The glycaemic index revisited | Unwin | Journal of Insulin Resistance 2016 @lowcarbGP

A healthy breakfast: cereals, toast, fruit juice?

Food item	Serving size in g/ml	How does each food affect blood glucose compared with one 4g teaspoon of table sugar?
Bran flakes	30	3.7 
Milk	125	1 
Brown toast, 1 slice	30	3 
Pure Apple juice	200	8.6 

Total for breakfast 16.3 teaspoons

Useful information for those with T2Diabetes making dietary choices

*As per calculations derived from the glycaemic index. To be found in: *It's the glycaemic response to, not the carbohydrate content of food that matters in diabetes and obesity* Journal of Insulin Resistance 2016. Unwin et al

https://phcuk.org/sugar/

What tools do we have?

- We are expert communicators
- Use the relationship you have built up with the individual
- Don't forget Diabetes Distress Scale

Increasing Motivation

- Identifying patterns
- Choosing small behaviours that challenge these
- Aim for small steps not perfection

What would make things 1% better?

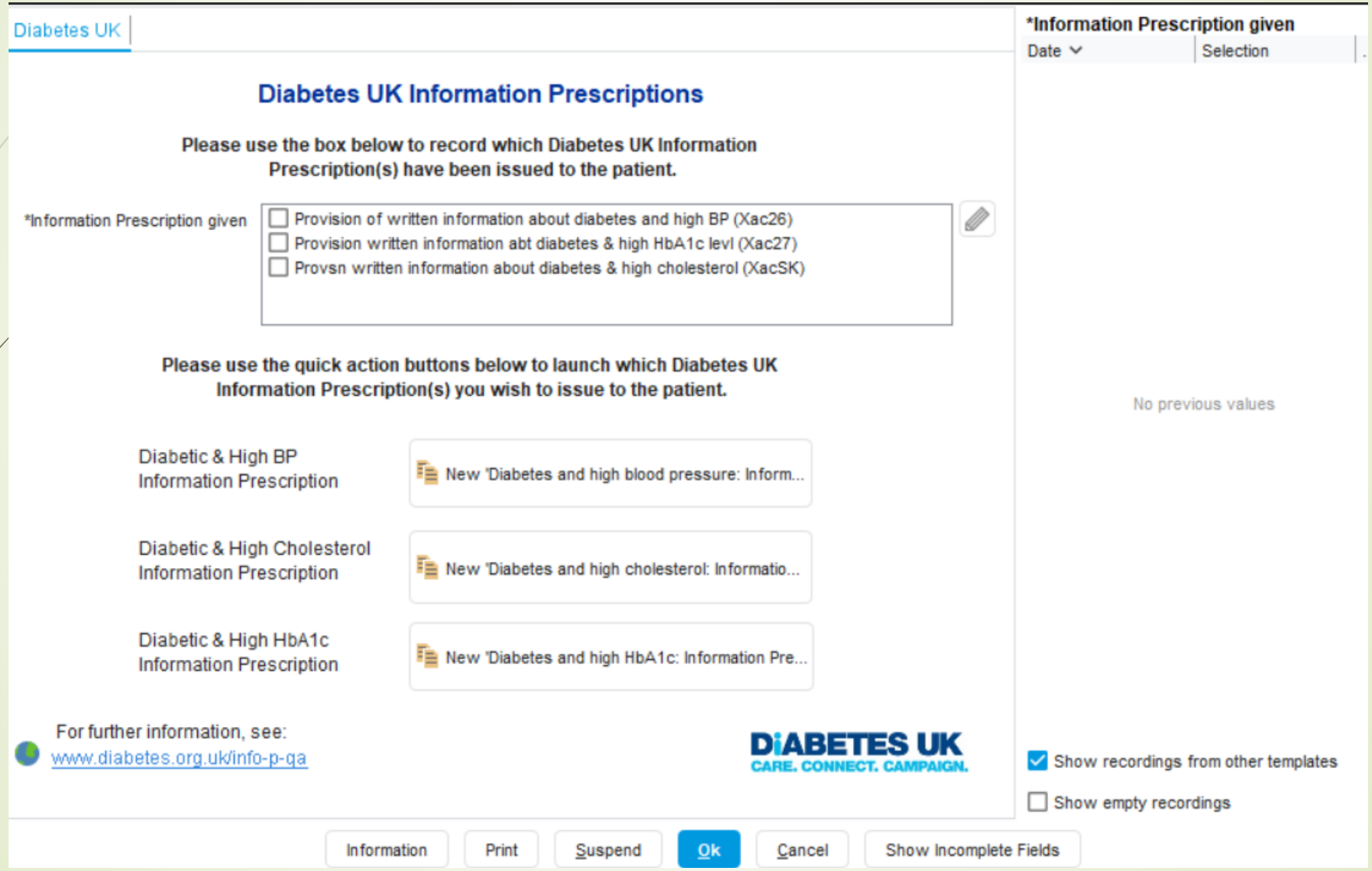
Why not just do it?

- Change is hard
- Someone else is nagging you
- Difficult to find the time and energy
- Gets too complicated then give up

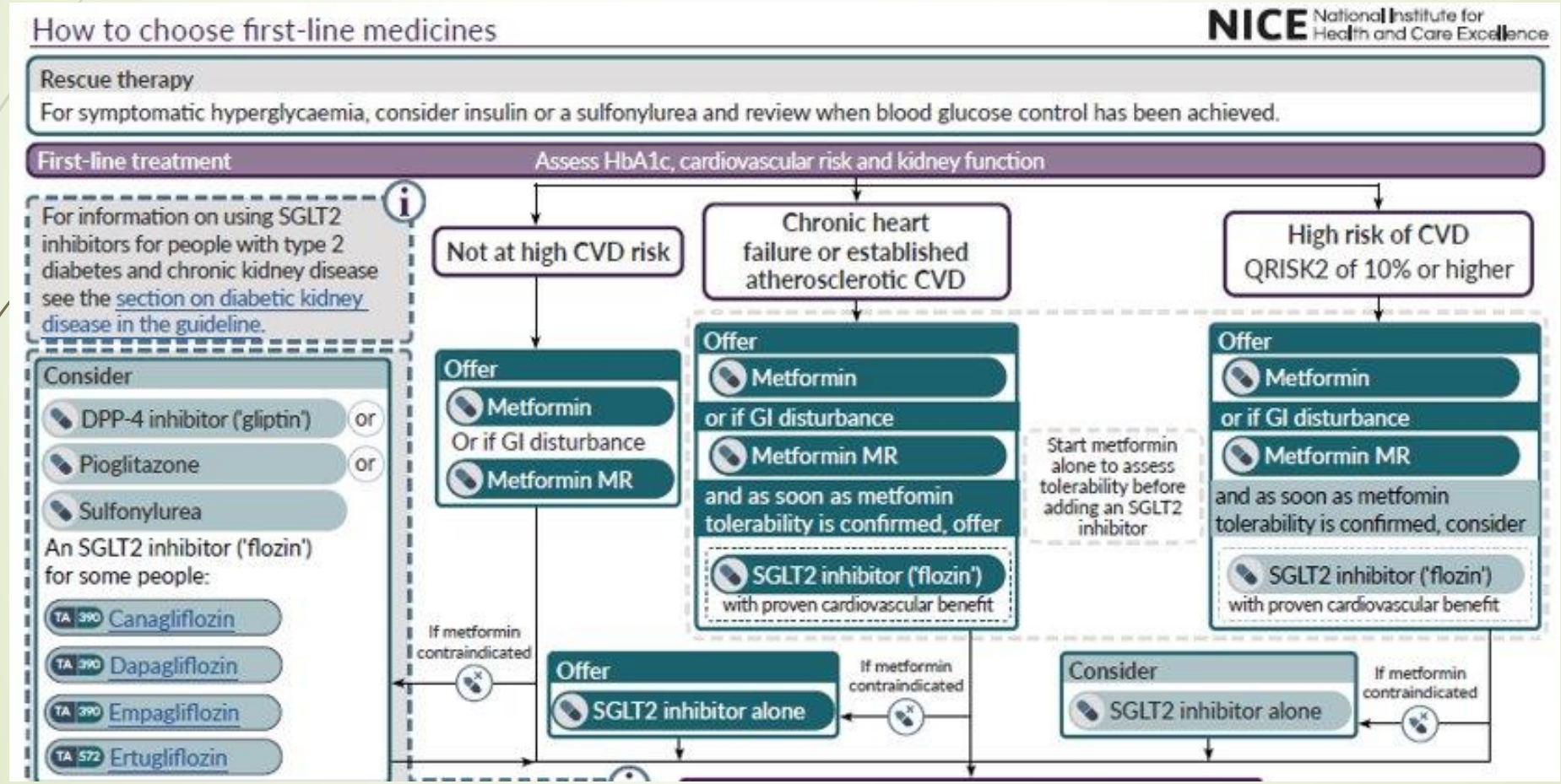
Motivational interviewing techniques

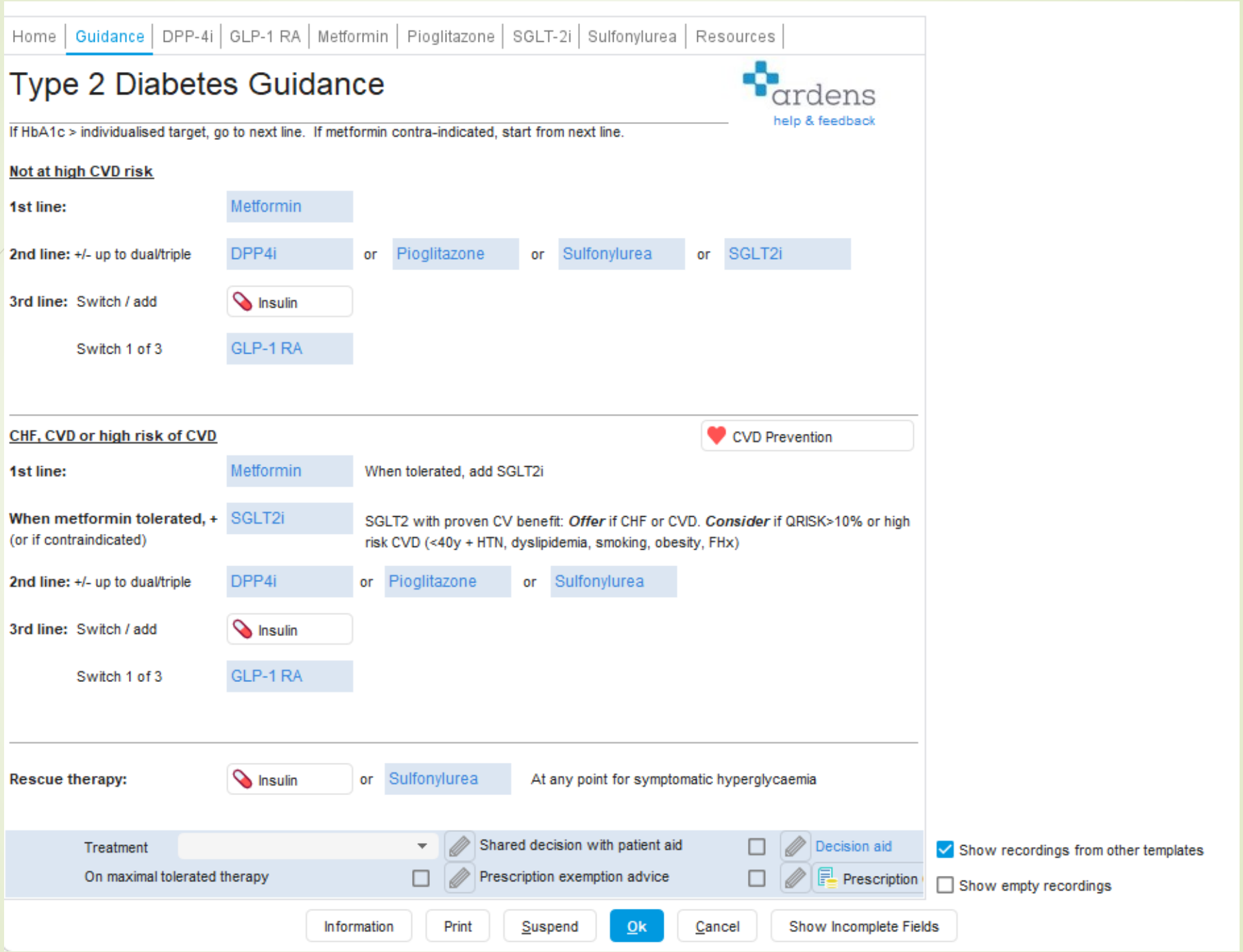
USE DIABETES UK PATIENT INFORMATION PRESCRIPTIONS

https://www.diabetes.org.uk/for-professionals/supporting-your-patients/information-prescriptions/information-prescriptions-qa for explaining the 3 treatment targets



Treatment target: HbA1c…. *NICE guidelines (NG28) have now been updated to place greater emphasis on the management of cardiovascular risk in those with type 2 diabetes*




Home
Guidance
DPP-4i
GLP-1 RA
Metformin
Pioglitazone
SGLT-2i
Sulfonylurea
Resources
Type 2 Diabetes Guidance
ardens
help & feedback
If HbA1c > individualised target, go to next line. If metformin contra-indicated, start from next line.
Not at high CVD risk
1st line:
Metformin
2nd line: +/- up to dual/triple
DPP4i
or
Pioglitazone
or
Sulfonylurea
or
SGLT2i
3rd line: Switch / add
Insulin
Switch 1 of 3
GLP-1 RA
CHF, CVD or high risk of CVD
CVD Prevention
1st line:
Metformin
When tolerated, add SGLT2i
When metformin tolerated, +
(or if contraindicated)
SGLT2i
SGLT2 with proven CV benefit: Offer if CHF or CVD. Consider if QRISK>10% or high risk CVD (<40y + HTN, dyslipidemia, smoking, obesity, FHx)
2nd line: +/- up to dual/triple
DPP4i
or
Pioglitazone
or
Sulfonylurea
3rd line: Switch / add
Insulin
Switch 1 of 3
GLP-1 RA
Rescue therapy:
Insulin
or
Sulfonylurea
At any point for symptomatic hyperglycaemia
Treatment
On maximal tolerated therapy
Shared decision with patient aid
Prescription exemption advice
Decision aid
Prescription
Show recordings from other templates
Show empty recordings
Information
Print
Suspend
Ok
Cancel
Show Incomplete Fields

Metformin nuggets

- Slow release a useful alternative if GI side effects
- Review the dose of metformin if the serum creatinine >130 or eGFR is <45
- Stop metformin if the serum creatinine > 150 or eGFR <30
- In 2022 MHRA suggested checking vit B12 as possibly 1 in 10 may have deficiency
  - If symptoms – macrocytic anaemia, extreme pallor, new onset neuropathy/gait problems, glossitis, altered mental state
  - "Periodic monitoring" in others – previous lowish B12, vegans and those with reduced absorption (PPI & colchicine)

SGLT2s: Cautions and Counselling

SGLT2 not suitable where:

- History of DKA
- Ketogenic or very low carbohydrate diet
- Currently unwell (acute illness, surgery or planned procedure)
- History of persistent or complicated UTI
- Pregnancy or risk of pregnancy
- Frail and elderly
- Type 1 diabetes

Counselling:

- Potential side effects and when to seek review, send a AccuRx/letter
  - Thrush
  - UTI
  - Fourniere's gangrene
- Sick day guidance (stop SGLT2 if diarrhoea/vomiting or symptoms of DKA)
- Staying hydrated
- Interrupt if hospitalised for major surgery


LIFESTYLE
trend UK
TYPE 2 DIABETES:
WHAT TO DO WHEN YOU ARE ILL
WHY IS THIS LEAFLET FOR YOU?
Everyone has days when they are not well. If you have diabetes, being unwell can affect your blood glucose control so it is important that you know how to manage this. This

GLP-1 RA

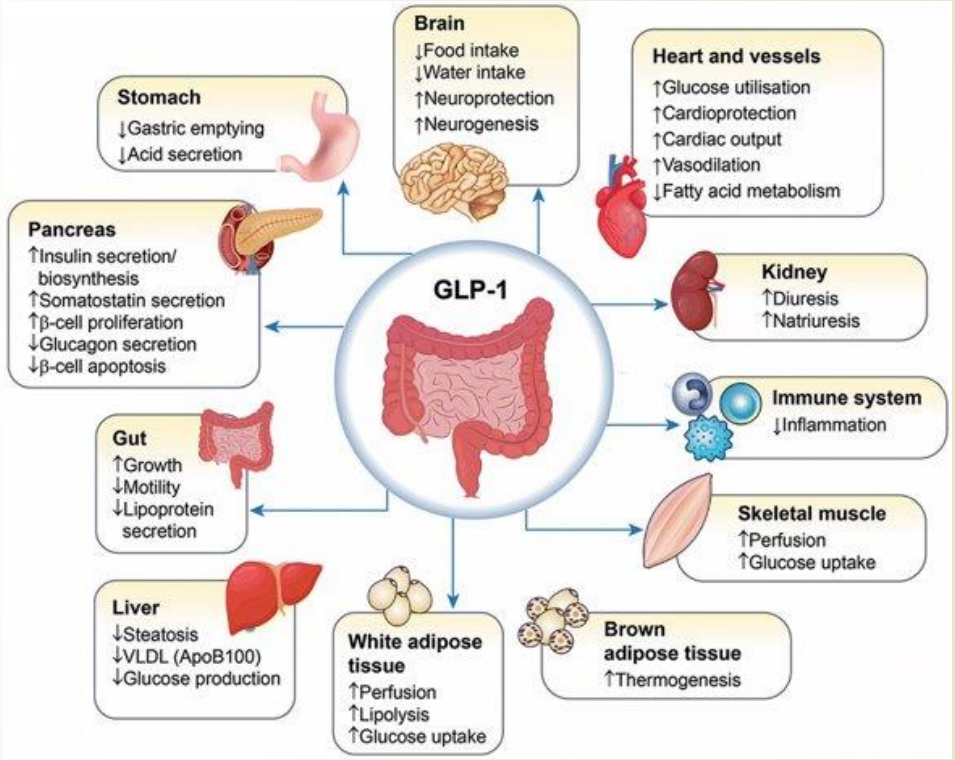
RA

Produced from proglucagon gene in L cells of small intestine

GLP1 R are expressed in various tissues, including pancreatic beta cells, pancreatic ducts, gastric mucosa, kidney, lung, heart, skin, immune cells, and the hypothalamus

GLP1 are down regulated by DDP4 (half life 2 minutes)

Synthetic GLP1 are resistant to DPP4 and has very long half life.



Incretin GLP-1 - Initiation for Diabetes

From age 18 onwards

ardens
help & feedback

★ Incretin treatment started ☐		Diabetes Formulary	GLP1 Letter	Tirzepatide Letter - DM2
Indications	Indicated as on insulin + recommended by specialist			
or	Indicated as on triple therapy ineffective, not tolerated or contraindicated			
+	Black / Asian / minority ethnic group + associated psychological/medical problems			
or	BMI >=35 + associated psychological/medical problems			
or	BMI <35 + insulin has significant work implications			
or	BMI <35 + weight loss would benefit comorbidities			
Advice - all	Advice - about GI side effects, dehydration + to increase fluid intake			
	Advice - diet, micronutrient deficiency + maintenance of muscle mass			
	Advice - on signs + symptoms of hypoglycaemia and DKA			
Advice - hormones	Advice - oral HRT absorption may be affected + appropriate endometrial protection considered			BMS
	Advice - to use non-oral contraception for 4 wks after initiation + each dose increase			FSRH tirzepatide only

Leaflet

Clinical information

If necessary to initiate or switch a patient to Rybelsus® (refer to actions 2 & 3), prescribers should counsel their patient on the following dose titration schedule and administration instructions for Rybelsus®:

Rybelsus® dose: Initially 3mg once daily for 1 month, then increased to 7mg once daily for at least 1 month, then increased if necessary to 14mg once daily. The maintenance dose is 7mg or 14mg once daily, where the 14mg dose of Rybelsus® is advised, this should be achieved by prescribing one 14mg tablet. Do not use two 7mg tablets to achieve the 14mg dose.

How to take Rybelsus® tablets:

1. Take Rybelsus® tablets on an empty stomach at any time of the day.
2. Swallow Rybelsus® tablets whole with no more than half a glass of water (up to 120 ml). **Do not split, crush, or chew the tablet, as it is not known if it affects absorption of semaglutide.**
3. After taking Rybelsus® tablets wait at least 30 minutes before having the first meal or drink of the day or taking other oral medicines. **Waiting less than 30 minutes lowers the absorption of semaglutide.**

https://www.rybelsus.info/content/dam/UK/AFFILIATE/www-rybelsus-info/hcp/resources/UK20RYB00224.pdf
https://www.rybelsus.info/content/dam/UK/AFFILIATE/www-rybelsus-info/hcp/resources/Rybelsus%20Patient%20Leaflet.pdf
https://www.medicines.org.uk/emc/product/11507

once weekly

mounjaro®

tirzepatide

- First and only licensed GIP and GLP-1 receptor agonist

INDICATION

Mounjaro is indicated for the treatment of adults with insufficiently controlled type 2 diabetes mellitus as an adjunct to diet and exercise:

- as monotherapy when metformin is considered inappropriate due to intolerance or contraindications
- in addition to other medicinal products for the treatment of diabetes.[1]

NICE National Institute for Health and Care Excellence

Tirzepatide is recommended for treating type 2 diabetes alongside diet and exercise in adults when it is insufficiently controlled only if:

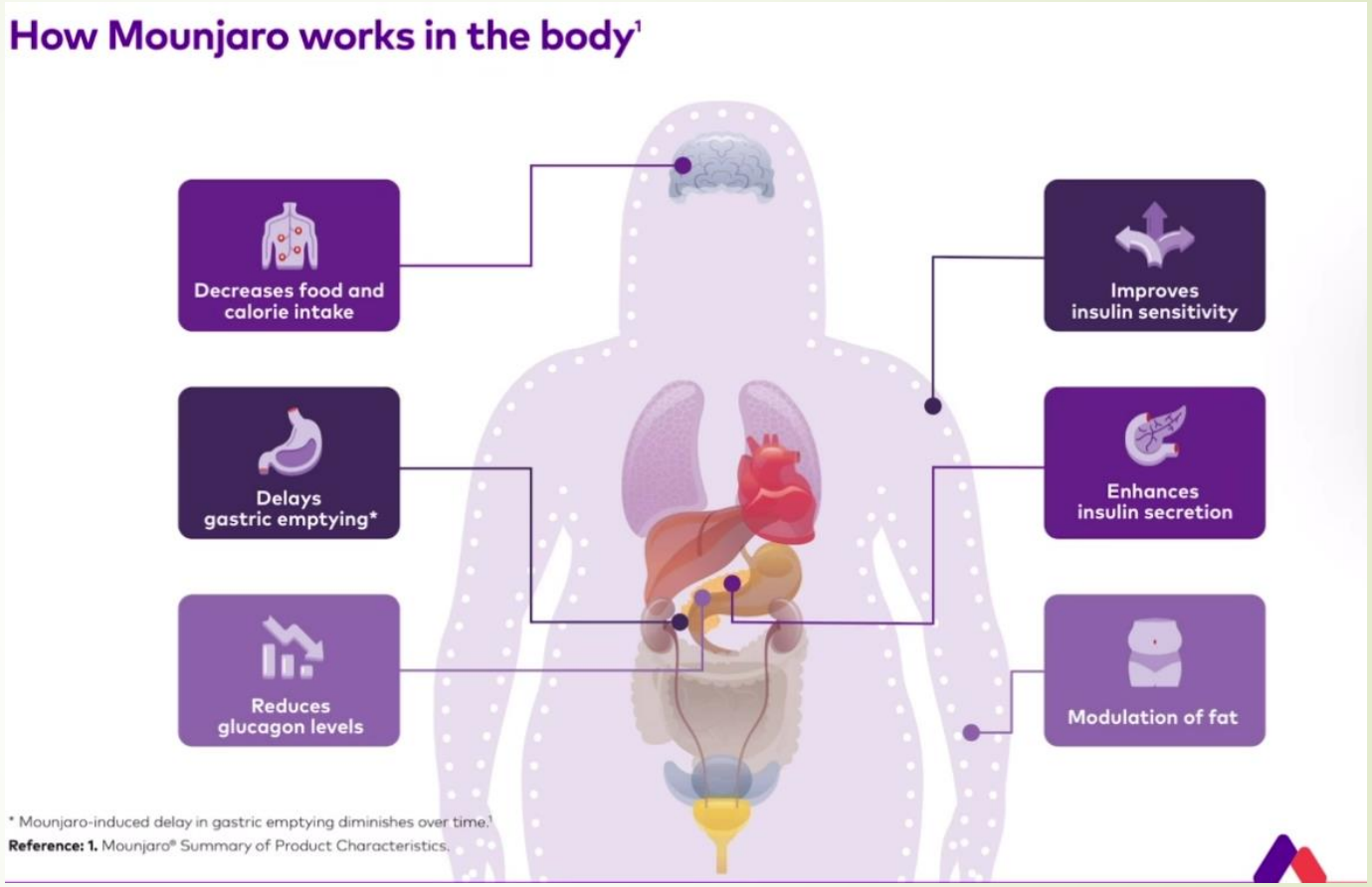
- triple therapy with metformin and 2 other oral antidiabetic drugs is ineffective, not tolerated or contraindicated, and
- they have a body mass index (BMI) of 35 kg/m^2 or more, and specific psychological or other medical problems associated with obesity, or
- they have a BMI of less than 35 kg/m^2, and:
  - insulin therapy would have significant occupational implications, or
  - weight loss would benefit other significant obesity-related complications.

  Use lower BMI thresholds (usually reduced by 2.5 kg/m^2) for people from South Asian, Chinese, other Asian, Middle Eastern, Black African or African-Caribbean family backgrounds.

https://www.nice.org.uk/guidance/ta924/resources/tirzepatide-for-treating-type-2-diabetes-pdf-82615547603653

Mounjaro: a single molecule that activates both GIP and GLP-1 receptors

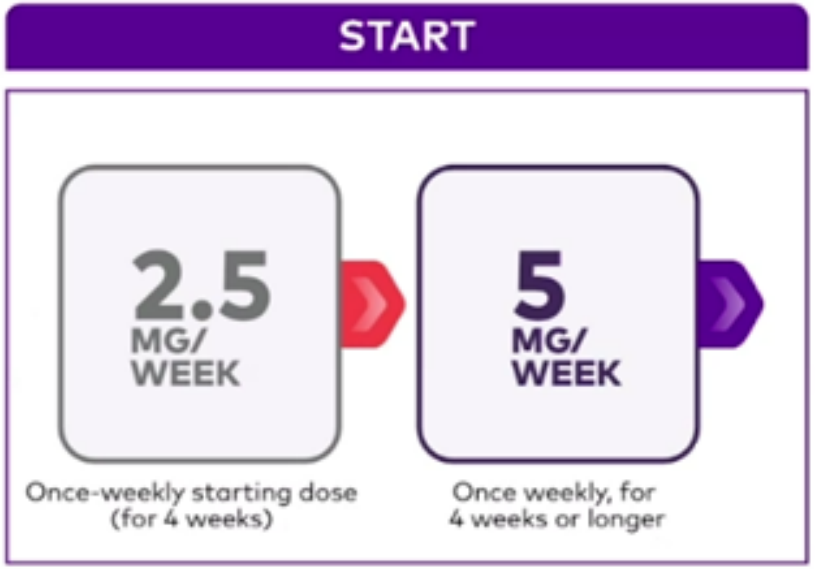
- GIP and GLP-1 are incretin hormones. Together they account for the incretin effect
- GIP is responsible for approx. 2/3 of the incretin effect in healthy humans without Type 2 diabetes
- In people with Type 2 diabetes, the incretin effect is diminished



GIP=glucose-dependent insulinotropic polypeptide; GLP-1=glucagon-like peptide-1; T2D=type 2 diabetes.

References: 1. Mounjaro® Summary of Product Characteristics. **2.** Nauck MA, Meier JJ. The incretin effect in healthy individuals and those with type 2 diabetes: physiology, pathophysiology, and response to therapeutic interventions. *Lancet Diabetes Endocrinol* 2016; 4(6): 525-536. **3.** Nauck MA, Meier JJ. GIP and GLP-1: Stepsiblings rather than monozygotic twins within the incretin family. *Diabetes* 2019; 68(5): 897-900.

Once-weekly dosing[1]



Start Mounjaro with 2 steps:[1]

1. Initiate with the 2.5 mg once-weekly starting dose
2. After 4 weeks, escalate to the 5 mg once-weekly dose

When Mounjaro is added to existing metformin and/or SGLT2i therapy, the current dose of metformin and/or SGLT2i can be continued.[1]

When Mounjaro is added to existing therapy of a sulphonylurea and/or insulin, a reduction in the dose of sulphonylurea or insulin may be considered to reduce the risk of hypoglycaemia. Blood glucose self-monitoring is necessary to adjust the dose of sulphonylurea and insulin. A stepwise approach to insulin reduction is recommended.[1]

Tailored dosing for patients' individual needs[1]

Available in 4 additional, once-weekly doses: 7.5 mg, 10 mg, 12.5 mg and 15 mg[1]

If needed to achieve individual treatment goals for your patients:[1]

- **After at least 4 weeks** at the current dose
- You can continue to **increase the dose by 2.5 mg**

Recommended maintenance doses are 5 mg, 10 mg and 15 mg (maximum dose) once weekly[1]

How Mounjaro should be administered

Scheduling a dosing day

Patients should take Mounjaro once weekly, on the **same day each week**.[1]

The day of weekly administration can be changed, if necessary, as long as the **time between two doses is at least 3 days**.[2]

The dose can be administered **at any time of the day, with or without meals**.[2]

Choosing an injection site

Mounjaro is to be injected subcutaneously in the abdomen, thigh or upper arm.[2]

The patient may need help from someone else to inject Mounjaro in the upper arm.[1]

Injection sites should be rotated with each dose. If a patient also injects insulin, they should inject Mounjaro into a different injection site.[2]

Please note: Patients should be advised to read the instructions for use included with the package leaflet carefully before administering the medicinal product.[2]

Once-weekly dosing with a prefilled KwikPen[1*†]

You can use Mounjaro at any time of the day, with or without meals. You should use it on the same day each week if you can.[2]

Please note: Patients should be advised to read the instructions for use and the package leaflet for the pre-filled KwikPen carefully before administering the medicinal product[1]

Store unused pens in refrigerator between 2°C and 8°C; used pens may be stored at room temperature up to 30°C and thrown away 30 days after your first injection.

To get to the prime position, slowly turn the dose knob until you hear 2 clicks and the extended line is shown in the dose window.

This is the prime position. Priming removes air from the cartridge and makes sure that your KwikPen is working correctly.

Not actual size.

The dial starts at 0 and goes up to 1. Dial the pen to the 1 to deliver a full dose (there are no numbers other than 0 and 1).

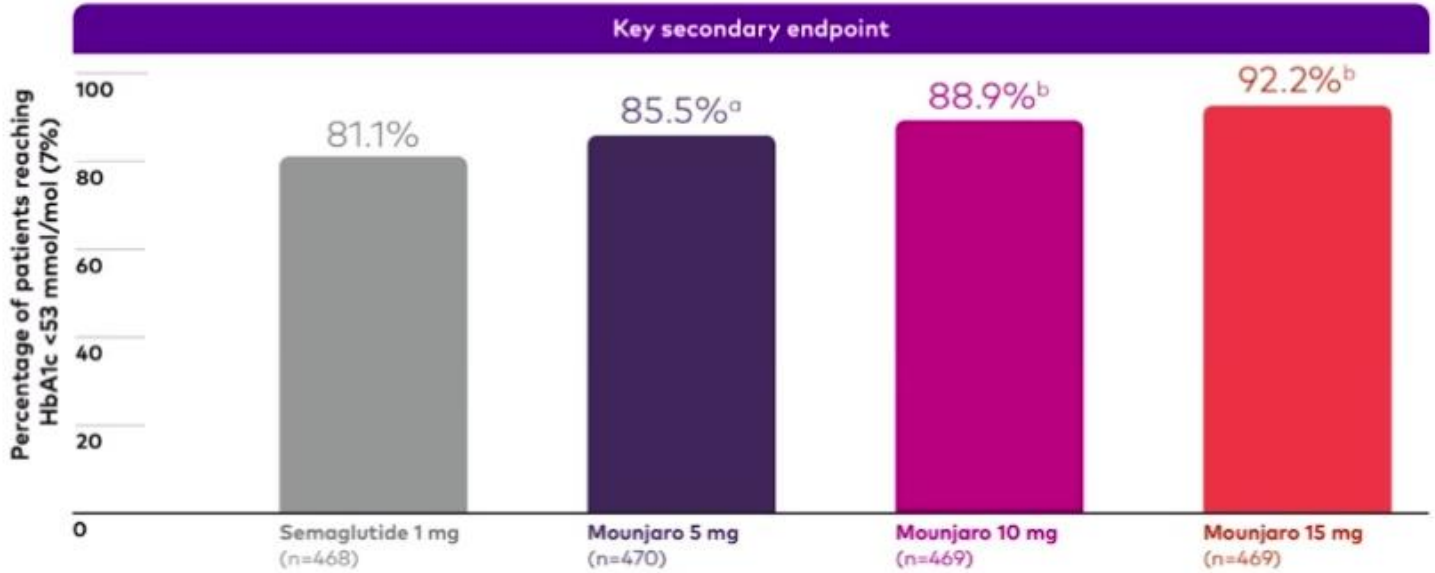
Instructions for Use >

*Please see Instructions for Use included with the pen.

†Do not freeze or use a KwikPen that has been frozen.

22141_Diabetes_UK_Kwikpen_Patient_brochure_01_11 (lillydiabetes.co.uk)

Proportion of patients achieving HbA1c of <53 mmol/mol (7%) with Mounjaro 5 mg, 10 mg and 15 mg vs semaglutide 1 mg at week 40[1,2]



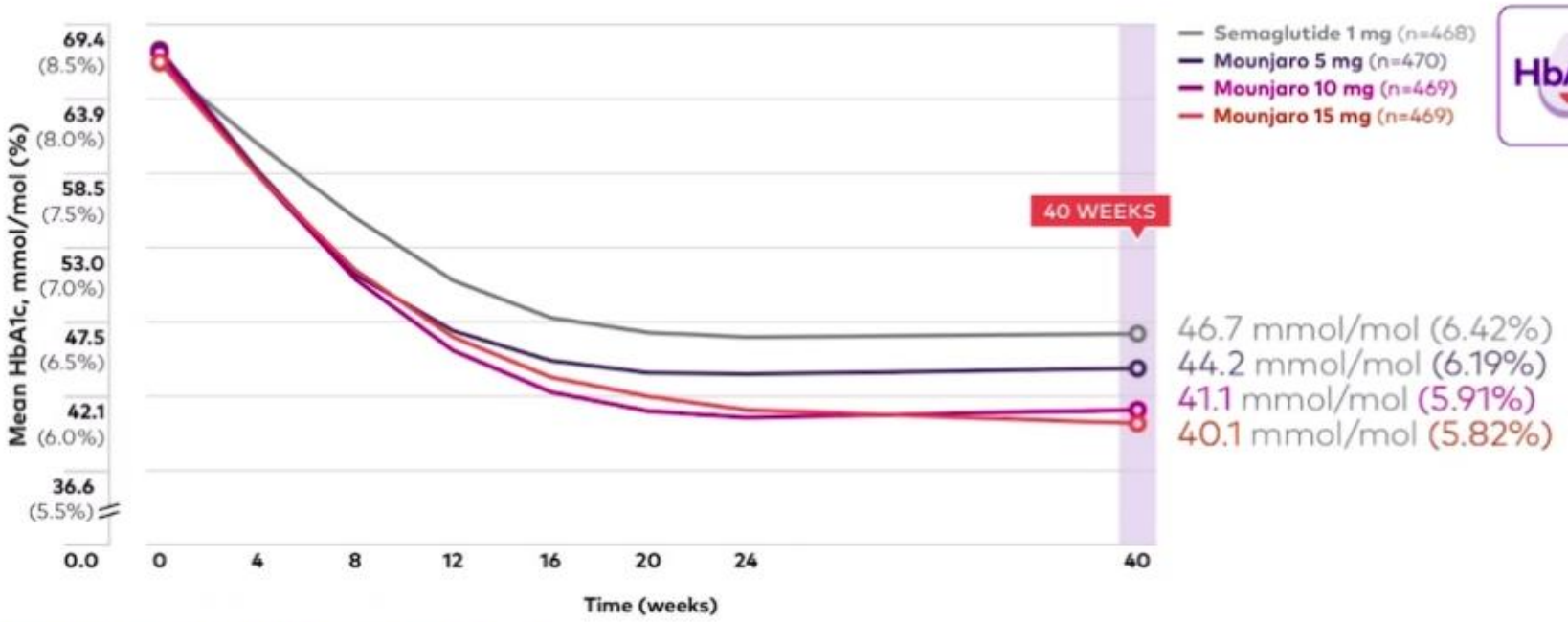
Mean baseline HbA1c: 67.0 mmol/mol (8.28%). [a]p<0.05 (for superiority, adjusted for multiplicity). [b]p<0.001 (for superiority, adjusted for multiplicity).

HbA1c

Significantly more patients treated with Mounjaro **5 mg, 10 mg** and **15 mg** **achieved the HbA1c target of <53 mmol/mol (7%)** vs semaglutide 1 mg at week 40[1,2]

9 out of 10 patients achieved HbA1c target of **<53 mmol/mol (7%)** with Mounjaro **15 mg** at week 40[1,2]

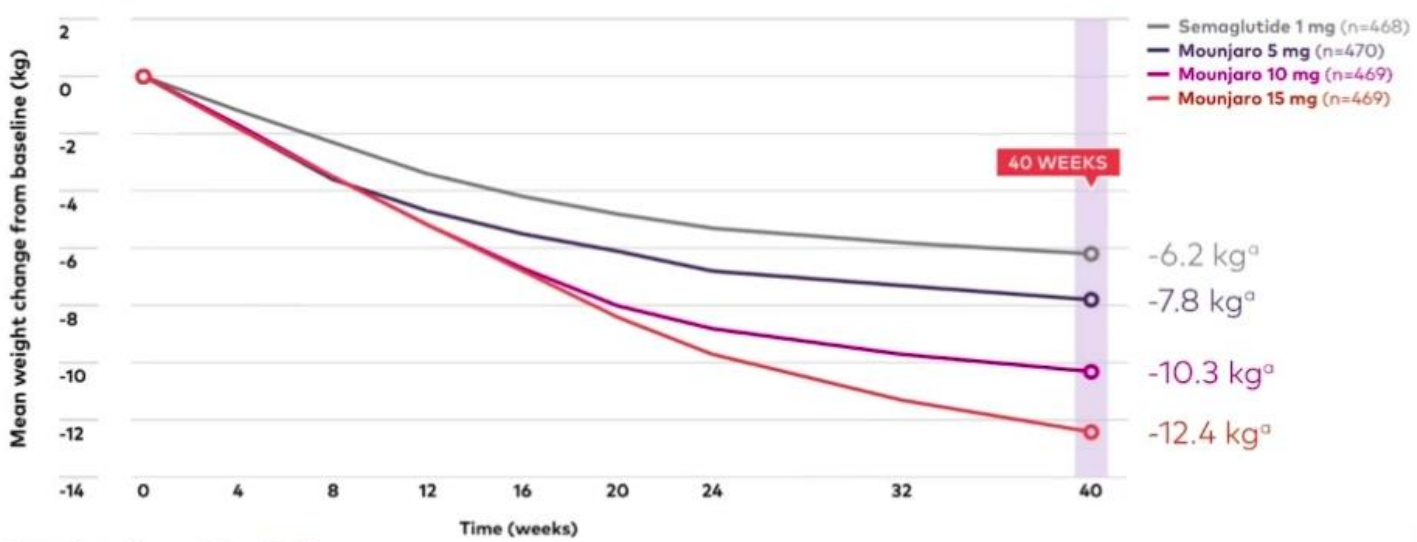
Change from baseline in HbA1c with Mounjaro 5 mg, 10 mg and 15 mg and semaglutide 1 mg over time to week 40[1,2]



Mean baseline HbA1c: 67.0 mmol/mol (8.28%).

Mean change from baseline in body weight with Mounjaro 5 mg, 10 mg and 15 mg vs semaglutide 1 mg at week 40[1,2]

Key secondary endpoint



Mean baseline weight: 93.8 kg. [a]p<0.001 vs baseline (not adjusted for multiplicity). [b]p<0.001 vs semaglutide 1 mg (for superiority, adjusted for multiplicity).

Difference in body weight vs semaglutide 1 mg, kg (95% CI)	Mounjaro 5 mg	Mounjaro 10 mg	Mounjaro 15 mg
	-1.7 kg (-2.6, -0.7)[b]	-4.1 kg (-5.0, -3.2)[b]	-6.2 kg (-7.1, -5.3)[b]

Efficacy estimand. MMRM analysis, mITT population (efficacy analysis set). Data presented are LS means.

CI=confidence interval; LS=least squares; mITT=modified intent-to-treat; MMRM=mixed model for repeated measures.

References: 1. Mounjaro® Summary of Product Characteristics. **2.** Frías JP, et al. Tirzepatide versus semaglutide once weekly in patients with type 2 diabetes. *N Engl J Med* 2021; 385(6): 503-515 + supplementary appendix.

Mounjaro **5 mg**, **10 mg** and **15 mg** demonstrated **superior mean weight reductions** vs semaglutide 1 mg at week 40[1,2]

Mounjaro **15 mg** delivered **double the mean weight reduction** vs semaglutide 1 mg at week 40[1,2]

In SURPASS clinical trials, weight change was a secondary endpoint.

SEE BAR CHART >

Superior HbA1c reduction with Mounjaro **5 mg**, **10 mg** and **15 mg** vs semaglutide 1 mg at week 40*[1,2]

Superior weight reduction with Mounjaro **5 mg**, **10 mg** and **15 mg** vs semaglutide 1 mg at week 40[1,2]

The most common adverse events with both Mounjaro and semaglutide 1 mg were GI in nature and were mostly mild to moderate in severity[2]

Summary of key safety information for Mounjaro

Contraindications[1]

Moujaro is contraindicated in patients with hypersensitivity to the active substance or to any of the excipients listed in the Summary of Product Characteristics.

Special warnings and precautions for use

Acute pancreatitis

Mounjaro has not been studied in patients with a history of pancreatitis, and should be used with caution in these patients.

Acute pancreatitis has been reported in patients treated with Mounjaro.

Patients should be informed of the symptoms of acute pancreatitis. If pancreatitis is suspected, Mounjaro should be discontinued. If the diagnosis of pancreatitis is confirmed, Mounjaro should not be restarted. In the absence of other signs and symptoms of acute pancreatitis, elevations in pancreatic enzymes alone are not predictive of acute pancreatitis.

Hypoglycaemia

Hypoglycaemia is common when Mounjaro is added to existing metformin and/or sodium-glucose co-transporter 2 inhibitor (SGLT2i) therapy. Patients' current dose of metformin and/or SGLT2i can be continued when they use Mounjaro.

Hypoglycaemia is very common when Mounjaro is used with medicines that contain a sulphonylurea and/or insulin. If a patient is using a sulphonylurea or insulin, a reduction in the dose of sulphonylurea or insulin may be considered to reduce the risk of hypoglycaemia. Blood glucose self-monitoring is necessary to adjust the dose of sulphonylurea and insulin. A stepwise approach to insulin reduction is recommended.

Clinically significant hypoglycaemia (blood glucose <3.0 mmol/L [54 mg/dL]) or severe hypoglycaemia (requiring the assistance of another person) occurred in 10–14% (0.14–0.16 events/patient year) of patients when Mounjaro was added to sulphonylurea and in 14–19% (0.43–0.64 events/patient year) of patients when Mounjaro was added to basal insulin.

The rate of clinically significant hypoglycaemia when Mounjaro was used as monotherapy or when added to other oral antidiabetic medicinal products was up to 0.04 events/patient year.

Gastrointestinal effects

Mounjaro has been associated with gastrointestinal adverse reactions, which include nausea, vomiting, and diarrhoea. These adverse reactions may lead to dehydration, which could lead to a deterioration in renal function including acute renal failure. **Patients treated with Mounjaro should be advised of the potential risk of dehydration, due to the gastrointestinal adverse reactions and take precautions to avoid fluid depletion and electrolyte disturbances. This should particularly be considered in the elderly, who may be more susceptible to such complications.**

Severe gastrointestinal disease

Mounjaro has not been studied in patients with severe gastrointestinal disease, including severe gastroparesis, and should be used with caution in these patients.

Diabetic retinopathy

Mounjaro has not been studied in patients with non-proliferative diabetic retinopathy requiring acute therapy, proliferative diabetic retinopathy or diabetic macular oedema, and should be used with caution in these patients with appropriate monitoring.

Elderly

Only very limited data are available from patients aged ≥ 85 years.

Risk of dehydration due to gastrointestinal adverse reactions, should be considered in the elderly, who may be more susceptible to such complications.

Sodium content

This medicinal product contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially 'sodium-free'.

Please see section 4 of the Mounjaro Summary of Product Characteristics for a complete list of safety information.

Reference: 1. Mounjaro® Summary of Product Characteristics.

Renal impairment

No dose adjustment is required for patients with renal impairment including end stage renal disease (ESRD). Experience with the use of tirzepatide in patients with severe renal impairment and ESRD is limited. Caution should be exercised when treating these patients with tirzepatide (see section 5.2).

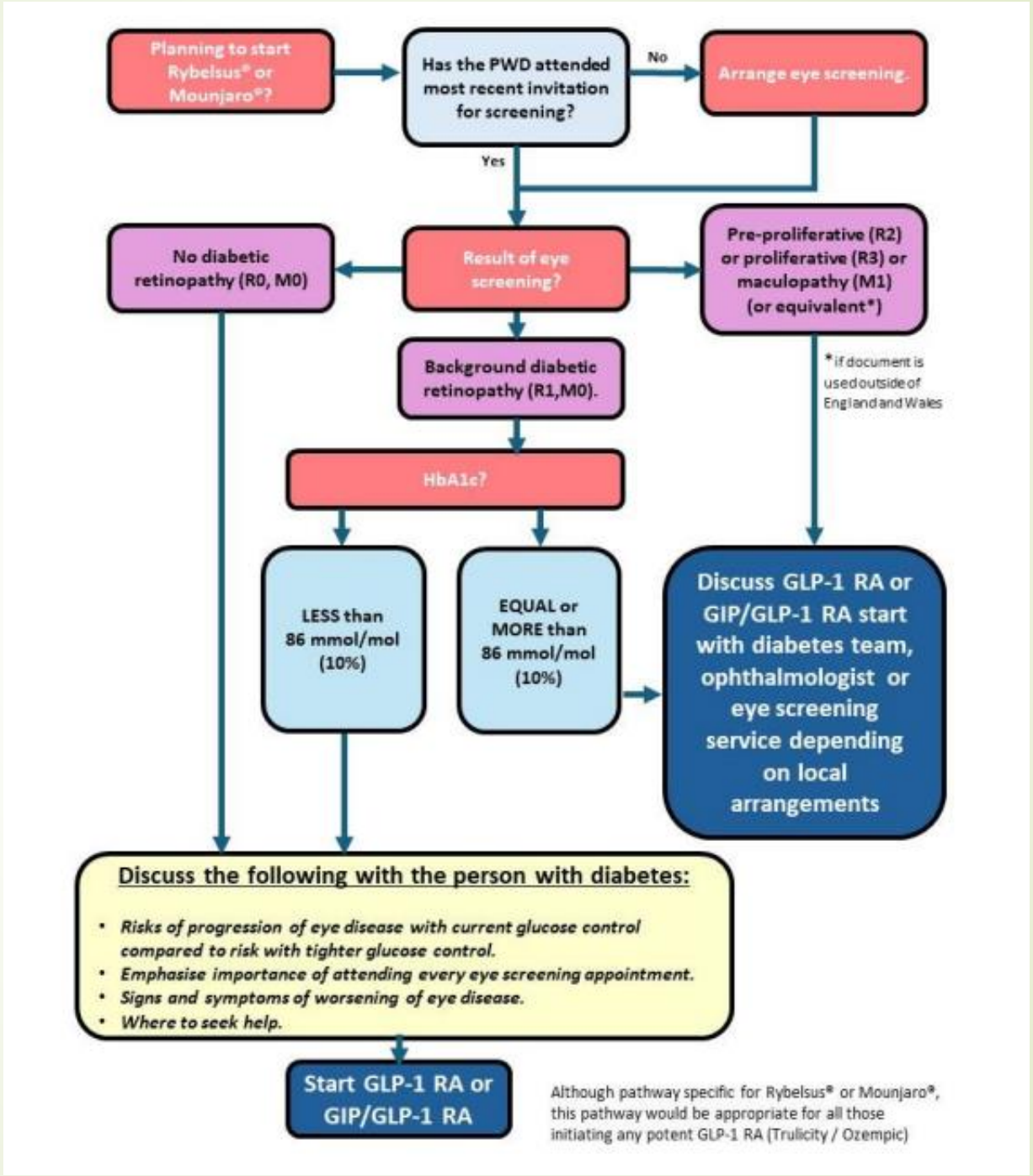
Mounjaro 10mg solution for injection in pre-filled pen - Summary of Product Characteristics (SmPC) - (emc) (medicines.org.uk)

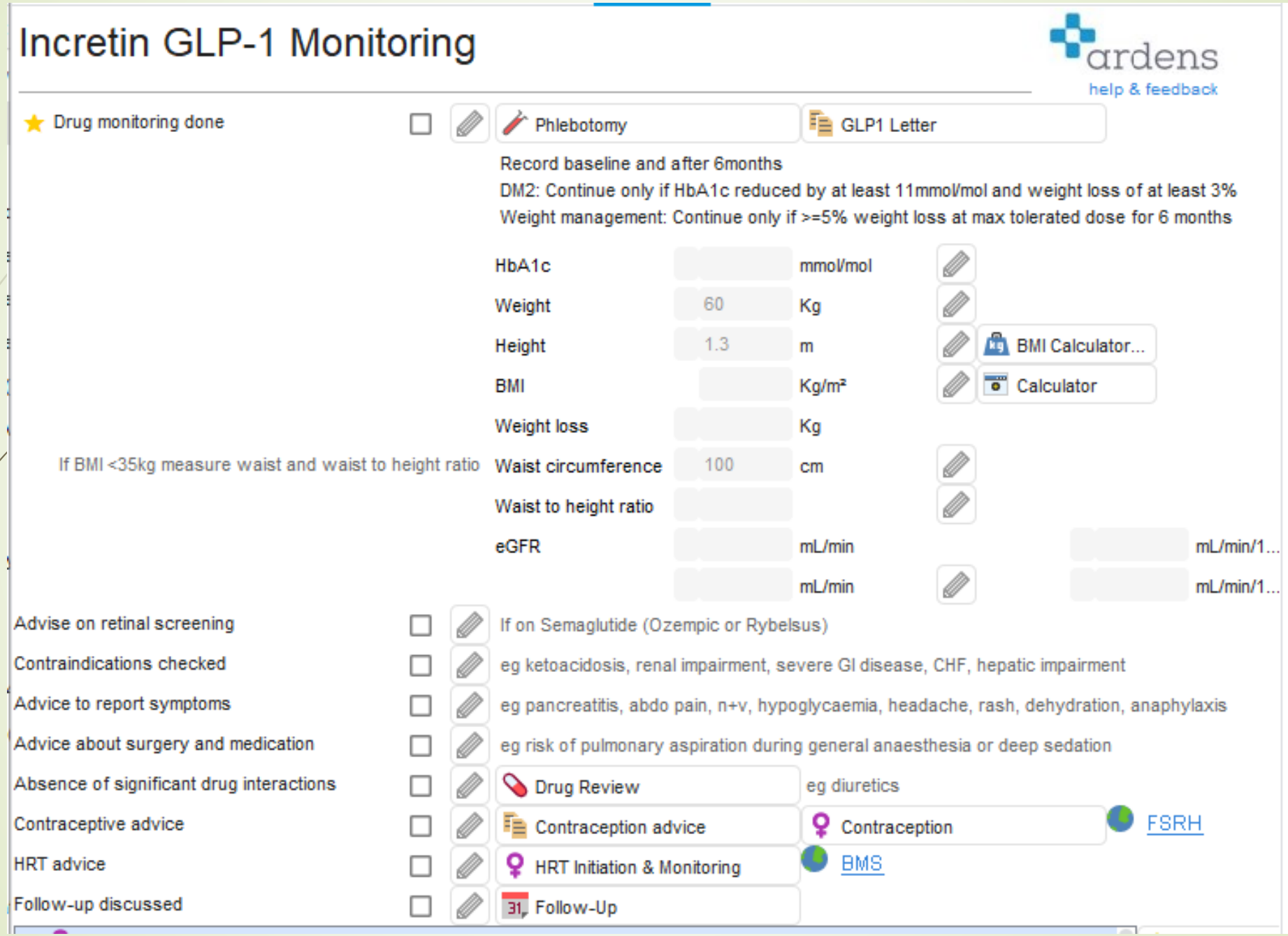
Association of British Clinical Diabetologists

PCDS Primary Care Diabetes Society

Figure 1. Suggested Pathway for Diabetic Eye Disease

Suggested pathway for diabetic eye disease when starting Rybelsus® or Mounjaro®




Incretin GLP-1 Monitoring
ardens
help & feedback
Drug monitoring done
Phlebotomy
GLP1 Letter
Record baseline and after 6months
DM2: Continue only if HbA1c reduced by at least 11mmol/mol and weight loss of at least 3%
Weight management: Continue only if >=5% weight loss at max tolerated dose for 6 months
HbA1c
mmol/mol
Weight
60
Kg
Height
1.3
m
BMI Calculator...
BMI
Kg/m²
Calculator
Weight loss
Kg
If BMI <35kg measure waist and waist to height ratio
Waist circumference
100
cm
Waist to height ratio
eGFR
mL/min
mL/min/1...
mL/min
mL/min/1...
Advise on retinal screening
If on Semaglutide (Ozempic or Rybelsus)
Contraindications checked
eg ketoacidosis, renal impairment, severe GI disease, CHF, hepatic impairment
Advice to report symptoms
eg pancreatitis, abdo pain, n+v, hypoglycaemia, headache, rash, dehydration, anaphylaxis
Advice about surgery and medication
eg risk of pulmonary aspiration during general anaesthesia or deep sedation
Absence of significant drug interactions
Drug Review
eg diuretics
Contraceptive advice
Contraception advice
Contraception
FSRH
HRT advice
HRT Initiation & Monitoring
BMS
Follow-up discussed
Follow-Up

GLP-1 RA and contraception

FSRH statement: Glucagon-like peptide-1 (GLP-1) agonists and oral contraception (Feb 2025) | FSRH

HRT advice

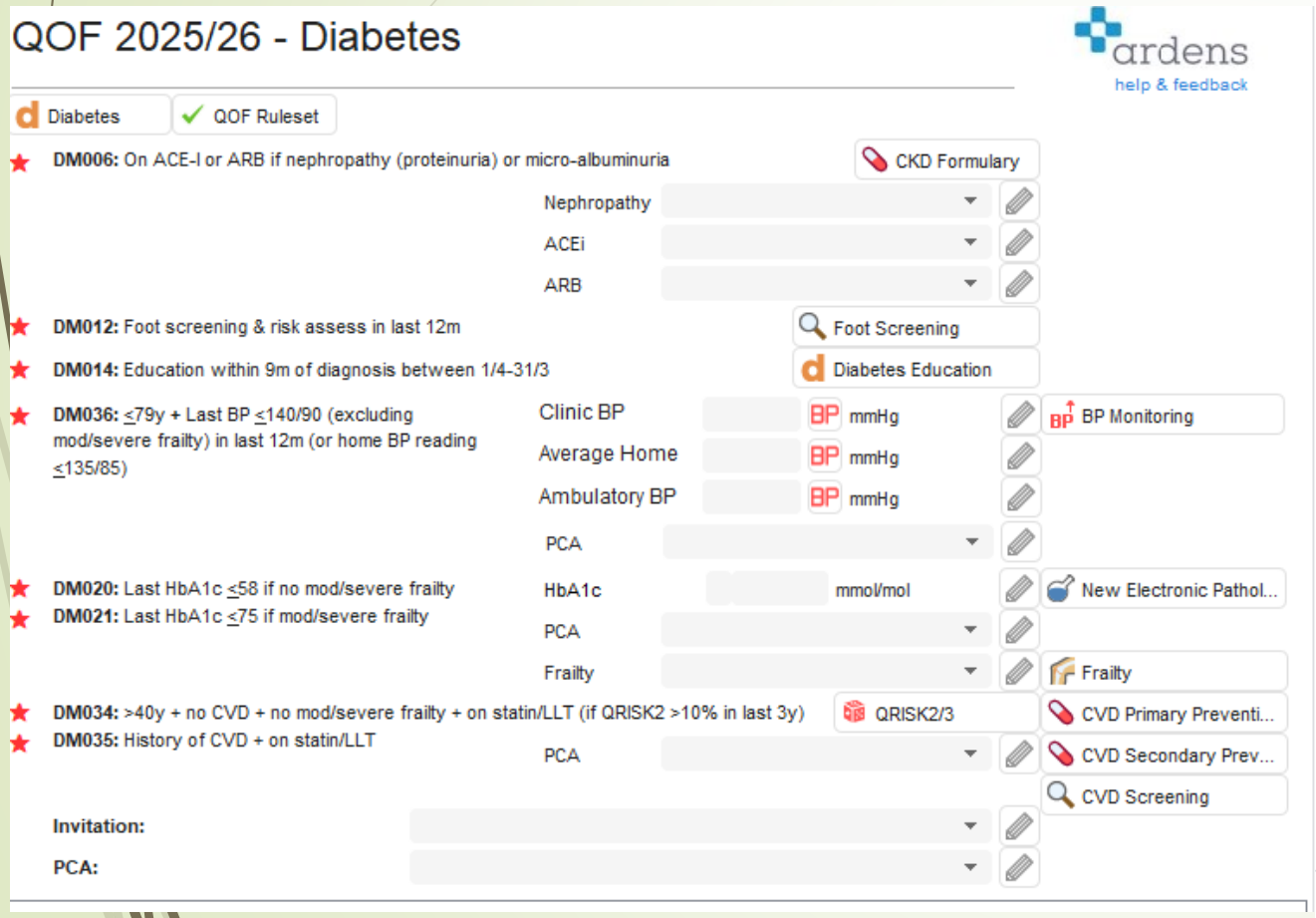
https://www.pcwhs.co.uk/_userfiles/pages/files/resources/glp1_contraception_hrt_article.pdf

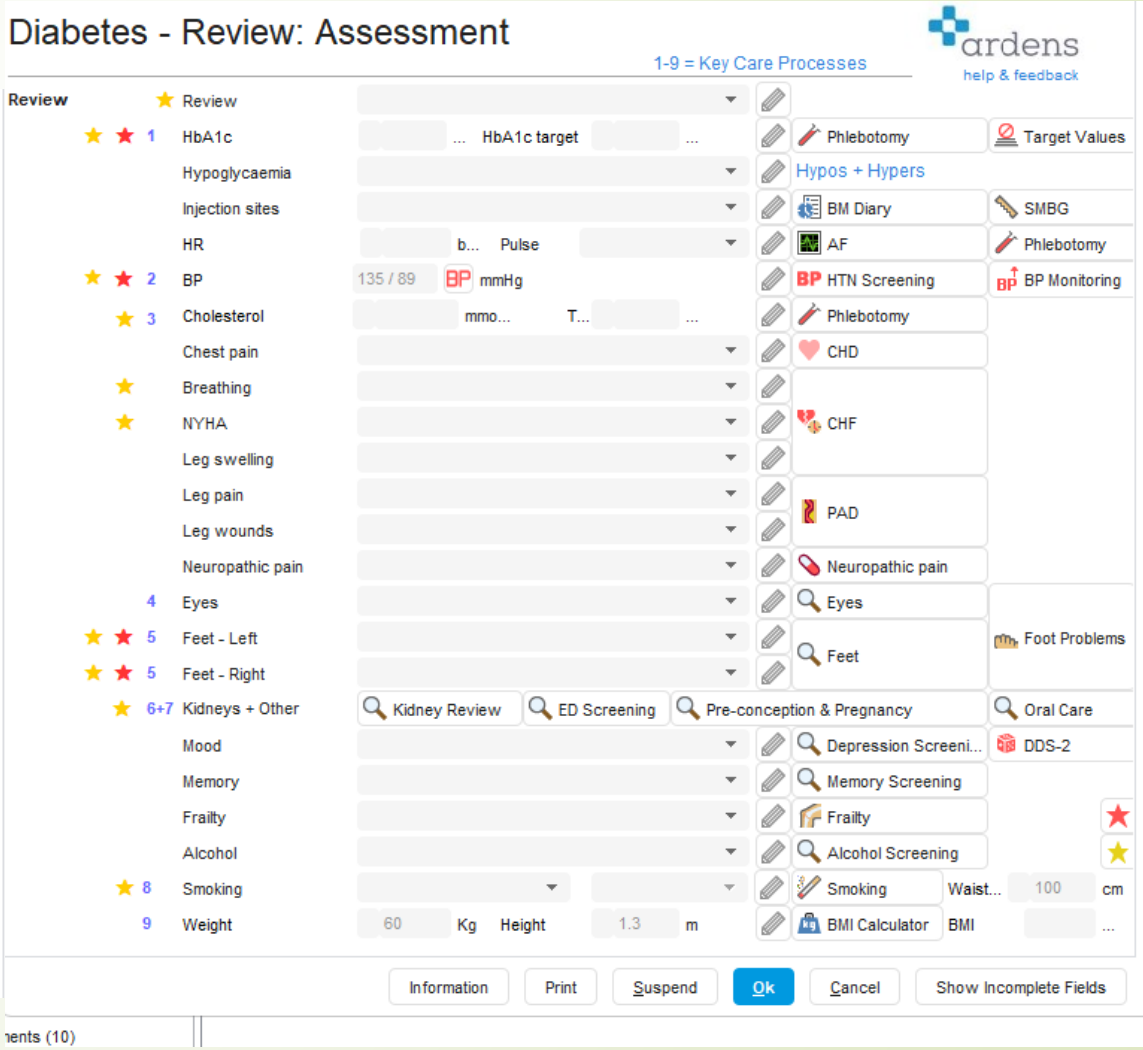
Injectable weight loss drugs, contraception and HRT

Dr. Sarah Gray
Dr. Toni Hazell
Dr. Louise Price
Dr. Lindsey Thomas

PCWHS directors

Chronic disease management & QoF





Changes to GP Contract in 2025/26

- On 28 February NHS England wrote to all GP practices and Primary Care Network directors to confirm the final arrangements for the GP Contract 2025/26.

- In 2025/26 there will be an **overall increase in investment of £889m** across the core practice contract and the Network Contract Directed Enhanced Service (DES). This will take the combined total estimated contract value from £12,287m in 2024/25 to £13,176m in 2025/26.

- In addition to the £889m increase in investment, practices will also have the opportunity to take part in a **new enhanced service for advice and guidance, which is worth up to £80m**. This enhanced service supports the government's commitment to move more care from secondary care into community settings and will ensure patients receive care in the right place at the right time via the use of specialist advice and guidance whilst also supporting elective recovery.

- DHSC and NHS England will **permanently retire the 32 QOF indicators income protected in 24/25.** This equates to 212 QOF points worth c.£298m in 25/26 of which:
  - 71 will be removed outright, with £ reinvested into global sum, routine childhood immunisations and locum reimbursement rates
  - the remaining 141 redistributed proportionately across nine CVD prevention indicators, targeted towards CVD prevention - a key driver of excess mortality.

Impact on the National Diabetes Programme

1. Retired Indicators (previously income protected in 24/25)

DM017: The contractor establishes and maintains a register of all patients aged 17 or over with diabetes mellitus, which specifies the type of diabetes where a diagnosis has been confirmed

2. Technical Changes in 2025/26 *(wording change highlighted)*

Current ID	Current Indicator	New ID	New Indicator	Change and rationale
DM022	The percentage of patients with diabetes aged 40 years and over, with no history of cardiovascular disease and without moderate or severe frailty, who are currently treated with a statin (excluding patients with type 2 diabetes and a CVD risk score of <10% recorded in the preceding 3 years)	**DM034**	The percentage of patients with diabetes, on the register, aged 40 years or over, with no history of CVD and without moderate or severe frailty, who are currently treated with a statin (excluding patients with type 2 diabetes and a CVD risk score of <10% recorded in the preceding 3 years), or where a statin is declined or clinically unsuitable, another lipid-lowering therapy.	• Other lipid lowering therapy cluster added to align with updated NICE indicator on which QOF is based. NICE Indicator IND275: Diabetes: lipid-lowering therapies for primary prevention of CVD (40 years and over) | Indicators | NICE
DM023	The percentage of patients with diabetes and a history of cardiovascular disease (excluding haemorrhagic stroke) who are currently treated with a statin	**DM035**	The percentage of patients with diabetes, on the register and a history of CVD (excluding haemorrhagic stroke) who are currently treated with a statin, or where a statin is declined or clinically unsuitable, another lipid-lowering therapy.	• Other lipid lowering therapy cluster added to align with updated NICE indicator on which QOF is based. NICE Indicator IND276: Diabetes: lipid-lowering therapies for secondary prevention of CVD | Indicators | NICE (published 27 November 2024)
DM033	The percentage of patients with diabetes, on the register, without moderate or severe frailty in whom the last blood pressure reading (measured in the preceding 12 months) is 140/90 mmHg or less (or equivalent home blood pressure reading)	**DM036**	The percentage of patients with diabetes, on the register, aged 79 years and under without moderate or severe frailty in whom the last blood pressure reading (measured in the preceding 12 months) is 140/90 mmHg or less (or equivalent home blood pressure reading)	• '79 years and under' age criteria added to align with updated NICE indicator on which QOF is based. NICE Indicator IND249: Diabetes: blood pressure (without moderate or severe frailty) | Indicators | NICE (published 19 August 2023).

Enhanced focus on CVD!

- Significant shift of funding towards CVD prevention
- QOF is being used as a key lever to improve prevention and management of hypertension and high cholesterol
- **Increased Points:** 141 QOF points (worth c. £198 million) are now concentrated across nine CVD indicators
- **Higher Targets:** The upper achievement thresholds (the percentage of patients needing to meet the target to get maximum points) have been significantly increased, often to 85% or 90%
- **Focus Areas:** These indicators target blood pressure control (for patients with hypertension, CHD, stroke/TIA, diabetes) and cholesterol management (statin prescribing, achieving target lipid levels)

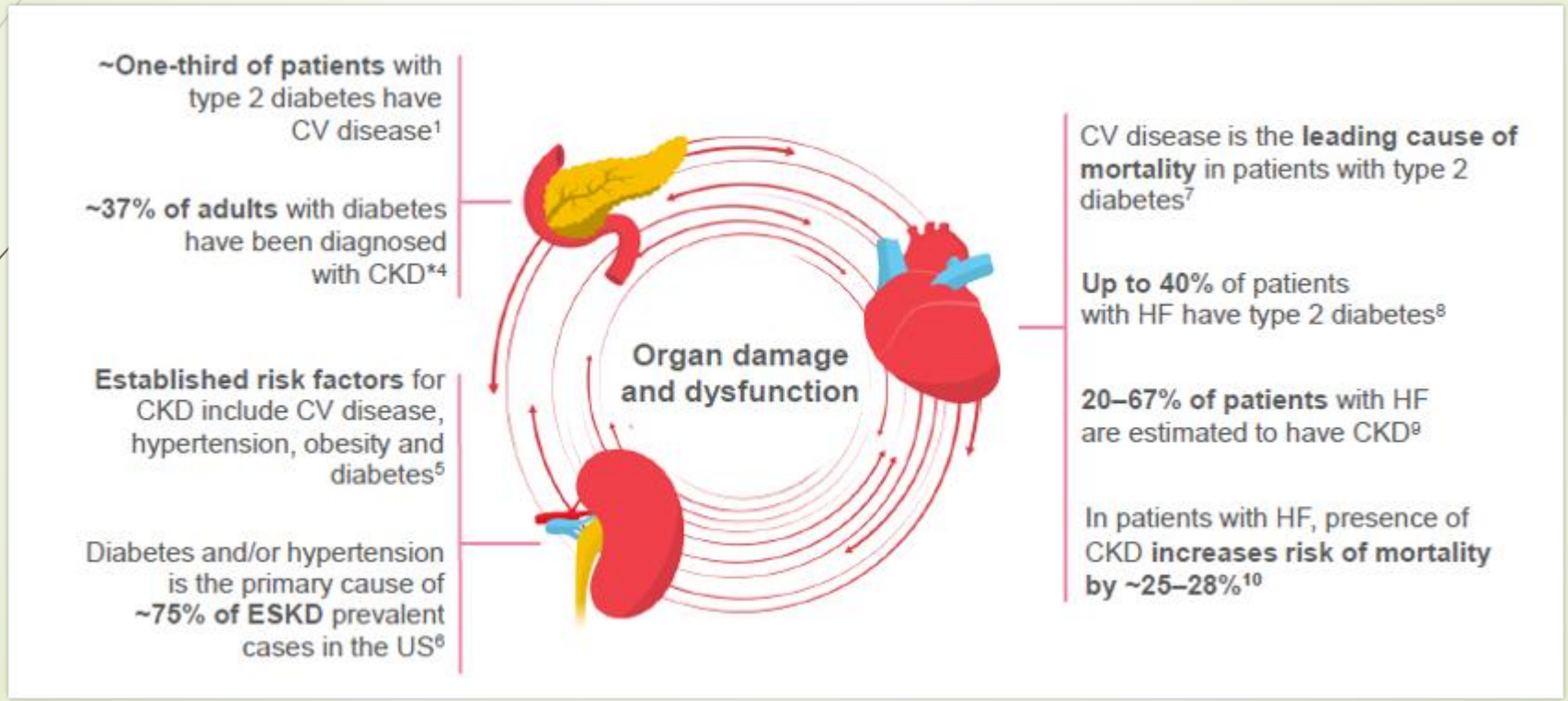
Now need to manage nearly all patients to target

- For example, of the 9 indicators in diabetes:

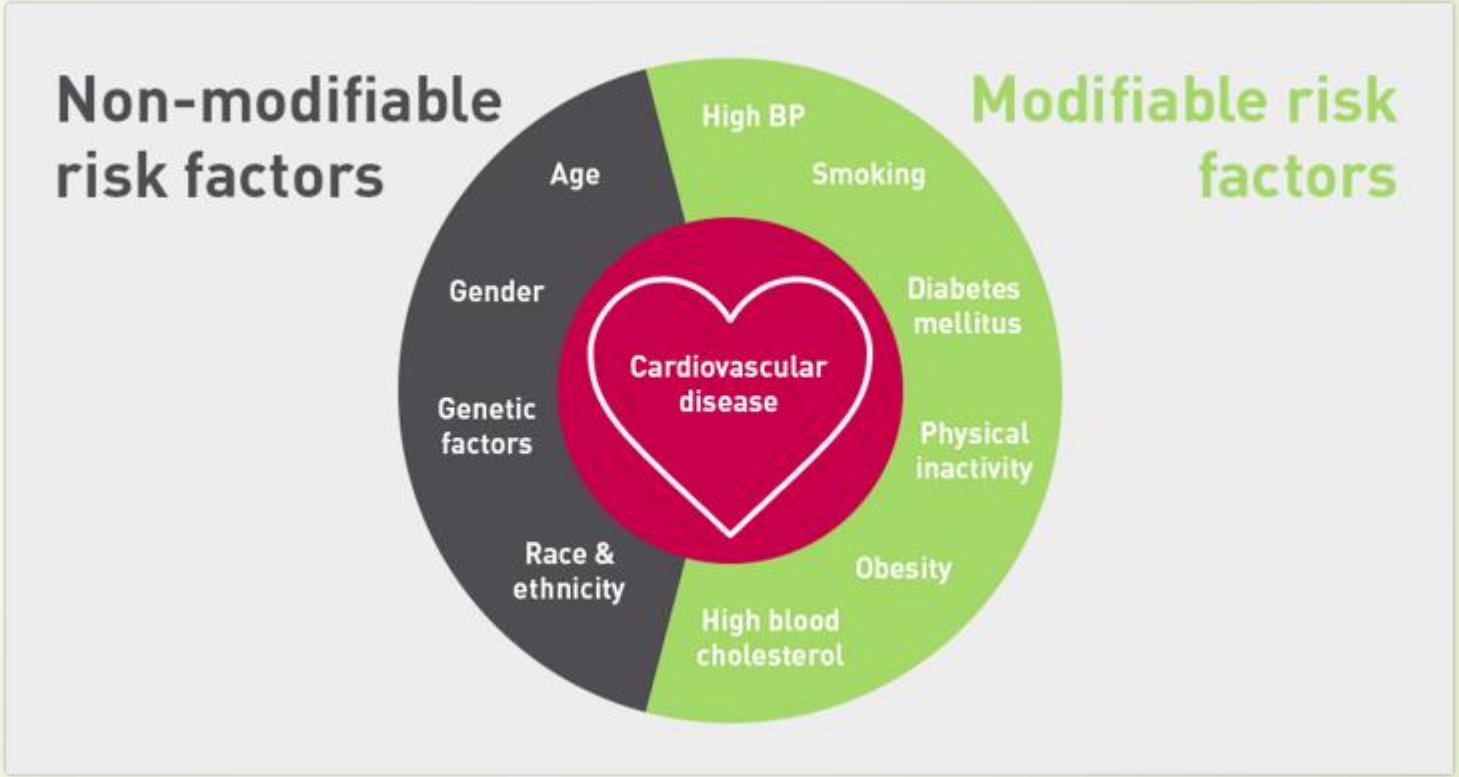
Indicator ID	Brief Description	2024/25 Upper Threshold	2024/25 Points	2025/26 Upper Threshold
DM036*	% Diabetes patients ≤79yrs (no mod/sev frailty) BP ≤140/90	78%	10	**90%**

PLAN, PRIORITISE, ROBUST RECALL, ENSURE ACCURATE CODING, OPTIMISE CLINICAL MANAGEMENT, ENGAGE PATIENTS & STAFF, COLLABORATE

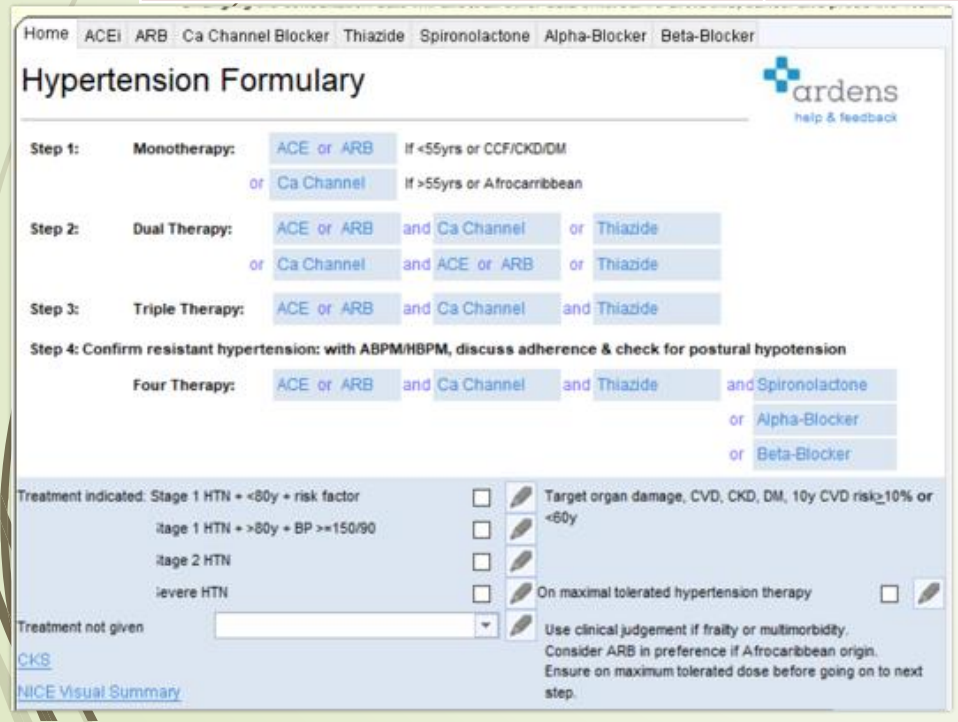
Cardio-reno-metabolic



Cardiovascular Risk



Intervention	Number of cardiovascular events prevented for every 1000 people treated over 5 years	Microvascular benefits
Lowering blood sugar by 0.9%	8	Glycaemic control is important, although BP control may be more important
Lowering cholesterol by 1mmol/L	23	
Reducing BP by 10/5	29	



- **TREAT TO TARGET BP PROACTIVELY**
- NICE NG 136
- Type 2 Diabetes
  - <140/90 (under 80 yrs)
  - <150/90 (over 80 yrs)
  - <130/80 if retinopathy

Summary of National Guidance for Lipid Management for Primary and Secondary Prevention of CVD

INITIAL CONSIDERATIONS:

- Measure non-fasting ***full lipid profile*** (total cholesterol, HDL-C, non-HDL-C, triglycerides) and HbA1c as part of an initial baseline assessment.
- Consider secondary causes of hyperlipidaemia and manage as needed.
- Ensure appropriate baseline and follow up tests as detailed on page 2. Measure BMI.
- Identify and exclude people with contraindications/drug interactions
- If non-fasting triglyceride above 4.5mmol/L see page 2.

PRIMARY PREVENTION

Consider statin therapy for adults who do not have established CVD but fall into the categories below. Use QRISK risk assessment tool where appropriate (see page 2, *'Primary Prevention Risk Assessment'*)

- Age ≤84 & QRISK ≥10% over next 10 years
- Type 2 diabetes & QRISK ≥10% over next 10 years
- Type 1 diabetes, if they have one or more of the following:
  - Over 40 years
  - Had diabetes for >10 years
  - Have established nephropathy
  - Have other CVD risk factors
- CKD eGFR < 60 mL/min/1.73m² and/or albuminuria
- Age ≥85 years if appropriate consider comorbidities, frailty & life expectancy

Identify and address all modifiable risk factors - smoking, diet, obesity, alcohol intake, physical activity, blood pressure and HbA1c.

Consider additional risk factors, if present, together with QRISK score (treated for HIV, severe mental illness, taking medicines that cause dyslipidaemia, systemic inflammatory disorder (e.g. SLE), impaired fasting glycaemia, recent change in risk factors)

PRIMARY PREVENTION

If lifestyle modification is ineffective or inappropriate offer statin treatment.

Atorvastatin 20mg daily

- Measure full lipid profile again after 3 months (non-fasting).
- High intensity statin treatment should achieve reduction of non-HDL-C > 40% from baseline. If not achieved after 3 months;
  - discuss treatment adherence, timing of dose, diet and lifestyle
  - If at higher risk (based on comorbidities, risk score or clinical judgement – see page 2 *'Additional Risk Factors'*) consider increasing the dose every 2-3 months up to a maximum dose of atorvastatin 80mg daily.
  - For how to increase in people with CKD see *'Special Patient Populations'* (page 2).

- If patients on a high-intensity statin have side effects, offer a lower dose or an alternative statin (see page 2 *'Extent of lipid lowering with available therapies'*)
- If maximum tolerated dose of statin does not achieve non-HDL-C reduction > 40% of baseline value after 3 months consider adding Ezetimibe 10mg daily (NICE TA385)

SEVERE HYPERLIPIDAEMIA

If TC>7.5mmol/L and/or LDL-C >4.9mmol/L and/or non-HDL-C >5.9mmol/L, a personal and/or family history of confirmed CHD (<60 years) and with no secondary causes: suspect familial hypercholesterolaemia (possible heterozygous FH)

Do not use QRISK risk assessment tool

DIAGNOSIS AND REFERRAL

Take fasting blood for repeat lipid profile to measure LDL-C.

Use the **Simon Broome** or **Dutch Lipid Clinic Network** (DLCN) criteria to make a **clinical diagnosis of FH**.

Refer to Lipid Clinic for further assessment if **clinical diagnosis of FH** or if TC>9.0mmol/L and/or LDL-C >6.5mmol/L and/or non-HDL-C >7.5mmol/L or Fasting triglycerides > 10mmol/L (regardless of family history) (page 2)

TREATMENT TARGETS IN FH

If clinical diagnosis of FH and/or other risk factors present follow the recommended treatment management pathway for primary or secondary prevention as for non-FH, ***BUT***

Aim to achieve at least a 50% reduction of LDL-C (or non-fasting non-HDL-C) from baseline.

Consider specialist referral for further treatment and/or consideration of PCSK9i therapy IF

- they are assessed to be at very high risk of a coronary event**
- OR therapy is not tolerated

SECONDARY PREVENTION

Offer statin therapy to adults with CVD, this includes angina, previous MI, revascularisation,stroke or TIA or symptomatic peripheral arterial disease. Do not delay statin treatment if a person has acute coronary syndrome. Take a lipid sample on admission (within 24 hours)

Identify and address all modifiable risk factors - smoking, diet, obesity, alcohol intake, physical activity, blood pressure and HbA1c.

SECONDARY PREVENTION

Do not delay statin treatment in secondary prevention while managing modifiable risk factors.

Prescibe a high intensity statin:

Atorvastatin 80mg daily

Use a lower dose of atorvastatin if there is a potential drug interaction, high risk of or experiencing adverse effects, or patient preference.

Offer atorvastatin 20mg if CKD (people with GFR< 60 mL/min/1.73m²).

- Measure full lipid profile again after 3 months (non-fasting).
- High intensity statin treatment should achieve reduction of non-HDL-C > 40% from baseline. If not achieved after 3 months
  - discuss treatment adherence, timing of dose, diet and lifestyle measures
  - If started on less than atorvastatin 80mg and the person is judged to be at higher risk (based on comorbidities, risk score or clinical judgement - see page 2 *'Additional Risk Factors'*), consider increasing to 80mg atorvastatin. For how to increase in people with CKD see *'Special Patient Populations'* (page 2).
- If non-HDL-C baseline value is not available*, consider target non-HDL-C < 2.5mmol/L (approximately equivalent to LDL-C < 1.8mmol/L) as recommended by Joint British Societies (JBS3).
  **this scenario is not covered by NICE CG181*
- If patients on a high-intensity statin have side effects, offer a lower dose or an alternative statin (see page 2 *'Extent of lipid lowering with available therapies'*)

If maximum tolerated dose of statin does not control non-HDL-C/LDL-C well enough after 3 months confirm statin adherence, then consider the following options based on shared decision making* with the patient

If recommended statin treatment is contraindicated or not tolerated - follow AAC Statin Intolerance Algorithm for advice regarding adverse effects (click here).

If statin intolerance is confirmed, consider:

- **Ezetimibe 10mg** monotherapy. Assess response after 3 months (TA385)

Ezetimibe 10mg daily (NICE TA385). Reassess after three months. If non-HDL-C remains > 2.5mmol/L; consider **injectable therapies** arrange a fasting blood test and assess eligibility

Injectable therapies**

If non-HDL-C > 2.5mmol/L; Arrange fasting blood test to measure LDL-C to assess eligibility:

- **Inclisiran** - if fasting LDL-C ≥ 2.6mmol/L despite maximum tolerated lipid

MANAGEMENT

This guidance applies to new patients and may also be taken into consideration for those already on statins at their annual review. If 40% reduction of non-HDL-C not achieved, offer high intensity statins. Discuss with people who are stable on a low- or medium-intensity statin the likely benefits and potential risk of side effects if changed to a high-intensity statin when they have a medication review and agree with the person whether a change is needed.

Ezetimibe, alirocumab, evolocumab or inclisiran can be added when patients' LDL-C levels are not lowered enough with the maximally tolerated dose of statins. Bempedoic acid with ezetimibe is an option when statins are contraindicated or not tolerated, and when ezetimibe alone does not control LDL-C well enough. Do not offer a fibrate, nicotinic acid, bile acid binder or omega-3 fatty acids alone or in combination with statin, for the prevention of CVD (Check NICE CG181 for exceptions).

PRIMARY PREVENTION RISK ASSESSMENT

QRISK3 is the current version of the QRISK calculator. www.qrisk.org/three

- Do not use this risk assessment tool for people with established CVD or those who are at high risk of developing CVD because of FH or other inherited disorders of lipid metabolism.
- Do not use a risk assessment tool to assess CVD risk in people with type 1 diabetes, or eGFR less than 60 mL/min/1.73 m^2 and/or albuminuria.
- Consider people aged ≥ 85 at increased risk of CVD because of age alone particularly people who smoke or have raised BP.

Additional Risk Factors

Note, standard CVD risk scores including QRISK may underestimate risk in people who have additional risk because of underlying medical conditions or treatments. These groups include the following groups of people;

- severe obesity (BMI>40kg/m^2) increases CVD risk
- treated for HIV
- serious mental health problems
- taking medicines that can cause dyslipidaemia such as antipsychotic medication, corticosteroids or immunosuppressant drugs
- autoimmune disorders such as SLE, and other systemic inflammatory disorders
- non-diabetic hyperglycaemia
- significant hypertriglyceridaemia (fasting triglycerides 4.5-9.9mmol/L)
- recent risk factor changes e.g. quit smoking, BP or lipid treatment

Consider socio-economic status as an additional factor contributing to CVD risk.

If QRISK < 10% over the next 10 years - Give lifestyle advice and ensure regular review of CVD risk in line with guidance.

SPECIAL PATIENT POPULATIONS

Type 1 Diabetes

While NICE recommends offering statins to patients with Type 1 diabetes as detailed in the algorithm, it also states to consider statins in all adults with type 1 diabetes.

Chronic Kidney Disease

Offer atorvastatin 20mg for the primary or secondary prevention of CVD to people with CKD (eGFR less than 60 mL/min/1.73m^2 and/or albuminuria)

Increase the dose if a greater than 40% reduction in non-HDL-C is not achieved and eGFR is 30 mL/min/1.73m^2 or more.

Agree the use of higher doses with a renal specialist if eGFR is less than 30 mL/

EXTENT OF LIPID LOWERING WITH AVAILABLE THERAPIES

Approximate reduction in LDL-C					
Statin dose mg/day	5	10	20	40	80
Fluvastatin			21%	27%	33%
Pravastatin		20%	24%	29%	
Simvastatin		27%	32%	37%	42%
Atorvastatin		37%	43%	49%	55%
Rosuvastatin	38%	43%	48%	53%	
Atorvastatin + Ezetimibe 10mg		52%	54%	57%	61%

Low intensity statins will produce an LDL-C reduction of 20-30%

Medium intensity statins will produce an LDL-C reduction of 31-40%

High intensity statins will produce an LDL-C reduction above 40%

Simvastatin 80mg is not recommended due to risk of muscle toxicity

- **Rosuvastatin** may be used as an alternative to atorvastatin if compatible with other drug therapy. Some people may need a lower starting dose (see BNF).
- Low/medium intensity statins should only be used if intolerance or drug interactions.
- **Ezetimibe** when combined with any statin is likely to give greater reduction in non-HDL-C or LDL-C than doubling the dose of the statin.
- **PCSK9i** (NICE TA393, TA394) alone or in combination with statins or ezetimibe produce an additional LDL-C reduction of approximately 50% (range 25-70%).
- **Bempedoic acid** when combined with ezetimibe (TA694) produces an additional LDL-C reduction of approximately 28% (range 22-33%) but no clinical outcome evidence is currently available.
- **Inclisiran** (TA733) alone or in combination with statins or ezetimibe produces an additional LDL-C reduction of approximately 50% (range 48-52%) but no clinical outcome evidence is currently available.

MONITORING

Baseline Measurements

In addition to full lipid profile, measure renal, thyroid and liver profiles (including albumin) and HbA1c to exclude secondary causes and co-morbidities.
Measure baseline liver transaminase (ALT or AST) before starting a statin.
Measure CK if unexplained muscle pain before starting a statin.
CK should not be measured routinely especially if a patient is asymptomatic.

	Primary Prevention		Secondary prevention	
	Lipid Profile	ALT or AST	Lipid Profile	ALT or AST
Baseline	✓	✓	✓	✓
3 months	✓	✓	✓	✓
6-9months	If <40% non-HDL-C reduction, up titration required. Repeat full lipid profile and ALT or AST within 3 months of each up-titration of statin dose or addition of ezetimibe as required			
12 months	✓	✓	✓	✓
Yearly	✓*		✓*	

Provide annual medication reviews for people taking statins to discuss effectiveness of therapy, medicines adherence, lifestyle modification and address CVD risk factors.

Consider an annual non-fasting **full lipid profile to inform the discussion around effectiveness of lipid lowering therapy and any medicines non-adherence.*

Monitoring

Repeat full lipid profile is non-fasting

TITRATION THRESHOLD / TARGETS

	NICE titration threshold	JBS3
Primary prevention	Intensify lipid lowering therapy if non-HDL-C reduction from baseline is less than 40%	non-HDL-C <2.5mmol/L (LDL-C <1.8mmol/L)
Secondary Prevention		
FH	Optimise lipid lowering therapy to achieve at least 50% reduction in LDL-C (or non-HDL-C.)	

If baseline cholesterol is unknown in the setting of secondary prevention use the use Joint British Societies' JBS3 consensus recommendation.
Non-HDL-C = TC minus HDL-C
LDL-C = non-HDL-C minus (Fasting triglycerides[a]/2.2)
[a] valid only when fasting triglycerides are less than 4.5 mmol/L

SPECIALIST SERVICES

Scope of specialist service available locally may include; lipid clinic, PCSK9i clinic (offering initiation and subsequent follow up), FH genetic diagnosis and cascade testing, lipoprotein apheresis service. NICE eligibility criteria for PCSK9i and fasting LDL-C thresholds are summarised below.

NICE TA393 Alirocumab NICE TA394 Evolocumab	Without CVD	With CVD	
		High risk [1]	Very high risk [2]
Primary non-FH or mixed dyslipidaemia	Not recommended	LDL C > 4.0 mmoL/L	LDL C > 3.5 mmoL/L
Primary heterozygous-FH	LDL C > 5.0 mmoL/L	LDL C > 3.5 mmoL/L	

[1] History of any of the following: ACS; coronary or other arterial revascularisation procedures; CHD, ischaemic stroke; PAD. [2] Recurrent CV events or CV events in more than 1 vascular bed (that is, polyvascular disease).

Bempedoic acid/ezetimibe and inclisiran are available in primary care and do not require initiation by specialist services.' PCSK9i may be available for prescribing in primary care: see local initiation pathways.

TRIGLYCERIDES

Triglyceride concentration	Action
Greater than 20mmol/L	**Refer to lipid clinic for urgent specialist review** if not a result of excess alcohol or poor glycaemic control. At risk of acute pancreatitis.
10 - 20mmol/L	Repeat the TG measurement with a fasting test (after an interval of 5 days, but within 2 weeks) and review for potential secondary causes of hyperlipidaemia. Seek specialist advice if the TG concentration remains > 10mmol/litre. At risk of acute pancreatitis
4.5 - 9.9mmol/L	If non-fasting triglycerides are greater than 4.5mmol/L, repeat with a fasting TG measurement Be aware that the CVD risk may be underestimated by risk assessment tools, optimise the management of other CVD risk factors present and seek specialist advice if non-HDL-C concentration is > 7.5 mmol/litre.

STATIN INTOLERANCE

Statin intolerance is defined as the presence of clinically significant adverse effects from statin therapy that are considered to represent an unacceptable risk to the patient or that may result in adherence to therapy being compromised.

Tips

- **Primary Prevention in Type 2 Diabetes**

  QRisk® ≥10%

  Atorvastatin 20mg if lifestyle modifications inappropriate or ineffective.

  TARGET: 40% REDUCTION IN NON-HDL (REVIEWED AT 3 MONTHS)

  Up-titrate

Optimisation of Lipid Therapy

Secondary Prevention

- Atorvastatin 80mg (20mg if eGFR <60)
- +/- Ezetimibe
- Aiming for >40% reduction in non HDL
- Inclisiran

Statin Intolerance

- Alternative statin (Rosuvastatin)
- Ezetimibe +/- Bempedoic acid

https://www.diabetesframe.org/

Diabetes Foot Screening

Foot Risk Awareness and Management Education (FRAME)

Foot Risk Awareness and Management Education (FRAME)

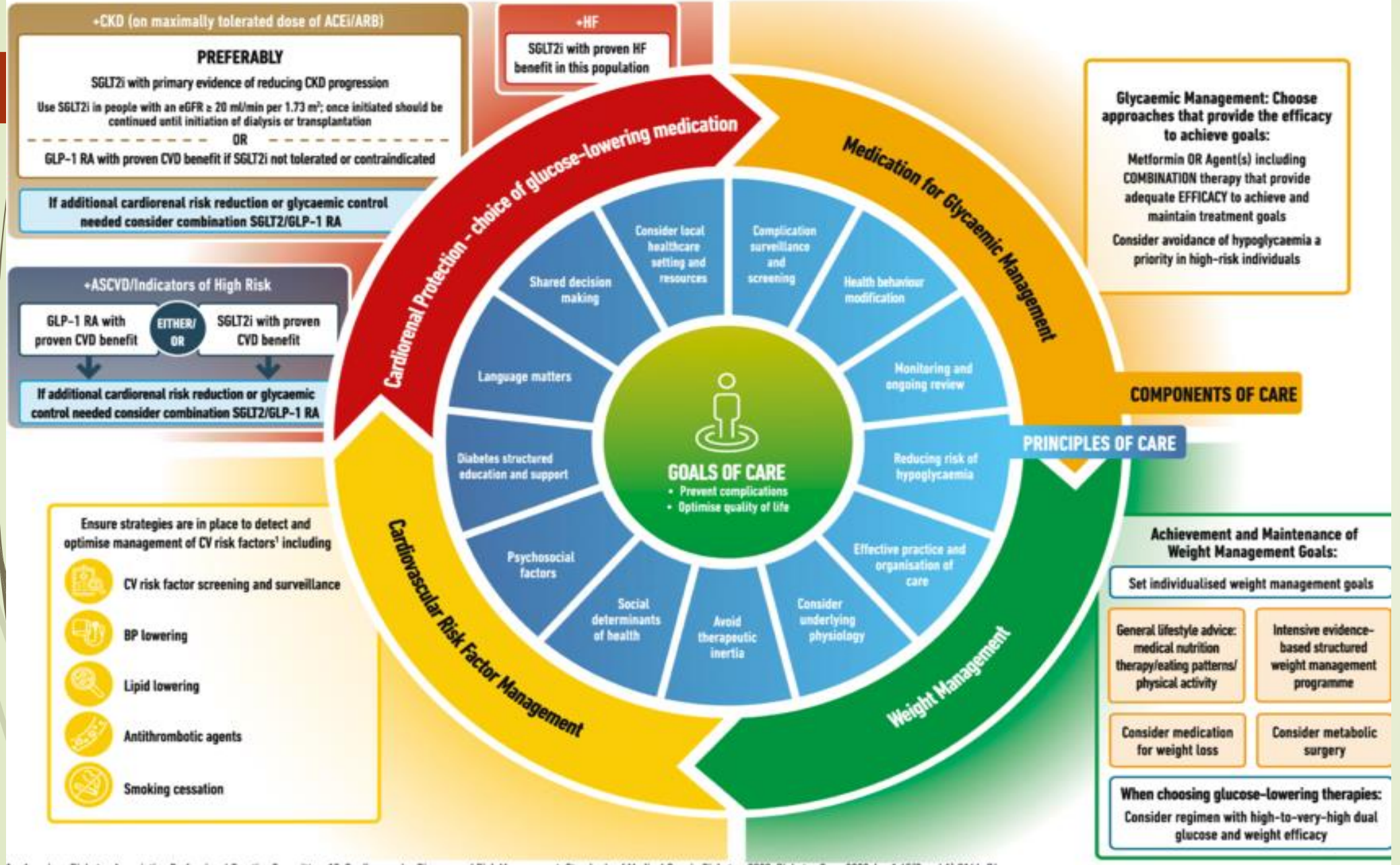
Introduction

The Foot Risk Awareness and Management Education (FRAME) project was commissioned by the Scottish Government to produce an e-learning resource which would help standardise diabetes foot screenings performed by any health care professional/worker involved in the care of an individual with diabetes.

The website aims to provide an interactive way of learning and uses animations and case scenarios. There is an assessment involving case scenarios at the end of this module which the learner may opt to undertake and which, if passed, gives a certificate of completion.

But really what is our goal in primary care for patients with type 2 diabetes?

HOLISTIC PERSON-CENTRED APPROACH TO T2DM MANAGEMENT



1 = American Diabetes Association Professional Practice Committee. 10. Cardiovascular Disease and Risk Management: Standards of Medical Care in Diabetes-2022. Diabetes Care. 2022 Jan 1;45(Suppl 1):S144–74.

ACEi, Angiotensin-Converting Enzyme Inhibitor; ARB, Angiotensin Receptor Blockers; ASCVD, Atherosclerotic Cardiovascular Disease; BP, Blood Pressure; CKD, Chronic Kidney Disease; CV, Cardiovascular; eGFR, Estimated Glomerular Filtration Rate; GLP-1 RA, Glucagon-Like Peptide-1 Receptor Agoni
Failure; SGLT2i, Sodium-Glucose Cotransporter-2 Inhibitor; T2D, Type 2 Diabetes.

3 Treatment targets 8 Key Care Processes

- **MY AIM IS TO INSTIL A *"TREAT AND REVIEW UNTIL PATIENT SPECIFIC TARGET IS REACHED"*ETHOS**

Responsibility of Diabetes Care providers	
1. HbA1c (blood test for glucose control)	**5. Urine Albumin/Creatinine Ratio** (urine test for risk of kidney disease)
2. Blood Pressure (measurement for cardiovascular risk)	**6. Foot Risk Surveillance** (examination for foot ulcer risk)
3. Serum Cholesterol (blood test for cardiovascular risk)	**7. Body Mass Index** (measurement for cardiovascular risk)
4. Serum Creatinine** (blood test for kidney function)	**8. Smoking History** (question for cardiovascular risk)

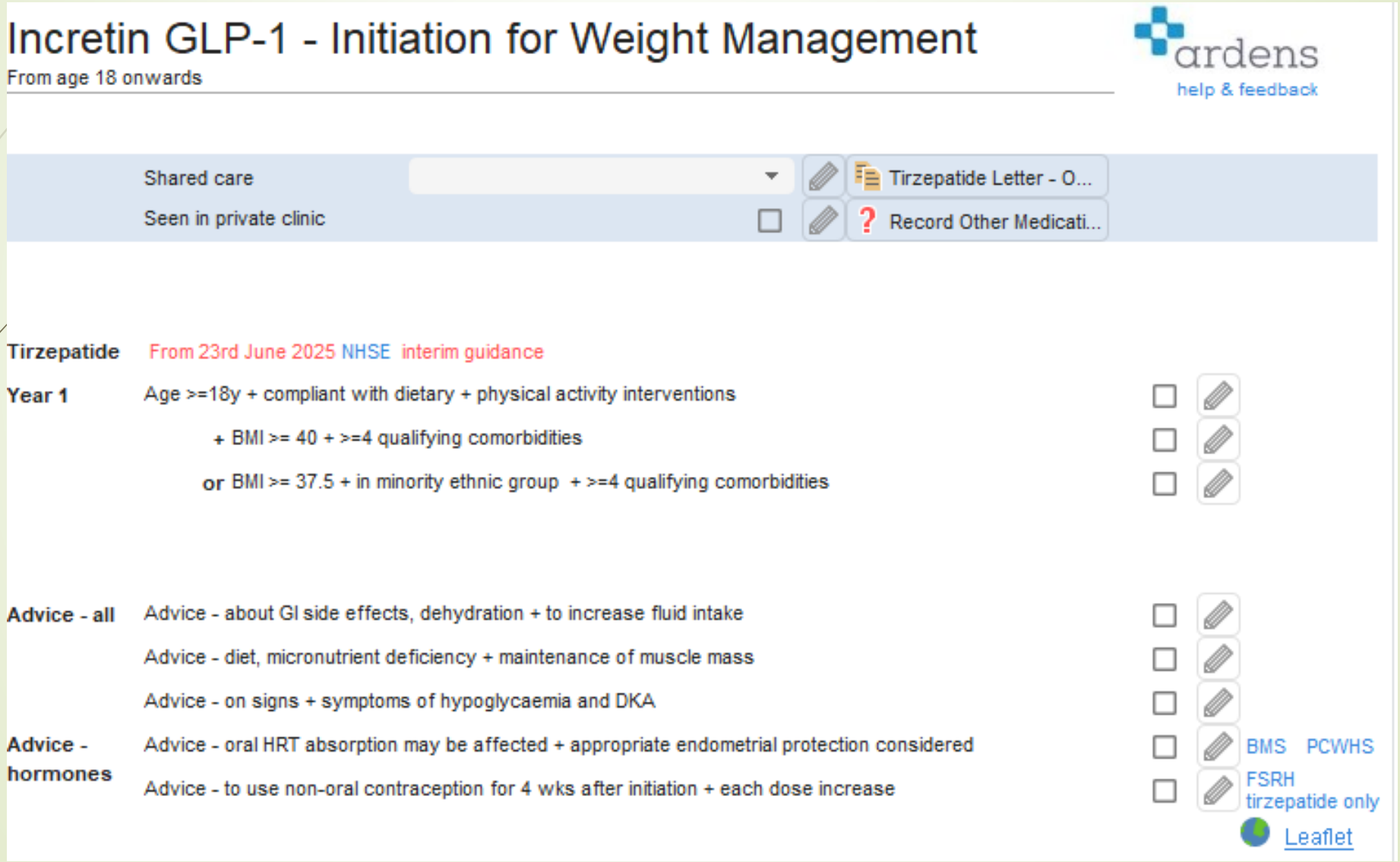
FINAL TIPS

- Identify what the patient's concern is and start consultation there
  - Targets are there but individualise to your patient
- Know where your blood ketone monitor is
- Consider SGLT2 in those even with at target HbA1c as has a cardiorenal protective element for those at risk
- Trend leaflets
  - Always give sick day rules out – by AccuRx if needed
- Review anyone with bladder cancer/heart failure – are they on pioglitazone?
- On medication reviews be aware SGLT2 may be for HF/CKD
- GLP-1 RAs are resistant to the effects of DPP4i so do NOT prescribe together
- Fight clinician inertia

FINAL TIPS 2

- Collect urinary ACR – talk to your practice staff
- Treat blood pressure actively
- Foot care can be learnt from frame
- Always double check if HbA1c is "in target" – be aware of hypoglycaemic events in frail/elderly on SUs
- Refer to NDPP
- Support patients looking to go into remission
- Join Primary Care Diabetes & Obesity Society - https://www.pcdosociety.org/membership
- **CODE CORRECTLY SO GREAT CARE CAN FOLLOW GREAT PROCESS**
- **BUT ABOVE ALL DO THE BASICS WELL!!**

Coming soon??



Incretin GLP-1 - Initiation for Weight Management

From age 18 onwards

ardens
help & feedback

Shared care
Tirzepatide Letter - O...
Seen in private clinic
Record Other Medicati...

Tirzepatide From 23rd June 2025 NHSE interim guidance

Year 1
Age >=18y + compliant with dietary + physical activity interventions
+ BMI >= 40 + >=4 qualifying comorbidities
or BMI >= 37.5 + in minority ethnic group + >=4 qualifying comorbidities

Advice - all
Advice - about GI side effects, dehydration + to increase fluid intake
Advice - diet, micronutrient deficiency + maintenance of muscle mass
Advice - on signs + symptoms of hypoglycaemia and DKA

Advice - hormones
Advice - oral HRT absorption may be affected + appropriate endometrial protection considered
Advice - to use non-oral contraception for 4 wks after initiation + each dose increase

BMS PCWHS
FSRH tirzepatide only
Leaflet

Thank you for listening
Any questions?

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