THE PPP Approach (pro active/pre natal/pre operative care)

Frimley Health and Care

Type 2 Diabetes Care 2024

Look at the patient in front of you. Which category do they fall into?

Relatively recent diagnosis, little comorbidity

Aim for Remission – should be first choice in most
In those with Diabetes < 6 years duration in 18-65 age group discuss + **refer to the Diabetes Remission Pathway**

Explain the concept of 'Good glycaemic legacy'. Cannot afford to wait. Quick up titration of medication needed to achieve good control early on. **Aim HbA1c ≤ 53mmol/mol.** If the patient has **EOT2D** (diagnosis at age <40) **aim for an HbA1c ≤48mmol/mol.**

1a. REDUCE CV RISK	STOP SMOKING AIM FOR A BP<140/90mmHg (NICE & QOF) **STATIN if QRISK3 score ≥10% or raised ACR (NICE)** **Aim reduction in non HDL Cholesterol by 40%**
1b. Glucose + cardiorenal	**Start Metformin in all** *If ASCVD/HF/CKD with ACR>30 also start an* ***SGLT-2i***
2. 3m later if HbA1c>53	*If high risk of CVD* (QRISK3 ≥ 10%) **SGLT-2i** *Not at high CV risk* add DPP4i/ TZD/ SU/ **SGLT-2i**
3. 3m later if HbA1c>53	*If ASCVD/high CV risk* consider **GLP-1** *If EOT2D + obese* consider **Tirzepatide** *Not at high CV risk* add DPP-4i/ TZD/ SU
4. 3m later if HbA1c>53	If on MF + 2 others can switch one for **GLP-1** (as per NICE NG28) **OR Tirzepatide** (as per NICE TA924) **OR** add insulin (NPH insulin or biosimilar)
Exceptions to note	**If HbA1c is ≥ 75mmol/mol at diagnosis** consider dual therapy; start 2nd drug after 2 week interval **If HbA1c ≥ 86 mmol/mol at diagnosis**, or patient symptomatic ++, consider insulin, SU or combo injectable **short term only** (**review at 4-6 weeks**)

Long duration of Diabetes with historical suboptimal control +/- significant cardiovascular disease

Think about life expectancy
Is this likely to be >10 years to be able to benefit from microvascular risk reduction?

Would encourage you to ***individualise the HbA1c*** target according to the extent of co-morbidity

Aim HbA1c <64mmol/mol + avoid hypos

Very Frail elderly, lots of comorbidity

Clinical Frailty Score (CFS) >6. Aim is for good symptom control rather than tight glucose control. **Aim HbA1C <75mmol/mol**

Accept CBGs 6-15
Really important to avoid significant hypos in this group which often go unrecognised

Consider withdrawal of sulphonylureas and short acting insulins due to hypoglycaemia risk

If a long acting insulin continues to be needed and your patient is on an NPH insulin then consider a switch to a long acting insulin analogue with less hypo risk such as Toujeo or Degludec

All women of Childbearing age

Check if using contraception at each consult and ask about their future pregnancy plans. Give Preparation for Pregnancy advice leaflet (on DXS)

If planning pregnancy, advise on need for
⇒ HbA1c <48 mmol/mol (if safe to do so)
⇒ Folic acid 5mg i.e. higher dose (**needs to be prescribed**)
⇒ 'Safe medicines' for pregnancy
⇒ Refer to pre pregnancy clinic

When referring any patient for an operation

⇒ **Highlight current HbA1c** in the referral letter to the surgeon
⇒ **Optimise control** (please make the patient aware that the operation date will be deferred in those with planned moderate or major surgical intervention unless the HbA1c is <69mmol/mol)

Prior to prescribing any medication check individual contra-indications to ensure treatment is suitable for your patient.

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Adapted from EASD-ADA 2019 consensus report + NICE NG28 + TA924

Remission	**Please refer to the Oviva T2DR program**. The DIRECT Trial has shown us that two thirds of those who lost 10 kgs or more are still in remission after 2 years. Look AHEAD, a study of 5,000 people with Type 2 Diabetes found that **diabetes remission, even if short lived, was associated with a 33% lower rate of CKD and a 40% lower rate of CVD compared to those who did not achieve remission**. **Referral eligibility criteria** – age 18-65, Diabetes for < 6 years, BMI 27 or above (BMI 25 or above if BAME origin), HbA1c 43-87mmol/mol (if on diabetic medication), 48-87mmol/mol (if not), not a current insulin user. **Link to pathway is on DXS.**
EOT2D	**Early onset Type 2 Diabetes (EOT2D)** is defined as that developing in people below the age of 40 years. More common in people from ethnic minorities and SE deprived areas. **EOT2D has a much more aggressive phenotype than older onset Type 2 Diabetes**, despite this they are less likely to receive the recommended care processes and tend to have a higher HbA1c and worse outcomes. Anticipate that **each practice will have approx. 20 such patients**. **The ask is as follows** 1. Remission is key – please refer to the DRP as above. 2. Aim for the lower Hba1c target of 48mmol/mol 3. Focus on contraception and preconception planning 4. Prioritise completion of care processes and 5. **Ensure the diagnosis is correct** especially in those with relatively low BMI or no features of insulin resistance or metabolic syndrome. **Remember to ask about family history of diabetes in detail. Consider Type 1 Diabetes** if 1 or more of : ketosis, rapid weight loss, BMI<25, personal and/or FH of AI disease. Request GAD and Tyrosine IA-2 antibodies and discuss with specialist team. **Consider MODY** if strong FH of Diabetes (multiple generations) especially if diagnosed in family members at a young age (<30). Please refer to guidance on the Exeter MODY calculator or discuss with specialist team.
Kidneys	Diabetes is the leading cause of ESRF. CKD = ACR>3 or eGFR<60. **Early detection of kidney damage using ACR is key – far earlier warning signal than a drop in eGFR**. **It is OK to do an opportunistic ACR check on the day if no early morning sample provided, if within normal range, this will suffice**. **Approach to raised ACR (after excluding a UTI as cause)** 1. maximise the ACE inhibitor or ARB dose **independent of the BP** to the maximum tolerated, 2. Add an SGLT2i 3. Consider finerenone as per NICE (TA 877) only if eGFR>25 and ACR >30. Do not start if K>5.
Statin use	**A statin induced reduction of LDL-C by 1mmol/L is associated with a 21% reduction in CV events. In primary prevention** patients with a calculated QRISK3 score ≥10% or a raised ACR qualify for a statin. NICE recommends Atorvastatin 20 mg once daily. Aim to reduce the baseline non HDL by 40%. **In secondary prevention** aim for a non HDL C of ≤2.5 or LDL C of ≤1.8 mmol/L**.** https://www.england.nhs.uk/aac/wp-content/uploads/sites/50/2020/04/lipid-management-pathway-v6.pdf **If a patient is already on a statin and their total cholesterol comes back as >5, look back at historical results and check medication adherence** **Evidence indicates the majority who report statin intolerance are able to take a statin when rechallenged**. Consider rosuvastatin (start with 5mg dose) **Use this helpful 2 page summary** https://www.england.nhs.uk/aac/wp-content/uploads/sites/50/2020/04/statin-intolerance-pathway-v2.pdf
Feet	**Strongly advise your patient to report any foot issues ASAP to the practice (new redness/warmth/deformity/ small wound as 'time is of the essence')** **Anyone with an ulcer (any size) warrants immediate referral** to community podiatry or the hospital foot protection team (pathway on DXS with numbers) **If you suspect a Charcot foot – please advise your patient to be strictly non weight bearing until seen at the hospital** Urgent referral to Wexham Park Hospital **Hot Foot Phoneline 07827843005** or email **fhft.podiatryhwph@nhs.net** Urgent referral to Frimley Park Foot Care Team **fhft.diabeticfootfph@nhs.net** (photo of lesion to help triage helpful but not essential)
New drug Tirzepatide	**Tirzepatide** is a dual GLP-1 and GIP agonist. **It works similarly to GLP-1 agents but with greater efficacy. Outperforms semaglutide, degludec and Glargine in terms of HBa1C lowering. 81-97% of patients in the SURPASS Trials achieved a HbA1c of <53mmol/mol. Superior weight reduction to semaglutide.** CVOT trial results anticipated in 2025. **Licensed** for treatment of adults with insufficiently controlled Type 2 diabetes as monotherapy when metformin is not tolerated or CI and in addition to other medicinal products for the treatment of diabetes. **NICE TA924** has approved its use in adults with Type 2 Diabetes on triple therapy metformin + 2 others with insufficient control + BMI ≥ 35 or BMI <35 and weight loss would benefit other obesity related complications (same as for GLP-1) **Weekly subcutaneous injectable** – comes in a Kwikpen – each pen contains 4 doses – can inject into abdomen/thighs/upper arms – rotate injection sites **Initiate at a dose of 2.5mg weekly and increase to 5mg after 4 weeks. Majority of the glucose lowering effect is seen at the 5mg dose.** **Based on the SURPASS trials there is likely to be substantially more weight reduction seen with the higher doses of Tirzepatide.** If needed further dose incrementation should be by 2.5mg (ie **5mg** > 7.5mg> **10mg**> 12.5mg> **15 mg** weekly) **at no less than 4 weekly intervals** to minimise GI SEs No dose adjustment required for renal or hepatic impairment. Avoid if history of pancreatitis or severe GI disease. Caution with retinopathy (*same as semaglutide*) **Women of childbearing age** – advise switching to a non oral contraceptive or add a barrier method, upon initiating Tirzepatide or after any dose change **for 4 wks** **The medication should be stopped for a minimum of 1 month before trying to get pregnant**. **Please read the full prescribing info** in https://www.lillydiabetes.co.uk/hcp/mounjaro + **updated guidance on the GLP-1 shortage** which suggests **Tirzeptide** or **oral Rybelsus** as alternatives in https://diabetesonthenet.com/wp-content/uploads/GLP-1-RA-Shortage-2024-ABCD-PCDS-FINALISED-170324.pdf