PRIMARY CARE
ISSUES & ANSWERS

CHECKLIST

The checklist below may be used as a prompt when reviewing medical records and/or during the initial consultation with the patient.

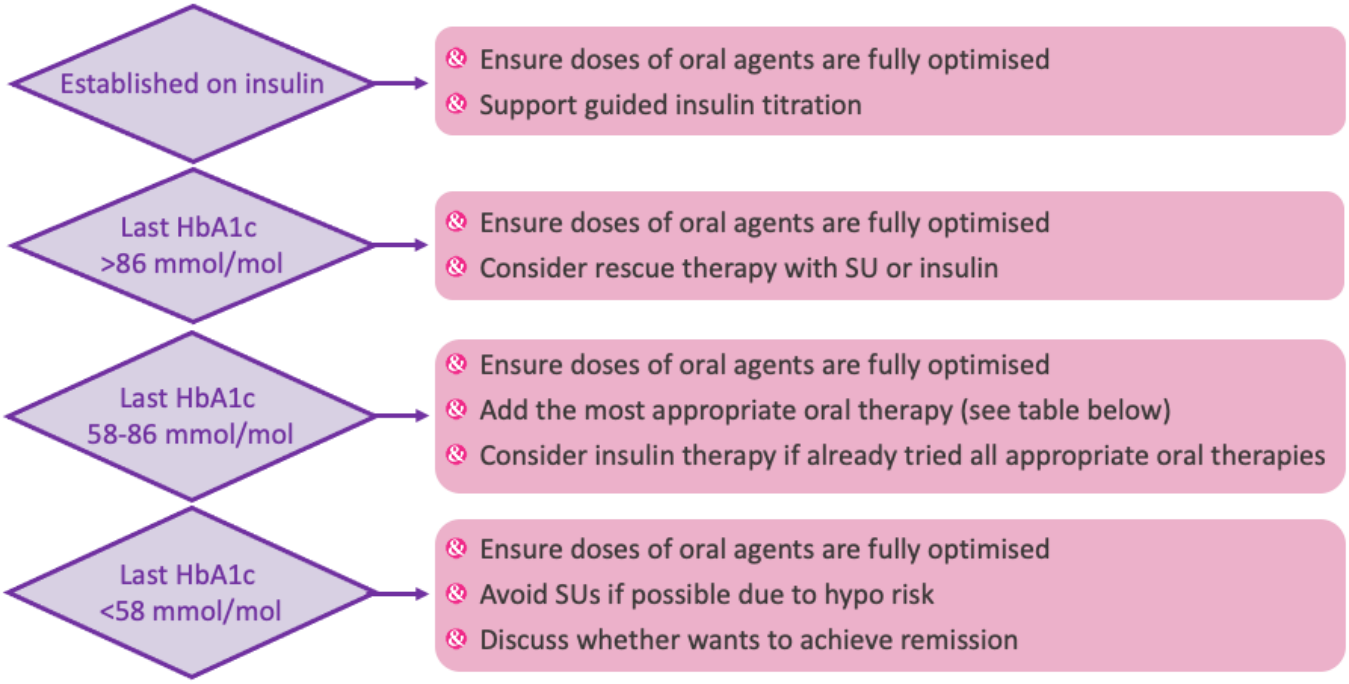
- [ ] Check date of T2D diagnosis and duration.
- [ ] Check last HbA1c - if over 6 months ago repeat (also note latest eGFR/ACR, BMI, CV risk status). If recent escalation of treatment, consider repeating if over 3 months ago.
- [ ] Decide on an appropriate HbA1c target for individual (taking account of the person's preferences and needs, duration of diabetes, co-morbidities, frailty status, life expectancy).
- [ ] Are there any signs of worsening glycaemic control (eg. increasing thirst, passing urine more frequently, tiredness) which would suggest need for immediate review/rescue therapy?
- [ ] Does individual perform self-monitoring of glucose? If so, assess results.
- [ ] Which GLP-1 RA is currently being prescribed – record start date, HbA1c reductions and weight loss over time (if an appropriate clinical response, consider adding individual to a register for re-starting GLP-1 RA therapy in the future when supply issues are resolved).
- [ ] What is person's lived experience on all current therapy? (Are they satisfied with measured outcomes: HbA1c reduction, weight loss? Have they experienced any tolerability problems?)
- [ ] Is there scope to reinforce advice about diet and lifestyle (consider local services and referral pathways to support this)?
- [ ] Review current medications – check adherence and consider if there is scope to titrate doses of existing glucose-lowering agents.
- [ ] List all previously prescribed diabetes medications - record start date and response in terms of HbA1c reduction. Determine why agents were stopped (note any adverse effects, tolerability issues, poor efficacy). Have circumstances altered? Can re-prescribing be considered?
- [ ] Consider individual clinical circumstances eg., co-morbidities, cautions/contraindications, weight and risks from polypharmacy and identify any classes of glucose-lowering medication that would be contraindicated and those that should be used with caution.
- [ ] Identify classes of glucose-lowering medication most suited to the individual taking account of the following:
  - Glucose-lowering potency required (high-moderate-low)
  - CV risk status
  - Existing heart failure
  - CKD stage/eGFR
  - BMI/weight
  - Risks associated with hypoglycaemia (eg. occupation, driving)

See "*Oral glucose-lowering therapies by class*"

The focus here is mainly on glycaemic management but this is a good opportunity to perform a holistic review of all care processes.

USEFUL INFORMATION

Reiterate lifestyle guidance and check medication adherence for all



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Type 2 diabetes remission	& Remission less likely with Type 2 diabetes >6 years and in individuals managed with insulin therapy & Requires motivation (and knowledge of local service provision and referral pathways)
Metformin	RECOMMENDED FIRST-LINE OPTION & Moderate glycaemic efficacy & Weight loss + & Low risk of hypoglycaemia & ASCVD benefit & GI side effects common ➢ Where there have been tolerability problems previously - was modified release version tried, if not worth trying this or using a lower dose. ➢ Caution in hepatic failure & alcoholism. ➢ Advise patient to temporarily stop during any acute dehydrating illness (give robust sick day guidance). ➢ Reduce dose to 500 mg bd if eGFR 30-45 and avoid if eGFR <30.

USEFUL INFORMATION

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SGLT2i	**RECOMMENDED AS FIRST-LINE OPTION (WITH OR WITHOUT METFORMIN) IN THOSE WITH ESTABLISHED CVD, HEART FAILURE AND/OR CKD** & **Moderate glycaemic efficacy (but minimal where eGFR<45)** & **Weight loss ++** & **Low risk of hypoglycaemia** & **ASCVD, HF and CKD benefit** & **Mycotic genital infections and UTIs may occur** ➢ MHRA (2019a) warns of rare reports of Fournier's gangrene; reinforce good personal hygiene and adequate hydration. MHRA (2017) warns of possible class effect of lower limb amputation (predominantly toe); avoid all SGLT2 inhibitors in those with active/past diabetic foot disease or symptomatic peripheral vascular disease. MHRA (2016) warns of euglycaemic DKA; if suspected, check ketones even if BG. ➢ Advise patient to temporarily stop during any acute dehydrating illness sick day guidance). ➢ Avoid ketogenic or starvation diet. ➢ Use with caution in very high HbA1c (>86 mmol/mol) and if insulin treated within 1 year of diagnosis.
DPP4i	& **Low/moderate glycaemic efficacy** & **Weight neutral** & **Low risk of hypoglycaemia** & **Well-tolerated** ➢ Possible increase in pancreatitis (NOTE: Same with GLP1 RA).
Pioglitazone	& **Moderate glycaemic efficacy** & **Weight gain ++** & **Low risk of hypoglycaemia** & **Possible CV benefit** & **Beneficial effect in fatty liver** & **Can cause fluid retention** ➢ Contraindicated in heart failure, caution in macular oedema. ➢ Avoid in severe hepatic impairment ➢ Increases fracture risk – caution/avoid in post-menopausal women ➢ Possible link with bladder cancer and contraindicated in uninvestigated haematuria and bladder cancer (dipstick urine before starting).

USEFUL INFORMATION

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Sulfonylurea	**RAPID EFFECT TO LOWER BLOOD GLUCOSE LEVELS - USEFUL AS RESCUE THERAPY WHERE GLUCOSE HIGH AND SYMPTOMATIC** & **High glycaemic efficacy** & **Weight gain +** & **High risk of hypoglycaemia** & **No CV benefit** & **Useful as rescue therapy for symptomatic hyperglycaemia** ➢ Efficacy dependant on sufficient residual β-cells function ➢ Self-blood glucose monitoring required for all to assist dose titration and identify hypoglycaemia. Avoid in frailty. Give driving and hypoglycaemia advice.
Insulin	**USEFUL AS RESCUE THERAPY WHERE GLUCOSE HIGH AND SYMPTOMATIC (and inadequate response to SU or where SU not appropriate)** & **High glycaemic efficacy** & **Weight gain +** & **High risk of hypoglycaemia** & **No CV benefit** ➢ Where insulin therapy is clinically indicated, initiate in line with NICE NG28 principles: https://www.nice.org.uk/guidance/ng28/chapter/recommendations - insulin-based-treatments. ➢ Specific insulin brands recommended within NICE NG28 may not have capacity for large uplift in prescribing, so base decisions on choice on ongoing insulin availability within the SPS supply tool: https://www.sps.nhs.uk/articles/prescribing-available-insulins/ **Insulin therapy should only be initiated and managed by healthcare professionals with the relevant expertise and training**

Adapted from: What next after metformin? A GPnotebook Shortcut. Diabetes & Primary Care 22: 33–4 available at: dotn767835b99d7d90d9aae5068e8362eaee.pdf (diabetesonthenet.com)

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