All patients should receive education regarding lifestyle measures: healthy diet, physical activity and weight management. +

Determine the individual’s HbA1c target – commonly ≤3 mmol/mol (7.0%) but should be appropriately individualised (refer to ADS position statement).

Effect of changes in therapy should be reviewed in 3 months.

**Review treatment:** if not at target HbA1c and/or if cardiovascular/chronic kidney disease are present:

- Check patient understanding of self-management including drug treatment
- Ensure current therapies are clinically appropriate including comorbidities/therapies impacting glycaemic control
- Review medication adherence
- Assess tolerability, adverse effects and risk of interactions.

++ Consider intensive weight management. Weight loss of ≥10% may allow a reduction or cessation of glucose lowering medication. Options include:

- Low energy or very low energy diets with meal replacements
- Pharmacotherapy
- Bariatric surgery.

Click here for the Australian Obesity Management Algorithm

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## AUSTRALIAN TYPE 2 DIABETES GLYCAEMIC MANAGEMENT ALGORITHM

### MONOTHERAPY: Metformin is the usual monotherapy unless contraindicated or not tolerated

- **Metformin**
- **SU**
- **Insulin**

Less commonly used are PBS approved: acarbose or TGA approved (but not PBS approved for monotherapy) DPP-4 inhibitor, SGLT2 inhibitor GLP-1RA, or TZD

### DUAL THERAPY: Choice of treatment – add on an oral agent or injectable therapy

Choice of dual therapy should be guided by clinical considerations (presence of, or high risk of, cardiovascular disease, heart failure, chronic kidney disease, hypoglycaemia risk, obesity), side effect profile, contraindications and cost.

- **SGLT2 inhibitor**
- **GLP-1RA**
- **DPP-4 inhibitor**
- **SU**
- **Insulin**

Less commonly used are PBS approved: acarbose or TZD

### MULTIPLE THERAPIES: Choice of treatment: include additional oral agent or GLP-1 RA or insulin

Choice of agents should be guided by clinical considerations as above. Note: combinations not approved by PBS include GLP-1RA with SGLT2i or GLP-1RA with insulin (#). Consider stopping any previous medication that has not reduced HbA1c by ≥0.5% after 3 months unless indicated for non-glycaemic benefits.

- **SGLT2 inhibitor**
- **GLP-1RA**
- **DPP-4 inhibitor**
- **SU**
- **Insulin**

Less commonly used are PBS approved: acarbose or TZD

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**To intensify treatment to meet glycaemic targets**

- If on metformin+SU+DPP-4i, consider adding SGLT2i, or switching DPP-4i to a GLP-1RA, or an SGLT2i.
- If on metformin+DPP-4i+SGLT2i consider adding SU or adding insulin.
- If on GLP-1RA consider adding basal or premixed/coformulated insulin (#).

- If on basal insulin, consider adding SGLT2i or GLP-1RA# or bolus insulin with meals, or change to premixed/coformulated insulin.
- Consider stopping medication that has not reduced HbA1c by ≥0.5% after 3 months unless indicated for non-glycaemic benefits.

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**With increasing clinical complexity consider specialist endocrinology consultation**

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For patients with high risk/established CVD, studies have shown improved all cause and CV death and non-fatal MI when used with usual care.

For patients with high risk/established heart failure (HF)/HF hospitalisation, studies have shown improved outcomes when used with usual care.

For patients with CKD as defined by albuminuria and/or eGFR >30 ml/min/1.73m², studies have shown reductions in important major renal end points, when used with usual care.

# Exenatide (Byetta) and dulaglutide (Trulicity) are the GLP-1RA approved on the PBS for use with insulin.

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**PBS** = Pharmaceutical Benefits Scheme, **HF** = heart failure, **CKD** = chronic kidney disease, **SU** = sulfonylurea, **TZD** = thiazolidinedione, **DPP-4i** = dipeptidyl peptidase-4 inhibitor, **GLP-1RA** = glucagon like peptide-1 receptor agonist, **SGLT2i** = sodium glucose co-transporter inhibitor.