Chronic Kidney Disease in Diabetes Mellitus 2 (CKD in DM2) Primary Care [Team] Clinical Pathway for Optimizing Kidney and Cardiovascular Outcomes:

For use in Stable Ambulatory Patients over 18 years of age

Adult with type 2 diabetes

Appropriate counselling/use of lifestyle therapies. See Diabetes Canada guidelines.

Change in clinical status or review of diabetes targets

Required therapy and targets
- **Metformin** – if indicated
- Ensure optimal cardiorenal protection:
  1. **ACE/ARB:** Prescribe if HTN (BP target <130/80)
  2. **Statin:** Prescribe as per guidelines
  3. Medication reconciliation and relevant de-prescribing e.g., Sulfonylureas

See Medication Review & Deprescribing section at Medication Management link above for details.

If no red flags

If red flags present

Immediate initiation of insulin therapy or transfer to Urgent Care **recommended** if evidence of Metabolic Decompensation, defined as one of more of the following:
1. Unintentional severe weight loss due to diabetes **OR**
2. Marked or symptomatic hyperglycemia **OR**
3. Diabetic Ketoacidosis/Hyperosmotic Syndrome

Consider based on history and current visit

Kidney Protection

Prioritize CKD in DM2 with ARC > 3

Note: if intolerant to any medication category, other medication categories for kidney protection may still be used

Should be used in conjunction with the CKD Pathway

Optimal kidney protection. Confirm **ACE/ARB** is prescribed to max tolerated dose
- BP target <130/80

GFR ≥ 20 (mL/min/1.73m^2)?

Yes

SGLT2is: Prescribe for cardiorenal protection
- Prescribe if ACR <3; consider if GFR <45

See SGLT2i section at Medication Management link above for details.

Safe Use: SGLT2is (Sick Day meds). See SGLT2i section at Medication Management link above for details.

No

Consult Nephrology prior to initiating SGLT2i.

See the referral guideline tab for details.

Additional Foundational Kidney Protection

Finerenone: Prescribed if GFR ≥25 and ACR >3

Avoid initiation if K^+ > 5.0
- If K^+ ≥4.8 measure electrolytes and creatinine **within 4 weeks**
- If K^+ 4.9-5.0 measure electrolytes and creatinine **more frequently** as per monograph.

See Mineralocortoid Receptor Antagonists section at the Medication Management link above for details.

Heart (CV) Protection

Cardiovascular disease?

Atherosclerotic Cardiovascular Disease (ASCVD) and Multiple risk Factor (MRF)

Optimal CV protection. Confirm **ACE/ARB** and **Statin** to max tolerated dose. See Diabetes Canada CPG

Heart Failure predominates

Ensure optimal guideline directed medical therapy for HF in addition to prescribing SGLT2i.

See Guidelines link above for HF Guidelines

ASCVD/MRK predominates

History of stroke, TIA, heart disease, myocardial infarction, peripheral artery disease; evidence of atherosclerosis; angina

Consider prescribing in combination
1. **SGLT2i**
2. **GLP-1**

GLP-1RA may be preferred where blood sugar lowering/weight loss is priority

Review appropriate **GLP-1** for A1C Optimization. See GLP-1 section at Medication Management link above for details.

DO NOT use GPL-1 and DPP-4i together due to redundant mechanism of action

Heart Failure Pathway

Reassess patient regularly as per guidelines

Prescribe appropriate **SGLT2is** for cardiorenal organ protection or A1C optimization.

See SGLT2 section at Medication Management link above for details.

A1C Optimization

Target: A1C ≤ 7.0% or individual target

Insulin may be indicated on patients who remain above target despite optimal therapy or in those who have metabolic complications of hyperglycemia. See Diabetes Canada CPG

Consider most appropriate care stream based on patient goal(s) (listed below)

See A1C optimization section at Medication Management link above for details on the following.

Reduce weight

Minimize hypoglycemia risk

Reduce blood glucose

Multiple possible agents **GLP1-RA SGLT2i, DPP4i**

See Diabetes Canada Guidelines.

Consider other agents. See Diabetes Canada User's Guide

Consider Endocrinology referral. See the referral guideline tab for details.

Safe use: SGLT2is (Sick Day Meds)

See Sick Day Planning link above for details.

Continue monitoring patient per guidelines

Medication reconciliation and relevant de-prescribing

Consider using specialist tele-advice or continue on pathway depending on clinical situation or concern. See referral guideline tab for details.