Steps	Process	Person specific issues to address

1. Aims
What matters to the individual about their condition(s)?
	Review diagnoses and consider:
	• Therapeutic objectives of drug therapy
	• Management of existing health problems
	• Prevention of future health issues, including lifestyle advice
		• Patient is concerned about his kidney condition and diabetes control.
		• Treatment objectives:
		  ○ Stabilise CKD
		  ○ Improve diabetes control
		• Improve blood pressure

2. Need Identify essential drug therapy	**Identify essential drugs (not to be stopped without specialist advice*)** • Drugs that have essential replacement functions • Drugs to prevent rapid symptomatic decline **from healthcare professional with specialist interest*	• Although not considered essential, there is a valid indication for all medication
3. Does the patient take unnecessary drug therapy?	**Identify and review the continued need for drugs** • what is medication for? • with temporary indications • with higher than usual maintenance doses • with limited benefit/evidence for use • with limited benefit in the person under review (see Drug efficacy & applicability (NNT) table)	• None considered unnecessary

4. Effectiveness
Are therapeutic objectives being achieved?
	Identify the need for adding/intensifying drug therapy to achieve therapeutic objectives
	• to achieve symptom control
	• to achieve biochemical/clinical targets
	• to prevent disease progression/exacerbation
	• is there a more appropriate medication to achieve goals
		• To achieve symptom control
		  ○ CKD management: initiate SGLT-2i* to delay the progression of CKD
		• BP control: BP slightly above target
		  ○ Already on ramipril 10mg daily
		  ○ Check BP after initiation of SGLT-2i
		• HbA1c is above target and BMI is 32
		  ○ Check adherence
		  ○ Add in 3rd line hypoglycaemic agent (GLP-1RA). NB: SGLT-2i don't exert their glucose-lowering effects in eGFR<45ml/min

5. Safety
Does the individual have or is at risk of ADR/ side effects?
 	
Does the patient know what to do if they're ill?
	Identify individual safety risks by checking for
	• appropriate individual targets?
	• drug-disease interactions
	• drug-drug interactions (see ADR table)
	• monitoring mechanisms for high-risk drugs
	• risk of accidental overdosing
	Identify adverse drug effects by checking for
	• specific symptoms/laboratory markers
	• cumulative adverse drug effects (see ADR table)
	• drugs used to treat side effects caused by other drugs
	Medication Sick Day guidance
		• SGLT-2i:
		  ○ DKA symptoms*; check awareness
		  ○ Raise awareness of thrush/UTI
		• GLP-1RA: raise awareness of GI ADRs and symptoms of pancreatitis
		• To monitor blood glucose and if below <4.0mmol/l, to stop gliclazide
		
		Sick Day guidance
		• Risk of acute kidney injury (ramipril, metformin and CKD)

6. Sustainability Is drug therapy cost-effective and environmentally sustainable?	**Identify unnecessarily costly drug therapy by** • Considering more cost-effective alternatives, safety, convenience **Consider the environmental impact of** • Inhaler use • Single use plastics • Medicines waste • Water pollution	• None - prescribing in keeping with current formulary recommendations • Patient advised to dispose of medicines through community pharmacy • Advised patient to only order what is needed, do not stockpile medicines

7. Patient centeredness
Is the patient willing and able to take drug therapy as intended?
	Does the patient understand the outcomes of the review?
	• Consider Teach back
	Ensure drug therapy changes are tailored to individual preferences. Consider
	• Is the medication in a form the patient can take?
	• Is the dosing schedule convenient?
	• What assistance is needed?
	• Are they able to take medicines as intended?
	Agree and communicate plan
	• Discuss and agree with the individual/carer/welfare proxy therapeutic objectives and treatment priorities
	• Include lifestyle and holistic management goals
	• Inform relevant health and social care providers of changes in treatments across the transitions of care
		• Delay progression of CKD:
		  ○ Discuss that the addition of an SGLT-2i* will delay CKD progression and may have beneficial effect on BP control
		  ○ eGFR to be monitored at least 6 monthly
		  ○ Follow up patient 1-2 weeks post SGLT-2i initiation to check adherence, ADRs and BP
		• BP control:
		  ○ Discuss if BP still above target after initiation of SGLT-2i, then additional antihypertensive treatment will be added
		• Diabetes management:
		  ○ Once patient is stabilised on the SGLT-2i (1-2 weeks post initiation), initiate GLP-1RA
		  ○ Check patient understands how to inject GLP-1RA pen correctly and dosing frequency
		  ○ Follow up patient post initiation at week 1 months 3 and 6. And then every 3-6 months thereafter
		• Non medication intervention: refer patient to a dietician. With patient's permission, wife is to attend also

Key concepts in this case

Prescribing for people with co-morbidities: CKD

- management of CKD in type 2 diabetes
- tight blood pressure control
- tight glycaemic control