Bedfordshire, Luton and Milton Keynes Health and Care Partnership

NHS

BEDFORDSHIRE, LUTON AND MILTON KEYNES AREA PRESCRIBING COMMITTEE (APC)

CHRONIC KIDNEY DISEASE (CKD) MANAGEMENT

Ratified by BLMK APC: September 2025
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Version: 1.2

The following organisations contribute to and participate in the BLMK APC – Bedfordshire Luton and Milton Keynes Integrated Care Board; Bedfordshire Hospitals NHS Foundation Trust; Cambridgeshire Community Services NHS Trust; Central and North-West London NHS Foundation Trust; East London NHS Foundation Trust; Milton Keynes University Hospital NHS

Chronic Kidney Disease Management in Adults

Optimisation of cardiovascular risk factors

Lifestyle advice
Weight loss, exercise, smoking cessation, diet, etc

Optimise blood pressure
Use ARB titrated to maximum tolerated dose. Targets are:
<130/80 mmHg if uACR >70 mg/mmol
<140/90 mmHg in everyone else

Optimise lipids
Offer atorvastatin 20mg unless contra-indicated. Increase dose if >40% NHDL reduction not achieved

Optimise glycaemia
Discuss and agree individualised HbA1c target with patients as per NICE guidance

CKD **without** Type 2 Diabetes

Check urine ACR

uACR < 3 mg/mmol

Offer SGLT2-i

Offer SGLT2i (dapagliflozin), unless contraindicated, if eGFR 20-45

Inform of sick day rules (stop if prolonged fasting, surgery, illness, or dehydration)

uACR persistently ≥ 3 mg/mmol

Offer ARB followed by SGLT2i

Offer ARB (or ACE-i), unless contraindicated, even if no hypertension. ARB is preferred due to simple titration.

CHECK RENAL FUNCTION 1-2 WEEKS LATER & THEN

Offer SGLT2i (dapagliflozin), unless contraindicated, if:
- eGFR 20-45 (irrespective of ACR) **or**
- eGFR 45-90 with uACR ≥ 22.6 mg/mmol

Inform of sick day rules for SGLT2i (stop during prolonged fasting, surgery, illness or dehydration)

(Note that ARB dose should be uptitrated to max tolerated but this can happen after SGLT2i initiation)

CKD **with** Type 2 Diabetes

Check urine ACR

uACR < 3 mg/mmol

Offer SGLT2-i

Offer SGLT2i (dapagliflozin), unless contraindicated, if eGFR ≥ 15

Caution about risk of hypos if on SU / insulin

Inform of sick day rules (stop if prolonged fasting, surgery, illness, or dehydration)

uACR persistently ≥ 3 mg/mmol

Offer ARB followed by SGLT2i

Offer ARB (or ACE-i), unless contraindicated, even if no hypertension. ARB is preferred due to simple titration.

CHECK RENAL FUNCTION 1-2 WEEKS LATER & THEN

Offer SGLT2i (dapagliflozin), unless contraindicated, if eGFR ≥ 15 (regardless of ACR)

Caution about risk of hypos if on SU / insulin

Inform of sick day rules for SGLT2i (stop during prolonged fasting, surgery, illness or dehydration)

(Note that ARB dose should be uptitrated to max tolerated but this can happen after SGLT2i initiation)

Serum potassium (mmol/L)	Current finerenone dose	
	10mg OD	20mg OD
< 4.8	Increase to 20mg OD	Maintain 20mg OD
4.8 - 5.5	Maintain 10mg OD	Maintain 20mg OD
> 5.5	Withhold finerenone. Consider restart when <5 mmol/L	Withhold finerenone. Consider restart when <5 mmol/L

Offer finerenone

If eGFR is 25-59, start at 10mg OD. If eGFR ≥ 60, start at 20mg OD.
Do not initiate if serum potassium > 5 mmol/L.
Recheck potassium 4 weeks after initiation and after any dose change – dose adjustments to be guided by Table on the left. Thereafter monitor 3-4 monthly.

Discuss patients with Type 1 diabetes, polycystic kidney disease or on renal immunological therapy with relevant specialist before SGLT2i initiation.

This pathway is a guide only and should not override clinical judgement. Responsibility for checking suitability of treatments rests with the prescriber
Adapted from East of England CKD Pathway. Approved: September 2025 Review: September 2026 Version: 1.2

Notes and References

1. General Principles & Diagnosis

- Chronic Kidney Disease (CKD) is defined as abnormalities of kidney structure or function, present for >3 months.
- This is primarily identified by a persistently low eGFR (<60 ml/min/1.73m²) or the presence of structural kidney damage.
- Urine Albumin-to-Creatinine Ratio (uACR) is the recommended test for detecting and quantifying proteinuria and is key to risk stratification. A confirmed, persistent uACR >3 mg/mmol is clinically significant.

Reference: NICE Guideline [NG203] *Chronic kidney disease: assessment and management* (2021).

2. ACE Inhibitor (ACEi) / ARB Initiation

- **NICE NG203** uses cautious wording for people without diabetes with uACR 3-30 mg/mmol ("consider" therapy) but strongly recommends it for all other groups with uACR >30 mg/mmol ("offer" therapy).
- The **UK Kidney Association (UKKA)**, by endorsing the global **KDIGO** guidelines, supports offering an ACEi/ARB to **all** patients with uACR ≥ 3 mg/mmol. This guideline follows the stronger specialist recommendation to ensure early intervention.
- Start ARB (or ACE-i) and titrate to maximum tolerated licensed dose (NICE NG203) within **one month**

Reference: NICE NG203 (Recommendations 1.6.5-1.6.7); KDIGO 2024 Clinical Practice CKD Guidelines (Recommendation 3.6.2)

3. SGLT2 Inhibitor Initiation

The criteria for initiation in non-diabetics are based on NICE Technology Appraisals which identify the groups with the most robust evidence for benefit:
- **eGFR 20-45 ml/min/1.73m²:** The risk associated with a low eGFR is high enough to warrant an SGLT2i regardless of albuminuria level.
- **eGFR 45-90 ml/min/1.73m² and uACR >22.6 mg/mmol:** This identifies a group with lower eGFR but high-risk albuminuria.

The criterion for initiation in Type 2 diabetes is based on the joint **ABCD-UKKA** guidelines (2024).

Reference: NICE TA1075 (Dapagliflozin); NICE TA942 (Empagliflozin), *Joint Association of British Clinical Diabetologists and UKKA Guidelines*.

4. Finerenone Initiation

Finerenone is a non-steroidal mineralocorticoid receptor antagonist (MRA) that provides additional cardiorenal benefit (in addition to RAS blockade and SGLT2i) in type 2 diabetes

Reference: NICE TA877 *Finerenone for treating chronic kidney disease in type 2 diabetes* (2023).

5. Practical Considerations for General Practice

- Sick Day Rules: Advise patients to temporarily stop ACEi/ARBs and SGLT2 inhibitors during acute dehydrating illnesses
- Once initiated, unless otherwise contraindicated or the patient is intolerant, SGLT2i therapy may be continued until the patient reaches end stage kidney disease

Referral of Adults to Nephrologists (NICE NG203):	Refer children and young people with CKD for specialist assessment if they have any of the following (NICE NG 203):
• 5-year risk of needing renal replacement therapy of greater than 5% (measured using the 4-variable Kidney Failure Risk Equation https://kidneyfailurerisk.co.uk/) • ACR >70mg/mmol or more, unless known to be caused by diabetes and already appropriately treated • ACR >30mg/mmol with haematuria • a sustained decrease in eGFR of 25% or more and a change in eGFR category within 12 months • a sustained decrease in eGFR of 15 ml/min per 1.73 m² or more per year • hypertension that remains poorly controlled (above the person's individual target) despite the use of at least 4 antihypertensive medicines at therapeutic doses (see also NICE's guideline on hypertension in adults) • known or suspected rare or genetic causes of CKD suspected renal artery stenosis	• an ACR of 3 mg/mmol or more, confirmed on a repeat early morning urine sample • haematuria • any decrease in eGFR • hypertension • known or suspected rare or genetic causes of CKD • suspected renal artery stenosis • renal outflow obstruction.

Glossary

ACEi	**Angiotensin-converting enzyme inhibitor**
ADPKD	**Autosomal dominant polycystic kidney disease**
ARB	**Angiotensin receptor blocker**
BP	**Blood Pressure**
CKD	**Chronic Kidney Disease**
DM	**Diabetes Mellitus**
eGFR	**Estimated glomerular filtration rate**
NHDL-C	**Non- high-density lipoprotein cholesterol**
RAS/RAAS	**Renin–angiotensin system/Renin–angiotensin–aldosterone system blockade**
SGLT2i	**Sodium/glucose co-transporter-2 inhibitors**
SU	**Sulfonylurea**
uACR	**Urine albumin-creatinine ratio**

APPENDIX

CKD and Type 2 Diabetes

3 Key actions that can be completed within 3 months to save lives (3 in 3)- *adapted from the LKN CKD Optimisation Pathway*

In adults with Type 2 diabetes and CKD (eGFR 20–90ml/min per 1.73m²)	
Action 1	**Month 1 (Visit 1) - RAS/RAAS blockade** ➢ Ensure patient is on high intensity statin (Atorvastatin 20mg) unless contraindicated. • Start RAS/RAAS blockade - ARB (Losartan 50mg) or ACEI (Ramipril 2.5mg) once daily unless contraindicated and titrate to maximum tolerated licensed dose within one month to achieve appropriate BP – refer to pathway. Other BP agents may need to be reduced to optimise ARB/ACEI dosing. *(In people with significant frailty, consider individualised BP targets as appropriate)* - refer to Hypertension Pathway – ARB preferred due to simple titration. • Recheck creatinine and potassium within 2 weeks of initiation; eGFR reduction is expected with ARB or ACEI therapy but this can continue unless ≥30% decrease or potassium >5mmol/L. (*Stop any nephrotoxic medications: Advise against use of NSAIDs and discuss alternatives).* • Optimise glycaemic control as per NICE guidelines (NG28).
Action 2	**Month 2 (Visit 2)** • Initiate SGLT2-inhibitor according to NICE recommendations - see CKD pathway for choice. • Consider/counsel on risks of diabetic ketoacidosis (which may be euglycaemic), sick day rules, risk of UTI/fungal infections and Fournier's Gangrene. Consider adjusting sulfonylureas/insulin where eGFR > 45ml/min per 1.73 m² and HbA1c < 58mmol/mol to mitigate risk of hypoglycaemia.
Action 3	**Month 3 (Visit 3)** • If BP remains above target initiate 2nd line agent (as per BLMK Hypertension Guidelines) • For Type 2 Diabetes and CKD, consider Finerenone as an add on therapy in patients with eGFR 25-60ml/min per 1.73 m², uACR >3mg/mmol and potassium <5mmol/L - refer to CKD pathway.

CKD without Type 2 diabetes

3 Key actions that can be completed within 3 months to save lives (3 in 3)- *adapted from the LKN CKD Optimisation Pathway*
Adults without Type 2 diabetes, with CKD (excluding polycystic kidney disease or on immunological therapy for renal disease, and renal transplant patients)

In adults without Type 2 diabetes, with CKD (eGFR 20–45ml/min per 1.73m² irrespective of presence of albuminuria or eGFR 45-90ml/min per 1.73m² and uACR >22.6mg/mmol)	
Action 1	**Month 1 (Visit 1) - RAS/RAAS blockade** ➢ Ensure patient is on high intensity statin (Atorvastatin20mg) unless contraindicated. • Start RAS/RAAS blockade - ARB (Losartan 50mg) or ACEI (Ramipril 2.5mg) once daily if indicated (uACR >70mg/mmol or >30mg/mmol if hypertensive) and not contraindicated, titrate to maximum tolerated licensed dose to achieve appropriate BP within one month – refer to pathway. ARB preferred due to simple titration. • Other BP agents may need to be reduced to optimise ARB/ACEI dosing *(In people with significant frailty, consider individualised BP targets as appropriate)* – refer to Hypertension Pathway • Recheck creatinine and potassium within 2 weeks of initiation; eGFR reduction is expected with ARB or ACEI therapy but this can continue unless ≥30% decrease or potassium >5mmol/L (*Stop any nephrotoxic medications: Advise against use of NSAIDs and discuss alternatives).*
Action 2	**Month 2 (Visit 2)** • Initiate SGLT2-inhibitor according to NICE recommendations - see CKD pathway for choice. • Counsel patients on sick day rules, risk of UTI/fungal infection and Fournier's Gangrene.
Action 3	**Month 3 (Visit 3)** • If BP remains above target (<140/90mmHg unless uACR >70mg/mol, then <130/80mmHg) initiate 2nd line agent (as per BLMK Hypertension Guidelines).

At Each Review

- **Inform patient of their eGFR, uACR and BP. Assess adherence with medications and discuss any reasons for non-adherence.**
- **Reiterate the meaning of each marker. Give detailed advice on lifestyle/diet.**
- **Discuss progress with each target.**

Acknowledgments

- **Key actions contained in the appendix have been adapted with kind permission from The London Kidney Network Optimisation Pathway**

References

- NICE NG203 Chronic kidney disease: assessment and management Accessed 05/09/2025
- NICE Technology appraisal guidance (TA1075): Dapagliflozin for treating chronic kidney disease. Accessed 05/09/2025
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- NICE Technology appraisal guidance (TA 877): Finerenone for treating chronic kidney disease in type 2 diabetes . Accessed 05/09/2025
- **UK Kidney Association's (UKKA) Guide to management of CKD** The UK eCKD Guide | UK Kidney Association**.** Accessed 05/09/2025
- KDIGO 2024 Clinical Practice Guideline for the Evaluation and Management of Chronic Kidney Disease. Accessed 05/09/2025
- CKD in Primary Care - LKN CKD Early Identification and Optimisation Pathways v1 22.08.22. Accessed 05/08/2025