

Michigan Quality Improvement Consortium Clinical Practice Guideline Update Alert

Guideline: Diagnosis and Management of Adults with Chronic Kidney Disease

Released: November 2018

This alert provides a summary of only the recommendations which were updated. Refer to the complete guideline for all recommendations and level of evidence.

Updated recommendations include:

All adults at increased risk for CKD

Screening

For patients at increased risk for CKD (e.g., diabetes mellitus, hypertension, family history of kidney disease, older age, obesity, metabolic syndrome, history of acute kidney injury) assess for permanent markers of kidney damage:

 Measure blood pressure at least two times/year. Creatinine (for eGFR), electrolytes, BUN, urinalysis, and urine dipstick for albumin, annually.

Testing for diagnosis and staging

Assess for markers of kidney damage:

- Spot urine for albumin-to-creatinine ratio (ACR) to detect macro- or microalbuminuria.
- Serum creatinine for estimated glomerular filtration rate (eGFR) to trend over a 3-month period (if < 60 ml/min/1.73m², and no prior eGFR, repeat within 90 days to establish trend). If eGFR < 60 ml/min/1.73m², obtain renal ultrasound.
- Fasting lipid profile, CBC, glucose; review prior lab results.

Risk Factor Management and Patient Education

At each routine health exam:

 Optimize management of comorbid conditions (e.g., diabetes mellitus [A1C], hypertension [≤ 130/80, if tolerated], urinary tract obstruction, cardiovascular disease).

Adults with CKD

Clinical plan based on CKD stage and albuminuria

Stage 1 (GFR ≥ 90): Monitor eGFR and microalbuminuria at least annually based on risk, smoking cessation, consider ACE and/or ARB therapy. Nephrology referral if microalbuminuria – 300 mg/g creatinine on spot ACR ratio (30 mg/dl on dipstick).

Stage 2 (GFR 60-89): Nephrology referral if eGFR decline > 5 mL/min/yr, or if macroalbuminuria. **Stage 3a (GFR 45-59):** Nephrology referral if anemic or abnormal PTH, VitD, Ca, or phosphorus. Avoid contrast, if possible. Avoid NSAIDs. Low-dose ASA allowed.

Stage 3b (GFR 30-44): Nephrology referral.

Stage 4 (GFR 15-29): Nephrology co-management; consider case management if available. CKD education and discussion of choices and options, dialysis access, advance care planning.

Stage 5 (GFR < 15): Renal replacement therapy when needed.