March 13, 2014

Memorandum

To: Family Physicians, General Internists, Nephrologists

From: Grant Greenberg MD, MA, MHSA, Guidelines Clinical Lead
       Van Harrison, PhD, Guidelines Process Lead

Subject: UMHS Clinical Care Guideline: Management of Chronic Kidney Disease [2014 new]

Key Aspects of Care

Background
- Chronic kidney disease (CKD) is under-recognized and under-treated
- Primary care physicians play a key role in CKD diagnosis and management:
  - recognizing the diagnosis of CKD
  - controlling blood pressure
  - managing cardiovascular risk factors
  - educating patients
  - avoiding nephrotoxic agents and common causes of acute kidney injury (AKI)

Screening and Diagnosis
- Consider screening for CKD in patients with increased risk for CKD, e.g., those with diabetes, with hypertension, and age > 55 years
- For CKD diagnosis, staging, and follow-up, the following lab tests are needed:
  - estimated glomerular filtrations rate (eGFR)
  - assessment for the presence or absence of albuminuria

Treatment
- Primary treatment to prevent progression to ESRD is blockade of the renin angiotensin aldosterone (RAA) system with either an angiotensin converting enzyme inhibitor (ACEi) or angiotensin receptor blocker (ARB)
- Blood pressure control:
  - for CKD patients without albuminuria, usual blood pressure control (BP <140/90) reduces disease progression and cardiovascular mortality
  - for CKD patients with albuminuria, tighter blood pressure control (BP <130/80) may be beneficial
- Manage comorbid conditions like diabetes and dyslipidemia – cardiovascular disease remains the leading cause of death among patients with CKD
- Statins are recommended for all patients age > 50 with CKD or CKD patients age 18-49 with elevated risk for CAD (> 10% predicted 10 year incidence for cardiovascular events)

Monitoring and Follow Up
- Timing and frequency of CKD monitoring depends on disease severity and risk for progression; e.g., for those with stage G1 disease, eGFR and urine albumin may be checked annually, while patients with stage G4 disease may require monitoring every 3 months or more
- Consider referral to a nephrologist for patients:
  - with CKD stages G4 or G5 for co-management and preparation for renal replacement therapy
  - at earlier stages for assistance with diagnosis of underlying cause and/or treatment of common complications of CKD

Patient education material.

Handouts associated with this guideline can be located at
http://sitemaker.umich.edu/umhs.patiented/clinical_care_guidelines_handouts and
http://www.uofmhealth.org/kidney