AN IMPROVED WAY TO SCREEN FOR CHRONIC KIDNEY DISEASE

• About 2 million people in the USA are diagnosed with chronic kidney disease utilizing creatinine to calculate the estimated glomerular filtration rate (eGFR), but don’t have chronic kidney disease.

• About 10 million people who actually have CKD are missed by creatinine

  -- Michael G. Shlipak, MD, MPH, chief, Division of General Internal Medicine, San Francisco VA Medical Center
  Cap Today Sept 2012

CHRONIC KIDNEY DISEASE (CKD) SCREENING

• Gender, Ethnicity, Muscle Mass, Diet and Drugs that affect tubular secretions

• Serum Creatinine remains in the normal range until 50% of renal function is lost

  “One approach, which I think is a conservative approach, is to say in the creatinine range of around 60 where there’s some uncertainty and we really want to know the answer and avoid false-positives, the addition of cystatin C as a confirmatory test would help us get the right answer.”

  -- “Estimating Glomerular Filtration Rate from Serum Creatinine and Cystatin C”
  Lesley A. Inker, M.D et al.
  The New England Journal of Medicine

CYSTATIN C IMPROVES SCREENING FOR CKD

“Cystatin C works as a check because the cystatin C-based equations are not strongly affected by age, sex, or race. And race, in particular, is a problem, because many computer systems, such as ours, don’t include race in patient information. If you use cystatin C, you don’t seem to need to include race in the eGFR calculation.”

  -- John H. Eckfeldt, MD, PhD, vice chair for clinical affairs in the Department of Laboratory Medicine and Pathology, University of Minnesota Medical Center.
  Cap Today Sept 2012

So in populations at pretty high risk for CKD, I think they should be screened with cystatin C so we know we’re not missing anything.

  -- Michael G. Shlipak, MD, MPH, chief, Division of General Internal Medicine, San Francisco VA Medical Center
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