

Editor-in-Chief Comment

Chronic Kidney Disease – How Many Have It?

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To the great credit of a generation of both basic and clinical investigators in nephrology, considerable progress has been made in the past two decades in slowing the progression of chronic kidney disease (CKD) by identifying those factors that cause progression and treating them. Appropriately, attention has now turned to identifying those individuals suffering from CKD so that appropriate interventions to reduce the anticipated epidemic of end-stage renal disease (ESRD) can be initiated. For a subspecialty focused on an organ in which multiple functions, including overall GFR, can be very precisely quantitated, this task sounds easy. However, as the two letters and editorial in this section demonstrate, it isn't.

In the May issue of *JASN*, Clase *et al.* (1) applied four equations that predict GFR from measurements of serum creatinine (S_{cr}) with S_{cr} values obtained in 13,251 normal, non-diabetic adults in the Third National Health and Nutrition Examination Survey (NHANES III). They arrived at the rather startling conclusion that CKD was as much as a log factor more common than previously predicted; for example, 13% of the population had GFR below 60 ml/min per 1.73 m², and these figures were significantly higher in the elderly. Clase *et al.* conclude by recommending that predictive equations to calculate GFR not be routinely applied by laboratories that measure S_{cr} until further research is done to determine the meaning of their observations. A subsequent editorial by Coladonato *et al.* (2) also cautions against overinterpretation of these data and outlines the many consequences of overestimating the CKD population. No one knows, for example, whether a low GFR

measurement reflects a longstanding stable situation or a point on a progressive course to renal failure.

Subsequently, Coresh *et al.*, the authors of a recent K-DOQI report that estimates a lower prevalence of CKD and urges the routine use of predictive equations to estimate GFR as a tool to identify patients with CKD (3), wrote to *JASN* contending that the unexpectedly high prevalence of CKD in the Clase *et al.* article resulted from a calibration problem in S_{cr} measurements and defending their recommendation that routine GFR calculations be provided by laboratories. Their letter was forwarded to Clase *et al.*, who provided a response and defense of their data and recommendation.

JASN does not normally publish letters to the editor. However, we are printing both of these letters in this issue because the questions they address are so central to the future of health care delivery to renal patients, who will provide it, and at what cost. However, not wishing to leave the arena without a resolution and plan, we also provide an accompanying overview by our Associate Editor for Clinical Epidemiology and Outcomes, Dr. William McClellan, which clearly outlines where we are now and where we need to go to resolve these very important issues.

References

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2. Coladonato J, Klassen P, Owen, WF: Perception *versus* reality of the burden of chronic kidney disease in the United States. *J Am Soc Nephrol* 13: 1686–1688, 2002
3. National Kidney Foundation: K-DOQI clinical practice guidelines for chronic kidney disease: Evaluation, classification and stratification. *Am J Kidney Dis* 39: S1–S266, 2002

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