

## Combating Chronic Kidney Disease: A Managed Care Perspective

This supplement to *The American Journal of Managed Care* features 2 articles that address the increasing prevalence of chronic kidney disease (CKD), the lack of or underuse of effective and standardized approaches to its prevention and treatment, and possible solutions.

The first article summarizes highlights of a roundtable symposium held May 3-5, 2001, in Chicago, Illinois. Kidney disease experts presented data showing the cost effectiveness of preventive treatment for early CKD and reviewed the care plans of managed care organizations (MCOs) that provide effective care for renal patients. The second article, by Brian J.G. Pereira, MD, further describes how early diagnosis and treatment of CKD can improve outcomes and reduce costs. This article also reviews the National Kidney Foundation Kidney Disease Outcomes Quality Initiative (K/DOQI) clinical practice guidelines related to CKD.

Current estimates indicate that approximately 20 million Americans aged 12 years and older have some form of CKD.<sup>1</sup> Progression to end-stage renal disease (ESRD) is the most significant consequence of CKD; it represents an advanced stage of CKD in which renal replacement therapy (RRT) (ie, dialysis or kidney transplantation) is needed to sustain life. The prevalence of ESRD has more than doubled over the past decade. However, CKD is much more common than ESRD and also significantly influences health and quality of life. The early stages of CKD typically produce few systemic symptoms, despite considerable impairment of kidney function. The asymptomatic nature of

CKD emphasizes the need for appropriate evaluation and screening of patients at risk for CKD.

Both articles review healthcare system factors (eg, deficiencies in the care model, workforce shortages, reimbursement structures) and provider factors (inadequate focus on prevention, suboptimal management of complications, late referral to specialists) that contribute to the underdiagnosis and undertreatment of CKD. They also describe how the suboptimal management of patients with CKD contributes to significant healthcare resource utilization in the years preceding RRT. Many of these predialysis costs relate to complications, comorbid conditions, and hospitalizations.

These articles also review strategies to improve CKD care, including intervention programs implemented at various care centers. These models demonstrate how MCOs can use existing data from patient database systems to establish health plan outcome measures and develop intervention programs. Goals and features of successful programs include the early detection of CKD and comorbid conditions, the use of appropriate outcome measures to stratify and guide patient care (eg, serum creatinine, glomerular filtration rate, hemoglobin levels, albumin levels), and the implementation of strategies to delay disease progression and prevent or treat complications. Patient education and the determination of cost data are other desirable program features.

Evidence presented in both articles suggests that such interventions are effective. For example, anemia is a frequent,

treatable, but frequently undertreated, complication of CKD. Studies have shown that use of erythropoietin to raise hemoglobin/hematocrit levels to K/DOQI target values (11 to 12 g/dL/33% to 36%) is associated with a lower risk of morbidity and mortality and also reduces hospital admissions, length of stay, and costs. Other cost-effective interventions that improve outcomes include measures to slow disease progression (eg, angiotensin converting-enzyme inhibitor therapy), early referral of patients to a nephrologist, and patient education. For example, prompt management of predialysis comorbid conditions and education about diet, medication, and psychosocial issues can reduce predialysis hospital admissions.

MCOs need to partner with providers of renal care to promote early intervention in patients with kidney disease. Organizations such as Group Health Cooperative of

Puget Sound have improved outcomes and lowered costs by putting aggressive, high-quality preventive care into practice. MCOs need to encourage clinicians to maintain a higher index of suspicion of kidney and cardiovascular disease in certain populations (eg, diabetic, hypertensive, African-American, and older patients), conduct regular screening tests, and evaluate, stratify, and manage patients with evidence of kidney dysfunction in accordance with the K/DOQI clinical practice guidelines. MCOs should also consider making the K/DOQI guidelines their standards of performance.

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... REFERENCE ...

1. K/DOQI clinical practice guidelines for chronic kidney disease: Evaluation, classification, stratification, executive summary. K/DOQI, Kidney Disease Outcomes Quality Initiative. *Am J Kidney Dis* 2002;39(suppl 1):S17-S31.