in patients with a lower estimated glomerular filtration rate, greater age and diabetes.

The SCG is a useful predictive tool that should help physicians discuss prognosis with ESRD patients who are considering NDT.

Original article Wong CF *et al.* (2007) Factors affecting survival in advanced chronic kidney disease patients who choose not to receive dialysis. *Renal Fail* **29:** 653–659

Hitting K/DOQI targets—except for blood pressure—reduces mortality in HD patients

New research has revealed a marked reduction in mortality rates among hemodialysis patients who meet K/DOQI targets for several clinical parameters. Mortality was increased, however, in patients whose blood pressure was within the recommended range.

This retrospective study included 13,792 hemodialysis patients followed until death, kidney transplantation, switch to peritoneal dialysis, prolonged absence from the clinic, or end of follow-up in 2005. Mean duration of follow-up was 569 days. Few patients met recommended targets at baseline.

The results revealed a significant improvement in the survival of patients whose dialysis dosage, hematocrit, serum albumin, calcium and phosphorus levels, and parathyroid hormone concentration met targets ($P \leq 0.0001$), with serum albumin level (≥4 g/dl) having the greatest positive effect (hazard ratio [HR] for death 0.27, 95% CI 0.24–0.31). The small proportion of patients who simultaneously met all six targets had an 89% reduction in mortality (HR 0.11, 95% CI 0.06–0.19). By contrast, those whose blood pressure fell below the recommended upper limit of 140/90 mmHg were significantly more likely to die (HR 1.90, 95% CI 1.73–2.10).

These findings underline the importance of adhering to clinical practice guidelines, as well as the problems inherent in extrapolating targets (e.g. those for blood pressure levels) from the general population to people receiving dialysis. The authors call for prospective randomized controlled trials to determine the optimum blood pressure for patients on hemodialysis.

Original article Tentori F *et al.* (2007) Which targets in clinical practice guidelines are associated with improved survival in a large dialysis organization? *J Am Soc Nephrol* **18:** 2377–2384

Antibiotic locks not effective against *S. aureus* catheter-related bacteremia

The success of using antibiotic lock solutions for treating catheter-related bacteremia without the need for catheter removal varies depending on the infecting organism, with *Staphylococcus aureus* infections associated with a high failure rate.

Maya *et al.* studied about 450 hemodialysis patients in Alabama, USA. An antibiotic lock protocol was administered in all catheter-dependent patients with suspected bacteremia (i.e. those with fever >38 °C or rigors). The protocol involved empiric administration of broad-spectrum systemic antibiotics (subsequently adjusted on the basis of blood culture results) in conjunction with instillation of an antibiotic–heparin solution into the catheter lumen after each dialysis session, for 3 weeks.

In total, 113 patients had a first episode of *S. aureus* catheter-related bacteremia. Treatment failure necessitating catheter removal occurred in 67 patients (59%), 40 of whom had a persistent fever 2–3 days after initiation of antibiotic therapy (i.e. by the next dialysis session), and 27 of whom had recurrent bacteremia within 90 days of resolution of their initial fever. Only 46 patients (41%) were, therefore, considered to have achieved a clinical cure. Serious complications occurred in 10 (25%) of the 40 patients with persistent fever, but in only 1 of the other 73 patients (1.4%; $P < 0.0001$). Six months after the initial infection, patient survival was similar in individuals with either type of treatment failure and in those who achieved a cure.

Original article Maya ID *et al.* (2007) Treatment of dialysis catheter–related *Staphylococcus aureus* bacteremia with an antibiotic lock: a quality improvement report. *Am J Kidney Dis* **50:** 289–295

Outcomes of access procedures at a high-volume outpatient vascular access center

Performing dialysis access procedures at an outpatient vascular access center (VAC) might be a cheap and efficient alternative to a hospital inpatient setting. Kian and co-workers have recently investigated the outcomes of emergent vascular access procedures (defined as those