panel's understanding of the nature and extent of the services included in the codes for which extensive discussion was required.

End-stage renal disease services, per full month (CPT codes 90918 through 90921).

Before rating the work of CPT codes 90918 through 90921, the refinement panel discussed the definition of the monthly capitation payment and the list of services included in and excluded from the monthly capitation payment that was developed by the Renal Physicians Association and presented to the RUC and the refinement panel. The refinement panel also reviewed HCFA regulations regarding the monthly capitation payment and agreed to rate the work of the codes based on the following definition and list of services included in and excluded from the monthly capitation payment.

The monthly capitation payment for maintenance dialysis is defined as a comprehensive monthly payment that covers all physician services associated with the continuing medical management of a maintenance dialysis

patient.

The following physician services are included in the monthly capitation payment:

 Assessment and determination of the need for outpatient chronic dialysis

therapy.

- Assessment of the need for a specified diet and the need for nutritional supplementation for the control of chronic renal failure. Specification of the quantity of total protein, high biologic protein, sodium, potassium, and amount of fluids to be allowed during a given time period. For diabetic patients with chronic renal failure, the prescription usually includes specification of the number of calories in the diet.
- Assessment of which mode(s) of chronic dialysis (types of hemodialysis or peritoneal dialysis) are suitable for a given patient and recommendation of the type(s) of therapy for a given patient.
- Assessment and determination of which type of dialysis access is best suited for a given patient and arrangement for creation of dialysis
- Assessment of whether the patient meets preliminary criteria as a renal transplant candidate and presentation of this assessment to the patient and family.
- Prescription of the parameters of intradialytic management. For chronic hemodialysis therapies, this includes

- the type of dialysis access, the type and amount of anticoagulant to be employed, blood flow rates, dialysate flow rate, ultrafiltration rate, dialysate temperature, type of dialysate (acetate versus bicarbonate) and composition of the electrolytes in the dialysate, size of hemodialyzer (surface area) and composition of the dialyzer membrane (conventional versus high flux), duration and frequency of treatments, the type and frequency of measuring indices of clearance, and intradialytic medications to be administered. For chronic peritoneal dialysis therapies, this includes the type of peritoneal dialysis, the volume of dialysate, concentration of dextrose in the dialysate electrolyte composition of the dialysate, duration of each exchange, and addition of medication to the dialysate, such as heparin, and the type and frequency of measuring indices of clearance. For diabetics, the quantity of insulin to be added to each exchange is prescribed.
- Assessment of whether the patient has significant renal failure-related anemia, determination of the etiology(ies) for the anemia based on diagnostic tests, and prescription of therapy for correction of the anemia, such as vitamins, oral or parenteral iron, and hormonal therapy such as erythropoietin.
- Assessment of whether the patient has hyperparathyroidism and/or renal osteodystrophy secondary to chronic renal failure and prescription of appropriate therapy, such as calcium and phosphate binders for control of hyperphosphatemia. Based upon assessment of parahormone levels, serum calcium levels, and evaluation for the presence of metabolic bone disease, the physician determines whether oral or parenteral therapy with vitamin D or its analogs is indicated, and prescribes the appropriate therapy. Based upon assessment and diagnosis of aluminum bone disease, the physician may prescribe specific chelation therapy with deferoxamine and the use of hemoperfusion for removal of aluminum and the chelator.
- Assessment of whether the patient has dialysis-related arthropathy or neuropathy and adjustment of the patient's prescription accordingly. Referral of the patient for any additional needed specialist evaluation and management of these end-organ problems.
- Assessment of whether the patient has fluid overload resulting from renal failure and establishment of an

- estimated "ideal (dry) weight." The physician determines the need for fluid removal independent of the dialysis prescription and implements these measures when indicated.
- Determination of the need for and prescription of anti-hypertensive medications and their timing relative to dialysis when the patient is hypertensive in spite of correction of fluid overload.
- · Periodic review of the dialysis records to ascertain whether the patient is receiving the prescribed amount of dialysis and ordering of indices of clearance, such as urea kinetics, in order to ascertain whether the dialysis prescription is producing adequate dialysis. If the indices of clearance suggest that the prescription requires alteration, the physician orders changes in the hemodialysis prescription, such as blood flow rate, dialyzer surface area, dialysis frequency, and/or dialysis duration (length of treatment). For peritoneal dialysis patients, the physician may order changes in the volume of dialysate, dextrose concentration of the dialysate, and duration of the exchanges.
- Periodic visits to the patient during dialysis to ascertain whether the dialysis is working well and whether the patient is tolerating the procedure well (physiologically and psychologically). During these visits, the physician determines whether alteration in any aspect of a given patient's prescription is indicated, such as changes in the estimate of the patient's dry weight. Review of the treatment with the nurse or technician performing the therapy is also included. The frequency of these visits will vary depending upon the patient's medical status, complicating conditions, and other determinants.
- Performance of periodic physical assessments, based upon the patient's clinical stability, in order to determine the necessity for alterations in various aspects of the patient's prescription. Similarly, the physician reviews the results of periodic laboratory testing in order to determine the need for alterations in the patient's prescription, such as changes in the amount and timing of phosphate binders or dose of erythropoietin.
- Periodic assessment of the adequacy and function of the patient's dialysis access.
- Assessment of patients on peritoneal dialysis for evidence of peritonitis and the ordering of appropriate tests and antibiotic therapy.