

**ESRD Network 11  
Medical Review Committee  
Recommended Treatment Goals  
2011 Goals**

The mission of ESRD Network 11 is to assess and improve the quality of care provided to individuals with end-stage renal disease. In keeping with this mission statement, the Medical Review Committee issues its recommended treatment goals on important clinical parameters. These parameters are based on available evidence and accepted practice guidelines such as K/DOQI (Kidney Dialysis Outcomes Quality Initiative) and others. These improvement goals are provided as assistance to dialysis facilities for use in quality improvement. The goals apply to the facility's permanent adult dialysis population. Temporary patients should not be included. **Throughout this document, mean value refers to the average of the first monthly value for each of three months.**

**ANEMIA MANAGEMENT**

Recommended	Best Practice
Facilities should target hemoglobin levels between 10-12 gm/dL. A normal distribution of Hgb levels centered around this target will include: <ul style="list-style-type: none"> <li>• &lt; 8% of patients with mean Hgb &lt; 10 gm/dL, <b>AND</b></li> <li>• &lt; 8% of patients with mean Hgb <math>\geq</math> 13 gm/dL.</li> </ul>	<ul style="list-style-type: none"> <li>• Meets the Recommended Treatment Goals <b>AND</b></li> <li>• A percent of patients having hemoglobin within the target range of 10-12 gm/dL that falls in the highest 10% of facilities in Network 11.</li> </ul>

- Facilities will monitor and evaluate iron status through regular measurement of transferrin saturation (TSAT) and Ferritin. Facilities will also maintain and follow a policy for administration of supplemental iron based on K/DOQI guidelines.

**HEMODIALYSIS ADEQUACY**

Recommended	Best Practice
$\geq$ 90% of HD patients on three times per week dialysis will have a mean URR of at least $\geq$ 65% or delivered Kt/V of $\geq$ 1.2  $\geq$ 85% of patients on frequent hemodialysis ( $\geq$ 4 times per week) will have a mean <b>weekly</b> Kt/V of $\geq$ 2.0.	$>$ 95% of HD patients on three times per week dialysis will have a mean URR of at least $\geq$ 65% or delivered Kt/V of $\geq$ 1.2

- Blood sampling for hemodialysis adequacy studies should be done by either the “slow flow” or “stop pump” technique to assure consistency in adequacy results (see K/DOQI Hemodialysis Adequacy Guideline 8).
- Kt/V should be measured in accordance with the recommendations in K/DOQI Guideline #2, that is, formal urea kinetic modeling (single pool, variable volume model) or the natural logarithm model.

#### ADEQUACY OF PERITONEAL DIALYSIS

Recommended	Best Practice
≥ 80% of PD patients will have a weekly Kt/V of ≥ 1.7	> 85% of PD patients will have a weekly Kt/V of ≥ 1.7

- 100% of PD patients will have adequacy of dialysis measured every four months. The initial measurement should be performed within 2-3 months of starting PD. Additional measurements should be performed at such time a change in clinical condition appears.
- Prescribed dose of PD should be altered as needed to maximize clearance, especially if the patient appears to have uremic signs and symptoms (PD Adequacy Guideline 2.1, 2006).

#### NUTRITIONAL STATUS

Recommended	Best Practice
≥ 80% of dialysis patients (HD and PD) will have mean serum albumin ≥ the lower limit of normal (LLN), and no more than 10% of patients will have mean serum albumin < 0.9 LLN	> 85% of dialysis patients (HD and PD) will have serum albumin ≥ the lower limit of normal (LLN), and no more than 10% of patients will have mean serum albumin < 0.9 LLN

- Serum albumin results are more dependent on lab methodology than are other indicators. The above goal is based on the lab’s reported lower limit of normal established for a normal, healthy population. Reference ranges based on other populations (e.g., dialysis patients, hospitalized patients) are not comparable.

#### BONE AND MINERAL METABOLISM

Recommended	Best Practice
≥ 65% of dialysis patients (HD and PD) will have a mean serum phosphorus of 3.5-5.5 mg/dL < 10% of patients will have mean serum	> 70% of dialysis patients (HD and PD) will have a mean serum phosphorus of 3.5-5.5 mg/dL < 5% of patients will have mean serum

phosphorus of > 8 mg/dL	phosphorus of > 8 mg/dL
≥ 80% of dialysis patients (HD and PD) will have a mean corrected serum calcium concentration of ≤ 10.2 mg/dL.	> 85% of dialysis patients (HD and PD) will have a mean corrected serum calcium concentration of ≤ 10.2 mg/dL. > 75% of dialysis patients (HD and PD) will have a mean corrected serum calcium concentration of ≤ 9.5 mg/dL.
≥80% of patients will have PTH monitored at least every 3 months	

- At the current time, the MRC cannot recommend specific review parameters for PTH due to variability of available PTH assays and paucity of bone biopsy correlations with these PTH assays. See Souberbielle JC, Boutten A, et al. *Inter-method variability in PTH measurement: implication for the care of CKD patients*. *Kidney Int* 2006;70(2):345-350.
- The MRC strongly recommends that each facility should decide upon a desired range for PTH for the dialysis patients receiving care in that facility. For good patient care, it is important to maintain PTH within a range that avoids low turnover bone disease (low PTH) and hyperparathyroidism (high PTH). The desired range for each facility will depend upon the assay that is being used and its comparison to the intact PTH assay that was used for the original K/DOQI Guidelines (see reference above).
- The MRC does recommend that facilities monitor PTH regularly and further recommends that facilities work with their lab to monitor which assay is being used, the reference range, and ask to be notified when assays or reference ranges are changed.
- The MRC anticipates that a PTH Guideline will be re-implemented as more evidence becomes available regarding the bone biopsy and clinical correlations with the currently available PTH assays.

#### VASCULAR ACCESS

Recommended	Best Practice
Facility AVF rate will achieve an annual increase that equals at least the specific goal set for that facility*.	≥ 65% of prevalent patients dialyze with an AV fistula
≤ 10% of prevalent patients are dialyzing with a catheter as sole access > 90 days	≤ 5% of prevalent patients are dialyzing with a catheter as sole access > 90 days

\* The facility goal is based on the following formula:

$$(66\% \text{ [CMS program goal]}) - (\text{facility baseline percent [AVF rate in Q4]}) \times 20\%$$

This formula applies to facilities whose 4<sup>th</sup> quarter AVF rate is less than 65%. The improvement goal set for each facility with an AVF rate less than 65% will be at least 1% or greater based on the formula calculation.

- Dialysis facilities should have a protocol for evaluating patients with catheter as sole access for placement of an AV fistula.
- The patient care team should regularly review all patients who refuse to have a fistula placed and encourage them to consider a fistula.
- Facilities should track vascular access as part of their regular CQI process.
- Stenosis monitoring should be performed based on the guidelines established by K/DOQI (Vascular Access Guidelines 10, 11, and 12).

### IMMUNIZATION

Recommended	Best Practice
<p>≥ 90% of patients will receive immunization for influenza</p> <p>≥ 80% of patients will receive immunization for pneumonia</p> <p>≥ 80% of patients without natural immunity will receive immunization for hepatitis B</p>	<p>≥ 95% of patients will receive immunization for influenza</p> <p>≥ 85% of patients will receive immunization for pneumonia</p> <p>≥ 90% of patients without natural immunity will receive immunization for hepatitis B</p>

- Frequency of immunization for each specific disease should be based on recommendations from the Centers for Disease Control and Prevention.
- Immunization records should be reviewed and updated on an annual basis as part of the long-term care planning process.
- Self-reported immunization information from patients is acceptable. Facilities should maintain a record of the month and year of immunization.

### ADVANCE CARE PLANNING

Recommended	Best Practice
<p>≥ 80% of patients will have documentation that advance care planning discussions were conducted within 6 months of initiating dialysis</p>	<p>≥ 85% of patients will have documentation that advance care planning discussions were conducted within 3 months of initiating dialysis</p>

- Documentation should reflect patient input into the discussion.

- Advance care planning issues should be reviewed on an annual basis as part of the long-term care planning process.
- Documentation may consist of notations on the long-term care plan or in the progress notes.

**TRANSPLANT REFERRAL**

<b>Recommended</b>	<b>Best Practices</b>
<p>≥ 85% of patients will be assessed by the nephrologist for transplant candidacy or referral within 6 months of initiating dialysis as demonstrated by documentation in the medical record</p>	<p>≥ 95% of patients will be assessed by the nephrologist for transplant candidacy or referral within 3 months of initiating dialysis as evidenced by documentation in the medical record</p>