

# ESRD NETWORK 13

Serving Arkansas, Louisiana & Oklahoma Renal Communities



## RECOMMENDATION: CMS CRITERIA TO DETERMINE ELIGIBILITY FOR THE ESRD PROGRAM

### RECOMMENDATIONS:

- Initiation of Renal Replacement Therapy (RRT) is determined by both glomerular filtration rate (GFR) and the presence of uremic symptoms.
- For adult (age > 18) patients, use the Modified MDRD formula.
- For adult dialysis patients, most will have GFR < 15 ml / min / 1.73m<sup>2</sup>.
- For adult pre-transplant patients, most will have pre-transplant GFR < 20 ml / min / 1.73m<sup>2</sup>.
- For pediatric (age ≤ 18) patients, use the Schwartz formula.
- For pediatric dialysis and pre-transplant patients, most will have GFR < 20 ml / min / 1.73m<sup>2</sup>.

#### The Modified MDRD Formula for Adults

- Based on formula for GFR used in Modification of Diet in Renal Disease study;
- Eliminates serum albumin and BUN in original formula;
- High correlation with GFR from iothalamate
- Estimated GFR (ml/min/1.73m<sup>2</sup>) = 186.3 \* (sCr)<sup>-1.154</sup> \* age<sup>-0.203</sup> \* (0.742 if female) \* (1.21 if African-American)

#### The Schwartz Formula for Children

- Introduced in 1980's to estimate GFR in children from serum Creatinine and height
  - More widely used by pediatricians than Counahan-Barratt formula
  - Correlates with inulin clearance over 5 – 180 ml / min / 1.73m<sup>2</sup> range
  - Estimated GFR (ml / min / 1.73m<sup>2</sup>) = k \* Ht (cm) / sCr
- Where k = 0.45 (age < 1.5)  
k = 0.55 (1.5 yr. through < 13 or female)  
k = 0.70 (age > 13 and male)

**CRITERIA:** All end stage renal disease (ESRD) patients = Stage 5 K/DOQI™ Stages of CKD.

### K/DOQI™ STAGES OF CHRONIC KIDNEY DISEASE

Stages	Description	GFR (mL/min/1.73 m <sup>2</sup> )
1	Kidney damage with normal or ↑ GFR	≥ 90
2	Kidney damage with mild ↓ GFR	60-89
3	Moderate ↓ GFR	30-59
4	Severe ↓ GFR	15-29
5	Kidney failure	<15 (or dialysis)

### EVALUATION:

- Ongoing data review to identify potential out of range values. Data review to include verifying accuracy of 2728 form and/or data entry.
- Review range of GFR's during analysis and development of CMS 2728 Nephrologist-Specific Profiles.
- Report receipt of any new patient registration forms (CMS 2728), which do not meet the CMS criteria for eligibility for the ESRD program to CMS through the Quarterly Progress Report.

Initiated: 04/30/03

Reviewed: 02/06/04, 02/24/05, 08/18/06, 08/12/08, 05/15/09, 05/14/10, 05/13/11

Updated 10/29/04, 05/13/05, 06/09/06, 02/29/08, 06/08

Transitioned to Recommendation: 05/25/07

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*Mission Statement: "To assess and improve the quality of care provided to individuals with End Stage Renal Disease."*