

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 / 1.73m².
- For adult pre-transplant patients, most will have pre-transplant GFR < 20 ml / min / 1.73m².
- For pediatric (age ≤ 18) patients, use the Schwartz formula.
- For pediatric dialysis and pre-transplant patients, most will have GFR < 20 ml / min / 1.73m².

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/1.73m²) = 186.3 * (sCr)^{-1.154} * age^{-0.203} * (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 / 1.73m² range
 - Estimated GFR (ml / min / 1.73m²) = 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 ²) |
|--------|------------------------------------|-----------------------------------|
| 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.

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4200 Perimeter Center Drive Suite 102 Oklahoma City, OK 73112-2314

Phone: 405.942.6000 Main Fax: 405.942.6884 Data Fax: 405.942.6181

Web site: <http://www.network13.org> Email: info@nw13.esrd.net

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