

Subject: **Estimated Glomerular Filtration Rate (eGFR)**

Effective Date: 2/12/2008

Explanation of Change: NWCL will begin reporting eGFR with every Creatinine.

Serum creatinine is the most widely used test to assess renal function. Creatinine is a product of muscle metabolism and is released into the blood at a fairly constant rate. It is removed from the blood (“cleared”) by the kidneys. The rate at which creatinine is cleared from the blood is a measure of the Glomerular Filtration Rate (GFR) and may be estimated (eGFR) from the serum creatinine level. With normal renal function, creatinine production equals its clearance by the kidneys, resulting in a normal serum creatinine level. However in renal failure, clearance decreases and thus serum creatinine may rise.

Creatinine production is related to muscle mass, thus it may be affected by size, gender, age and race. In contrast, renal function is affected largely by age, disease and physiological drugs. With mild renal dysfunction, the eGFR is a more accurate reflection of renal function than is the serum creatinine by itself. The National Kidney Foundation has recommended that the eGFR be reported with serum creatinine for more complete interpretation of renal function.

Changes you can expect to see:

- Creatinine results will be reported to two decimals (mg/dL)
- An eGFR will be reported with all creatinine results directly below the creatinine value
- When a profile (BMP or CMP) is ordered, the eGFR will be reported after the profile results
- The eGFR result must be adjusted if the patient is African American. The result should be multiplied by 1.2 and a report comment will alert the patient care provider that this must be done.
- eGFR results less than 60 mL/min/1.73 m<sup>2</sup> report to the nearest whole number
- The National Kidney Disease Education Program (NKDEP) recommends reporting eGFR values above 60 as >60 mL/min/1.73 m<sup>2</sup> rather than as an exact number

The estimated glomerular filtration rate is not valid on patients under the age of 18 years and will not be reported by Northwest Clinical Laboratory.

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Reference: National Institutes of Health (NIH) Publication No. 06-5509 December 2006  
[www.nkdep.nih.gov](http://www.nkdep.nih.gov)