Serum Creatinine/ Calculated eGFR (Estimated Glomerular Filtration Rate)

- **eGFR less than 60 ml/min**
  - **eGFR < 15 ml/min**
    - Stage 5 CKD
    - Refer to nephrologist
  - **eGFR 15-29 ml/min**
    - Stage 4 CKD
    - Refer to nephrologist
- **eGFR 30-59 ml/min**
  - **Stage 3 CKD**
  - Repeat in 2-3 months
  - Obtain urine microalbumin
  - Assess for medications and other coexisting conditions, e.g. diabetes, hypertension
  - Young age suggests need for closer follow-up
  - If evidence of more rapid decline, requires further work-up*

- **eGFR greater than or equal to 60 ml/min**
  - **eGFR 60-89 ml/min**
    - Stage 2 CKD
    - Monitor
    - Treat existing or coexisting conditions, e.g. hypertension, diabetes.
    - Proteinuria or hematuria indicates need for further evaluation & follow-up.
    - Young age suggests need for closer follow-up
    - Other findings: protein or albumin in urine are high; cells or casts in urine
  - **eGFR ≥ 90 ml/min**
    - Stage 1 CKD
    - Normal Renal Function
    - Other findings: protein or albumin in urine are high; cells or casts in urine

Factors to consider:
- eGFR has not been validated for persons less than 18 or greater than 70 years old
- Conditions that may affect eGFR include extreme body size, severe malnutrition or obesity, skeletal muscle disease, paraplegia or quadriplegia, vegetarian diets, rapidly changing kidney function
- eGFR needs to be adjusted for black population
- eGFR is reliable when serum creatinine has a steady state; not rising or declining
- Drug interference with creatinine method or levels may cause inaccurate eGFR results

* NICE recommended criteria for rapid decline: a. ≥ loss of GFR of 5ml/min/1.73 m² over a year or less; b. ≥ loss of GFR of 10 ml/mon/1.73 m² over 5 years or less.

**Abbreviations:**
- CKD: Chronic Kidney Disease
References: