CKD Treatment Algorithm

CKD Stage 1

GFR > 90 mL/min/1.73 m² P:C ratio > 1.0 gm protein/gm creatinine x 2

CKD Stage 2

GFR 60 - 89 mL/min/1.73 m²

CKD Stage 3

GFR 30 - 59 mL/min/1.73 m²

CKD Stage 4

GFR 15 - 29 mL/min/1.73 m²

CKD Stage 5

GFR < 15 mL/min/1.73 m²

PRIMARY CARE Assess Complications

LABS

- BP monitoring q 6 mo., and consider home BP monitoring
- GFR q 12 mo.
- Urinalysis q 12 mo. to assess hematuria, proteinuria, microalbuminuria
- Lipids q 12 mo.
- If diabetic, Hgb A₁C and microalbuminuria q 12 mo.

RISK ASSESSMENT

- Avoidance of nephrotoxic agents
- · Immunizations
 - -Flu vaccine q 12 mo.
 - -Pneumovax, as indicated
 - -Hep B vaccine, as indicated -COVID vaccine
- · Assess cardiovascular risk:
 - -Smoking cessation
- -Physical activity

EDUCATION

- · Cardiovascular risk
- · Medications to avoid

*GFR value requires the

Immunizations

PRIMARY CARE Assess Complications

LABS

- BP monitoring q 3-12 mo., and consider home BP monitoring
- GFR q 12 mo.
- Urinalysis q 3 -12 mo. to assess hematuria, proteinuria, microalbuminuria
- Lipids q 12 mo
- If diabetic, Hgb A₁C and microalbuminuria q 12 mo.
- Hgb q 12 mo. if > 11 gm/dL

RISK ASSESSMENT

- Medications: consider ACE/ARB/SGLT2
- Avoidance of nephrotoxic agents
- Immunizations
 - -Flu vaccine q 12 mo.
 - -Pneumovax, as indicated
 - -Hep B vaccine, as indicated
- -COVID vaccine
- Assess cardiovascular risk:
 - -Smoking cessation
 - -Physical activity

EDUCATION

- · Cardiovascular risk
- · Medications to avoid
- Immunizations

EDUCATION

following data variables:

race, sex, age, and serum creatinine

**Note: Change package will incorporate primary care provider assessment for CKD- associated complications for Stages1 and 2 and nephrology assessment for CKD-associated complications for Stages 3-5.

Midwest Kidney Network

CO-MANAGEMENT Assess Complications

LABS

- BP monitoring q 3-12 mo., and encourage home BP monitoring
- GFR q 3-12 mo.
- Urinalysis q 6-12 mon. to assess hematuria, proteinuria, microalbuminuria
- Lipids q 2 mon.
- If diabetic, Hgb A₁C and microalbuminuria q 12 mo.
- Hqb > 11 q 3-6 mo.
- Hgb < 11 q 1-3 mo.
- · Lytes and glucose q 12 mo.
- PTH, Ca & P q 3-12 mo.
- Measure 25-Vitamin D q 12 mo.

RISK ASSESSMENT

- Medications: consider ACE/ARB/SGLT2
- Avoidance of nephrotoxic agents
- Immunizations
 - -Flu vaccine q 12 mo.
 - -Pneumovax, as indicated
 - -Hep B vaccine, as indicated
 - -COVID vaccine
- Assess cardiovascular risk:
 - -Consider statin use
- -Smoking cessation
- -Physical activity

EDUCATION

- · Cardiovascular risk
- Medications to avoid
- Immunizations
- Nutrition: low protein, low sodium diet. Low K if serum levels elevated
- · Mineral and Bone Disorder

NEPHROLOGY** Assess Complications

LABS

- BP monitoring q 3-6 mo., and encourage home HP monitoring
- GFR q 3-6 mo.
- Lipids q 12 mo.
- If diabetic, Hgb A₁C and microalbuminuria q 12 mo.
- Hgb q 3-6 mo., monthly if on ESA therapy
- PTH, Ca, P. q 3-6 mo.
- Measure 25-Vitamin D q 12 mo.

RISK ASSESSMENT

- Medications: consider ACE/ARB
- Avoidance of nephrotoxic agents
- Immunizations
 - -Flu vaccine q 12 mo.
 - -Pneumovax, as indicated
 - -Hep B vaccine, as indicated -COVID vaccine
- · Assess cardiovascular risk:
 - -Consider statin use
- -Smoking cessation
- -Physical activity

EDUCATION

- Cardiovascular risk
- · Medications to avoid
- Immunizations
- Nutrition: low protein, low sodium diet. Low K/PO4 diet if serum levels elevated
- Mineral and Bone Disorder
- Anemia: consider ESA if Hbg<10
- · Surgical access placement
- Encourage home modality options

REFERRALS

- Referral for modality education
- Transplant center for eval

NEPHROLOGY** Assess Complications

LABS

- BP monitoring q 1-3 mo., and encourage home BP monitoring
- GFR q 1-3 mo.
- Lipids q 12 mo.
- If diabetic, Hgb A₁C.
- Hgb monthly
- PTH, Ca, P q 1-3 mo.
- Measure 25-Vitamin D g 12 mo.
- HBV titer

RISK ASSESSMENT

- Avoidance of nephrotoxic agents
- Immunizations
 - -Flu vaccine q 12 mo.
 - -Pneumovax, as indicated
 - -Hep B vaccine, as indicated
- -COVID vaccine
- Assess cardiovascular risk:
- -Smoking cessation -Physical activity

EDUCATION

- Cardiovascular risk
- · Medications to avoid
- Immunizations
- Nutrition: Advise diet low in fluids, salt, phos. & potassium
- Mineral and Bone Disorder
- Anemia: consider ESA if Hbg<10
- Surgical access monitoring
- · Modality options
- Evaluation for kidney transplant

REFERRALS

- Referral for modality education
- Surgeon for access placement
- Transplant center for eval