

Chronic Kidney Disease (CKD) Algorithm Validation Instructions

The goal of this evaluation is to determine if a patient has chronic kidney disease (CKD) by reviewing his/her health records. For patients having CKD, please also identify their NKF CKD stage and KDIGO albuminuria category (see below). As an output of the review, please provide a table with the following columns:

Review_ID	eMerge_ID	NKF CKD Stage	A-Staging
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1. First, perform A-staging, where A1 indicates normal, A2 moderately increased and A3 severely increased albuminuria. For this purpose, please use the most recent urine test (no earlier than 24 months before the most recent eGFR) and the following criteria:

NA: No urine protein test of any kind available

A1: UACR/A24 < 30 mg/g or
 UPCR/P24 <= 0.19 g/g or
 UA protein Negative, Trace, or 10 (with previous Negative, Trace, or 10)

A2: UACR/A24 30-300 mg/g or
 UPCR/P24 >0.19 & <= 0.85 g/g or
 UA protein 30

A3: UACR/A24 >300 mg/g or
 UPCR/P24 >0.85 g/g
 UA protein 100 or more

2. For the NKF CKD Stage column, select from the following categories based on the most recent serum Cr measurement (to determine eGFR, please use CKD-EPI equation)

CKD Stage 1:	GFR >= 90 AND (A2 or A3 or known kidney disease of any kind)*
CKD Stage 2:	GFR 60 to less than 90
CKD Stage 3a:	GFR 45 to less than 60
CKD Stage 3b:	GFR 30 to less than 45
CKD Stage 4:	GFR 15 to less than 30
CKD Stage 5:	GFR < 15
ESRD on dialysis:	If on hemodialysis
ESRD after transplant:	If received a kidney transplant (regardless of current allograft function)
CKD G1A1-Control:	If no existing diagnosis of any kidney disease, most recent GFR >= 90 and no evidence of proteinuria by the most recent urine test [#]
CKD G1-Control:	If no existing diagnosis of any kidney disease, most recent GFR >= 90 and no urine tests [#]

** Note: to define CKD Stage 1, the CKD-classifying lab abnormalities of A-stage 2 or 3 should be present on the most recent urine test[#] and a previous urine test obtained more than 3 months prior to the recent test.*

[#] Note: most recent urine test or urine tests are searched from 24 months before the most recent GFR to present