

CKD Screening and Diagnosis

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It is important to screen for CKD at diabetes diagnosis because early CKD detection and treatment decreases the development of kidney failure by 30-70%. Improved outcomes are seen when we screen, diagnose, monitor, and treat CKD complications and have early preparation for kidney replacement therapy, such as transplantation and dialysis.

The Urine Albumin Screening and Monitoring Card was designed to help busy providers understand this sometimes confusing topic. Click on the link above to download and or print a pdf of this card. Albuminuria describes a condition in which urine contains an abnormal amount of albumin. High levels and or a rapid rise may be a sign of serious kidney disease. Let me give you a brief overview of the card

Albuminuria describes a condition in which urine contains an abnormal amount of albumin. High levels and or a rapid rise may be a sign of serious kidney disease There are two tests which are the gold standard for testing kidney disease in people with diabetes is the Urine Albumin to Creatinine Ratio or UACR. The second is serum creatinine level with calculated Estimated Glomerular Filtration Rate or eGFR. Screen for albuminuria by checking a UACR at diabetes diagnosis and yearly thereafter. A diagnosis of albuminuria is made when the UACR result is at least 30 mg/g on two separate occasions. Once diagnosed, monitor CKD by checking the UACR and eGFR at least once a year. Check them more often if they are rising rapidly, after implementing interventions and in the later stages of CKD.

Remember, you should not screen for albuminuria under certain conditions, such as if the patient has a UTI or if the UA is positive for leukocytes, nitrite, or RBCs. Resolve these issues first, then screen for urine albumin. Not all CKD in patients with diabetes is due only to their diabetes. This is one suggested work-up you can do to help rule out non-diabetes causes of CKD. Several strategies should be implemented to reduce albuminuria, prevent or slow nephropathy progression and lower the risk of heart disease. These include controlling blood glucose, blood pressure and lipids.

The right hand side of the card lists the various test being used by clinics to assess urine protein. This is done to help sites sort out which test they actually using, especially as they complete the diabetes audit. The first test is the UACR which we've been discussing. It is the test recommended by the American Diabetes Association and the National Kidney Foundation. The other five tests are for the various reasons cited not as accurate sensitive or reliable as the UACR. So clinics are strongly encourages to switch to the UACR test. The small box on the bottom of the right side of the card lists the UACR ranges for normal micro or macro albuminuria.

Providers should be aware that albuminuria is a continuous risk variable that the distinction between micro and macro is somewhat arbitrary.