



## Importance of ACR testing in patients with hypertension

Despite similar risk of albuminuria to those with diabetes, albumin-to-creatinine ratio (ACR) screening in patients with hypertension is low, and the guidelines for hypertension are inconsistent. A recent meta-analysis based on international cohorts of over 3 million patients, demonstrated extremely low ACR testing rates in diabetes (35.1%) and hypertension (4.1%) overall<sup>1</sup>.

**This is despite the median prevalence of an abnormal ACR being 32.1% in diabetes and 21.9% in hypertension.**

It was found that ACR testing was unrelated to the predicted risk of an abnormal ACR, suggesting that albuminuria testing is not targeted towards

the highest-risk individuals. It's been calculated that the burden of an abnormal ACR in undetected cases is nearly 20-fold higher than detected cases. The vast underdiagnosis of Chronic Kidney Disease (CKD) in patients with hypertension has profound public health implications, particularly as effective therapies are available for treating early stages of CKD. Early detection and management reduce the burden of CKD by improving the quality of care of these patients, slowing down disease progression, and preventing end stage renal disease. This is particularly relevant in socially disadvantaged and underserved populations who carry a disproportionate burden of CKD and are less likely to be diagnosed early.

## Guidance on ACR testing in hypertension

Although the NICE guidelines for ACR testing are less specific than for those with diabetes, clinicians may find it useful to review the recommendations made by other professional bodies:



For all people with hypertension offer to test for the presence of protein in the urine by sending a urine sample for estimation of the albumin: creatinine ratio and test for haematuria using a reagent strip."

[NICE Guidelines](#)



Serum creatinine, eGFR, and ACR should be documented in all hypertensive patients, and if CKD is diagnosed, repeated at least annually."

[European Society Of Cardiology](#)



Increased excretion of albumin is a sensitive and specific marker for CKD due to diabetes, hypertension" and that "The most common risk factors for CKD include diabetes, hypertension..." "Current guidelines recommend routine CKD testing in patients at increased risk for CKD."

[National Kidney Foundation](#)



Screening is for high-risk individuals: Physicians can easily test their existing patients during regular, routine visits. The CKD tests can be added to any lab panel requested by the physician, especially for patients with hypertension and diabetes."

[KDIGO](#)

Together with the NHS, Healthy.io has successfully screened **over 7,500 patients with hypertension**, with 25% of patients returning abnormal (A2) or high abnormal (A3) test results, requiring further assessment and follow-up.

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