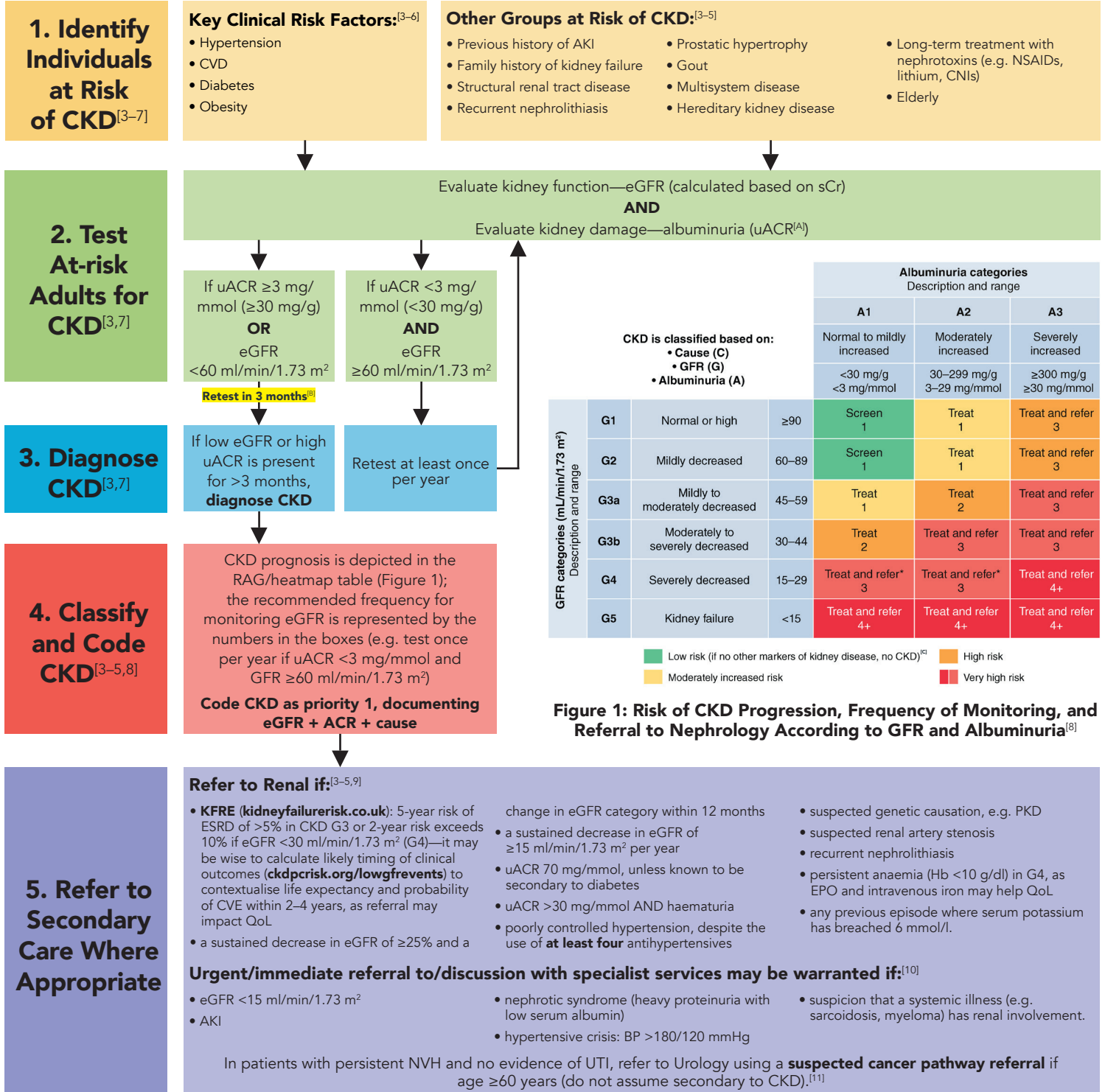


Identification of CKD in Primary Care

Authors: Dr Eimear Darcy, GP Partner, Grange Family Practice Omagh; Dr William Hinchliffe, Consultant in Renal and General Medicine, South Tyneside and Sunderland Foundation NHS Trust; Dr Deepika Manoharan, Registrar in Renal and General Medicine, South Tyneside and Sunderland Foundation NHS Trust; Dr Kevin Fernando, GP Partner, North Berwick Health Centre and Content Advisor, Medscape Global and UK (email: kfernando@webmd.net)

Prevention of ESRD matters, as it has worse survival rates than colorectal, prostate, and breast cancer.^[1] Microalbuminuria and eGFR <60 ml/min/1.73 m² are independent and amplifying predictors of mortality risk.^[2]



		Albuminuria categories Description and range				
		A1	A2	A3		
		Normal to mildly increased	Moderately increased	Severely increased		
		<30 mg/g <3 mg/mmol	30–299 mg/g 3–29 mg/mmol	≥300 mg/g ≥30 mg/mmol		
GFR categories (mL/min/1.73 m ²) Description and range	G1	Normal or high	≥90	Screen 1	Treat 1	Treat and refer 3
	G2	Mildly decreased	60–89	Screen 1	Treat 1	Treat and refer 3
	G3a	Mildly to moderately decreased	45–59	Treat 1	Treat 2	Treat and refer 3
	G3b	Moderately to severely decreased	30–44	Treat 2	Treat and refer 3	Treat and refer 3
	G4	Severely decreased	15–29	Treat and refer* 3	Treat and refer* 3	Treat and refer 4+
	G5	Kidney failure	<15	Treat and refer 4+	Treat and refer 4+	Treat and refer 4+

Legend:
■ Low risk (if no other markers of kidney disease, no CKD)^[9]
■ Moderately increased risk
■ High risk
■ Very high risk

Figure 1: Risk of CKD Progression, Frequency of Monitoring, and Referral to Nephrology According to GFR and Albuminuria^[8]

Footnotes
[A] A spot uACR is acceptable.^[3,6]
[B] NICE suggests repeating the eGFR within 2 weeks if eGFR <60 ml/min/1.73m²^[3]—this is at the discretion of the ordering clinician, based on the acuity of the presenting cause. If there is persistent invisible haematuria, also consider referring for investigation for urinary tract malignancy.^[3]
[C] Key markers of kidney disease include urine sediment abnormalities, tubular disorders, histology-proven abnormalities, imaging-proven structural abnormalities, and kidney transplantation.^[4,5]

ACR=albumin to creatinine ratio; AKI=acute kidney injury; BP=blood pressure; CKD=chronic kidney disease; CNI=calcineurin inhibitor; CVD=cardiovascular disease; CVE=cardiovascular event; eGFR=estimated glomerular filtration rate; EPO=erythropoietin; ESRD=end-stage renal disease; GFR=glomerular filtration rate; KFRE=Kidney Failure Risk Equation; NSAID=nonsteroidal anti-inflammatory drug; NVH=non-visible haematuria; PKD=polycystic kidney disease; QoL=quality of life; RAG=red, amber, green; sCr=serum creatinine; uACR=urine albumin to creatinine ratio; UTI=urinary tract infection