

Kidney Health in Primary Care: Identifying Risk, Slowing Progression, and Navigating Referrals

Pranav Garimella, MD, MPH

Nephrologist, UC San Diego

Chief Medical Officer, American Kidney Fund

Outline

- Introduction to chronic kidney disease
- KDIGO screening recommendations
- Treatments for CKD prevention and progression
- Referral to nephrology
- Genetics and kidney disease

Disclosures

- Nephrologist: UC San Diego Health, CMO American Kidney Fund
- Research funding: NIH
- Consultant: Otsuka
- Advisory board: Natera

The Silent Crisis Unfolding in Your Clinic



More than **1** in **7**

14% of US adults are estimated to have chronic kidney disease—that is about 35.5 million people.



Executive Board
156th session

Agenda item 7

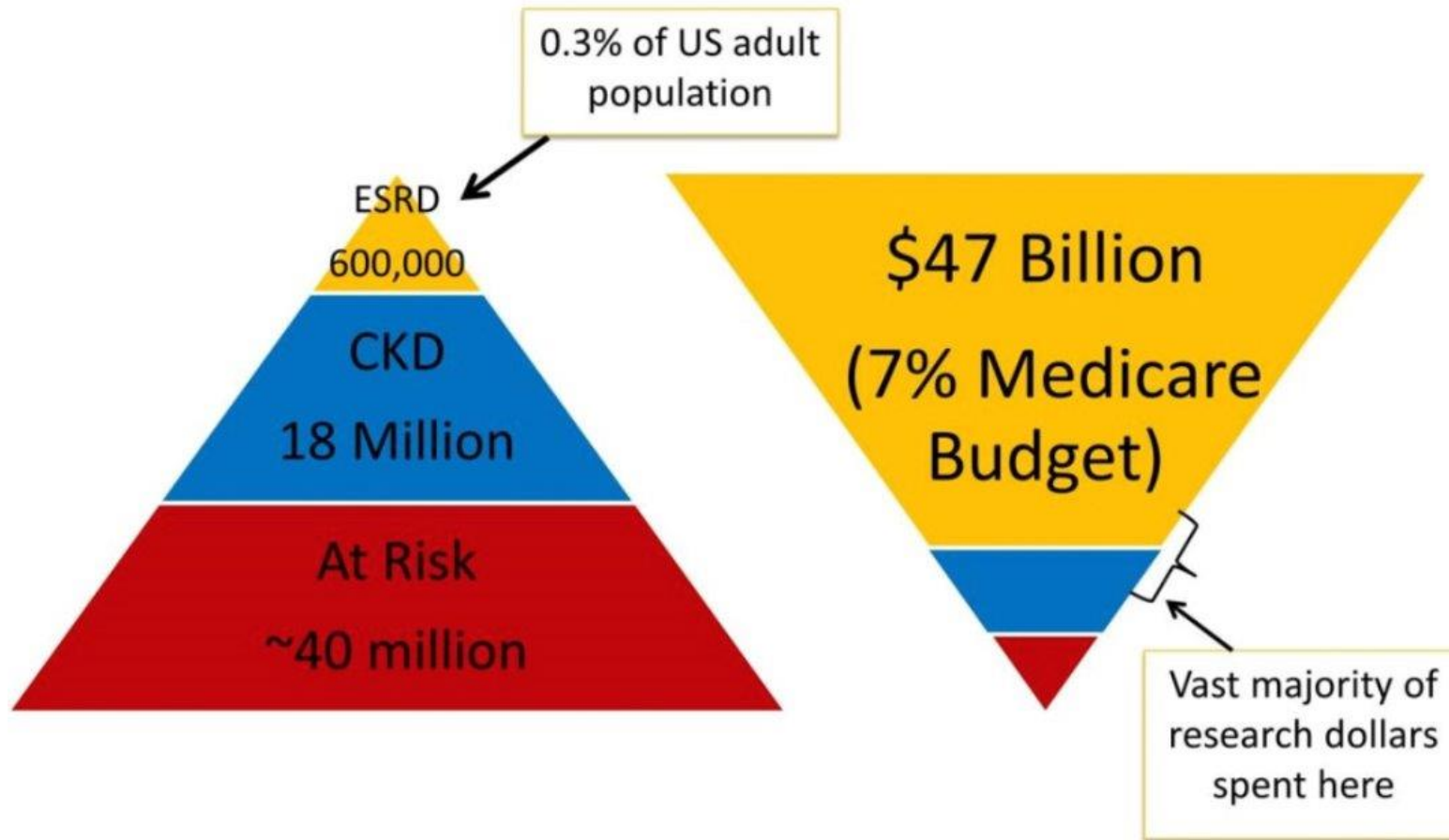
3 February 2025

EB156/CONF./6

Reducing the burden of noncommunicable diseases through promotion of kidney health and strengthening prevention and control of kidney disease

- **90% of persons with CKD do not know they have it**

Kidney Disease and Kidney Failure - High Resource Utilization



The PCP's 3-Step Playbook for the CKD Crisis



IDENTIFY

Who is at risk? What are the essential labs?



STRATIFY

How severe is it? What is the risk of progression?

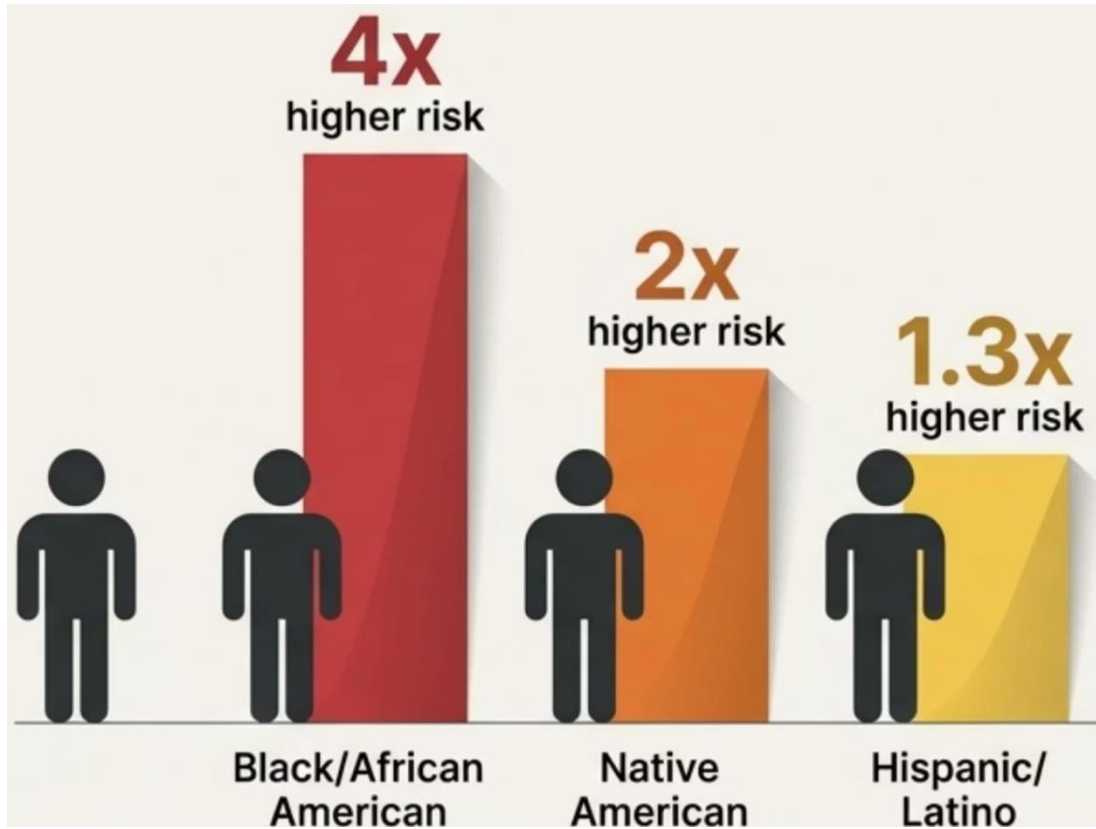


ACT

What are the evidence-based interventions to slow the disease?

CKD is a Crisis of Health Equity

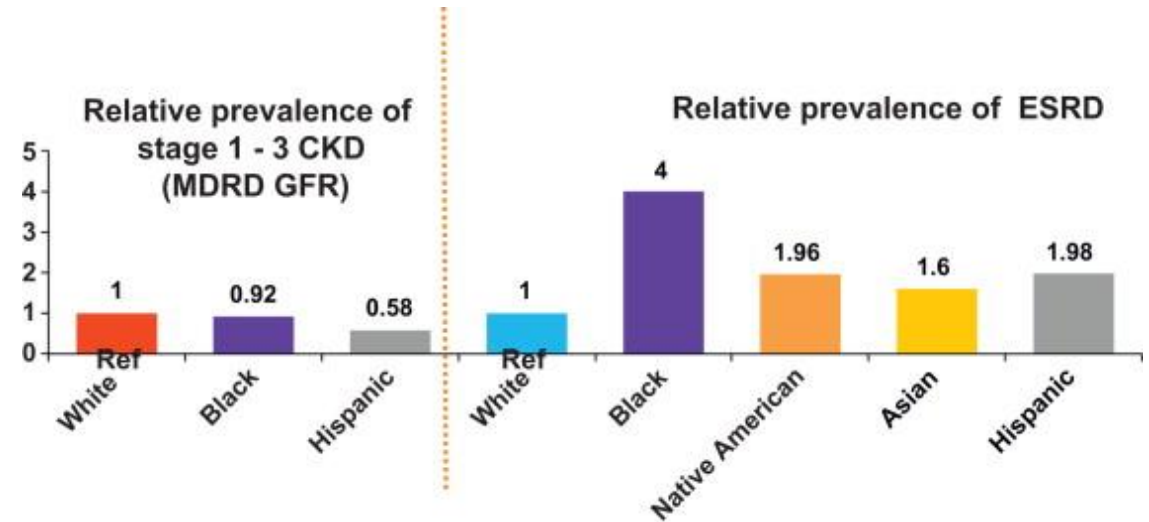
ESRD Risk Disparity



The Drivers Aren't Just Genetic

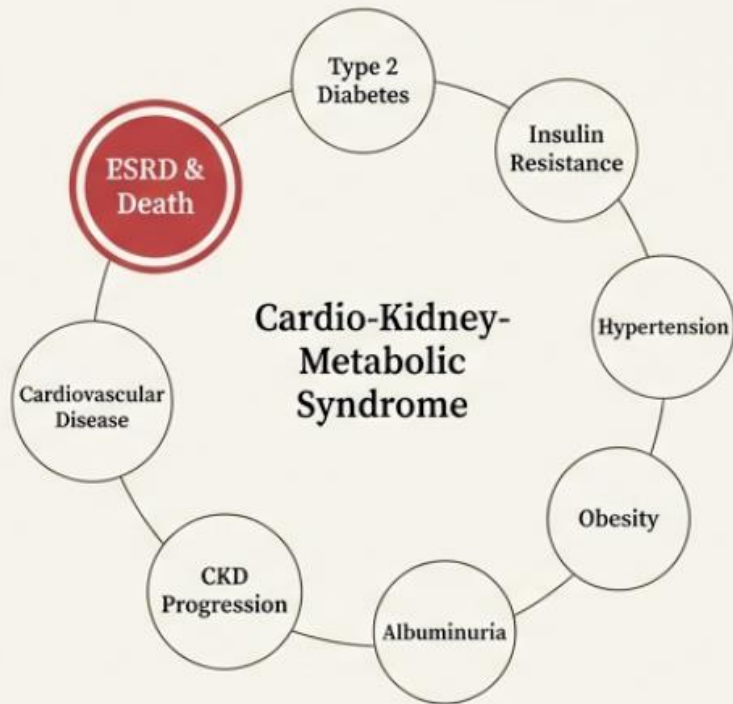
Social Determinants of Health: Transportation barriers, medication cost, health literacy, food access.

Structural Barriers: Less access to specialists, preventive care, and newer medications.



Cardio-Kidney-Metabolic Syndrome

The Vicious Cycle



You're not treating three separate diseases; you're treating one interconnected system. A single intervention has multiple benefits.

- ❏ Type 2 Diabetes, Hypertension, Obesity, and CKD form an interconnected cycle leading to cardiovascular disease, ESRD, and death. Breaking one link helps break the entire chain.

Step 1: Who is a risk



Cardiovascular Disease



Diabetes (any type)



Hypertension



Age ≥ 65



Family History of CKD



High-Risk Ancestry



Obesity (BMI ≥ 30)

Step 1: The Two Essential Labs

eGFR (Estimated Glomerular Filtration Rate)

Measures: Kidney FUNCTION

Answers: How well are the kidneys filtering?

UACR (Urine Albumin-to-Creatinine Ratio)

Measures: Kidney DAMAGE

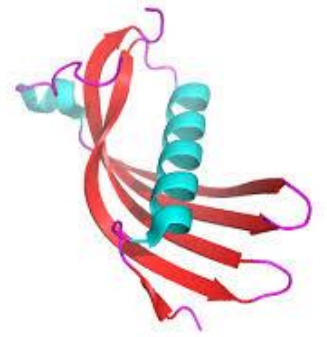
Answers: Is protein leaking into the urine?

Ordering eGFR without UACR is seeing only half the picture.
UACR is the **single strongest predictor of CKD progression**.



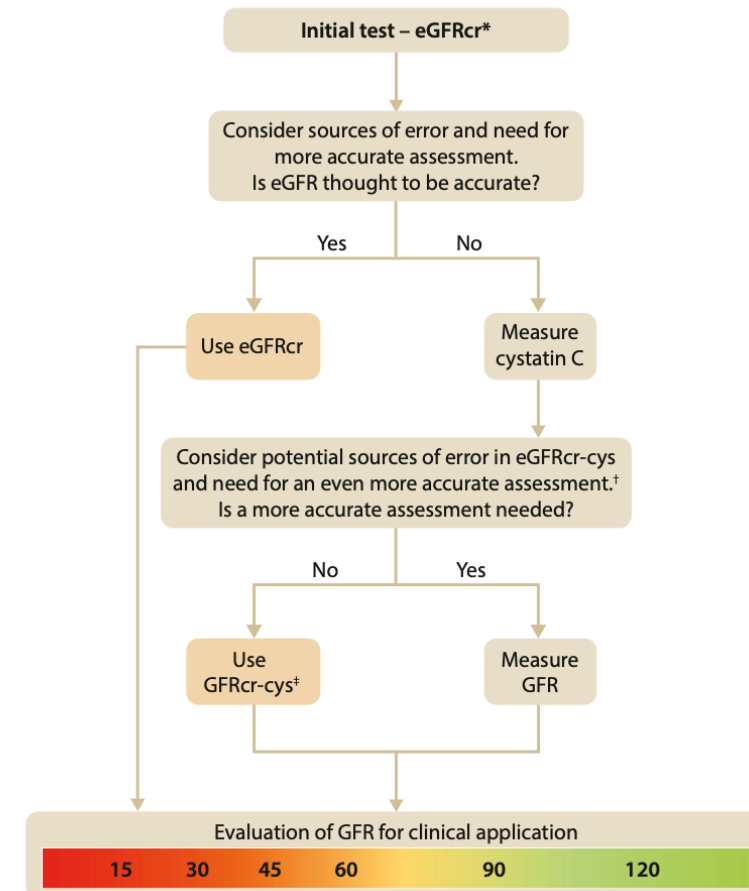
Cystatin C

- Protein produced by all nucleated cells of the body
- Tighter correlation with measured GFR
- Stronger association with adverse outcomes than creatinine

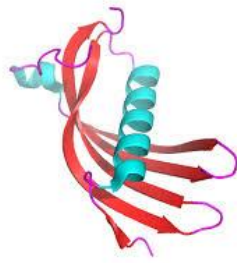


1.1.2.1: In adults at risk for CKD, we recommend using creatinine-based estimated glomerular filtration rate (eGFR_{cr}). If cystatin C is available, the GFR category should be estimated from the combination of creatinine and cystatin C (creatinine and cystatin C-based estimated glomerular filtration rate [eGFR_{cr-cys}]).

KDIGO 2024 Clinical Practice Guideline for the Evaluation and Management of Chronic Kidney Disease. Kidney Int. 2024.



Cystatin C



- Protein produced by all nucleated cells of the body
- Tighter correlation with measured GFR
- Stronger association with adverse outcomes than creatinine

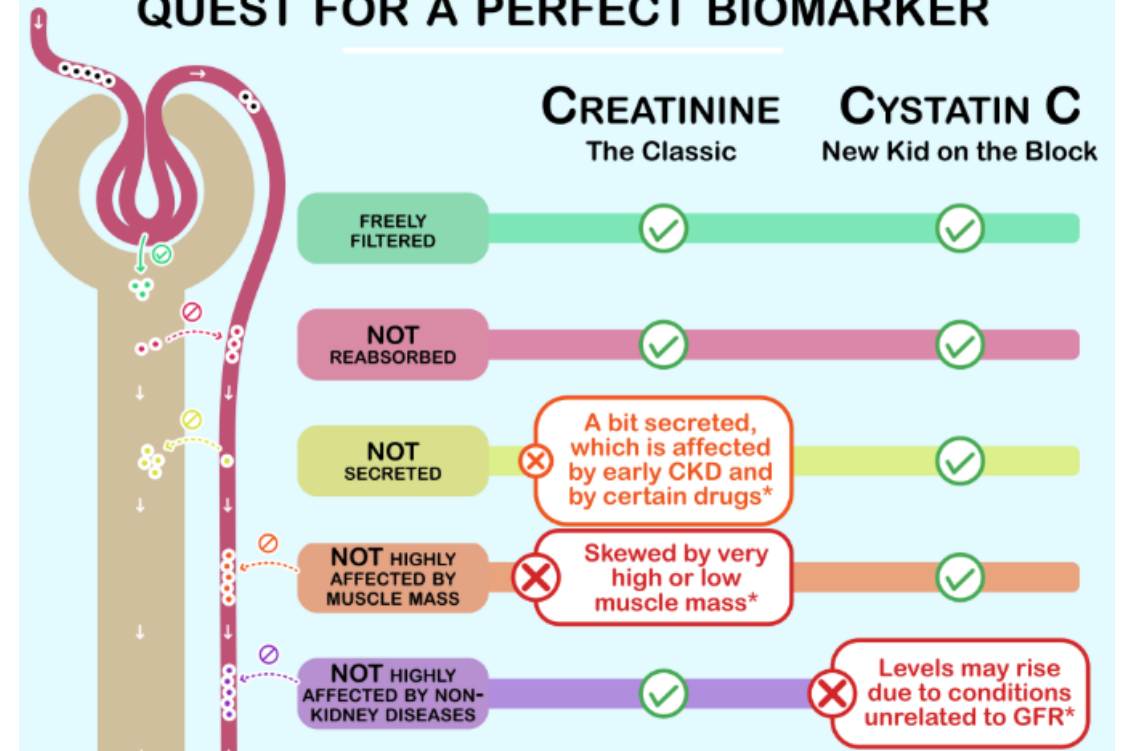
1B

1.1.2.1: In adults at risk for CKD, we recommend using creatinine-based estimated glomerular filtration rate (eGFR_{cr}). If cystatin C is available, the GFR category should be estimated from the combination of creatinine and cystatin C (creatinine and cystatin C-based estimated glomerular filtration rate [eGFR_{cr-cys}]).



KDIGO 2024 Clinical Practice Guideline for the Evaluation and Management of Chronic Kidney Disease. Kidney Int. 2024.

ESTIMATED GLOMERULAR FILTRATION RATE: QUEST FOR A PERFECT BIOMARKER



Step 2: How severe is it?

KDIGO: Prognosis of CKD by GFR and albuminuria categories				Persistent albuminuria categories		
				Description and range		
				A1	A2	A3
				Normal to mildly increased <30 mg/g <3 mg/mmol	Moderately increased 30–300 mg/g 3–30 mg/mmol	Severely increased >300 mg/g >30 mg/mmol
GFR categories (ml/min/1.73 m ²) Description and range	G1	Normal or high	≥90			
	G2	Mildly decreased	60–89			
	G3a	Mildly to moderately decreased	45–59			
	G3b	Moderately to severely decreased	30–44			
	G4	Severely decreased	15–29			
	G5	Kidney failure	<15			

Green: low risk (if no other markers of kidney disease, no CKD); Yellow: moderately increased risk; Orange: high risk; Red: very high risk. GFR, glomerular filtration rate.

Stratify Risk with the the KDIGO Heat Map Map

This grid is your north star. It tells you follow-up frequency, treatment intensity, and referral urgency.

Step 2: How severe is it?

Stratify Risk with the KDIGO Heat Map

CKD is classified based on:

- Cause (C)
- GFR (G)
- Albuminuria (A)

				Albuminuria categories		
				Description and range		
				A1	A2	A3
				Normal to mildly increased <30 mg/g <3 mg/mmol	Moderately increased 30–299 mg/g 3–29 mg/mmol	Severely increased ≥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 3
	G2	Mildly decreased	60–89	Screen 1	Treat 1	Treat 3
	G3a	Mildly to moderately decreased	45–59	Treat 1	Treat 2	Treat 3
	G3b	Moderately to severely decreased	30–44	Treat 2	Treat 3	Treat 3
	G4	Severely decreased	15–29	Treat* 3	Treat* 3	Treat 4+
	G5	Kidney failure	<15	Treat 4+	Treat 4+	Treat 4+

■ Low risk (if no other markers of kidney disease, no CKD)
 ■ High risk
 ■ Moderately increased risk
 ■ Very high risk

Color-to-Action Guide

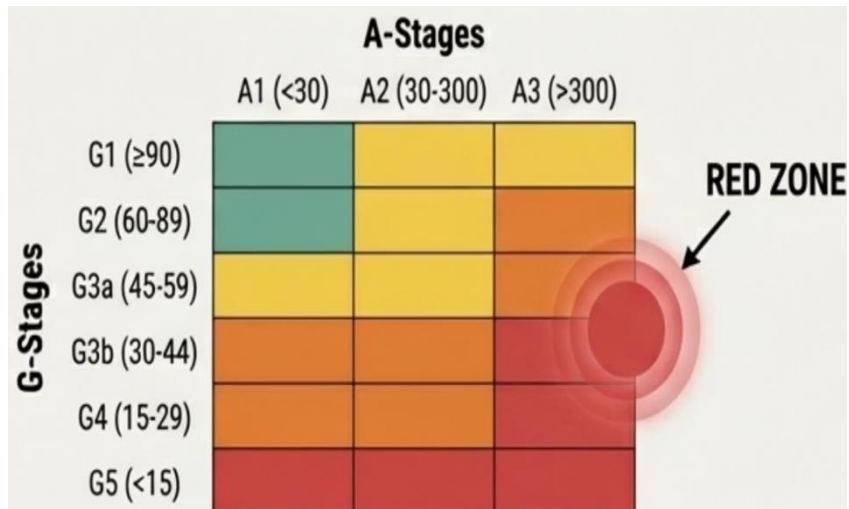
	GREEN (Low Risk): Monitor annually. Standard preventive care.
	YELLOW (Moderate Risk): Monitor 6-12 months. Start ACEi/ARB for albuminuria. Target BP <130/80.
	ORANGE (High Risk): Monitor 1-3 months. Intensive management (BP <120, SGLT2i). Schedule nephrology consult.
	RED (Very High Risk): Monitor monthly. Urgent referral needed. Prepare for potential ESRD.

Putting it into perspective

The 3-Step Analysis

Mr. Smith, 65, with uncontrolled T2DM and HTN.

- Creatinine: 1.4
- eGFR: 42
- UACR: 450



1. IDENTIFY: He has risk factors and meets the definition of CKD (eGFR <60 and UACR >30).

2. STRATIFY: G-Stage: **G3b** (eGFR 42), A-Stage: **A3** (UACR 450). On the Heat Map: **RED ZONE (Very High Risk)**.

3. ACT: ????

Is this an acute emergency or not?



Is there a prior creatinine to compare?

Prior was normal?

→ Think AKI. Look for reversible causes (dehydration, NSAIDs, sepsis).

Prior was also elevated?

→ This is CKD. Determine if it's stable or progressive. Manage outpatient.

No prior available?

→ Assume CKD until proven otherwise, but look for acute triggers.

Evaluation of causes CKD

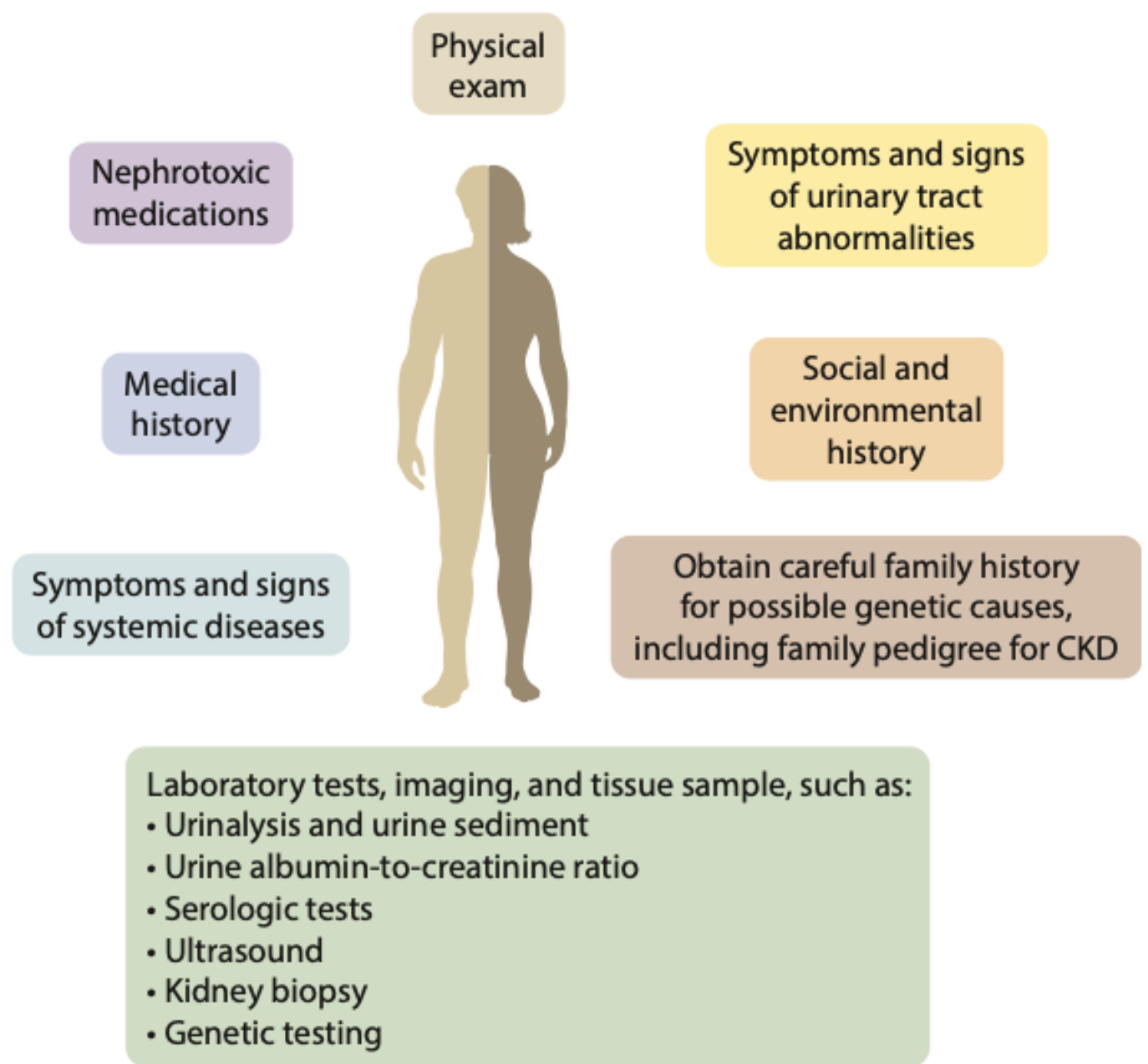
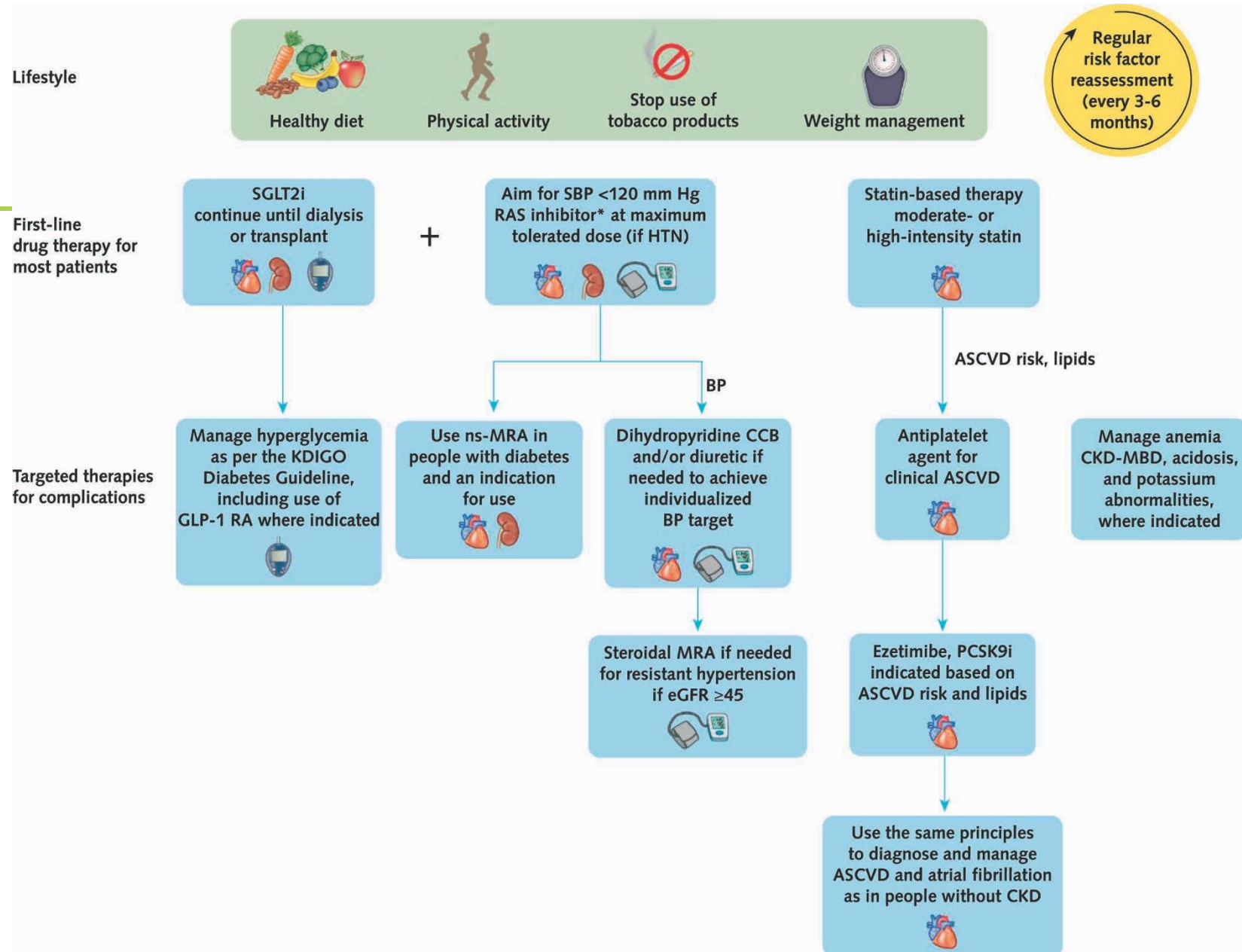
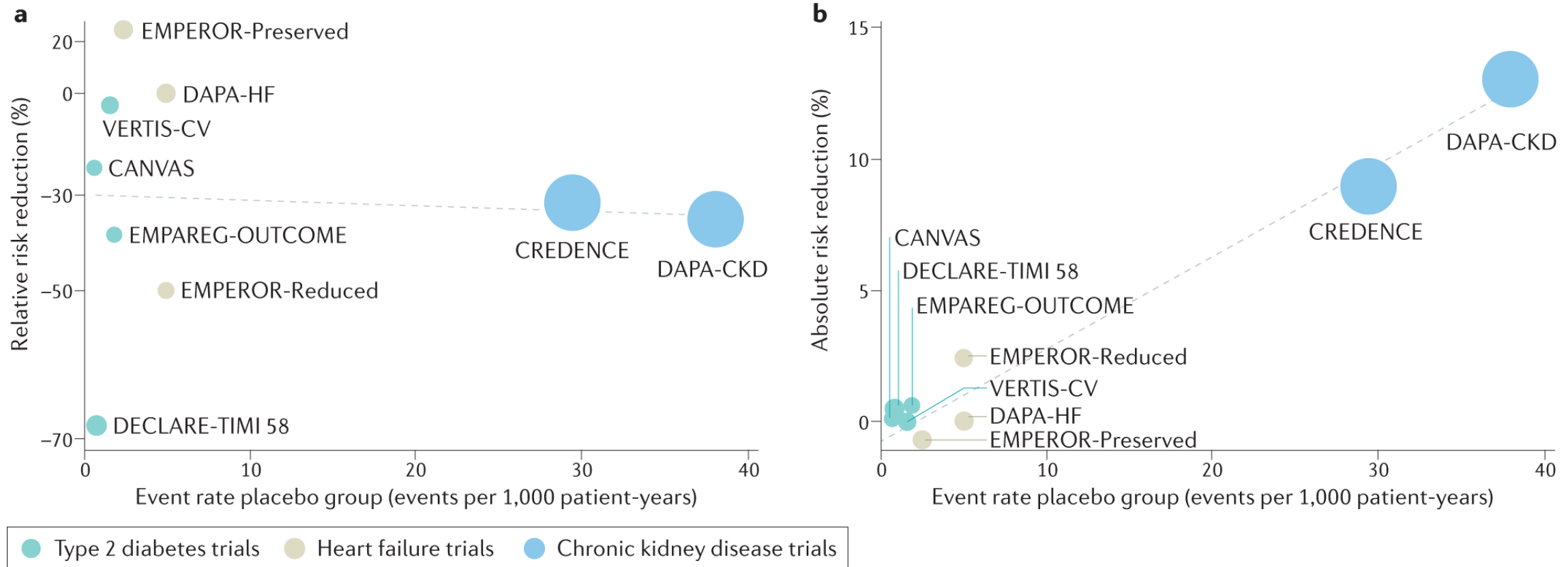


Figure 8 | Evaluation of cause of chronic kidney disease (CKD).

Approach to CKD treatment and risk modification



Effect of SGLT2 inhibitors on kidney failure



Who should receive SGLT2i

SGLT2 Inhibitor Cold Map

*Indications for SGLT2i in
CKD/Albuminuria/T2DM/
HFrEF/HFmrEF/HFpEF*



				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	≥ 300mg/g ≥ 30mg/mmol
GFR Categories (ml/min/1.73m ²) Description and range	G1	Normal to high	≥ 90			
	G2	Mildly decreased	60-89			
	G3a	Mildly to moderately decreased	45-59			
	G3b	Moderately to severely decreased	30-44			
	G4	Severely decreased	15-29 20			
	G5	Kidney failure	<15			



Cardiovascular / kidney risk reduction



Cardiovascular risk reduction only:
HFrEF / HFmrEF / HFpEF



No evidence for benefit / safety*

Nonsteroidal MRA - Finerenone

FIDELIO-DKD

Does finerenone improve outcomes in patients with CKD?

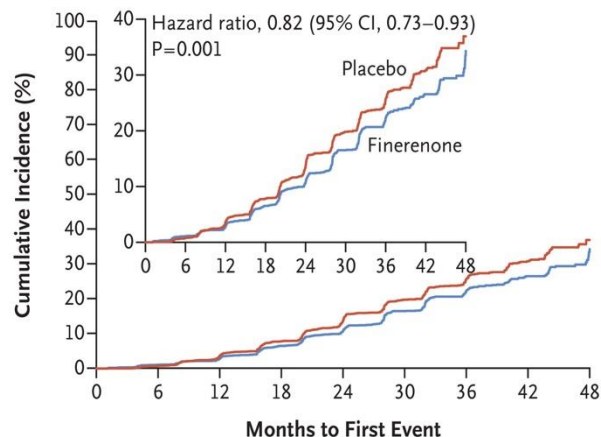
-  **Double-blinded**
-  **Type 2 diabetes**
-  **2.6 years**
Median follow-up
-  **RAAS blockade**
Maximum tolerable dose

Stratification

-  **eGFR 25 to <75**
(mL/min/1.73m²)
-  **uACR 300 to 5000**
(mg/g)
-  **eGFR 25 to <60**
(mL/min/1.73m²)
-  **uACR 30 to <300**
(mg/g)
-  **Diabetic retinopathy**

Conclusion In patients with CKD, finerenone resulted in lower risks of cardiovascular events than placebo

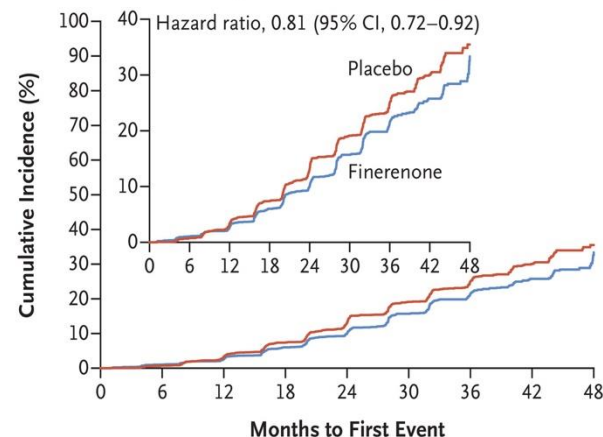
A Primary Composite Outcome



No. at Risk

Placebo	2841	2724	2586	2379	1758	1248	792	453	82
Finerenone	2833	2705	2607	2397	1808	1274	787	441	83

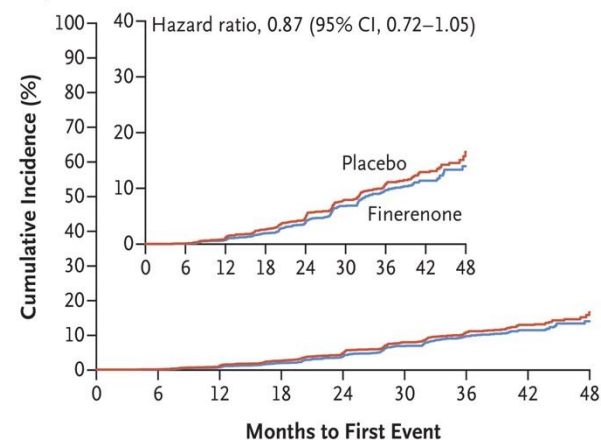
B Sustained Decrease of ≥40% in the eGFR from Baseline



No. at Risk

Placebo	2841	2722	2588	2379	1758	1249	793	453	82
Finerenone	2833	2703	2606	2396	1808	1275	788	442	83

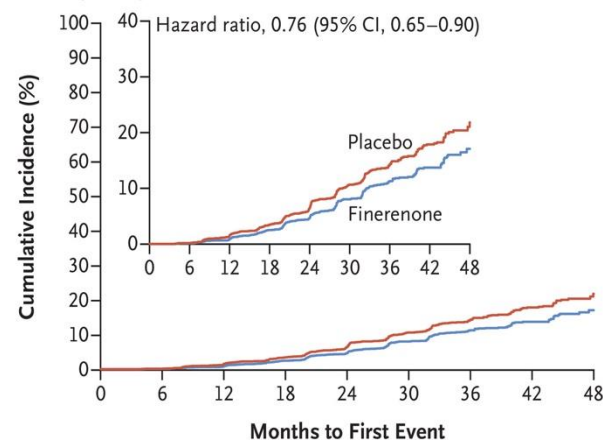
C Kidney Failure



No. at Risk

Placebo	2841	2741	2645	2508	1911	1390	892	513	103
Finerenone	2833	2733	2658	2506	1932	1393	897	510	104

D Secondary Composite Outcome



No. at Risk

Placebo	2841	2740	2636	2490	1887	1364	873	499	98
Finerenone	2833	2732	2655	2492	1915	1377	883	501	101

Safety



Discontinuation of trial regimen due to hyperkalemia

0.9%

2.3%

are similar

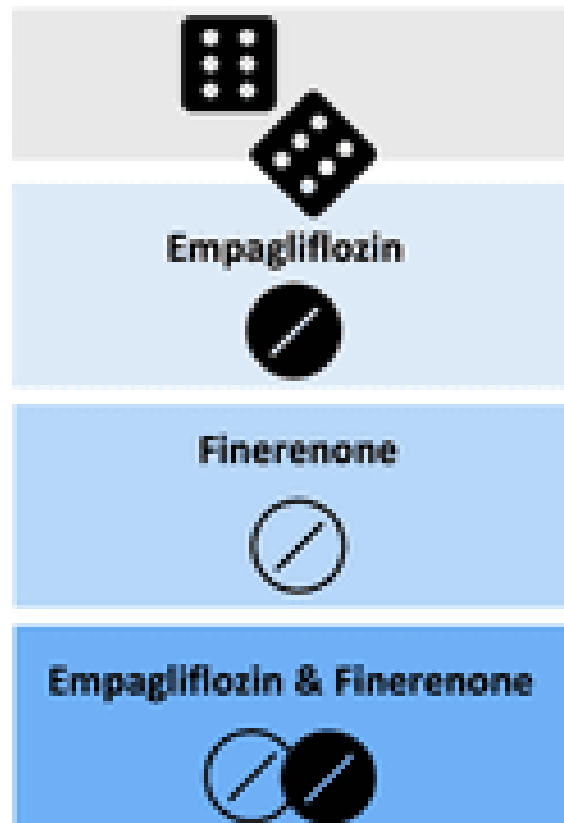
one on chronic kidney disease
online October 23,

Finerenone and empagliflozin: is the combination better than either agent alone in CKD and Type 2 Diabetes?

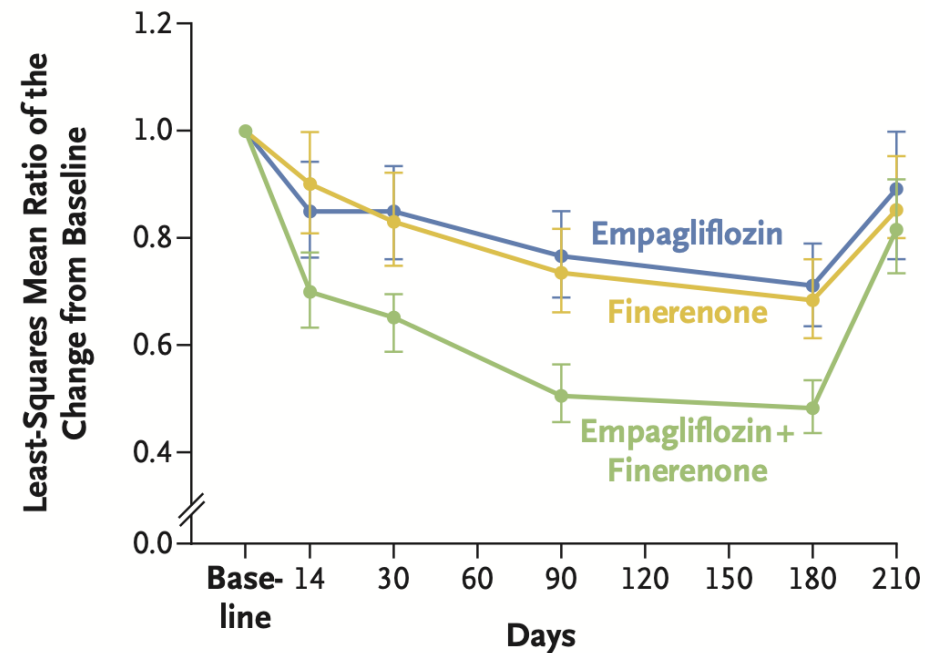


Methods

-  Randomized, double-blind trial
-  CKD + T2D 
-  14 countries
-  98% ACEI/ARB users
23% GLP-1RA users
-  Stratified according to eGFR and UACR



A Change in Urinary Albumin-to-Creatinine Ratio



No. of Patients

Finerenone	258	247	248	237	236	227
Empagliflozin	261	254	252	246	238	232
Empagliflozin + finerenone	265	248	253	248	240	238

 No unexpected adverse events

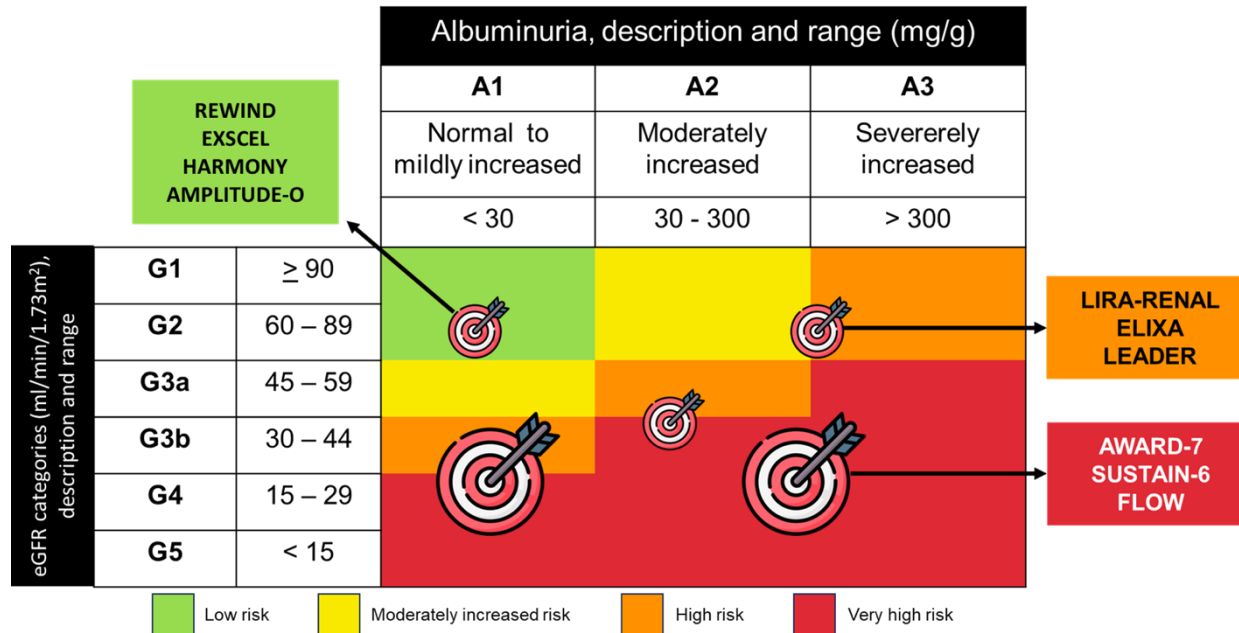
Conclusion: Among persons with both chronic kidney disease and type 2 diabetes, initial therapy with finerenone plus empagliflozin led to a greater reduction in the urinary albumin-to-creatinine ratio than either treatment alone.

VA by Michelle Favel

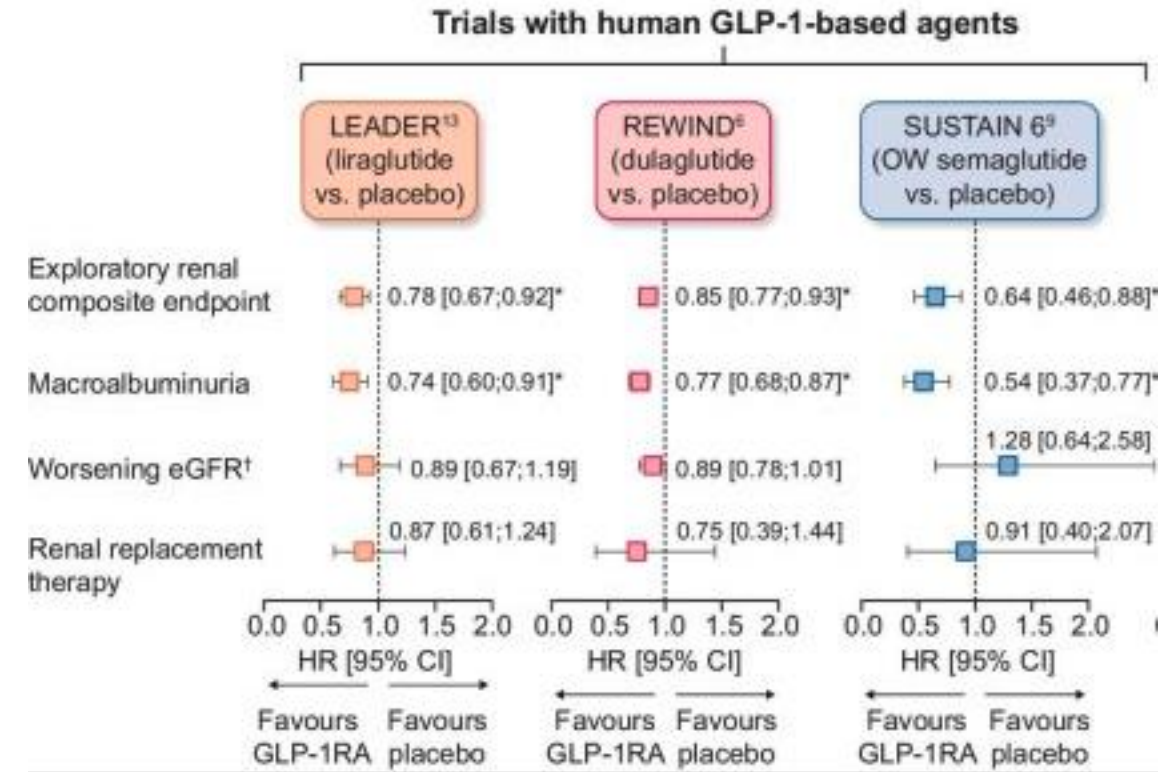
Agarwal R, Green JB, Heerspink HJL, et al; CONFIDENCE Investigators. Finerenone with Empagliflozin in Chronic Kidney Disease and Type 2 Diabetes. *N Engl J Med*. 2025 Jun 5.

Role of GLP1-RA in kidney disease

GLP-1-RA Renal Outcome Trials



@dra_milflores



FLOW Trial: Effects of semaglutide on chronic kidney disease in patients with type 2 diabetes

Methods and cohort



Multinational, randomized, and placebo-controlled trial



Type 2 diabetes with chronic kidney disease

eGFR, 25–50 mL/min/1.73 m²
UACR, 100–5000 mg/g

eGFR, 50–75 mL/min/1.73 m²
UACR, 300–5000 mg/g



Study period:
June 2019–May 2021



Median follow-up period:
3.4 years

Semaglutide
(N = 1767)

HR, ETD
(95% CI)
p value

Placebo
(N = 1766)

**Major kidney
disease
events**

331

HR, 0.76
(0.66–0.88)
0.0003

410

**Annual rate of
change in eGFR**

mL/min/1.73 m²

–2.2

ETD, 1.16
(0.86–1.47)
<0.001

–3.4

**Major
cardiovascular
events**

212

HR, 0.82
(0.68–0.98)
0.029

254

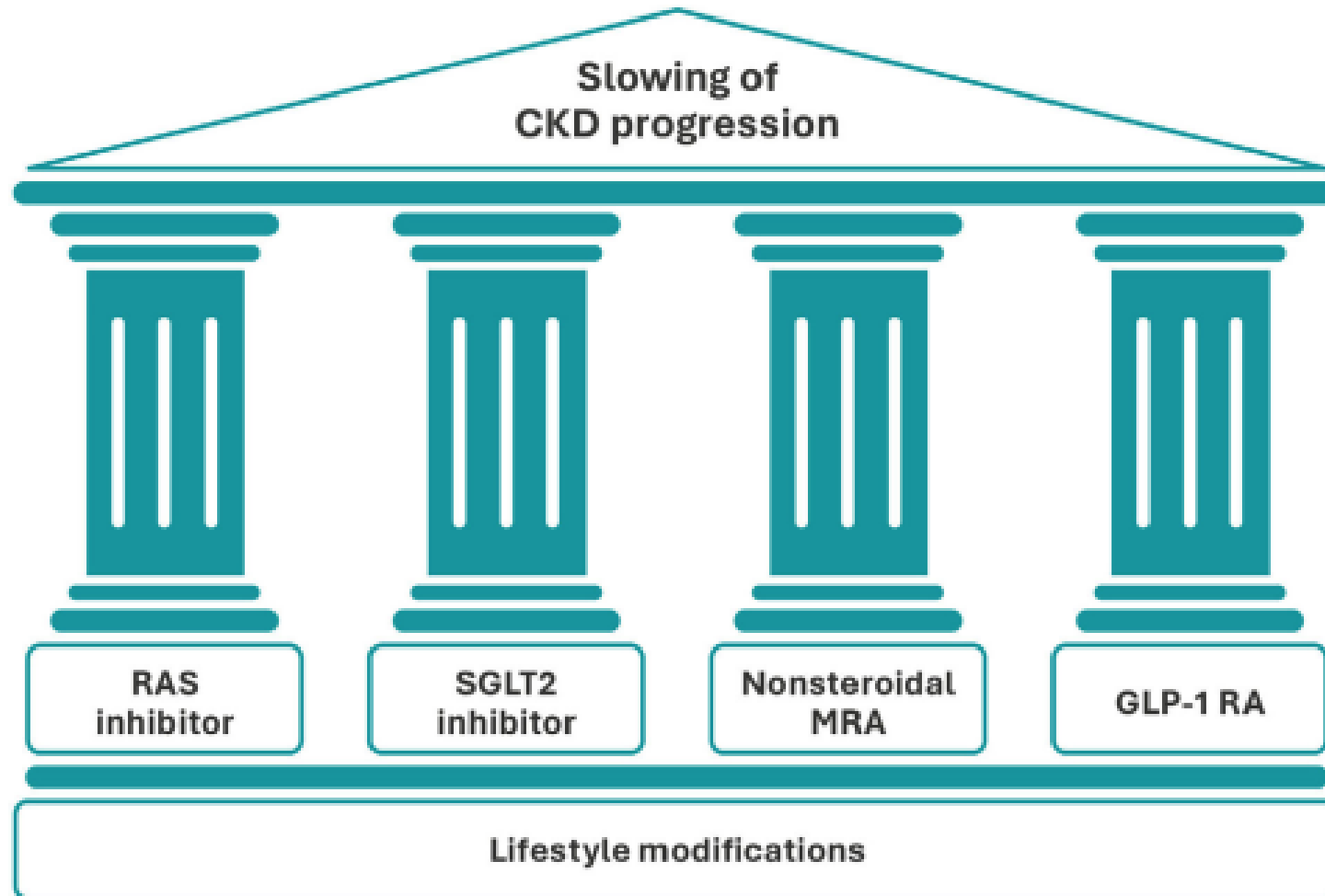
ETD, estimated treatment difference.

Conclusions: Semaglutide reduced the risk of clinically important kidney outcomes, major cardiovascular events, and death from any cause in participants with type 2 diabetes and chronic kidney disease.

Perkovic V, et al. **Effects of Semaglutide on Chronic Kidney Disease in Patients With Type 2 Diabetes.** *N Engl J Med* 2024; 391:109–121. doi: 10.1056/NEJMoa2403347

Visual abstract by Priyadarshini John, MD, DM, MSc

The 4 pillars of pharmacotherapy in CKD



The KDIGO 2024 Update: A Call for Proactive Primary Care



Comprehensive Evaluation

Moving beyond a single eGFR number.



Risk-Based Management

Tailoring therapy to individual kidney and cardiovascular risk.



Patient-Centered Strategy

Integrating patient needs and preferences into every decision.

We Know the Triggers



eGFR <30 (G4/G5)



Rapid Progression
(>5 mL/min/year)



Nephrotic Syndrome
(UACR >2200 mg/g + Edema)

We Face the Reality



Long Wait Times



Distance &
Travel Barriers



Cost & Affordability



Lost to Follow-up

Michael: Your Patient



Patient: Michael, 67

History: Poorly controlled T2 Diabetes,
Uninsured

The Barrier: Previous referral failed due
to cost & distance.

eGFR Progression

52 → 38

Regular (in 6 months)

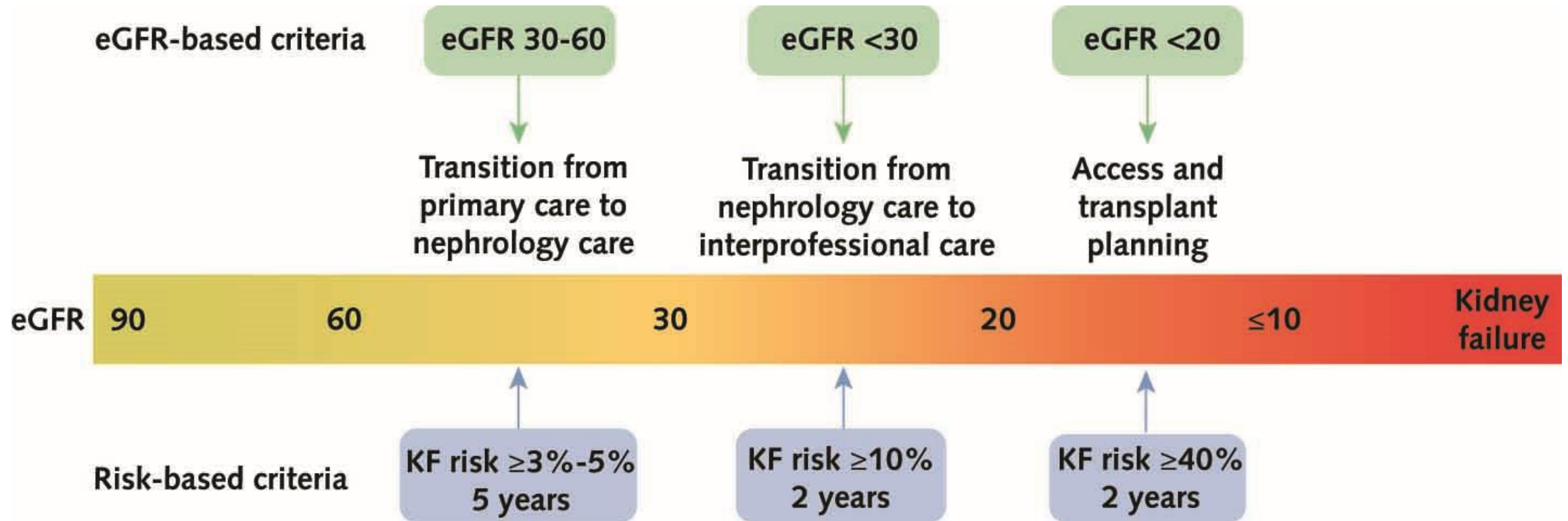
Albuminuria

UACR **180** mg/g

Emerging Complications

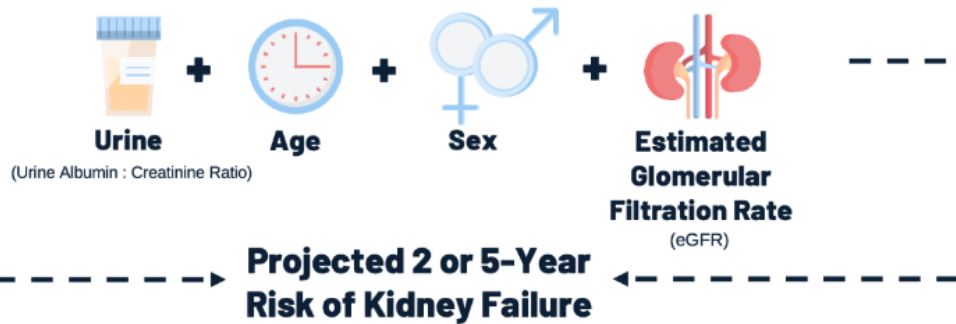
- K+: **5.7** mEq/L
- Hgb: **10.8** g/dL
- BP: **145/90** mmHg

Transition from an eGFR-based to a risk-based approach to chronic kidney disease care



The Kidney Failure Risk Equation

Kidney Failure Risk Equation (KFRE)



5-year kidney failure risk 3–5%
→ consider nephrology referral



2-year kidney failure risk >10%
→ start multidisciplinary care



2-year kidney failure risk >40% → plan for KRT
(modality education, access, transplant referral)



Risk-based referral model to nephrologist-specialist care in Stockholm

Results

SCREAM recalibration further improved predictive performance of the Non-North American KFRE

↓ **25%** KFRE models **reduce unnecessary referrals**, without missing many cases

Optimal performance thresholds (5-year kidney failure risk):

Non-North American KFRE	SCREAM recalibrated
15%	9%

Methods

SCREAM (Stockholm CReAtinine Measurements): Stockholm, Sweden Healthcare utilization cohort 2006–2021

N = 192,964 people with creatinine and albuminuria measurements within 12 months
N = 887,388 total observation

Caldinelli, A. et al.
NDT (2025)
@NDTSocial

A risk-based KFRE referral model outperforms classical referral models, reducing unnecessary referrals and allowing for better use of healthcare resources. However, thresholds higher than those recommended by KDIGO 2024 may offer better sensitivity and specificity.

Predicted risk of kidney failure and 40% decline in eGFR – risk thresholds for individualized care

Same eGFR, very different KFRE risk

Patient A

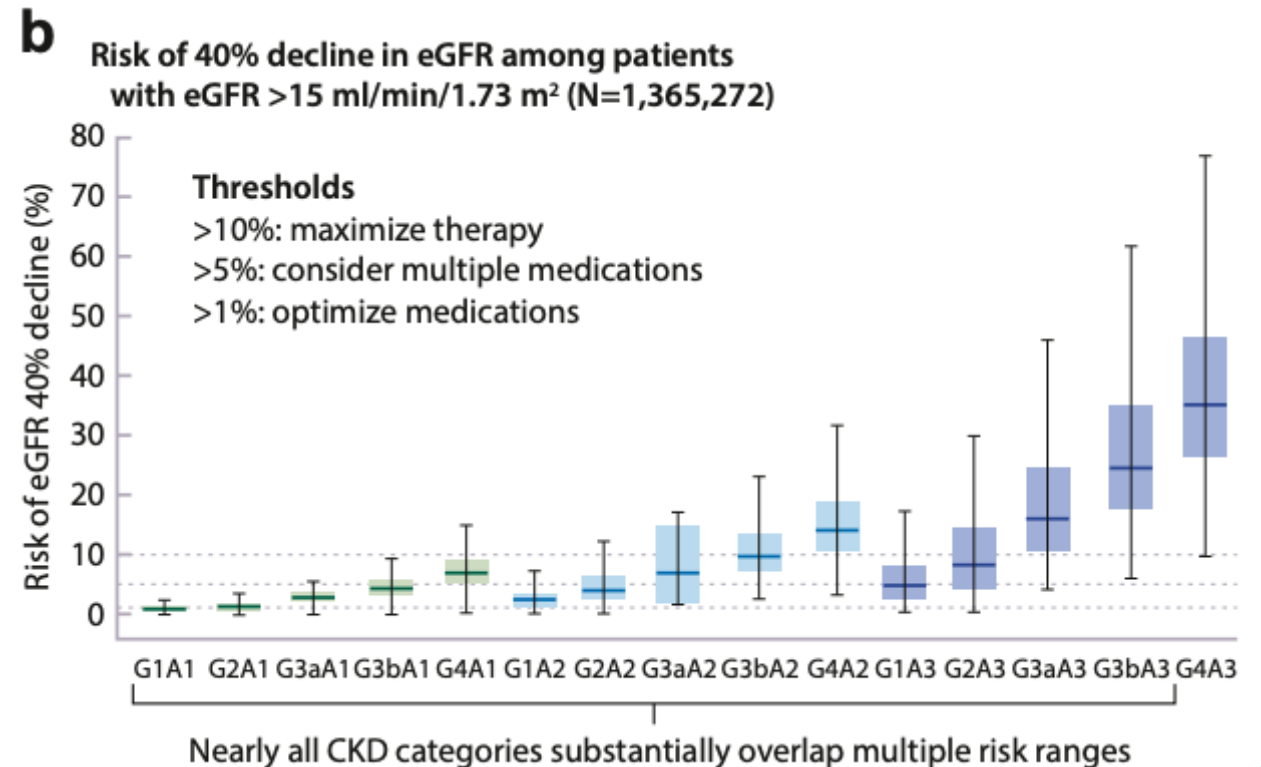
 eGFR 28
 Albumin 100 mg/g
 Female, 79 yrs

2-yr risk 3.5%
5-yr risk 10%

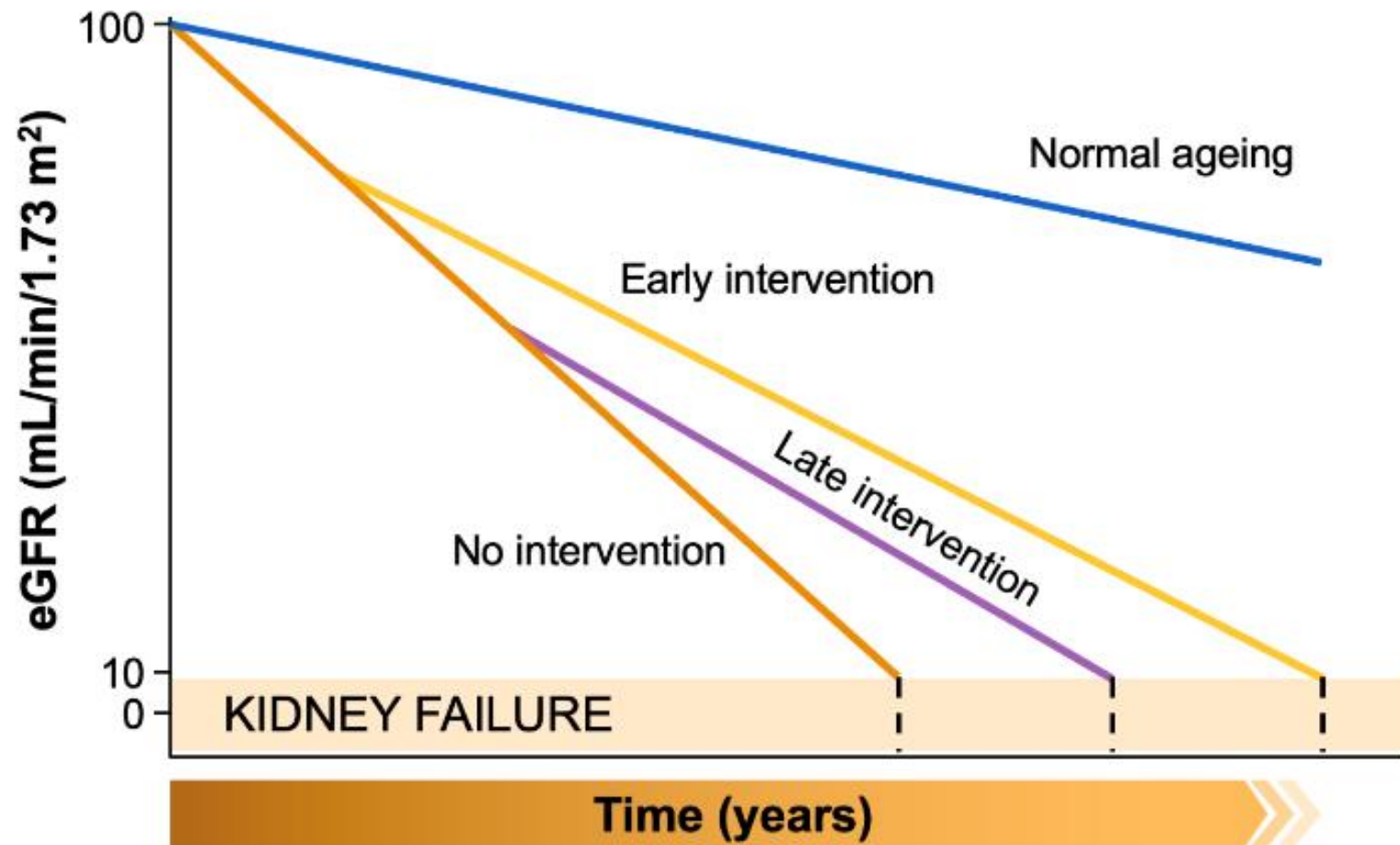
Patient B

 eGFR 28
 Albumin 780 mg/g
 Male, 71 yrs

2-yr risk 12.7%
5-yr risk 34.6%



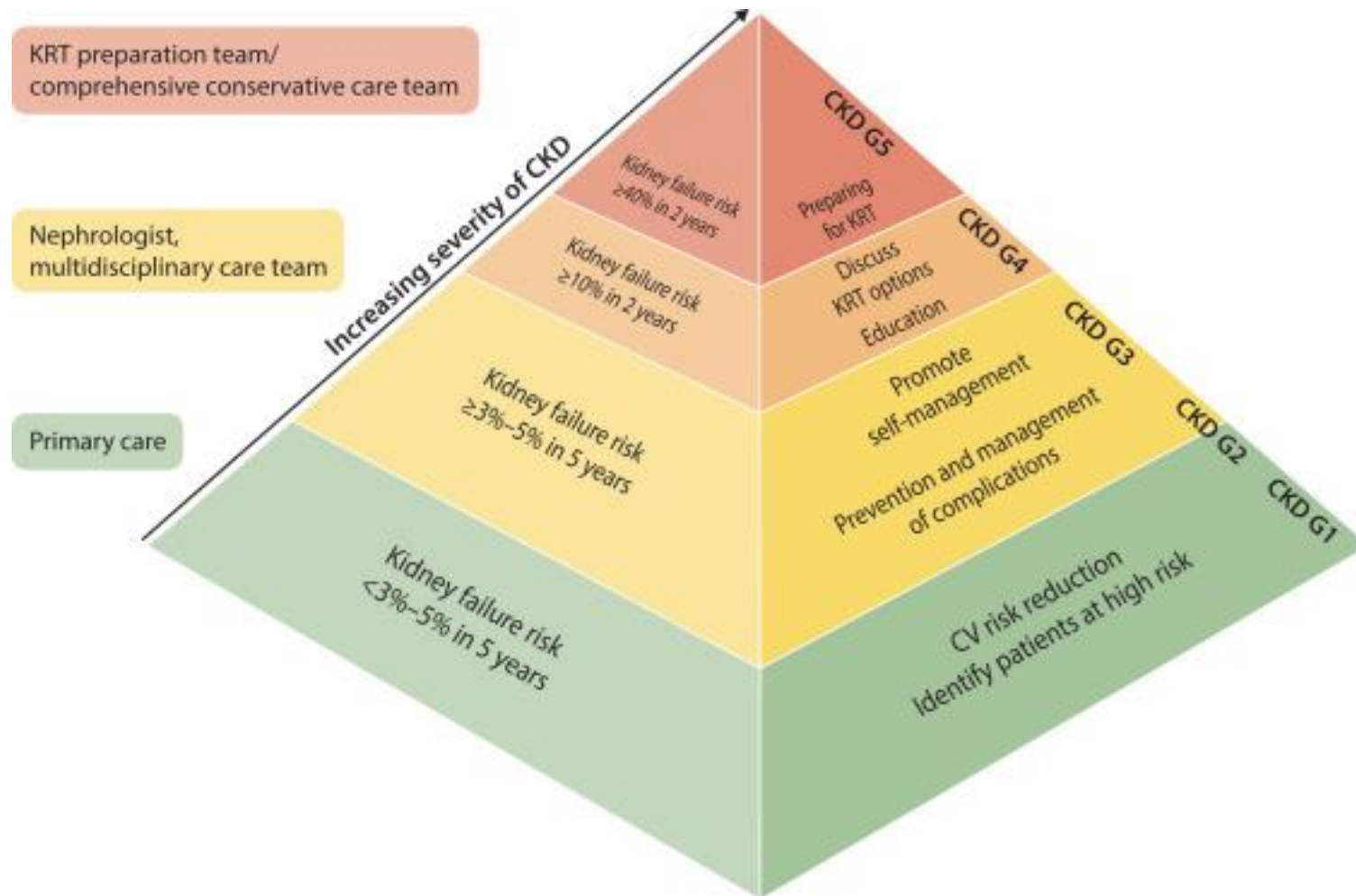
Effect of early intervention on the trajectory of CKD compared with normal aging



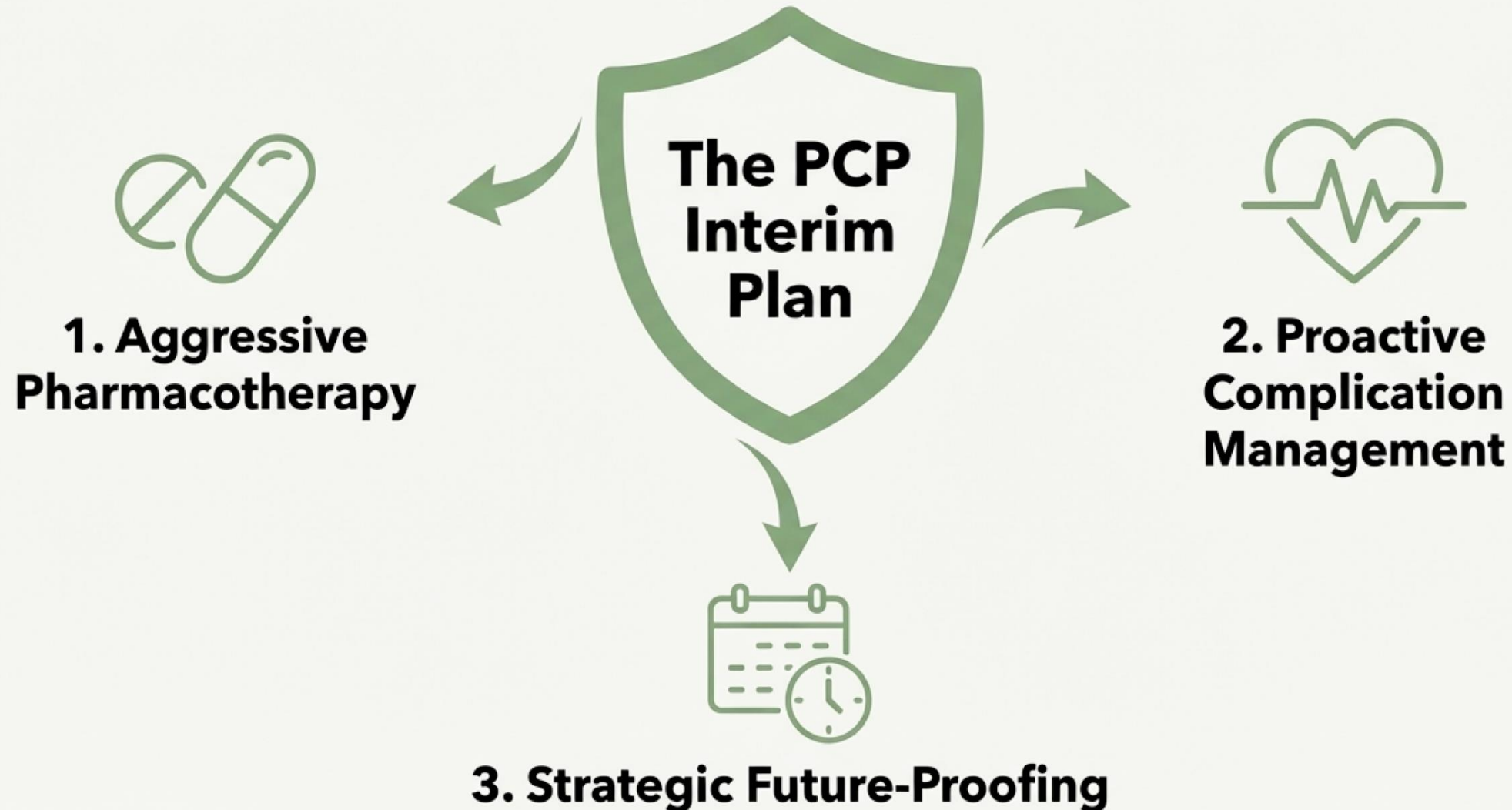
Other indications for Nephrology referral

- Urine albumin-to-creatinine ratio > 300 mg/g, including nephrotic syndrome
- Hematuria that is not secondary to urologic conditions
- Inability to identify a presumed cause of CKD
- eGFR decline of > 30% in less than 4 months without an obvious explanation
- Difficult-to-manage complications
- Serum potassium > 5.5 mEq/L
- Difficult-to-manage drug complications
- Resistant hypertension
- Recurrent or extensive nephrolithiasis
- Hereditary kidney disease

Optimal care model by increasing severity of chronic kidney disease

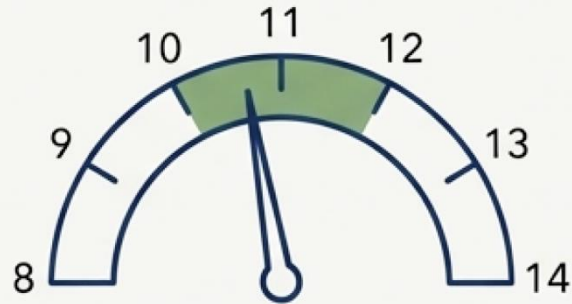


From Waiting to Acting: Your Proactive Strategy



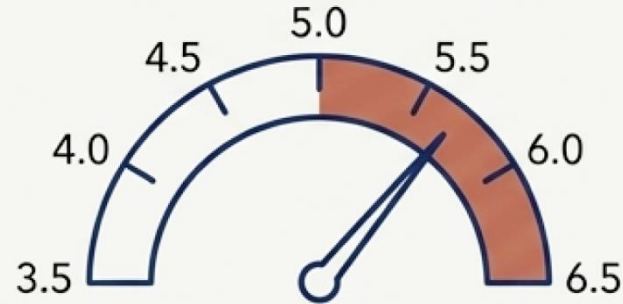
Managing common complications

ANEMIA (Hgb 10.8)



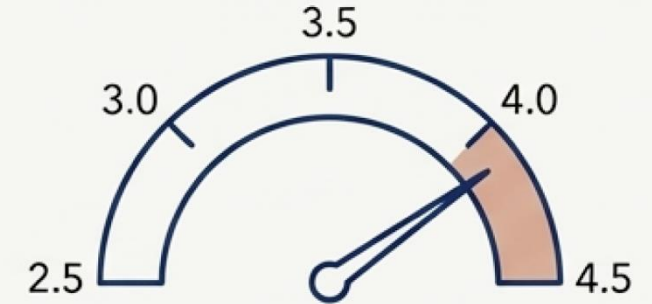
- **Assess:** Check iron studies first.
- **Act:** Replete iron if deficient before considering an ESA.
- **Target:** Hgb **10-12 g/dL.**

HYPERKALEMIA (K+ 5.7)



- **Assess:** Review diet for high-potassium foods.
- **Act:** Counsel on K+ restriction *to enable* RAASi titration.
- **Target:** Keep K+ **<6.0 mEq/L.**

CKD-MBD (Phos 4.1)



- **Assess:** Monitor Phosphate, Calcium, PTH every 3-6 months.
- **Act:** Initiate dietary phosphate counseling.
- **Target:** Keep phosphate in the normal range.

Planning for the future

Now
(eGFR >20)



Vaccinate Now
(Immune response is better pre-uremia)



- Hepatitis B Series: Use the double-dose (40 mcg) formulation.



- Pneumococcal: PCV20.



- Annual: Influenza & updated COVID-19.

Future
(ESRD/Transplant)



Plan for Transplant Early
(The evaluation takes months)

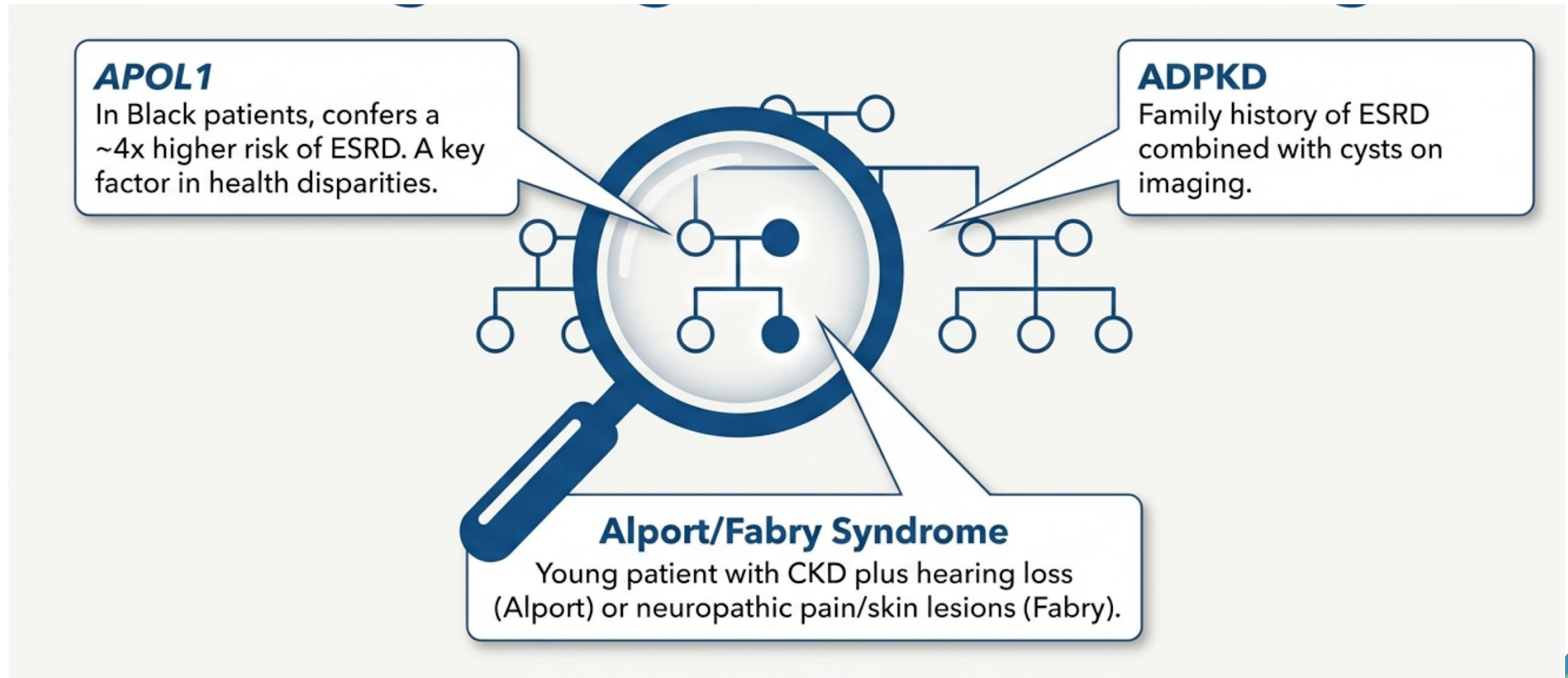


- Refer to Transplant Center when eGFR approaches 20-25.



- Discuss Living Donor Options with the patient and family.

Recognizing Genetic CKD – history is key



What increases the diagnostic yield of genetic testing?

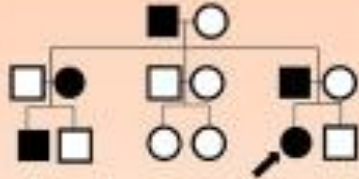
Young age of onset



Examples:

- Nephrotic syndrome
- Microscopic hematuria
- CKD
- HTN/electrolyte abnormalities

Strong family history



Examples:

- ADPKD
- Alport syndrome
- Young onset of ESKD

Cystic/anatomic abnormalities



Examples:

- Multiple renal/hepatic cysts
- CAKUT

CKD of unclear etiology



Examples:

- No diagnosis despite thorough work up
- Tubulointerstitial disease of unclear cause (ADTKD)

Extrarenal manifestations



Examples:

- Liver cysts
- Developmental delay
- Skeletal abnormalities
- Vision/hearing loss

Key Take Aways

The Problem

- 1 in 7 US adults (35.5M) have CKD; 90% don't know it
- CKD is a health equity issue: Black/African American patients face 4x higher ESRD risk

The 3-Step Playbook

- 1.IDENTIFY** — Screen at-risk patients (CVD, diabetes, hypertension, age ≥ 65 , family history, obesity, high-risk ancestry) with the two essential labs: eGFR (function) + UACR (damage)
- 2.STRATIFY** — Use the KDIGO heat map (eGFR $\times$ albuminuria) to assign risk color (green $\rightarrow$ red) and determine monitoring frequency and referral urgency
- 3.ACT** — Apply the 4 pillars of pharmacotherapy: RAS inhibitor, SGLT2 inhibitor, nonsteroidal MRA (finerenone), GLP-1 RA — on top of lifestyle modification

Key Take Aways

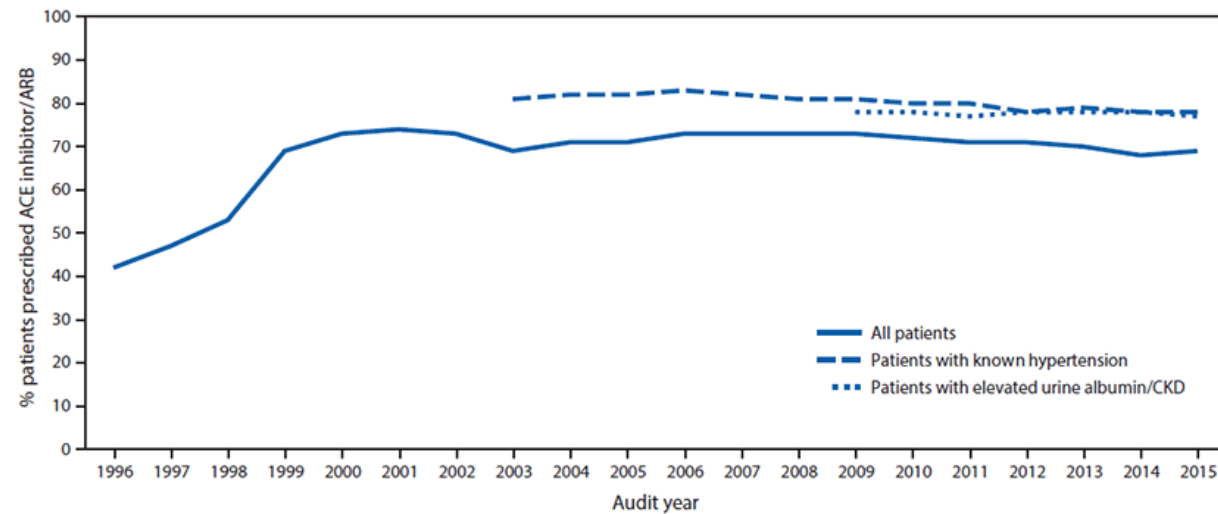
When to Refer to Nephrology

- UACR >300 mg/g, unexplained hematuria, unclear CKD etiology
- eGFR decline >30% in <4 months, resistant hypertension, K⁺ >5.5
- Hereditary kidney disease or recurrent nephrolithiasis
- Kidney Failure Risk Equation (KFRE): 5-yr risk 3–5% → consider referral; 2-yr risk >10% → multidisciplinary care; 2-yr risk >40% → plan for KRT

Genetics Red Flags

- Young age of onset, strong family history, cystic/anatomic abnormalities, unclear etiology, extrarenal manifestations (hearing/vision loss, skin lesions)
- Key genes: APOL1 (Black patients, ~4x ESRD risk), PKD1/PKD2 (ADPKD), COL4A genes (Alport)

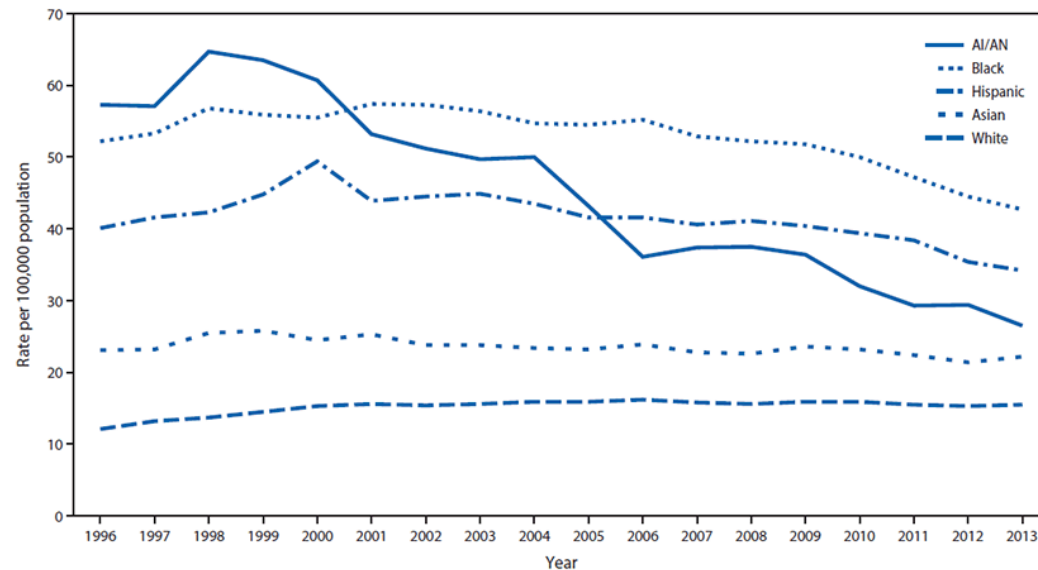
FIGURE 3. ACE Inhibitor/ARB prescription in AI/AN patients with diabetes, 1996–2015



Source: Indian Health Service Diabetes Care and Outcomes Audit.

IHS has been at the forefront of this change already

FIGURE 1. Incidence* of diabetes-related end-stage renal disease among adults aged ≥18 years, by race and ethnicity — United States, 1996–2013



Source: Data from the U.S. Renal Data System and the U.S. Census.

Know Your Patients

A Companion Resource for Healthcare Professionals

This guide is designed for clinicians evaluating individuals at risk for kidney disease as this resource emphasizes the importance of timely detection of kidney disease and clear patient communication. Delayed diagnoses of kidney disease are common, and early intervention enables access to treatments that can preserve kidney function.



SCREENING HEALTH HISTORY AND LIFESTYLE

- ☐ Obtain health history and family history of kidney disease
- ☐ Screen for high-risk conditions: diabetes, hypertension, cardiovascular disease, obesity, autoimmune disease
- ☐ Assess lifestyle with diet, physical activity, tobacco use, medications
- ☐ Evaluate social determinants of health including access to care and food security



LABS

- ☐ Basic metabolic panel (creatinine trend, potassium, phosphorus, and eGFR using CKD-EPI without race)
- ☐ Cystatin C: older adults, or high/low muscle mass, amputee
- ☐ Urinalysis for specific gravity, blood, protein, infection
- ☐ Urine Albumin-to-Creatinine Ratio (UACR): obtain for patients at risk for kidney disease such as diabetes, high blood pressure, cardiovascular disease, family history of kidney disease
- ☐ Complete Blood Count to evaluate for anemia
- ☐ Hemoglobin A1C
- ☐ Lipid Panel



RADIOLOGY

- ☐ Kidney ultrasound to evaluate kidney anatomy, obstruction, stones (obtain doppler if possible)



ESTABLISH MONITORING INTERVAL

- ☐ Monitor for anemia, acidosis, gout, mineral bone disease
- ☐ Interval monitoring of UACR and eGFR trends
- ☐ Medication adjustment as kidney function changes



REFERRAL AND CARE COORDINATION

- ☐ GFR < 45, significant decline in GFR for age, albuminuria, microscopic hematuria, changes in symptoms, or management of CKD complications
- ☐ Coordinate PCP, endocrinology, cardiology, and dietitian
- ☐ Nephrology referral for genetic counseling and testing for patients with early-onset CKD or family history



PATIENT ENGAGEMENT AND COMMUNICATION

- ☐ Ensure patient understanding of key findings and treatment follow-up plan
- ☐ Address any concerns with insurance, accessing medicines, and transportation - consult with social work

Professional Resources:



Research Resources



Accredited Activities



KNOW

Your Kidneys

Identify and reach your kidney health goals. Whether you're looking to prevent kidney issues or manage existing conditions, get empowered with knowledge and practical tips for a healthier life.

Launch the tool



KNOW

Your Cause

Understand the reasons behind your kidney disease. By learning the cause of your kidney disease, you'll be able to make informed decisions and work with your healthcare team to create a personalized plan to manage your health.

Explore your cause



KNOW

Your Plan

Create a plan that empowers you to take charge of your kidney health and live your best life. Managing kidney health involves understanding your treatment options, making informed decisions, and developing a personalized plan. Work with your healthcare team to create a plan that works best for your lifestyle and stage of kidney disease.

Customize your plan





March 2026

The Indian Health Service (IHS) Chronic Kidney Disease National Clinical Strategic Initiative is designed to promote recognition of risk factors, guideline-based prevention, screening, early diagnosis, & treatment as well as improved kidney disease outcomes in Indian Country.

Chronic Kidney Disease Model Pilot Program

The IHS National Pharmacy and Therapeutics Committee (NPTC) is **actively seeking Chronic Kidney Disease Models** in tribal communities served by federal direct care, Tribal, and Urban Indian Organization (I/T/U) programs as part of the IHS [Chronic Kidney Disease \(CKD\) National Clinical Strategic Initiative](#).

Participation

Participation as an IHS Chronic Kidney Disease Model Pilot is recommended for clinical professionals and teams who are focused on CKD mitigation efforts at I/T/U facilities in tribal communities.

Individuals and teams interested in participating in the Chronic Kidney Disease Model Pilot Program are asked to submit a brief Chronic Kidney Disease Model Pilot Program Application consisting of the following to ihsmedsafety@ihs.gov:

- 1) Name and professional discipline(s) of the applicant Chronic Kidney Disease Model Pilot (individual and/or team).
- 2) Location and tribal community/communities served.
- 3) Brief narrative (200 words or less) describing your project and objectives related to Chronic Kidney Disease mitigation efforts in Indian Country.

Upon receipt of a completed application from an eligible I/T/U site, each individual/team will receive a letter of designation as a Chronic Kidney Disease Model Pilot.

Support

Inquiries from IHS federal, tribal, and Urban Indian Organization programs pertaining to the Chronic Kidney Disease National Clinical Strategic Initiative, eligibility as a Chronic Kidney Disease Model Pilot, or other logistics may be directed to ihsmedsafety@ihs.gov.

IHS Chronic Kidney Disease National Clinical Strategic Initiative

The **IHS Chronic Kidney Disease National Clinical Strategic Initiative** is a comprehensive strategy designed to support federal, Tribal, & Urban Indian Organization programs in activities designed to identify risk factors, and promote guideline-based prevention, screening, early diagnosis & treatment of chronic kidney disease in Indian Country.

Further information about the **Chronic Kidney Disease Initiative** (link) can be found on [the NPTC website](#).

- Proactive strategy to ensure recognition of risk factors and implementation of guideline-based prevention, screening, diagnosis, and treatment of CKD along with its associated conditions (diabetes and hypertension).
- First Indian Health Center was designated the first IHS Chronic Kidney Disease Model Pilot site under this initiative

THANK YOU

Pranav Garimella, MD, MPH
Nephrologist, UC San Diego
Chief Medical Officer, American Kidney Fund