American Heart Association®
Cardiovascular-Kidney-Metabolic Health Initiative™

CARDIOVASCULAR-KIDNEY-METABOLIC HEALTH IMPLEMENTATION GUIDE

For health care organizations and professionals working in primary care, nephrology, endocrinology, cardiology and beyond.

March 10, 2026

HOW TO USE THIS GUIDE

This guide is intended to provide resources for clinicians and stakeholders to better understand cardiovascular-kidney-metabolic (CKM) syndrome and assist organizations in adopting the recommendation for a CKM model of care outlined in the presidential advisory and scientific statement.

THIS DOCUMENT WILL PROVIDE INFORMATION AND RESOURCES FOR:

- **Current evidence** related to the clinical management of CKM syndrome.
- **Practical tools** for implementing coordinated and patient-centered care as part of a CKM model of care.
- **Ways to evaluate** your current practice and provide tools for standardizing and improving care.
- **Support** for training and teaching other care team members and patients about CKM syndrome.

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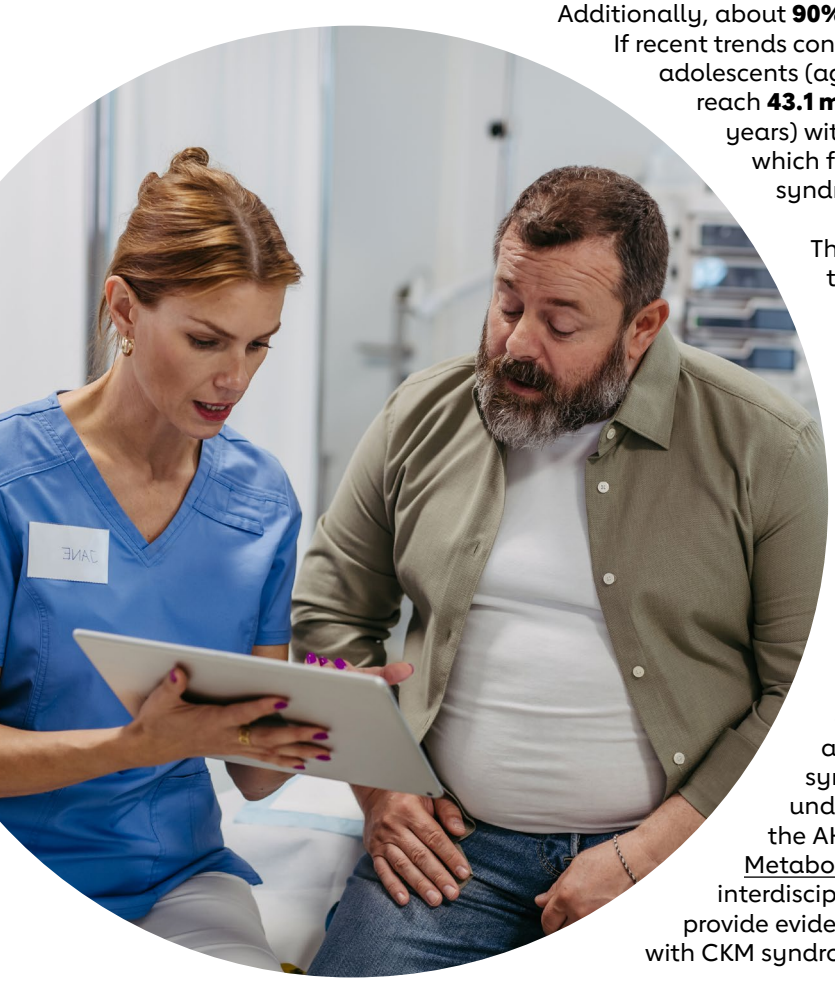
INTRODUCTION

About 1 in 3 U.S. adults have at least three risk factors for cardiovascular-kidney-metabolic (CKM) syndrome, a health disorder related to the strong connections among cardiovascular disease (CVD), kidney disease and metabolic disease (Type 2 diabetes and obesity)[1].



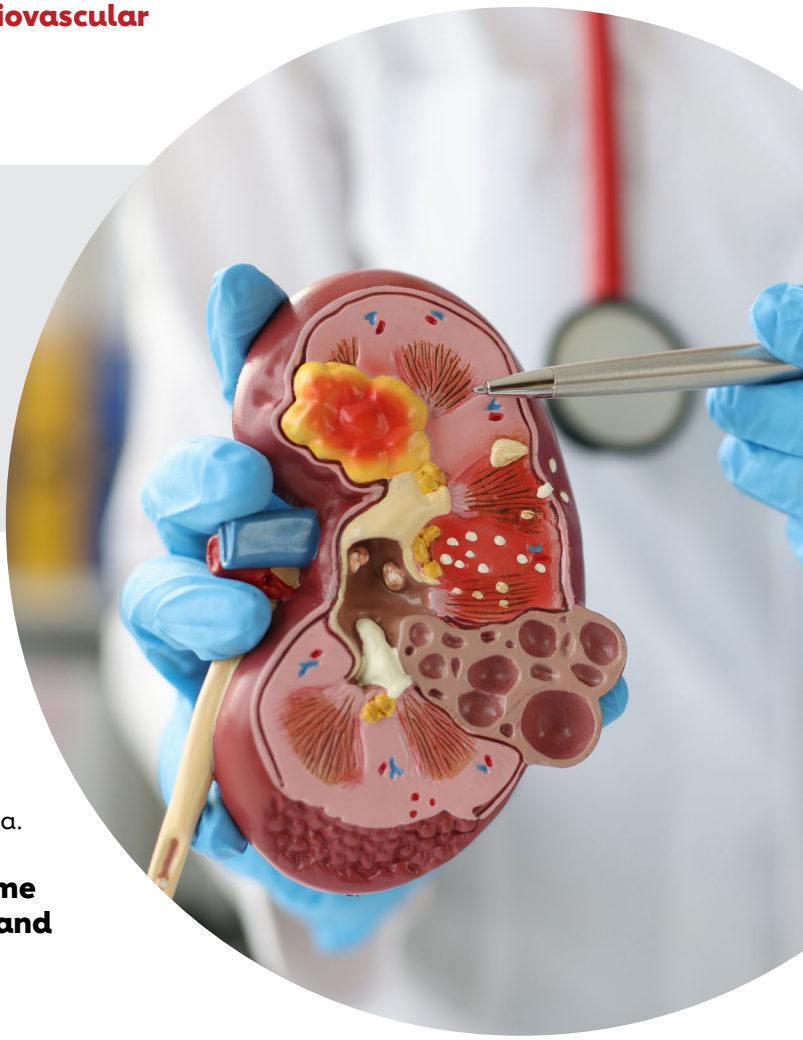
Additionally, about **90% of US adults** meet the criteria for CKM syndrome[2]. If recent trends continue, by 2050, the total number of children and adolescents (aged 5 – 24 years) with overweight and obesity will reach **43.1 million** and the total number of adults (aged 25+ years) with overweight and obesity will reach 213 million[3] which further illustrates the trend toward high CKM syndrome prevalence.

These statistics provide compelling evidence for the need to provide holistic care to address the connections among chronic diseases such as obesity, diabetes, and cardiovascular disease (CVD) as well as evaluate and address social drivers of health (SDOH). Addressing comorbid conditions together, rather than in silos, opens the opportunity to identify co-morbidities or consequences earlier to reduce risks and improve outcomes for patients.

In response to this overwhelming evidence, the American Heart Association's (AHA) Cardiovascular-Kidney-Metabolic Health Presidential Advisory was published to outline a staging model connecting many chronic diseases. Additionally, the presidential advisory provides a definition for CKM syndrome to help clinicians and others understand these connections. In July 2024, the AHA launched the Cardiovascular-Kidney-Metabolic Health Initiative™ to support an interdisciplinary care model and help clinicians provide evidence-based care to patients with CKM syndrome.

OVERVIEW OF CKM SYNDROME

AHA's presidential advisory explains the importance of clarity on the definition of CKM syndrome. CKM syndrome is identified as "a systemic disorder characterized by pathophysiological interactions among metabolic risk factors, chronic kidney disease (CKD), and the cardiovascular system leading to multiorgan dysfunction and a high rate of adverse cardiovascular outcomes[4]".



SIMPLIFIED DEFINITION

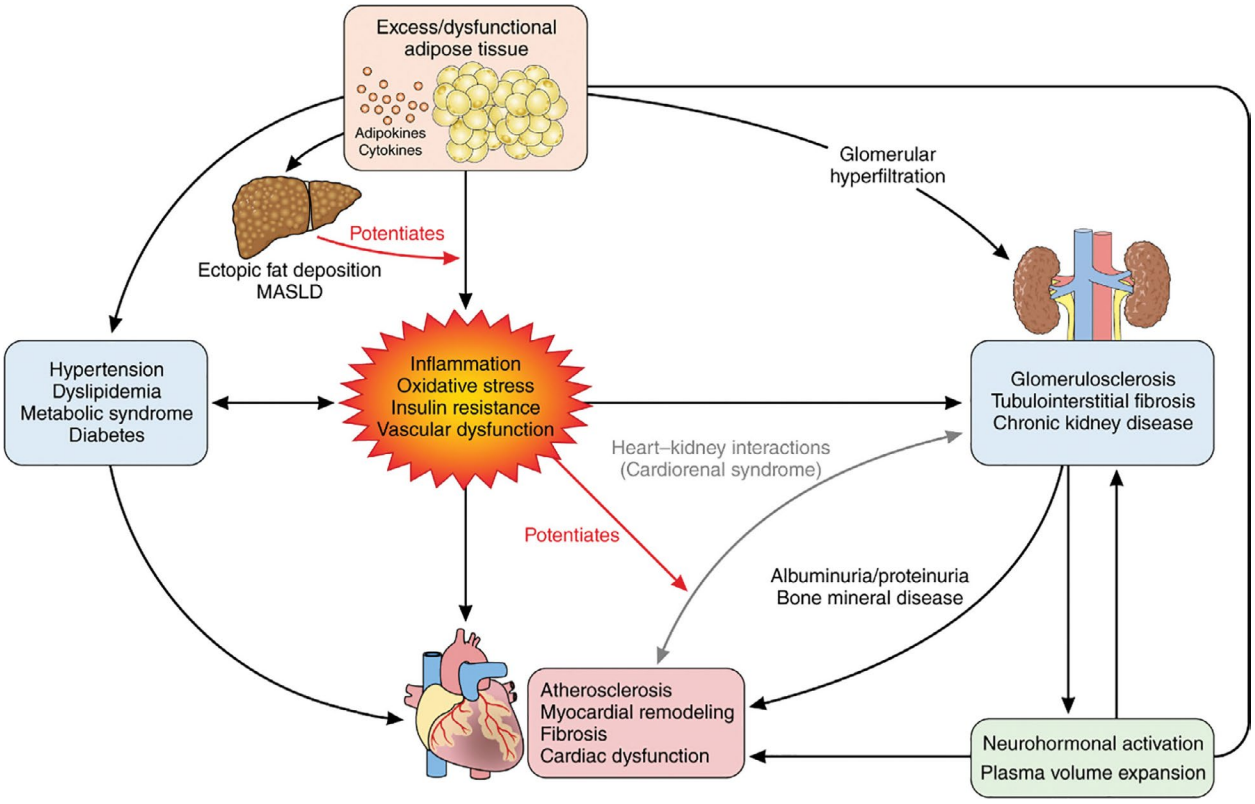
CKM syndrome is a health disorder due to connections among heart disease, kidney disease, diabetes, and obesity leading to poor health outcomes.

This definition is crucial for identifying individuals who are at high risk for morbidity and mortality due to CKM syndrome. Having a unified definition, applicable to all clinicians and community stakeholders, enhances communication and understanding, thereby facilitating better policy decisions and increased funding for research in this area.

AHA's presidential advisory on CKM syndrome outlines four focus areas to improve health and outcomes of the CKM patient including:

- **More clarity** on the definition of CKM syndrome.
- **An approach** to cardiovascular-kidney-metabolic syndrome staging that promotes prevention across the life course.
- **Prediction algorithms** that include the exposures and outcomes most relevant to CKM health.
- **Strategies** for the prevention and management of cardiovascular disease in relation to cardiovascular-kidney-metabolic health that reflect harmonization across major subspecialty guidelines and emerging scientific evidence.

CONCEPTUAL DIAGRAM FOR CKM SYNDROME[5]



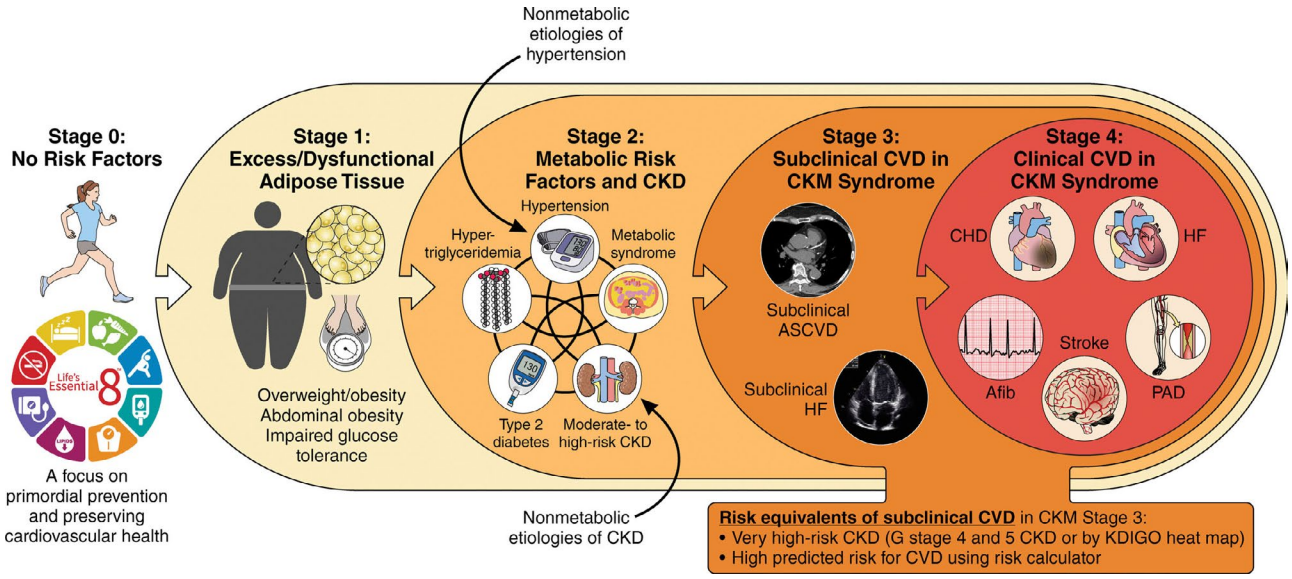
Evidence indicates that CKM syndrome is a progressive condition; therefore, early detection and prevention efforts are key to reducing risk and minimizing further disease progression.

Many syndromes and conditions connecting organs and organ systems are widely established, such as the association between the heart and kidneys, known as cardiorenal syndrome, or between the heart and metabolic system, known as cardiometabolic disease. CKM syndrome expands these associations to include the interplay of the metabolic, cardiovascular, and renal systems highlighting the many overlaps between these systems and the effects they have on each other.

CKM SYNDROME
STAGES

Each stage of CKM syndrome is a critical window for early intervention and an opportunity for patient activation. As a progressive condition, that commonly begins in early life, it is vital for healthcare professionals to identify early windows for preventive action, especially when patients are asymptomatic, to detect and target CKM risk factors. Recognizing the clinical benefit and importance of these concepts, the AHA presidential advisory proposed a novel model classifying CKM into five stages. The model is shown below.

STAGES OF CKM SYNDROME[6]



THE IMPORTANCE OF SDOH

Evaluation of SDOH is crucial across all stages of CKM syndrome. SDOH are associated with disparities in health outcomes and can influence the course of disease in CKM. Use of validated screening tools to evaluate SDOH is recommended for all patients to assess social needs and implement effective interventions.

STAGE 0
PREVENTION

For individuals in stage 0, the focus should be on risk reduction to prevent advancement to other stages of CKM syndrome.

The Life's Essential 8™ framework focuses on activities that improve and maintain cardiovascular health. For individuals in this stage, encourage adherence to the behaviors in Life's Essential 8 to promote health and minimize risk.

- Eat better
- Be more active
- Quit tobacco
- Get healthy sleep
- Manage weight
- Control cholesterol
- Manage blood sugar
- Manage blood pressure

STAGE 1

Stage 1 CKM syndrome includes individuals with overweight or obesity[7], abdominal obesity[8], or dysfunctional adipose tissue[9] without the presence of other metabolic risk factors or CKD.

Pathogenetically, the majority of CKM syndrome factors stem from an excess and dysfunction of adipose tissue, particularly visceral and ectopic body fat[10]. Thus, management of stage 1 CKM syndrome should focus on weight loss with support from an integrated team. Strategies should include a nonjudgemental approach to discussing weight management, including the therapeutic options of intensive lifestyle intervention, pharmacotherapies, and bariatric surgery, as indicated.

The current health care landscape shows critical gaps in providing effective obesity care. Illustrating one of these gaps, studies have shown that 23% of patients never speak with a clinician about their weight or weight management[11]. To start conversations with patients, The Society for Behavioral Medicine suggests an evidence-based model utilizing the 5A's (assess, advise, agree, assist, and arrange) approach. This framework supports clinicians in their conversations with patients about weight management.

TIP: Patient first language is recommended when discussing obesity. For example, use "person with obesity" rather than "obese person."

THE 5A (ASSESS, ADVISE, AGREE, ASSIST, AND ARRANGE) MODEL FOR IMPLEMENTING OBESITY TREATMENT IN PRIMARY CARE[12]

Assess	• Identify the patient's **knowledge, intentions, and motivations** to get treatment. Open-ended questions are a good way to start, such as "What are some reasons you'd like to begin more active treatment for your obesity?" and "*What have you learned about your options for obesity treatment so far?*" • Identify **patient's lifestyle and clinical risk factors** associated with obesity. This could include review of the electronic health record or use of rapid assessment tools to measure diet, physical activity, or other factors. • Identify barriers for obesity treatment success. Again, open-ended questions can provide a patient-centered approach, such as "What challenges do you have for managing your obesity?"
Advise	• Provide patient-centered advice on obesity treatment options. This communication may be more effective directly after the "assess" discussion during which the provider can gain understanding of the patient's perspective and specific circumstances, can address misconceptions, and can provide information on the risks and benefits of the treatment options with consideration of the patient's motivations and intentions.
Agree	• Support patients to explore their preferences for treatment options, support the patient's decision-making process, and **agree on a strategy for obesity treatment**. • Once a treatment strategy is selected, support the patient's goal setting by **agreeing on specific goals**. Starting with SMART (specific, measurable, achievable, realistic, and time-based) goals can help patients achieve initial success and make progress toward larger, long-term goals.
Assist	• Assist the patient in developing **action plans to achieve and maintain the goal**. This could include helping the patient to anticipate barriers to maintaining the selected obesity treatment and making a plan for overcoming possible obstacles (such as problem-solving). For example, "*I think it's great that you want to start by starting to walk again every day. You said you have a nearby park where you can do that easily, but what will you do on days when the weather makes it hard to walk outside?*"
Arrange	• Arrange for **follow-up support** with the shared understanding that obesity treatment is going to be an ongoing process. The patient and provider should agree that progress towards goals will be discussed at the next visit and a specific progress measure should be agreed upon. • This could also include **referral to specialists** in the chosen obesity treatment, including behavioral change experts such as dieticians or exercise physiologists, or obesity medicine specialists for pharmacological or surgical interventions. • Lastly, **referral to clinical or community resources** could provide additional support.

RESOURCE Use the STOP Obesity Alliance Weight Can't Wait Guide as a toolkit for addressing obesity with your patients.

This guide recommends a sixth "A" in their framework, advising that it is best to ask the patient for permission for conversations about weight before proceeding.

WAIST CIRCUMFERENCE

It is well established that BMI can both under and overestimate adiposity. Due to this, the CKM presidential advisory suggests assessment of both body mass index (BMI) and waist circumference as standard practice to evaluate obesity. This is in line with the most recent recommendations for obesity evaluation, which expand beyond the use of BMI alone[13].

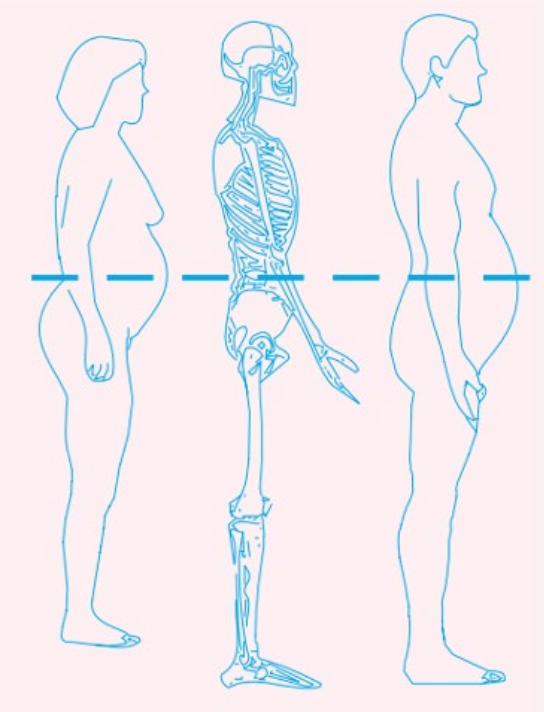
Use of additional measurements to evaluate obesity provides a more accurate representation of excess adiposity at the individual level. Organizations are encouraged to measure waist circumference as a routine standard practice at medical visits and document these measurements in the electronic health record (EHR) to improve the accuracy of obesity diagnosis and classification. Recommendations also suggest using a measuring tape which measures at least 200cm[14].

To implement waist circumference measurements in the standard visit workflow, first identify the appropriate member(s) of the care team to take the measurement. Then, ensure these care team members have proper training to ensure accurate measurements are taken.

The following steps can be used to train care team members to measure waist circumference accurately:

1. If possible, recommend that patients wear loose-fitting clothes for their visit without waist trainers or girdles to increase reliability of the waist circumference measurement
2. Request consent from the patient to measure waist circumference
3. Once consent is obtained, have the patient start in a standing position
4. Wrap a soft flexible tape measure around the patient's waist at the level of the iliac crest
5. Ensure the tape measure is level all the way around the patient's body parallel to the floor
6. Ensure the tape measure is snug but not tight
7. Instruct the patient to breathe in gently and note the measurement on the exhale[15]
8. Ensure documentation of the measurement in the patient's medical record. Sample documentation methods include:
    a. A free text entry in the vitals field
    b. A free text entry in the clinician progress note
    c. A free text entry in the patient after visit summary

POSITIONING FOR WAIST CIRCUMFERENCE MEASUREMENT



Measuring-Tape Position for Waist (Abdominal) Circumference in Adults[16]

Source: National Heart, Lung, and Blood Institute; National Institutes of Health; U.S. Department of Health and Human Services.

KIDNEY FUNCTION EVALUATION

Accurate classification of kidney function is crucial in stages 2-4 of CKM syndrome. Screening recommendations advocate for assessments of both urine albumin-creatinine ratio (UACR) and estimated glomerular filtration rate (eGFR) at least annually. These tests should be evaluated based on the kidney disease improving global outcomes (KDIGO) classification criteria shown below to stage and assess kidney health as well as determine the need for treatment and referrals to specialists.[17]

KDIGO HEAT MAP FOR CKD CLASSIFICATION

CKD IS CLASSIFIED BASED ON: Cause (C)* GFR (G)† Albuminuria (A)†				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 per 1.73 m²) 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+

LOW RISK
IF NO OTHER MARKERS OF KIDNEY DISEASE, NO CKD

MODERATELY INCREASED RISK

HIGH RISK

VERY HIGH RISK

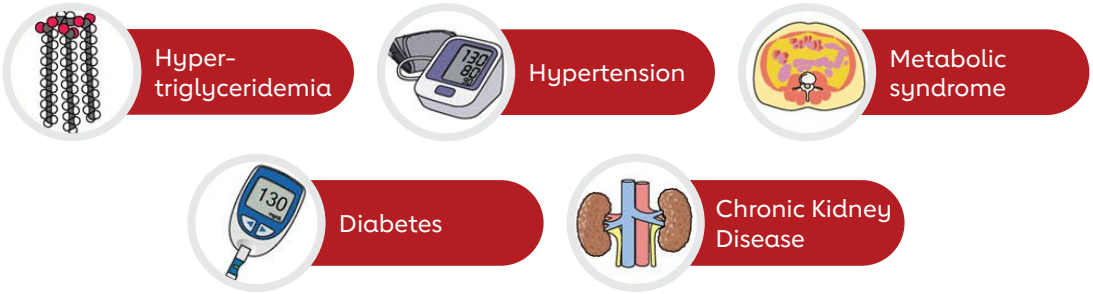
*Cause refers to the cause of CKD as ascertained by the clinician. Most patients who fit into the cardiovascular-kidney-metabolic (CKM) staging framework will have CKD attributable to diabetes, hypertension, and other metabolic risk factors. However, pharmacotherapies such as angiotensin-converting enzyme inhibitors/angiotensin receptor blockers and sodium-glucose cotransporter-2 inhibitors have demonstrated kidney and cardiovascular benefits in trials for patients with CKD resulting from either metabolic risk factors or other causes (eg, some glomerulopathies). Therefore, the CKM staging framework is relevant for almost all patients with CKD. †Clinicians may wish to discuss with their nephrology service, depending on local practice patterns on monitoring or referring. CKD indicates chronic kidney disease; and GFR, glomerular filtration rate.

STAGE 2

Stage 2 CKM syndrome is characterized by metabolic risk factors and/or moderate-to-high risk KDIGO categories of CKD.

This stage includes individuals with hypertriglyceridemia, hypertension, metabolic syndrome, diabetes, or moderate-to-high risk CKD. Many of these conditions develop downstream from excess or dysfunctional adipose tissue as seen in stage 1 CKM. In some cases, hypertension and CKD may have causes less directly related to excess adiposity (e.g., secondary causes of hypertension or glomerulopathies). However, several aspects of the screening and management of these conditions overlap with the broader approach in the CKM staging construct, with specific considerations for the etiology of hypertension and CKD in tandem.

The focus of this stage is the treatment of metabolic factors through lifestyle changes and appropriate pharmacologic agents to reduce CVD and kidney failure risk. Use of guideline-directed pharmacologic therapies is recommended to treat individual or overlapping conditions in a risk appropriate fashion. To support conversations about the management of these chronic conditions, use the linked resources for each condition provided below.



STAGE 3

Stage 3 encompasses subclinical CVD or very high-risk CKD, in the presence of CKM factors.

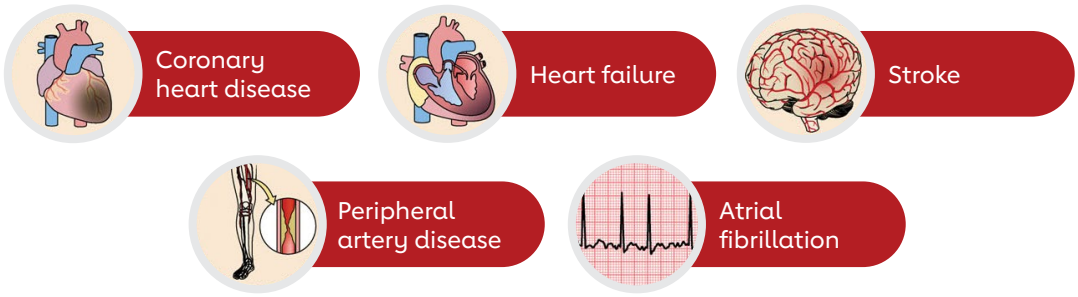
This includes subclinical atherosclerotic cardiovascular disease (ASCVD) or subclinical heart failure (HF). Stage 3 CKM also includes a risk equivalent of subclinical CVD as defined by stage G4 or G5 CKD or very high-risk per the KDIGO classification or high predicted ten-year CVD risk using the PREVENT-CVD calculator. The risk equivalents highlight the importance of kidney health screening with both UACR and eGFR, which are also represented in the inputs of the PREVENT calculator. This stage represents a high-risk phenotype. Preventive therapies should be prioritized to minimize risk of adverse cardiovascular disease events and premature death, with strong considerations for intensification of lifestyle modifications and deploying combinations of guideline-directed medical therapies to accrue the most net benefit.

STAGE 4

Stage 4 CKM syndrome is diagnosed when the patient has clinical CVD as defined by a diagnosis of coronary heart disease, HF, stroke, peripheral artery disease, or atrial fibrillation.

Additionally, stage 4 is further broken into two subgroups: stage 4a with no kidney failure present and stage 4b when kidney failure is present.

The management goal for individuals with stage 4 CKM should be to optimize care and prioritize secondary prevention. For more information and resources to support care of patients with clinical CVD visit the links below.



RISK-ENHANCING FACTORS

Each disease outlined in the CKM syndrome stages above serve as risk factors for progression themselves, however, many additional risk factors exist.

Individuals in the high-risk groups outlined in the table below should be prioritized for monitoring as well as risk reduction strategies due to their increased risk.[18]

CHRONIC INFLAMMATORY CONDITIONS e.g., psoriasis, RA, lupus, HIV/AIDS	**SEX-SPECIFIC RISK ENHANCERS** beyond gestational diabetes consideration in stage 1 **History of premature menopause (age <40 years)** **History of adverse pregnancy outcomes** e.g., hypertensive disorders of pregnancy, preterm birth, small for gestational age **Polycystic ovarian syndrome** **Erectile dysfunction**
HIGH-RISK DEMOGRAPHIC GROUPS e.g., South Asian ancestry, lower socioeconomic status	
HIGH BURDEN OF ADVERSE SDOH	
MENTAL HEALTH DISORDERS e.g., depression and anxiety	**ELEVATED HIGH-SENSITIVITY C-REACTIVE PROTEIN** ≥2.0 mg/L if measured
SLEEP DISORDERS e.g., obstructive sleep apnea	**FAMILY HISTORY OF KIDNEY FAILURE; FAMILY HISTORY OF DIABETES**

SCREENING PROTOCOL

Accurate identification of individuals with CKM syndrome is crucial for effective management and timely risk reduction strategies.

Early detection through appropriate and timely screening of both biological factors and SDOH is recommended to facilitate treatment and prevention efforts. Implementing standardized screening protocols organization-wide is essential for correctly identifying the stages of CKM syndrome as part of standard care pathways.

The chart below outlines current evidence-based screening recommendations for both early life and adulthood that can be implemented into standard care pathways and used organization wide as a part of CKM care models.[19]

EARLY LIFE SCREENING
Prioritize early detection and prevention efforts

ADULTHOOD SCREENING
Provide screening to correctly identify CKM staging and identify treatment opportunities

PERIOD	SCREENING APPROACH
EARLY LIFE <21 years	Screening for overweight and obesity using sex- and age-specific CDC growth charts annually Blood pressure assessment (stronger evidence/recommendation for those with CKM factors): starting at age 3, annually for children with no risk factors; at every health encounter for children with overweight/obesity, diabetes, kidney disease, or structural heart disease Mental and behavioral health, SDOH screening for all children Fasting lipid panel recommended: once between 9 and 11 years of age and then again between 17 and 21 years of age - Screening is advised beginning at 2 years of age if family history is suggestive of either early CVD or significant primary hypercholesterolemia Additionally check FPG/OGTT/HbA1c, ALT: starting at 9-11 years of age - If normal, may repeat every 2-3 years for all children with obesity - If normal, may repeat every 2-3 years for children overweight if additional risk factors present (family history of obesity-related diseases, elevated blood pressure or lipid levels, tobacco use)
ADULTHOOD ≥21 years	Screening for social determinants of health Measurement of BMI and waist circumference annually Screening for MetS components (elevated blood pressure, elevated triglycerides, low HDL cholesterol, and hyperglycemia) - Annually for those with stage 2 CKM - Every 2-3 years for those with stage 1 CKM or history of gestational diabetes - Every 3-5 years for those with stage 0 CKM Screening for advanced liver fibrosis related to MASLD every 1-2 years for individuals with diabetes, prediabetes, or ≥2 metabolic risk factors using the FIB-4 index Assessment of UACR along with serum creatinine/cystatin C for accurate KDIGO staging - Annually for those with stage 2 CKM or higher - More frequently for those with higher KDIGO risk Coronary artery calcium screening reasonable in those with intermediate 10-year ASCVD risk to guide intensification of preventative therapies Subclinical HF screening with echocardiogram and/or cardiac biomarkers likely based on age/comorbidities/risk score but not yet defined

CKM SYNDROME MANAGEMENT

Use the treatment guidelines below when considering pharmacologic and non-pharmacologic treatments for your patients with CKM syndrome.[20]

ALGORITHM FOR THE MANAGEMENT OF PATIENTS WITH CKM SYNDROME STAGES 1-3

STAGES 1- 3
Patient with CKM Syndrome at Risk for CVD

Promotion of cardiovascular health with an emphasis on Life's Essential 8 framework: eat better, be more active, quit tobacco, get healthy sleep, manage weight, control cholesterol, manage blood sugar, manage blood pressure

Systematic screening for SDOH using validated tools, incorporation of community health workers and care navigators into the care team, leveraging existing community resources and community programs

Interdisciplinary care - use of CKM coordinator and interdisciplinary team; targeted referrals of high-risk CKM patients to subspecialists

STAGE 1
EXCESS OR DYSFUNCTIONAL ADIPOSITY

Discuss weight loss using STOP obesity alliance toolkit

Can consider **weight loss support via integrated team** to facilitate lifestyle change/navigate weight loss options (obesity medicine, metabolic surgery, dietician, pharmacy, mental health, CHW/ care manager):
- Intensive lifestyle intervention
- Pharmacotherapies (BMI ≥30 kg/m²) without comorbidities)
- Bariatric surgery (BMI ≥40 kg/m²) without comorbidities)

If persistent/progressive IGT despite intensive lifestyle modification **→ consider metformin**

STAGE 2
ESTABLISHED CKM RISK FACTORS

Presence of metbolic syndrome triggers intensive lifestyle intervetion targeting multifactorial risk control

Pharmacotherapy for comprehensive control of residually uncontrolled MetS components

Hypertriglyceridemia
- Lifestyle modification
- Maximize statin therapy in intermediate or higher ASCVD risk
- TG ≥500 mg/dL→ fibrates
- TG 135-499 mg/dL + diabetes + additional risk factors→ consider eicosa-pentaenoic acid (EPA)

Hypertension
- Lifestyle modification
- Follow established hypertension guidelines to achieve BP <130/80 mmHg
- In those with diabetes and albuminuria→ prioritize ACEi/ARB
- In those with CKD→ prioritize ACEi/ARB

Moderate- to High-Risk Chronic Kidney Disease*
- With albuminuria (UACR >30 mg/g)→ ACEi/ARB
- CKD (with or without diabetes)→ SGLT2i†
- DKD with residual albuminuria (>30 mg/g) on ACEi/ARB→ finerenone§ (can be used on background SGLT2i)

Diabetes
- Lifestyle modification
- Moderate-to-high intensity statin
- Ezetimibe for high risk

Comorbidity-based approach to antihyperglycemic pharmacotherapy:
- BMI ≥35 kg/m²→ GLP-1RA
- HbA1c ≥9% or high insulin dose→ GLP-1RA
- CKD→ SGLT2i†

Considerations for Metformin Co-Utilization

HbA1c ≥7.5% or on insulin → Co-utilization of metformin‡ and cardioprotective antihyperglycemic

HbA1c <7.5% → Cardioprotective antihyperglycemics without metformin initiation (continue metformin‡ if already using)

STAGE 3
SUBCLINICAL CVD IN CKM SYNDROME

Subclinical Atherosclerosis

CAC >0
- Favors statin use in intermediate risk

CAC >100
- Favors asprin use if low bleeding risk
- Favors considering other agents for ASCVD risk reduction (eg, PCSK9i, GLP-1RA, icosapent ethyl) based on CKM profile

Subclinical Heart Failure
- EF <40%→ ACEi/ARB, ß-blocker
- In diabetes→ SGLT2i†

CVD Risk Equivalents for Stage 3 CKM
- Very high-risk CKD*
- High predicted CVD risk per risk calculator

ALGORITHM FOR THE MANAGEMENT OF PATIENTS WITH CKM SYNDROME STAGE 4

STAGE 4
Patient with CKM Syndrome with Existing CVD

Promotion of cardiovascular health with an emphasis on Life's Essential 8 framework: eat better, be more active, quit tobacco, get healthy sleep, manage weight, control cholesterol, manage blood sugar, manage blood pressure

Systematic screening for SDOH using validated tools, incorporation of community health workers and care navigators into the care team, leveraging existing community resources and community programs

Interdisciplinary care → Use of CKM coordinator and interdisciplinary team; targeted referrals of high-risk CKM patients to subspecialists

HF: GDMT for all patients

ASCVD: Asprin and high-intensity statin for all patients, consider addition of ezetimibe and PCSK9i based on LDL level/goals or presence of high-risk ASCVD

MANAGEMENT OF EXCESS OR DYSFUNCTIONAL ADIPOSITY

Discuss weight loss using STOP obesity alliance toolkit

Weight loss support via integrated team to facilitate lifestyle change/navigate weight loss options (obesity medicine, metabolic surgery, dietician, pharmacy, mental health, CHW/care manager):
- Intensive lifestyle intervention
- Pharmacotherapies[§] (BMI ≥27 kg/m^2)
- Bariatric surgery (BMI ≥35 kg/m^2)

If persistent/progressive IGT despite intensive lifestyle modification → **consider metformin**

MANAGEMENT OF OTHER CKM RISK FACTORS

Presence of metbolic syndrome triggers intensive lifestyle intervetion targeting multifactorial risk control

Pharmacotherapy for comprehensive control of residually uncontrolled MetS components

Hypertriglyceridemia
- Maximize lifestyle modification and statin therapy
- Fibrates for ≥500 mg/dL
- Consider eicosa-pentaenoic acid (EPA) for TG 135-499 mg/dL for patients with diabetes + additional risk factors

Hypertension
- Lifestyle modification
- Follow established hypertension guidelines to achieve BP <130/80 mmHg
- In diabetes or CKD → prioritize ACEi/ARB; consider steriodal MRA for resistant hypertension
- Avoid CCB in HFrEF
- African American patients with HFrEF → prioritize hydralazine + isosorbide dinitrate after 4 pillars of GDMT

Chronic Kidney Disease
- With albuminuria (UACR >30 mg/g) → ACEi/ARB
- ARNi preferred in HFrEF
- In CKD (in those with/without diabetes) → SGLT2i*
- DKD with residual albuminuria (>30 mg/g) on ACEi/ARB → finerenone[§] (can be used on background SGLT2i)

Diabetes
- Lifestyle modification
- Co-utilization of metformin[‡] with cardioprotective antihyperglycemics if HbA1c ≥7.5%

In ASCVD
To reduce MACE → either SGLT2i* or GLP-1RA
To reduce HF hospitalizations → SGLT2i*

GLP1-RA/ SGLT2i based on:
- BMI ≥35 kg/m^2 → GLP-1RA
- HbA1c ≥9% or high insulin dose → GLP-1RA
- CKD → SGLT2i*
- Concomitant HF → SGLT2i*

In HF
To reduce HF hospitalizations and CV mortality → SGLT2i*
Avoid → thiazolidinediones, DPP4i

SGLT2i for all patients with HF +
- BMI ≥35 kg/m^2 → GLP-1RA
- HbA1c ≥9% or high insulin dose → add GLP-1RA
- Diabetes with multiple comorbidities add GLP-1RA
- Albuminuria → consider adding finerenone[†]

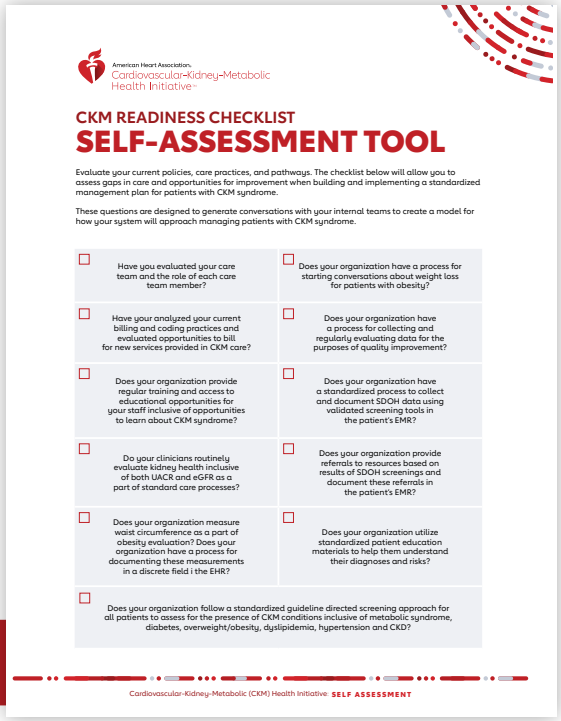
Multiple comorbidities in the setting of Diabetes and CVD → Consider co-utilization of SGLT2i* and GLP-1RA

SELF ASSESSMENT

Now that the foundational evidence for CKM syndrome and its component stages have been reviewed, your organization is ready to self-assess.

Self-assessment is a great way to evaluate your organization's current practices and measure them against guidelines and standards. Use the self-assessment tool as a checklist for your organization to evaluate current practices and identify areas of opportunity. When using this tool, ensure key stakeholders and clinicians are consulted. Additionally, consider utilizing chart audits or a peer review process to evaluate current care practices. After completing the self-assessment, use the following sections for resources and information to get your organization started when implementing key activities related to CKM care.

CLICK TO **DOWNLOAD**



American Heart Association. Cardiovascular-Kidney-Metabolic Health Initiative℠

CKM READINESS CHECKLIST

SELF-ASSESSMENT TOOL

Evaluate your current policies, care practices, and pathways. The checklist below will allow you to assess gaps in care and opportunities for improvement when building and implementing a standardized management plan for patients with CKM syndrome.

These questions are designed to generate conversations with your internal teams to create a model for how your system will approach managing patients with CKM syndrome.

- ☐ Have you evaluated your care team and the role of each care team member?
- ☐ Does your organization have a process for starting conversations about weight loss for patients with obesity?
- ☐ Have your analyzed your current billing and coding practices and evaluated opportunities to bill for new services provided in CKM care?
- ☐ Does your organization have a process for collecting and regularly evaluating data for the purposes of quality improvement?
- ☐ Does your organization provide regular training and access to educational opportunities for your staff inclusive of opportunities to learn about CKM syndrome?
- ☐ Does your organization have a standardized process to collect and document SDOH data using validated screening tools in the patient's EMR?
- ☐ Do your clinicians routinely evaluate kidney health inclusive of both UACR and eGFR as a part of standard care processes?
- ☐ Does your organization provide referrals to resources based on results of SDOH screenings and document these referrals in the patient's EMR?
- ☐ Does your organization measure waist circumference as a part of obesity evaluation? Does your organization have a process for documenting these measurements in a discrete field i the EHR?
- ☐ Does your organization utilize standardized patient education materials to help them understand their diagnoses and risks?
- ☐ Does your organization follow a standardized guideline directed screening approach for all patients to assess for the presence of CKM conditions inclusive of metabolic syndrome, diabetes, overweight/obesity, dyslipidemia, hypertension and CKD?

Cardiovascular-Kidney-Metabolic (CKM) Health Initiative: SELF ASSESSMENT

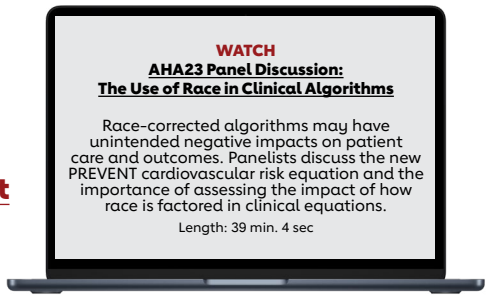
PREDICTING RISK OF CVD EVENTS (PREVENT)

In 2023, the AHA released a scientific statement on Novel Prediction Equations for Absolute Risk Assessment of Total Cardiovascular Disease Incorporating Cardiovascular-Kidney-Metabolic Health.

The creation of new risk prediction equations was indicated to provide a comprehensive framework to incorporate prevention and management of obesity, diabetes, and CKD. Previous prediction equations did not include these factors.

The 2013 ACC/AHA Pooled Cohort Equations (PCEs) have been widely used and validated for risk estimation. As risk factor prevalence and ASCVD risk have changed over time, a need for the development of an updated risk equation became evident. In response to this the PREVENT calculator was created to address key gaps in the PCEs. Additional CKM factors, such as kidney function and metabolic health, have been associated with CVD and thus were included to improve accuracy of the risk assessment.

The PREVENT calculator can be accessed online here.

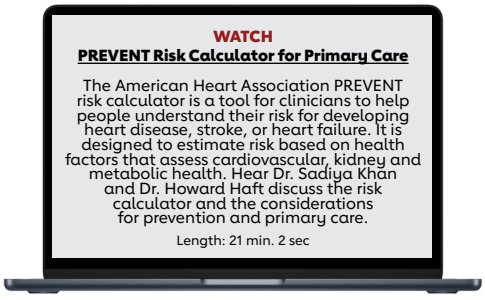


WATCH

AHA23 Panel Discussion: The Use of Race in Clinical Algorithms

Race-corrected algorithms may have unintended negative impacts on patient care and outcomes. Panelists discuss the new PREVENT cardiovascular risk equation and the importance of assessing the impact of how race is factored in clinical equations.

Length: 39 min. 4 sec



WATCH

PREVENT Risk Calculator for Primary Care

The American Heart Association PREVENT risk calculator is a tool for clinicians to help people understand their risk for developing heart disease, stroke, or heart failure. It is designed to estimate risk based on health factors that assess cardiovascular, kidney and metabolic health. Hear Dr. Sadiya Khan and Dr. Howard Haft discuss the risk calculator and the considerations for prevention and primary care.

Length: 21 min. 2 sec

ADOPTING NEW CARE MODELS

Leadership and stakeholder buy-in is essential at all levels across an organization when implementing new models of care.

The model for CKM syndrome provides a new framework for disease progression and thus emphasizes the importance of interdisciplinary care for management of the whole patient collaboratively. For many health care organizations, this may present challenges in navigating a new landscape where the patient is at the center of care and large amounts of coordination are needed to optimize outcomes.

Insights provided by Cardiometabolic Center Alliance, Inc. for items to consider when adopting new CKM care models:

- **Return on Investment (ROI)** related to "cost" of adopting a new program or model and potential savings for healthcare systems, patients, and/or payers
  - 1-year, 3-year, 5-year and 10-year expectations in cost and cost savings.
- **Potential impact on admissions and readmissions,** especially for patients with heart failure and kidney failure
- **Potential impact on patient satisfaction scores**
- **Payer mix and age** for potential patient population
- **Ways to leverage** the benefits of 340B programs
- **Understanding that preventative care may take longer** to show meaningful cost savings compared with a patient population with existing CKM comorbid conditions

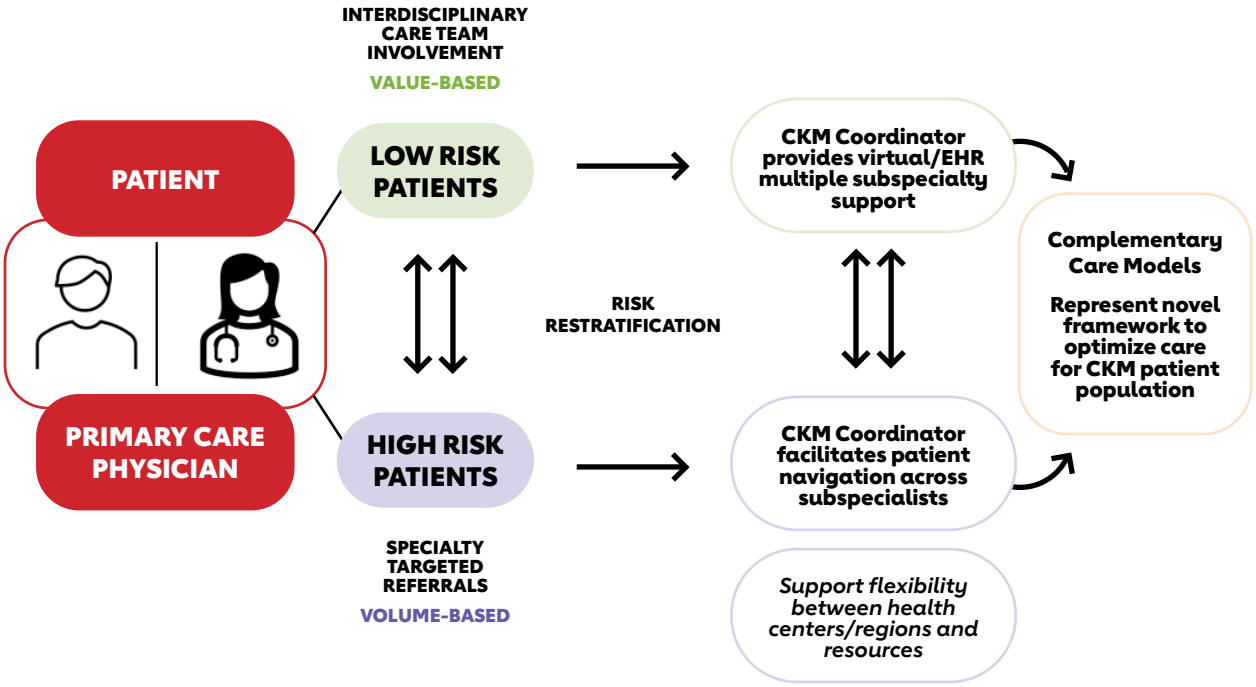
VOLUME AND VALUE-BASED CARE

When any 2 of the following are present: CKD, diabetes, and subclinical/clinical CVD:

VALUE BASED CARE Interdisciplinary team assists Primary Care Physician in caring for low-risk patients with support from CKM Coordinator across subspecialties

VOLUME BASED CARE Specialty targeted referrals assist PCP in caring for high-risk patients with CKM Coordinator navigation across subspecialties (i.e. Nephrology, Endocrinology, Cardiology)

**For health centers/regions with lower density of subspecialists, flexibility to rely more on virtual or CKM coordinator/interdisciplinary team and value-based care approach*



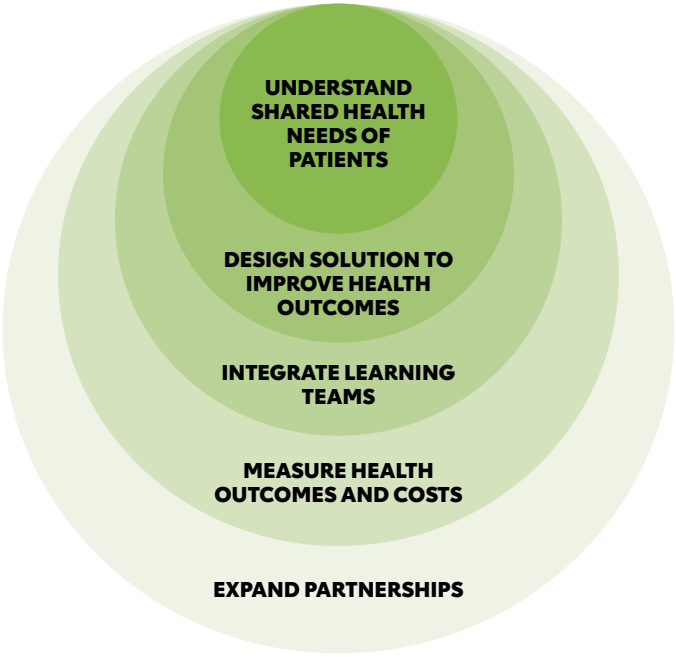
The diagram represents a novel complementary framework to overcome barriers and deliver holistic, patient-centered care experienced by the CKM population.

STRATEGIC FRAMEWORK FOR VALUE-BASED HEALTH CARE IMPLEMENTATION TO ACHIEVE BETTER PATIENT OUTCOMES[21]

Value-based care strategies include establishing a robust multidisciplinary team to facilitate clinical management across specialties when any two of the following are present: CKD, diabetes, and subclinical/clinical CVD, with support from a CKM coordinator.

As an example, team-based projects may include outreach activities to build a diverse membership of professions and disciplines, developing CKM clinical protocols and guidelines, incorporating SDOH into case review process, or redesigning algorithms/the workflows to improve care coordination.

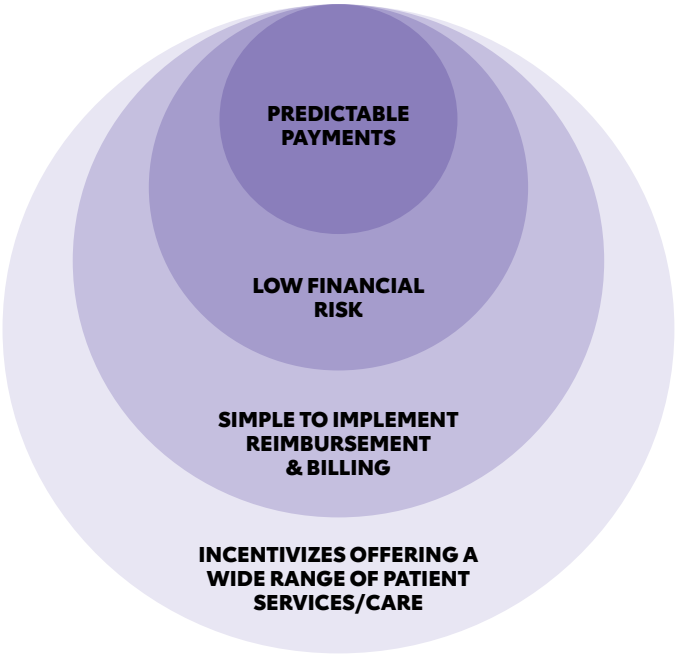
In contrast, volume-based care strategies involve targeted referrals of high-risk patients to subspecialists (nephrology, endocrinology, cardiology, etc.), activating volume-based expertise, and use of a CKM coordinator to assist with patient navigation.



STRATEGIC FRAMEWORK FOR VOLUME-BASED HEALTH CARE[22, 23, 24]

Team-based evaluations and assessments of overlapping CKM conditions may include using virtual platforms, developing criteria for referral coordination, patient risk stratification process mapping, expanding referral networks and physician outreach programs, or leveraging technology to standardize workflows.

These models represent a shift in the framework of existing reimbursement metrics and criteria, requiring clear guidelines on roles and responsibilities, buy-in from organizational stakeholders, and system level support. Multidisciplinary teams can work together to break down existing silos to focus on quality and equity of care (value-based) and administrative burdens related to quantity of services (volume-based) to support a unified framework focused on cross-sector collaboration, spread, and sustainability.



PRIORITIZING PATIENT OUTCOMES & MAINTAINING FINANCIAL STABILITY

CREATING A COMPLEMENTARY FRAMEWORK TO HOLISTIC CKM CARE

25, 26, 27, 28, 29, 30, 31, 32, 33

COMBINED PAYMENT MODELS

Combining volume and value-based payment structures can help **incentivize high-quality care delivery, lower financial burden & ensure fair compensation** for volume of services provided

ADVANCED TECH & PERFORMANCE METRICS

Investing in health IT, analytic tools, and advanced data infrastructures can **reward both quality of care & efficient delivery of services** to align incentives and measure patient outcomes efficiently

TEAM-BASED CARE COORDINATION

Promoting interdisciplinary team collaboration to **deliver seamless care transitions & avoid unncessary duplication of services** can help reduce fragmented care & costs

PREVENTATIVE CARE

Emphasizing **preventative screening & early interventions to manage patient health** can help avoid progression along CKM stages & deliver cost-effective care benefitting patients and HCPs

PATIENT ENGAGEMENT

Including patients as members of the care team and empowering them with education, tools, and resources **improves patient experience & overall health outcomes**

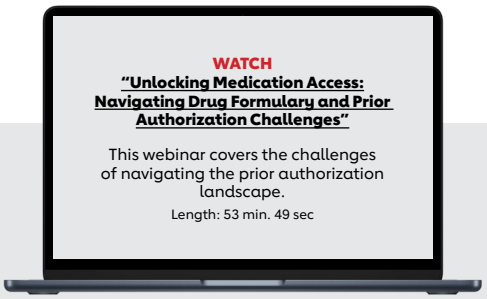
INSURANCE AND BILLING

Ensuring access to comprehensive, quality care is a critical component of CKM syndrome management. Most patients with CKM syndrome would benefit from counseling for intensive lifestyle interventions. However, access is often limited by a patient's lack of insurance coverage and high out-of-pocket costs for counseling. Integrating innovative care and financial payment models can help improve management and disparities in CKM conditions. This necessitates changes to support insurance coverage, access, and sustainable reimbursement strategies.

TIP: The STOP Obesity Alliance partnered with the Obesity Action Coalition to analyze state obesity treatment coverage. Access the analysis and find information about your state's coverage here.

ACCESS TO PHARMACOTHERAPIES

More than 130M US adults may be eligible for medications to treat CKM syndrome or its components. Furthermore, about 95% (more than 9 out of 10) of those eligible would qualify for treatment for weight management alone[34]. While these therapies have demonstrated immense value, challenges related to cost and access can create barriers to optimal prescribing. For instance, the benefits of SGLT2 inhibitors and GLP-1RAs are well documented, however, they remain under prescribed. Collaboration between clinicians-especially pharmacists, health care systems, payers, insurance companies, and patients is needed to align goals ultimately resulting in the increased guideline-directed use of these medications.



TIP: Clinical pharmacists can provide critical support for the prescription and coverage of guideline directed therapies. In some instances, they can support the care team in navigating access to pharmacotherapies by providing medication therapy management (MTM) or utilizing collaborative practice agreements (CPA).

TEAM-BASED CARE

"Team-based health care is the provision of health services to individuals, families, and/or their communities by at least two health providers who work collaboratively with patients and their caregivers — to the extent preferred by each patient — to accomplish shared goals within and across settings to achieve coordinated, high-quality care.[35]"

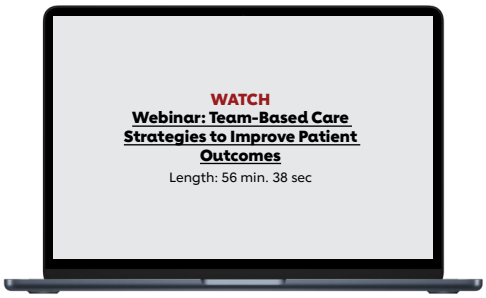
Adopting a team-based model of care is a transformative systems approach to delivering comprehensive patient-centered CKM care. However, fundamental to the success of any team-based model is the skill and reliability with which team members work together to optimize efficiency. By expanding the CKM care team to include many health care professionals, as noted in the table, discipline-specific roles and responsibilities can be maximized to support the achievement of shared goals. However, not all health care organizations will have access to all listed specialties. Organizations can consider referral pathways to other organizations to fill gaps when needed.

In 2006, the American Public Health Association (APHA) defined CHWs as trusted members with an unusually close understanding of the community served.

For example, the integration of community health workers (CHWs), can serve as vital intermediaries between health and social services and the community, facilitate access, and improve the quality and cultural competence of service delivery.[36]

POTENTIAL CKM CARE TEAM MEMBERS	
CKM Coordinator	Diabetes Educators
Primary Care	Dietetics
Cardiology	Physical Therapy and Clinical Exercise Physiologists
Nephrology	Care Navigators
Endocrinology	Social Workers and Other Mental Health Professionals
Obesity Medicine Specialists & Bariatric Surgery	Medical/Program Director
Women's Health	Community Health Workers
Pharmacists and Pharmacy Team Members	Health Care Administrators
Nursing	Billing and Coding Specialists
Hepatology	Hospitalist

COMMON ROLES FOR CHW'S IN CKM[37]:



Care Coordination
Outreach for appointments with reminder calls, confirmation of a means of transportation to the appointment, and follow-up.

Case Management
Address Social Determinants of Health (SDoH), accessing health system and community resources including fresh and healthy foods, transportation, socioeconomic or social services.

Educational
Personalized, adaptable approach to healthy lifestyle and life circumstances (PAL2). Support self-management of disease screening, prevention and management of CKM; Plan and/or lead support groups.

Clinical
Conduct basic screening tests (e.g. Weight, blood pressure, diabetic foot checks, glucose); Medical Adherence and ensuring supply of medications.

Hospitals
Assisting CKM patients in their transition back to their homes and reducing the possibility of a re-admission to the hospital.

Insurance Navigation
Helping individuals and families enroll in health insurance and link to other health services and low-cost financial resources to pay for needed health services.

To get started, refer to the table below to discuss with your team how each principle of team-based care may be used in your setting.

PRINCIPLES OF TEAM-BASED HEALTH CARE[38]

SHARED GOALS
The team — including the patient and, where appropriate, family members of other support persons — works to establish shared goals that reflect patient and family priorities, and can be clearly articulated, understood, and supported by all team members.

CLEAR ROLES
There are clear expectations for each team member's functions, responsibilities, and accountabilities, which optimize the team's efficiency and often make it possible for the team to take advantage of division labor, thereby accomplishing more than the sum of its parts.

MUTUAL TRUST
Team members earn each others' trust, creating strong norms of reciprocity and greater opportunities for shared achievement.

EFFECTIVE COMMUNICATION
The team prioritizes and continuosly refines its communication skills. It has consistent channels for candid and complete communication, which are accessed and used by all team members across all settings.

MEASURABLE PROCESSES AND OUTCOMES
The team agrees on and implements reliable and timely feedback on successes and failures in both the functioning of the team and achievement of the team's goals. These are used to track and improve performance immediately and over time.

CKM COORDINATOR

CKM Presidential Advisory provides a suggestion for the creation of a CKM Coordinator role as a vital part of the team involved in the care of the CKM patient.

It is suggested that this care team member should be responsible for coordination between specialties and ensure the CKM patient is receiving all needed services and referrals as outlined in the organization's model of care. This team member would ensure that the coordination of care for the CKM patient is seamless.

Ideally, all organizations providing comprehensive CKM care will use a coordinator.

TIPS FOR IMPLEMENTING A CKM COORDINATOR:

- **Use the sample job description** to evaluate places where existing care team members may already be providing the outlined responsibilities.
- **Have care team members collaborate** to identify an existing team member that could take on the role of CKM coordinator, or if an additional team member is needed to fulfill these duties.
- **Evaluate** what services the coordinator can bill for, and what the reimbursement rates are for those services. Consider collaborating with billing professionals to research opportunities for reimbursement for this role.

SAMPLE JOB DESCRIPTION

Cardiovascular-Kidney-Metabolic (CKM) Health Coordinator

Overview
The CKM Health Coordinator supports and facilitates the interdisciplinary CKM team. They are responsible for overseeing the coordination of care among specialists for the CKM patient. This position takes a role in ensuring that the CKM patient receives timely guideline directed care and receives all needed referrals.

Responsibilities
- Leads communication between all care team members about the CKM patient.
- Ensures all specialty referrals are completed in a timely manner.
- Coordinates prior authorization paperwork for CKM patients inclusive of both office visits/ procedures and pharmacotherapies.
- Follows up on patient hospitalizations ensuring smooth coordination of care between the inpatient and outpatient settings.
- Organizes the CKM team to lead quality improvement initiatives to improve CKM outcomes.
- Analyzes key metrics related to CKM health and identifies gaps to prioritize quality improvement opportunities.
- Leads CKM team huddles to identify high priority patients.
- Organizes CKM health clinical champions for meetings to facilitate case review of high-risk patients.
- Follows up on missed clinical opportunities (labs, referrals, etc.) based on guideline directed standardized workflows.
- Coordinates and provides team trainings to keep all care team members up to date on current guidelines.
- Creates and organizes standardized patient education materials to be used by all CKM team members.
- Ensures appropriate social drivers of health (SDOH) screening protocol is in place system wide. Follows up on missed opportunities to connect patients to needed social services.
- Ensures all patients have appropriate care plans in place to direct the care team on needed services and goals.

Required Qualifications
- Experience working in the healthcare setting
- Experience as a member of the clinical care team- nurse, pharmacist, dietitian, social worker
- Clinical subject matter knowledge- obesity, diabetes, cardiovascular disease, kidney disease
- Experience in management and leading teams

Preferred Qualifications
- Has experience utilizing population health tools
- Has experience deploying a registry tool

PATIENT-CENTERED FOCUS

CKM PATIENT EDUCATION

Ensuring that patients and their caregivers/ families understand CKM syndrome and the associated risks of progression along the staging continuum is paramount to addressing overall patient health. Standardized patient education materials that your organization can use to educate patients on CKM syndrome can be found here.

PATIENT EDUCATION PRIORITY AREAS

- What is CKM syndrome?
- What are the stages and what stage is the patient currently at?
- Strategies to slow or reverse progression along the staging model
- Treatment strategies and options for reducing risk

For resources that promote general healthful behaviors and emphasize improving and maintaining cardiovascular health, use Life's Essential 8™.

MOTIVATIONAL INTERVIEWING (MI)

Motivational interviewing was created in 1983 as a treatment for alcohol use disorder. Since then, it has been studied extensively as an effective counseling model to promote behavior change for many other conditions. It is described as a "directive, client-centered counseling style for eliciting behavior change by helping clients to explore and resolve ambivalence[39]".

Due to the effectiveness of MI in counseling for lifestyle changes, it can be used by clinicians to foster and promote change in patients with CKM syndrome, especially those ambivalent to or uncertain about making changes. MI can be implemented with minimal time and resources, thus making it an easy approach for clinicians to use.

Clinicians utilizing MI engage patients through four distinct processes including:

- **Engaging:** Relationship building with patients
- **Focusing:** on one area of change
- **Evoking:** orienting goals around patient priorities
- **Planning[40]:** developing a concrete plan for behavior change

Clinicians can use these techniques to practice the spirit of MI and promote change:

- **Asking** patients open ended questions
- **Active listening** including reflecting back the content of patient statements
- **Affirmation** including praise, recognition, and understanding
- **Summarizing** especially patient statements that reflect motivation to change
- **Encouraging self-motivation statements** including patient desires, abilities, reasons for change, and commitment, activation, and first steps

SOCIAL DRIVERS OF HEALTH (SDOH)

Due to the influence of SDOH on CKM development, diagnosis, and outcomes, the AHA presidential advisory emphasizes systematically assessing and addressing SDOH as part of the clinical care model for patients with CKM syndrome.

SDOH, or the economic, social, environmental, and psychosocial factors that affect health outcomes over the life course, have a prominent impact on CKM health and are associated with disparities in cardiovascular health behaviors[41]. Understanding a patient's complexity (both clinically and non-clinically) helps interdisciplinary care teams make informed patient-centered decisions and tailor SDOH focused interventions for CKM prevention and treatment.

SCREENING TOOL	DOMAINS ASSSESSED BY THE SCREENING TOOLS
Health Leads	**ESSENTIAL DOMAINS:** food insecurity, housing instability, utility needs, financial resource strain, transportation challenges, exposure to violence, sociodemographic information **OPTIONAL DOMAINS:** childcare, education, health literacy, employment, health behaviors, social isolation and supports, behavioral/mental health
Centers for Medicare & Medicaid Innovation: Accountable Health Communities Health-Related Social Needs Screening Tools	**CORE DOMAINS:** housing instability, food insecurity, transportation problems, utility help needs, interpersonal safety **SUPPLEMENTAL DOMAINS:** financial strain employment, family and community support, education, physical activity, substance use, mental health, disabilities
AAFP: The EveryONE Project	Housing, food, transportation, utilities, childcare, employment, education, finances, personal safety
PRAPARE Implementation and Action Toolkit	**PERSONAL CHARACTERISTICS:** race, ethnicity, farmworker status, language preference, veteran status **FAMILY AND HOME:** housing status and stability, neighborhood **MONEY AND RESOURCES:** education, employment, insurance status, income, material security, transportation needs **SOCIAL AND EMOTIONAL HEALTH:** social integration and support stress **OTHER MEASURES:** incarceration history, safety, refugee status, domestic violence
OCHIN: Social Determinants of Health Record Tools in Community Health Centers	Housing insecurity, food insecurity, education, financial resource strain, alcohol use, race, ethinicity, tobacco use and exposure, depression, exposure to violence, physical inactivity, social isolation, stress
SEEK PSQ	**ECONOMIC STABILITY:** food insufficiency **HEALTH AND HEALTH CARE:** smoke alarm needed, contact information for posion control needed **FAMILY CONTEXT:** parental intimate partner violence, parental depression, parental stress, parental substance or alcohol use disorder, tobacco use within home, gun in home, help with childcare when needed
IHELP Screening Tool	**ECONOMIC STABILITY:** food insufficiency, housing instability **EDUCATION:** concerns about child's education needs **HEALTH AND HEALTH CARE:** concerns about child's health insurance **FAMILY CONTEXT:** violence in the household
WE CARE Screening Tool	**ECONOMIC STABILITY:** food insufficiency, housing instability, difficulty paying bills, parental employment **EDUCATION:** parental education, lack of childcare **FAMILY CONTEXT:** intimate partner violence in household, parental depression symptoms, alcohols or substances use disorder in household

It is important to establish structured systems to incorporate SDOH screening into the standardized workflow as well as track referrals for needed resources based on these screenings. Many validated tools exist to screen for SDOH. If your EHR doesn't have an integrated screening tool, there are many alternative options.

Standardized SDOH screening can be administered by any member of the care team including but not limited to physicians, nurses, social workers, case managers, community health workers, and/or patient navigators. It can also be completed by the patient prior to the visit, or during or after a health care encounter. The team member responsible should be educated and trained to administer, document, and evaluate these screenings and provide connections to resources. Once the screening is completed, teams can use the results to evaluate patients' health related social needs (HRSNs) and assist the patient with navigation to resources and services as part of their treatment plan.

TIP: Try a standardized resource like The EveryONE Project Social Determinants of Health Guide to Social Needs Screening to support your organization in addressing SDOH. Additionally, the PRAPARE Action Toolkit provides examples of how to implement standardized workflows to collect SDOH data.

Recommendations for integrating SDOH into the CKM care model:

- **Incorporate HRSN screening** into existing patient intake or discharge processes.
- **Have a dedicated staff member** for screening and resource navigation.
- **Train staff to use empathetic scripts.** Use the following resources to support this work:
  - Patient-Centered Social Needs Screening Conversation Guide
  - Patient-Centered Social Needs Screening Observer Checklist
- **Implement systems** to track and manage HRSN data, ensuring efficient follow-up and resource allocation.
- **Use standardized SDOH-related Z-codes** (Z55-Z65[42, 43]) for tracking and improving quality and care coordination.
- **Educate staff, coders, and billing** on how to use appropriate ICD-10-CM Z codes, to ensure accurate claim submissions, meet requirements set by payers, and maximize reimbursement opportunities.
- **Build relationships** with community-based organizations to enhance clinical-community connections to resources and service delivery and closed-loop referral processes.

TIP: Gather your team to develop and adapt your own workflow diagram. Consider the steps and staff involved and use a flowchart, process map, or patient journey map to support implementation.

To help your patients find resources in their communities to overcome SDOH barriers use the links below:

- **FindHelp: Your Health Roadmap | American Heart Association**
- **The EveryONE Project Neighborhood Navigator**

AHA'S COMMITMENT TO HEALTH EQUITY

IMPROVE HEALTH OUTCOMES: The Health Equity portfolio on the Professional Education Hub is on of the main key drivers of AHA's 8th Commitment, as a solution for clinicians, health professionals, and scientists to remove barriers/bias that affect health outcomes.

The American Heart Association equips professionals with the tools, resources, and knowledge to begin addressing health equity in their institutions with CME course offerings. Visit AHA's **Health Equity for Healthcare Professionals** to learn more.

HEALTH CARE PROFESSIONAL EDUCATION

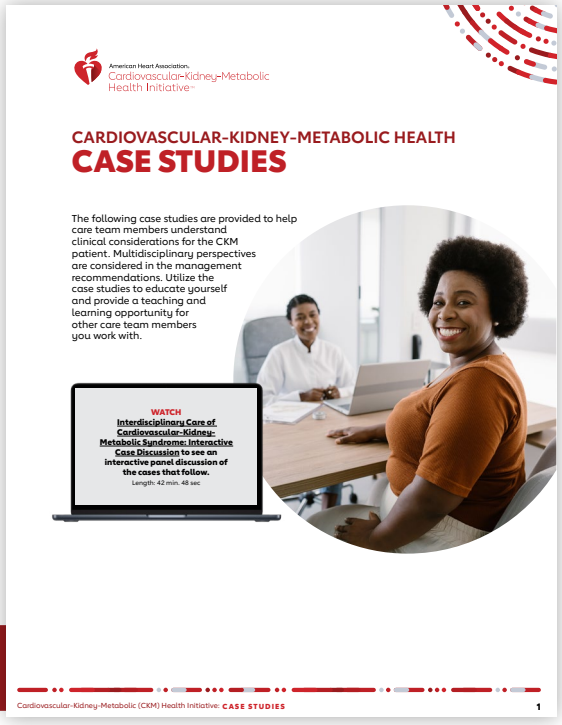
It is important for clinicians to stay up to date with current evidence to adequately and effectively treat patients with CKM syndrome and thus reduce poor outcomes. Providing regular education and training for clinicians to facilitate learning can help all health care professionals stay up to date with the most recent science and guidelines. For resources to support your clinician's knowledge of CKM syndrome, click here.

TIP: Use the Top Things to Know: A Synopsis of the Evidence for the Science and Clinical Management of Cardiovascular-Kidney-Metabolic (CKM) Syndrome as a quick resource to equip your clinicians with key knowledge of CKM syndrome and the presidential advisory.

CASE STUDIES

This document provides case studies to support clinician understanding of managing patients with CKM syndrome. These case studies can be used to support team-based care and understanding of complex management situations.

CLICK TO **DOWNLOAD**



PERFORMANCE IMPROVEMENT

ENGAGING IN AHA QUALITY PROGRAMS

A focus on quality and performance improvement initiatives can improve patient outcomes and improve overall care. Regularly evaluating your organization's data is a great first step in understanding areas of opportunity for improvement. AHA provides a host of quality improvement programs to assist your organization's journey to better care and outcomes. In addition to providing award recognition, these programs provide supportive resources to help your organization achieve goals. Consider leveraging these offerings to support setting the stage to scale up your CKM program and for care model adoption success and sustainability. Find more information about quality improvement offerings from AHA here.

OUTPACE CVD™

Outpace CVD™ offers quality improvement and recognition opportunities for organizations providing outpatient care for hypertension, diabetes, and cholesterol by supplying data insights, educational materials, and regional staff support. Each year, Outpace CVD™ engages nearly 1,900 healthcare organizations and positively impacts over 33 million patient lives through its programs and collaborations.

GET WITH THE GUIDELINES®

Get With The Guidelines® (GWTG) programs connect hospitals with current evidence-based guidelines and accurate measurement tools to improve care quality and industry practices. Programs are offered for stroke, heart failure, resuscitation, AFIB, and coronary artery disease. More than 2,600 U.S. hospitals participate in at least one Get With The Guidelines® program. That means nearly 80% of the American population has access. Plus, since the creation of the program, upwards of 13 million U.S. patient records have been entered into the registry.

HEALTH CARE CERTIFICATION

Certification programs are developed with the latest evidence-based treatment practice guidelines and standards of care for best practices using the AHA's Certification Framework for both healthcare organizations and healthcare professionals. Certification delivers on multiple objectives including strengthening systems of care, improved patient care, operational efficiencies, attracting skilled talent, and standing out from the competition. Organizations and individuals spanning across many countries globally continue to improve quality of care and life for patients through certification.

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7. Defined by a BMI ≥25 kg/m2 or ≥23 kg/m2 if Asian ancestry

8. Defined by a waist circumference ≥88 cm in women or ≥102 cm in men, if Asian ancestry ≥80 cm in women or ≥90 cm in men

9. Defined by a fasting blood glucose ≥100-124 mg/dL or HbA1c between 5.7%- 6.4

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