



# Understanding Staging for Cardiovascular-Kidney-Metabolic Syndrome (CKM Syndrome)

CKM syndrome consists of 4 stages to show how changes can happen over time. People can shift between stages as their health conditions get better or worse. If detected early enough, and with the right care, some organ damage can be stopped or sometimes even reversed. Your healthcare professional can help review what actions are right for you and your health.

**Stage 0** refers to people who do not have CKM syndrome. This stage is used to represent good CKM health. The focus of this stage is staying healthy and preventing the development of CKM syndrome.

**Stage 1** includes people with excess weight (measured by waist circumference or BMI), those with insulin resistance, or prediabetes – meaning the body is starting to have problems regulating blood sugar.

**Stage 2** includes any of the following conditions:

- High blood pressure
- High triglycerides
- Type 2 diabetes
- Metabolic syndrome
- Chronic kidney disease

These conditions place added stress on blood vessels, which can result in damage to the kidneys, heart muscle and other organs.

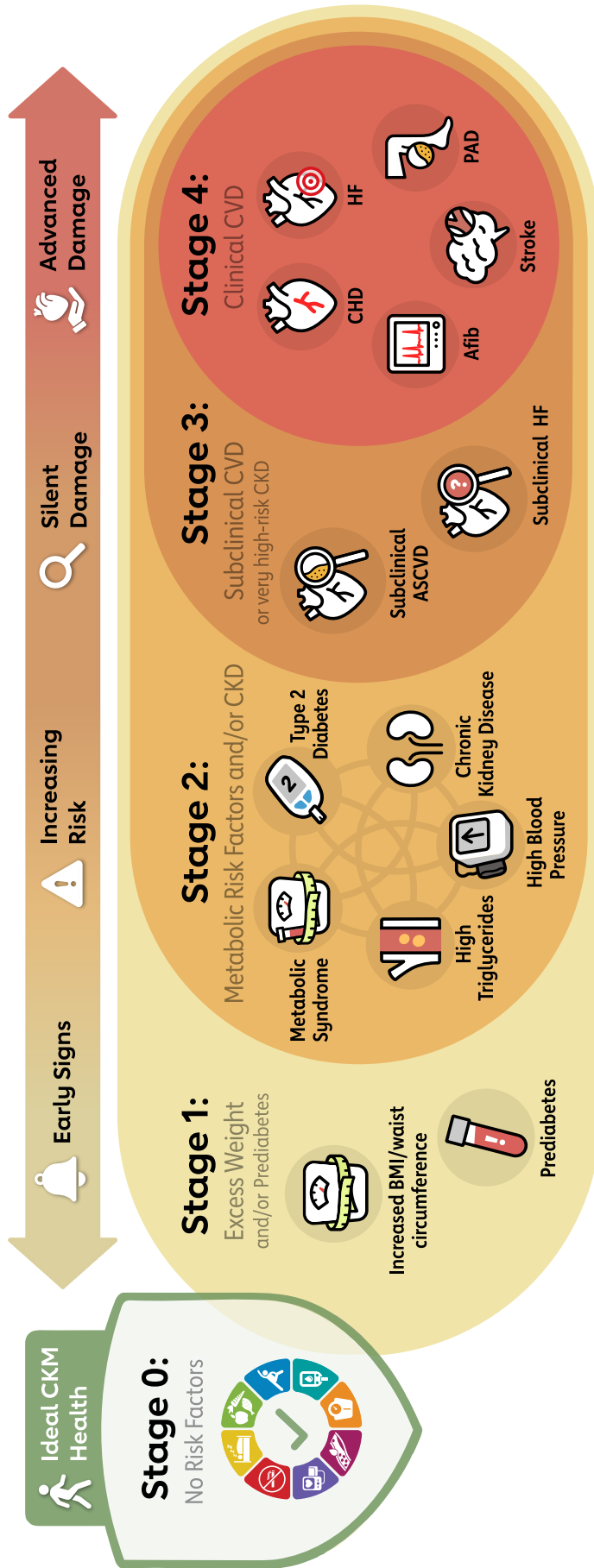
**Stage 3** is determined by specific health tests or imaging that may be used to check for damage to the heart, kidneys and blood vessels. If damage is found, or risk is high, even if you don't have symptoms, you may be in Stage 3.

**Stage 4** is the most serious stage. It includes people with CKM risk factors who have been diagnosed with cardiovascular disease (coronary heart disease, heart failure, atrial fibrillation, stroke, peripheral artery disease) and may also have kidney failure. People in this stage may have symptoms such as chest pain, shortness of breath, weakness, leg pain, swelling or slow wound healing.

The list below lists common health conditions at each stage.

CKM Syndrome Stages and Health Conditions			
Stage 1	Stage 2	Stage 3	Stage 4
Excess weight or obese Prediabetes	Type 2 diabetes High blood pressure High triglycerides Chronic kidney disease Metabolic syndrome: 3 or more of the following: <ul style="list-style-type: none"> <li>• Increased waist circumference</li> <li>• Low HDL (good cholesterol)</li> <li>• High triglycerides</li> <li>• High blood pressure</li> <li>• Prediabetes/diabetes</li> </ul>	Beginning signs of heart failure  Beginning signs of atherosclerosis (hardening of the arteries from plaque)	Heart failure Stroke Atrial fibrillation (irregular heartbeat) Peripheral artery disease (reduced blood flow to limbs) Coronary heart disease (reduced blood flow to the heart)

# CKM Syndrome Staging Model



## Key Take-Aways:

Area for key take-aways and recommendations.

## Recommendations and Next Steps:

Area for recommendations and next steps.

## Terms & Abbreviations

- CKM - Cardiovascular-Kidney-Metabolic
- Subclinical - Early disease, not yet causing symptoms
- Clinical - Disease found by symptoms or examination
- Metabolic Syndrome - 3 or more of the following:
  - Increased waist circumference
  - Low HDL (good cholesterol)
  - High triglycerides
  - High blood pressure
  - Prediabetes / Diabetes
- Afib - Atrial Fibrillation
- ASCVD - Atherosclerotic Cardiovascular Disease
- CVD - Cardiovascular Disease
- CHD - Coronary Heart Disease
- HF - Heart Failure
- PAD - Peripheral Artery Disease
- CKD - Chronic Kidney Disease