

Predicting chronic Kidney disease

Background

What is Chronic Kidney Disease (CKD)

CKD is a condition in which the kidneys are damaged and cannot filter blood as well as they should. Because of this, excess fluid and waste from blood remain in the body and may cause other health problems, such as heart disease and stroke.

General symptom and health condition related to CKD

- Anemia or low number of red blood cells

- Increased occurrence of infections

- Low calcium levels, high potassium levels, and high phosphorus levels in the blood

- Loss of appetite or eating less

- Depression or lower quality of life.

Problem

Based on CDC report, Kidney diseases are the **ninth leading cause of death** in the United States. But about **37 million** US adults are estimated to have CKD and most are undiagnosed. In fact, **48%** of people with severely reduced kidney function and not on dialysis are not aware of even having CKD.

Interest

This problem would interest the health care providers, such that with minimal physician laboratory results, the health care provider can diagnose patients with CKD in early stage. Early diagnosis of CKD will be very vital for avoiding more health problems and can avoid further expensive treatments.