

# **EARLY DETECTION OF CHRONIC KIDNEY DISEASE USING MACHINE LEARNING**

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## **PROBLEM STATEMENT**

Chronic kidney disease (CKD) is one of the most critical health problems due to its increasing prevalence. Chronic kidney disease, also known as chronic renal disease or CKD, is a condition characterized by a gradual loss of kidney function over time. It includes conditions that damage your kidneys and decrease their ability to keep you healthy by filtering wastes from your blood.

Diabetes and high blood pressure, or hypertension, are responsible for two-thirds of chronic kidney disease cases. Anyone can get chronic kidney disease at any age. However, some people are more likely than others to develop kidney disease. Most people may not have any severe symptoms until their kidney disease is advanced.

A better testing method which could possibly detect CKD in the early stages would be much more useful. Medical test results taken for other purposes are used to detect CKD at early stages. Various efforts have been undertaken to advance early therapy to prevent the condition from progressing to chronic disease. Recent research suggests that some of the negative outcomes can be avoided with early identification and treatment. Peculiar and contributing attributes from the above mentioned test results are combined to develop a Machine Learning Model. This Machine Learning Model will be used to predict CKDs rather early than the presently existing methods.