

Medial EarlySign's clinical study links diabetes with kidney damage

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Machine Learning Algorithm Identifies 25% More Patients at Risk, Compared with Commonly Used Clinical Tools



Medial EarlySign is a leader of machine-learning based solutions to improve non-communicable disease management.

The company announced the results of an additional clinical data study in the domain of diabetes identifying diabetic patients who are at highest risk for having renal dysfunction within one year.

Medial EarlySign's machine-learning based model analyzed dozens of factors residing in Electronic Health Records (EHRs); including laboratory tests results, demographics, medication, diagnostic codes and others, to predict who might be at high risk for having renal dysfunction within one year.

By isolating less than 5% of the 400,000 diabetic population selected among the company's database of 15 million patients, the algorithm was able to identify 45% of patients who would progress to significant kidney damage within a year, prior to becoming symptomatic.

This represents 25% more patients than would have been identified by commonly used clinical tools and judgement.

Kidney problems are one of the most common diabetes-related complications, affecting approximately 20%-40% of diabetics worldwide.

Early identification and treatment may help prevent or slow the progression of damage to the kidney, reducing the likelihood of future complications, such as ESRD.

This model joins a group of predictive models and algorithmic calculators developed and researched by Medial EarlySign, with the goal of providing healthcare organizations a comprehensive set of predictive tools to address the challenge of engaging with the right patients and offering effective interventions to reduce morbidity and mortality from diabetes.