Electronic health record-based algorithm does not cut hospitalization in kidney dysfunction triad, trial shows

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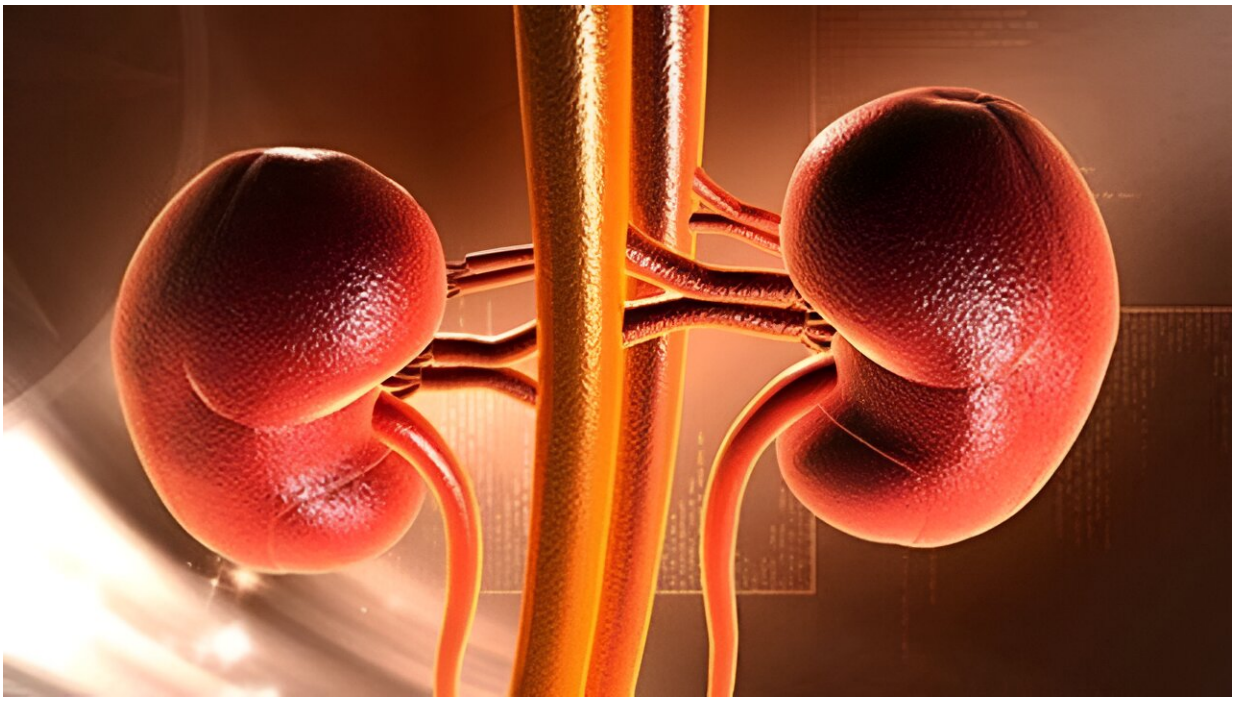

For patients with the triad of chronic kidney disease, type 2 diabetes,

and hypertension, the use of an electronic health record-based algorithm and intervention does not result in reduced hospitalization at one year, according to a study published in the *New England Journal of Medicine*.

Miguel A. Vazquez, M.D., from the University of Texas Southwestern Medical Center in Dallas, and colleagues conducted an open-label, cluster-randomized trial involving 11,182 patients with the kidney-dysfunction triad treated at 141 primary care clinics to receive an intervention using a personalized algorithm (based on the electronic health record and practice facilitators to assist providers in delivery of guideline-based interventions) or to receive usual care.

Seventy-one practices with 5,690 patients were assigned to the intervention group, and 70 practices with 5,492 patients were assigned to the usual-care group.

The researchers found that the hospitalization rate was 20.7 and 21.1 percent in the intervention and usual-care groups, respectively, at one year. The two groups had similar risks for emergency department visits, readmissions, cardiovascular events, dialysis, or death from any cause. The groups also had similar risks for adverse events, apart from acute kidney injury, which occurred in more patients in the intervention group (12.7 versus 11.3 percent).

"At one year, we did not find better disease control or reduced hospitalization with the intervention than with usual care," the authors write.

More information: Miguel A. Vazquez et al, Pragmatic Trial of Hospitalization Rate in Chronic Kidney Disease, *New England Journal of Medicine* (2024). DOI: 10.1056/NEJMoa2311708