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RESEARCH NEWS

Prediction tools for kidney disease aren't mature enough for clinical use

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Researchers have been busy developing tools to help predict who will develop chronic kidney disease. Systematic reviewers recently found 30 prediction models, most of which included age, sex, body mass index, diabetes, systolic blood pressure, serum creatinine, a measure of proteinuria, and serum albumin or total protein. The same reviewers found another 17 models that researchers hoped would predict which adults with chronic kidney disease are most likely to progress to end stage renal failure.

Both sets of models were in the early stages of development and usually still expressed as mathematical formulas, rather than easy to use scores or calculators. Few had been tested in populations beyond the sample used to derive them. Those that were externally validated generally looked less reliable afterwards. None of the models had been road tested in controlled trials to make sure it did more good than harm in practice.

Reliable and accurate prediction of chronic kidney disease may prove useful one day, perhaps to direct screening more efficiently. But we still have a long way to go, say the authors. Researchers in the field should probably focus on further validation of existing models, rather than on developing new ones. Only then can we debate how best to use them.

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