UnitedHealth's Optum working on Medicare risk scoring system that would use AI

Trump administration may test AI risk scores in Medicare's innovation center

UnitedHealth Group

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SAN DIEGO — Optum, the health data and care provider division of UnitedHealth Group, is developing a way to calculate how sick Medicare patients are through artificial intelligence, instead of relying solely on diagnosis codes submitted by physicians.

Ken Cohen, a physician and Optum's executive director of translational research, said Thursday at a conference organized by America's Physician Groups that he was working with the Duke-Margolis Institute for Health Policy on this "next generation" of Medicare risk coding using AI.

UnitedHealth and Optum have a significant interest — both reputationally and financially — in helping to build a new type of coding system. The broader company is facing a criminal fraud investigation by the Department of Justice related to Medicare Advantage, the Wall Street Journal reported this week. That comes on top of a civil investigation over its billing and coding, as well as an antitrust investigation.

UnitedHealth is the largest Medicare Advantage insurer in the country. Aided by its Optum medical clinics and in-home providers, the company gets more money than any other for the way it codes the health conditions of Medicare Advantage enrollees — amounting to more than $10 billion annually, according to one study.

The federal government pays Medicare Advantage plans based on local health care spending, and then it adds extra money based on how sick the plans' members are. The more diagnosis codes people have in their medical records, the higher their "risk score" becomes — and higher risk scores result in more money for health insurers. This coding system is known as risk adjustment.

However, the federal government altered risk adjustment within Medicare Advantage starting last year, and UnitedHealth now faces steep losses in revenue from the revised system.

Federal watchdogs and Medicare advisers have warned lawmakers and the public for more than a decade that insurers have abused risk adjustment by making people appear sicker on their medical charts than they actually are. The risk of fraud has been high due to those financial incentives, and because the process relies on humans — doctors, nurses, and coders — to jot down and interpret people's conditions.

Cohen said the new Medicare risk-scoring system he and others are working on would automate how risk scores are calculated. It would collect data from numerous sources — hospitals, labs, imaging centers, and others housing medical claims. That data would then be run through an AI engine that "would create an accurate [risk adjustment factor] score," he said.

"It's early, but that's the direction," Cohen said. He did not mention what kind of guardrails would be in place to ensure that people's diagnoses were accurate and free from manipulation, or when this would be rolled out.

The Trump administration may already be interested in testing these kinds of AI risk scores. Cohen said Abe Sutton, President Trump's director of the Center for Medicare and Medicaid Innovation, has referred to this concept as "inferred" risk scores. In a blog post this week,

Sutton briefly mentioned creating new Medicare Advantage models that would test the "impact of inferred risk scores."

CMS, Duke-Margolis, and UnitedHealth did not immediately respond to requests for comment.

Health care increasingly has embraced AI with lofty dreams that the technology would speed the discovery of new treatments and make care better and cheaper. The early returns have been mixed. While AI is helping to automate medical documentation and coding, many doctors and data scientists remain concernedabout AI's unreliability and inaccuracy, which are often built on clinical and racial biases.

UnitedHealth has had its own problems with care algorithms and AI. An algorithm developed by Optum previously allowed white patients to get more care than Black patients, even though both were almost equally sick.

UnitedHealth also owns NaviHealth, a company that is now part of Optum and manages the care of Medicare Advantage patients when they leave the hospital. At the core of NaviHealth is an algorithm that attempts to predict when someone could be discharged from a post-acute facility.

A STAT investigation found many insurers, not just UnitedHealth, used the algorithm to cut off rehab care for extremely sick Medicare Advantage patients. UnitedHealth has said the technology was used only as a guide, but internal documents showed employees had to adhere to the predictions or face consequences.