

Study: If more Wisconsin doctors provided better care, key medical procedures would cost 30% less

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Jeffrey Kluever, executive director of the Business Health Care Group, delivering the opening remarks before a presentation of a study on the variation in the cost and quality of care provided by primary care physicians in Wisconsin. (Photo: Michael Sears / Milwaukee Journal Sentinel)

If every primary care physician in Wisconsin provided the same quality of care and was as prudent in their use of health care dollars as those in the top half for performance, the cost of treating key medical conditions would be 30% lower.

That would work out to hundreds of millions of dollars in savings a year while providing better care to patients.

That's the finding of a study that analyzed millions of medical claims to gauge the performance of primary care physicians — those who specialize in family medicine, internal medicine or pediatrics — in Wisconsin.

The study — the first of its kind in the state — has the potential to help improve the quality of care, identify care that doesn't benefit patients and lower health care costs, said Jeffrey Kluever, executive director of the Business Health Care Group.

The employer coalition paid for the study, with some funding from the Greater Milwaukee Business Foundation on Health.

The study was done by GNS Healthcare, a company based in Cambridge, Mass.

The company, founded by physicists and mathematicians, used a form of artificial intelligence known as causal machine learning, to analyze how 3,760 primary care physicians provided care and performed on accepted quality measures for 26 medical conditions in the study.

The conditions included high-blood pressure, diabetes, high cholesterol, asthma, coronary heart disease, obesity, depression and other mood disorders.

The study found that an estimated 35% of the physicians provided below average care and an estimated 21% provided care that was more costly than the average for their counterparts.

The cost was based on an episode of care and included emergency department visits, hospitalizations, labs, prescription drug and imaging tests.

"There was no correlation between cost and quality — I mean virtually zero," said Earl Steinberg, a physician and director of clinical analytics for GNS Healthcare. "We can show it. We produced a graph of every doc."

For example, patients of physicians found to be outstanding performers in controlling health care costs — only 7% of those in the study — were less likely to be hospitalized for asthma, congestive heart failure or high-blood pressure.

The hope is the study will help health systems and clinics learn what sets apart physicians who perform best at providing quality care efficiently from those who don't.

"We've had some preliminary discussions and we've already receive favorable feedback," Kluever said.

The employer coalition, whose members provide health insurance for 200,000 people in Wisconsin, was formed because of the rising cost of health care.

“It is taking compensation out our pocket,” Kluever said, “simply because employers have to continue to feed the beast that’s called health care expenses.”

Nationally, employers and employees pay an average of \$20,576 for health benefits, with workers paying on average \$6,015 toward the cost, according to a widely followed survey by the Kaiser Family Foundation.

That doesn’t include deductibles and other out-of-pocket costs. An estimated one in five employees are covered by health plans with an out-of-pocket maximum of \$6,000 or more.

The GNS study found substantial variation in the cost and quality of care provided by primary care physicians in the state.

“The variation translated into a very large number in substantial savings,” Steinberg of GNS said.

The wide variation in how physicians provide care for the same medical condition has been documented for decades.

Health systems now have clinical guidelines for their physicians and other health care providers. But Dave Osterndorf, an actuary who advised the Business Health Care Group, said the emphasis placed on following those guidelines varies.

“It’s not anywhere consistent,” said Osterndorf, a partner at Health Exchange Resources in Glendale. “In fact, it’s totally inconsistent.”

The GNS study, he said, shows the inefficiencies in the health care system.

Studies have found that 30% to 35% of the \$3.5 trillion that the country spends on health care could be considered waste.

A study published in October in the Journal of the American Medical Association, or JAMA, came up with a more conservative estimate: 20% to 25% of spending was waste – or roughly \$800 billion a year.

It looked at six areas: failure to provide appropriate care, lack of care coordination, overtreatment or low-value care, high prices, fraud and abuse and high administrative costs.

The GNS study analyzed medical claims for 2017 from the Wisconsin Health Information Organization. The organization, known as WHIO, has de-identified medical claims — patients' names are removed — for 4.2 million people, roughly 72% of the state's population, and can be used to track an entire episode of care.

The physicians needed to have more than 100 patients with one of the 26 medical conditions to be included in the study. And they had to have more than 30 patients to be measured on a specific condition. The thresholds were needed to provide accurate estimates.

The study excluded patients with catastrophic costs and adjusted for age, complexity and other risks.

It also calculated the estimated accuracy, or confidence interval, of its results for every physician.

One drawback is WHIO's data doesn't have actual costs, and prices that insurers pay can vary widely among hospitals and clinics. The study used estimated prices.

Osterndorf said the study could not have been done 15 years ago.

"It takes a ton of data and some really sophisticated analytics," he said.

The unknown is whether health systems and clinics make use of the study to become more efficient.

Changing physician practice patterns is not easily done, Osterndorf and Steinberg noted. And physicians' incomes often are tied to the amount of revenue they generate.

Providing care more efficiently also means less revenue for a health system.

Wisconsin ranks high on health care quality, said Dana Richardson, chief executive officer of WHIO. But it also ranks high in health care costs.

She also noted that the U.S. health care system began working to improve the quality of care 30 years ago.

"We don't have 30 years to control costs," she said.

The Business Health Care Group plans similar studies for other medical specialties, such as orthopedics and cardiology, that account for a much larger share of total health care spending.

The Business Health Care Group is sharing the report with presentations scheduled in Madison and Wausau in addition to Milwaukee this week.

“You can be assured that we are going to do subsequent studies,” Kluever said.