Second opinion? Diagnosing doctors

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(PhysOrg.com) -- What difference does a great doctor make to your health? Patients everywhere would love to know the answer.

A recent study co-authored by Joseph Doyle, an economist at the MIT Sloan School of Management, offers a subtle conclusion to this question. Treatment by a highly rated physician does not necessarily change the outcome of a serious medical problem. Instead, the best doctors typically offer an accurate diagnosis more quickly than moderately rated doctors, leading to hospital stays for patients that are 10 percent shorter and less expensive — an average that increases to 25 percent for certain medical specialties.

“As a patient myself, I always hope to go to a prestigious hospital, but I wonder how much more of an advantage that is,” says Doyle. “It turns out that if you don’t have access to the most prestigious teams, the less

prestigious ones will eventually make the same types of interventions, but it just takes them longer to get there, and it's more costly." These findings figure to resonate at a time when the cost of health care is a major political preoccupation.

To reach this conclusion, Doyle — along with his colleagues Steven Ewer of the University of Wisconsin and Todd Wagner of Stanford University — examined roughly 70,000 treatment episodes involving 30,000 patients, spread over 13 years, at a Veterans Affairs hospital in a large city in the United States. The hospital's practices naturally lent themselves to a comparison of doctor quality since the institution randomly assigned patients to two separate teams of physicians and residents, which had markedly different medical backgrounds.

One of these teams (dubbed "Program A" by the researchers) consisted of members trained at an elite U.S. medical school, which sometimes boasts the nation's highest average MCAT scores among its incoming students. The other group ("Program B") has members trained at a middle-ranked medical school. Medical residents with Program A had medical board-certification scores that on average placed them in the top quarter of the national results, while the Program B doctors had scores placing them in the bottom fifth of U.S. residency programs. (The researchers agreed to keep the identities of the VA hospital and medical schools anonymous.)

Money, not mortality

Despite these differences, in some ways the bottom-line results for patients were similar regardless of whether they were treated by doctors in Program A or Program B. The mortality rates for the two programs were within a percentage point of each other, as measured over 30 days, one year and five years from the time each patient was treated.

“I find that to be a feel-good result,” Doyle says.

As Doyle, Ewer, and Wagner see it, the major difference between the teams involved the ease and confidence with which the more highly regarded doctors made their diagnoses. The doctors in Program B, the ones from the lower-ranked medical school, ordered 8 percent more tests than their counterparts in Program A, and on average took 8 percent longer to request an initial test for a patient. These differences were more pronounced within certain specialties. For instance, the Program B doctors took 21 percent longer to order heart exams, 51 percent longer to request an angiography, and 32 percent longer to order a cardiac stress test, for patients with congestive heart failure. Such delays have a direct impact on the overall cost of treatment, since they result in longer hospital stays for patients. Moreover, laboratory expenditures were 13 percent higher or patients in program B.

The doctors in Program B also consulted with specialists more often, which can also prolong the duration of a hospital visit. “Sometimes people look at the use of specialists as waste or excessive cost,” says Doyle. “But maybe these [lesser-ranked] physicians need specialists to achieve the same outcomes.”

Other health-care economists find the study a useful look at a complex question. “I think this has been on the minds of people trying to fix health care: What goes on in that black box inside the heads of doctors?” says Jonathan Skinner, an economist who teaches at both Dartmouth College and Dartmouth Medical School. “It speaks more broadly to why we see greater medical costs in some areas — it may be the difficulties physicians are having making a diagnosis.”

Only so much room at the top

To be sure, there will always be differences among doctors; in any group

of physicians, some will have better training or be more highly regarded than others. By quantifying the disparities among doctors, however, and linking them to particular practices, Doyle's work provides a yardstick for medical professionals who would like to reduce the gap between excellent and average doctors in absolute terms.

As Doyle notes, a basic caveat to the study is that it examines just one VA hospital (the researchers are looking for others featuring the same arrangements). Nonetheless, Skinner, for one, thinks the paper will have a significant impact among policymakers. "The larger point this speaks to in terms of policy is that measurement is really important in understanding what physicians do," he says. "If you take a bunch of physicians and train them, you cannot assume they will all do the same things. It would be nice to have feedback mechanisms where doctors and residents could sit down and observe what is going on. They might change what they do."

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