Dartmouth Atlas Project Finds Access and Use of Primary Care Does Not Guarantee Better Health Outcomes

Medicare patients receive care and outcomes of widely varying quality; where you live has a greater influence on the care you receive than the color of your skin

Lebanon, N.H. (September 9, 2010) – Meeting the nation’s primary care needs is more than a numbers game. A new report from the Dartmouth Atlas Project shows that neither higher amounts of primary care services, nor making sure patients routinely see a primary care clinician is, by itself, a guarantee that a patient will get recommended care or experience better outcomes.

Researchers also found that patients’ access to and use of primary care, the quality of overall care, and their likelihood of hospitalization varied markedly in different locations.

The report, which studies the fee-for-service Medicare population from 2003 to 2007, shows that improving access to primary care alone does not always keep people with chronic conditions out of the hospital, improve their chances of getting the optimal care recommended for their condition, or improve health outcomes.

“Our findings suggest that the nation’s primary care deficit won’t be solved by simply increasing access to primary care, either by boosting the number of primary care physicians in an area or by ensuring that most patients have better insurance coverage,” said David C. Goodman, M.D., M.S., lead author and co-principal investigator for the Dartmouth Atlas Project. “Policy should also focus on improving the actual services primary care clinicians provide and making sure their efforts are coordinated with those of other providers, including specialists, nurses and hospitals.”

This new analysis also found that increasing access to primary care may not be enough to overcome racial disparities in quality and outcomes. Although blacks were as little as half as likely to see a primary care clinician and up to 84 percent more likely to be hospitalized than whites within areas, these disparities were less pronounced than differences across locations.

The Role of Primary Care Access and Supply

Regardless of race and income, patients receive care of widely varying quality depending upon where they live and the health system that provides their care. During the report period, 77.6 percent of beneficiaries had an annual visit to a primary care clinician, but patients’ chances of an annual primary care visit varied widely depending upon where they lived. The rate of primary
care visits ranged from about 60 percent of beneficiaries in the Bronx, N.Y. and Manhattan to nearly 90 percent in Wilmington, N.C. and Florence, S.C.—about a 50 percent difference between the highest and lowest regions.

The differences across regions for all beneficiaries were much larger than differences between races within regions. On average, blacks were less likely to see a primary care clinician than whites—70.4 percent had at least one annual visit in 2003-07 compared with 78.1 percent for whites—about 11 percent more than blacks.

But, in a few regions, blacks were slightly more likely to have had a primary care visit than whites. In Waterloo, Iowa, for example, 88.7 percent of blacks had an annual primary care visit, versus 86.5 percent of whites. By contrast, in the Olympia, Wash., only 42.9 percent of blacks had an annual primary care visit, versus 79.8 percent of whites, nearly twice as many.

The relationship between the per capita supply of total primary care physicians and the percent of Medicare beneficiaries who had at least one annual visit with a primary care clinician during 2003-07 suggests that there is no correlation between the supply of physicians and access to primary care.

In some regions, a relatively high proportion of beneficiaries had at least one visit, but the overall primary care physician supply was low. This includes Wilmington, N.C., where there were 69.0 primary care physicians per 100,000 residents and 87.4 percent of patients had at least one annual primary care visit. Despite high physician supply in White Plains, N.Y. (101.4 per 100,000), less than 70 percent of beneficiaries saw a primary care clinician each year.

“A commonly cited reason for the wide variation in access to primary care is a shortage of clinicians, particularly physicians. This may contribute to the problem in some locations, but the findings suggest that there is no simple relationship between the supply of physicians and access to primary care,” said Elliott S. Fisher, M.D., M.P.H., report author and co-principal investigator for the Dartmouth Atlas Project. “As is often the case in health care—it’s not always how much you spend, but how you spend it.”

The Relationship between Primary Care and Quality

There is strong evidence that primary care physicians can play a crucial role in ensuring that patients get high-quality care. However, despite the central role that primary care can play, access is not always enough to ensure that patients receive high-quality care or get better outcomes.

The report measured primary care at a regional level. A higher supply of primary care may be more important in smaller areas, but unfortunately public policy and reimbursement practices have not matched patient needs with supply at any level, local or regional.

The report included the percent of female Medicare beneficiaries age 67-69 who had at least one mammogram over a two-year period during 2003-07 and found that there was no relationship between rates of breast cancer screening and the amount of primary care delivered. There was a modest relationship between the percent receiving recommended mammograms and the percent of beneficiaries seeing a primary care physician at least once a year.

Similarly, the report found no relationship between rates of A1c testing of Medicare beneficiaries with diabetes and the amount of primary care delivered. There was a modest relationship
between rates of A1c testing in beneficiaries with diabetes and the overall likelihood that beneficiaries saw a primary care physician at least once a year. There was also no relationship between rates of blood lipid testing and eye examinations and the overall likelihood that beneficiaries with diabetes saw a primary care clinician at least once a year.

Rates of leg amputation, a serious complication of diabetes and peripheral vascular disease, also had no relationship with having at least one annual visit with a primary care clinician. And patients’ risk of leg amputation varied dramatically depending upon where they lived – there was a tenfold difference in the rate of leg amputation, ranging from 0.33 per 1,000 beneficiaries in Provo, Utah to 3.29 per 1,000 in McAllen, Texas.

The report also found that having an annual primary care visit did not keep patients out of the hospital for ambulatory care-sensitive conditions such as diabetes and congestive heart failure. There was a more than fourfold difference in the rate of ambulatory care-sensitive discharges among Medicare beneficiaries, ranging from 30.7 per 1,000 in Honolulu to 135.0 per 1,000 in Monroe, La.

To explain this gap in access to primary care and health outcomes, researchers theorize that the patients most in need of this care may not be receiving it. Another possible reason is that primary care is most effective when it is embedded within a health care system where care is coordinated, physicians communicate with one another about their patients, and feedback is available about performance that allows physicians and local hospitals to continually improve. Achieving the benefits of primary care is likely to require both improving the services provided by primary care clinicians and more effective integration and coordination with other providers.

The Dartmouth Atlas Project is run by the Dartmouth Institute for Health Policy and Clinical Practice and principally funded by the Robert Wood Johnson Foundation. A link to the full study can be found at www.dartmouthatlas.org.

Methodology
Data drawn for this report were from the enrollment and claims data of the Medicare program and restricted to the fee-for-service population over age 65; HMO patients were not included. The geographic areas included in the study consisted of Dartmouth Atlas hospital service areas (HSAs), which are natural markets for health care defined on the basis of travel for common causes of hospitalization and Dartmouth Atlas hospital referral regions (HRRs), which are larger natural markets reflecting travel for tertiary care that include one or more HSAs and at least one major referral hospital. For more details, see the Appendix on Methods at www.dartmouthatlas.org/publications/reports.aspx.

About the Dartmouth Atlas Project
For more than 20 years, the Dartmouth Atlas Project has documented glaring variations in how medical resources are distributed and used in the United States. The project uses Medicare data to provide comprehensive information and analysis about national, regional, and local markets, as well as individual hospitals and their affiliated physicians. These reports, used by policymakers, the media, health care analysts and others, have radically changed our understanding of the efficiency and effectiveness of our health care system.

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