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VIEWPOINT

Disparity in Health: Is Geography Destiny?

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- Small area analysis, a methodology for assessing health care utilization rates across geographic areas, was pioneered by Dr. John Wennberg, the Peggy Y. Thomson Professor of the Evaluative Clinical Sciences at Dartmouth Medical School. Nationally and internationally recognized in medical epidemiology, Dr. Wennberg's work has catalyzed a whole new field of inquiry in the examination of geographic variations¹ in the utilization of medical services such as cardiac catheterization/angioplasty^{2,3,4}, diabetic amputation⁵, and orthopedic surgical procedures⁶.
- According to the [Dartmouth Atlas of Health Care 1999](#), initially created by Dr. Wennberg to chronicle geographic variation in health care utilization, the rate of cardiac bypass graft surgery (CABG) was 5.4 per 1,000 Medicare enrollees living in Gainesville, Florida, while it was 9.4 per 1,000 Medicare enrollees living in Hudson, Florida, approximately 120 miles from Gainesville.
- This variation in CABG rates between two Florida communities relatively close to each other persists even after potential explanatory factors including the health profile and status of patients are adjusted for. This variation in care may be secondary to a variety of factors, including patient preferences, local practice norms, and economic and market incentives. Some of these factors may not be valid reasons for the decision to perform or not perform a CABG, and thus may indicate either an overuse or underuse of such medical services.
- Given that, on average, a Medicare patient in Gainesville is more likely to get a CABG than a Medicare patient in Hudson, it is critical that efforts be made to assess the outcome implications of such geographic variations in care. In other words, what is the "right" rate for coronary artery bypass surgery? Without this information, we cannot adequately address these variations in care, and, in terms of disparities in health, geography may well end up being destiny.

References

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