

FAQs Re: Dartmouth Atlas Project Study, “Evaluating the Efficiency of California Providers in Caring for Patients with Chronic Illness,” Published in Health Affairs Web-Exclusive, November 16, 2005

1. What is the Dartmouth Atlas Project?

The Dartmouth Atlas of Health Care Project (DAP) began in 1993 with funding from the Robert Wood Johnson Foundation. The goals of the project were first to define existing health care markets in the United States, and then to use the methodology of small area analysis, developed by John E. Wennberg and Alan Gittelsohn in the 1970s, to compare the distribution and utilization of health care resources in different markets and regions of the United States. The DAP has shown that health care resources and utilization vary remarkably, revealing that there is little consistency or equity in the quality and quantity of health care services Americans receive. The DAP published a series of books in the 1990s, moving to a more flexible and cost-effective strategy of web-based dissemination of new findings after 2000. The DAP is the only long-term, comprehensive study of health care markets in the United States. Its databases and analyses are made available to researchers, journalists and the public free of charge on its web site.

2. Why is the information in this study important, and what are its implications?

Health care spending is consuming an increasingly larger proportion of GNP every year, but there is little evidence that the amount we are spending is producing better outcomes for populations or for individual patients. Other countries spend far less per person and have better health outcomes. One way to address the question of why is to study which parts of the system appear to be producing “excess” levels of intervention, which are extremely costly but provide no additional benefit, over other parts of the system that operate far more efficiently. Some researchers (including Mark McClellan, head of CMS) estimate that up to 30% of current spending on health care is wasted. Finding that waste and eliminating it would help provide financial security for the Medicare program without loss of value to the people it covers.

3. Please explain the conclusion that “more health care is not necessarily better”?

The DAP has observed, over the course of its research, that death rates in areas where there is less capacity and less utilization are not higher than death rates in areas where there is much higher capacity and utilization – that is, the additional investment in hospital and physician resources does not “pay off” in increased longevity. Recent studies by Dr. Elliott Fisher ¹ have indicated that there is *higher* mortality in high-resourced, high-utilization areas than in low-resourced, low-utilization areas. One explanation for this phenomenon is that the risks associated with hospitalizations and interventions – infections, medication errors, and the like – outweigh the benefits.

4. Why does the research focus on hospitals?

Hospital services are the single largest component of health care spending, and the decisions made by doctors and hospitals about who gets admitted, how long patients

¹ The Implications of Regional Variations in Medicare Spending. Part 1: The Content, Quality, and Accessibility of Care - Elliot S. Fisher, M.D., M.P.H.; David E. Wennberg, M.D., M.P.H.; Therese A. Stuckel, Ph.D.; Daniel J. Gottlieb, M.S.; F.L. Lucas, Ph.D.; and Etoile L. Pinder, M.S.

they stay in the hospital, whether they go to the ICU, etc. drive both care and cost. A hospital's affiliated physicians decide who is admitted as well as the amount and type of care those patients receive. In turn, the probability of being hospitalized and admitted to the hospital and to its ICU is related to the capacity of the hospital compared with the size of the population it serves. The more hospital beds there are per capita, the greater the likelihood the patients will be admitted.

5. How were hospitals selected? Why were hospitals with 400 or more deaths included?

Hospitals were selected by size, as determined by the number of persons "assigned" to each hospital (by linking Medicare claims by each enrollee to the hospital he or she used during the study period). The study was confined to hospitals with large enough populations to result in statistical stability and retain the confidentiality of patient information. The paper presents data from hospitals with at least 400 deaths during the study period. Hospitals with at least 80 deaths during the study period are discussed on the web site. The data that was analyzed came from a uniform national Medicare claims database.

6. What is the real driver of "overuse"?

Probably the most important driver of how health care resources are established and used is the current reimbursement system. Hospitals and doctors are paid for activities – hospitalizations, procedures, tests – and are economically punished for using less-invasive, less-costly strategies of care.

7. If a hospital is seen as inefficient, does this mean that they provide poor care?

The study did not directly measure the quality of care. Instead, it focuses on what could be called overcare – hospitalizations and procedures that cost money but do not provide a corresponding benefit (large numbers of days in intensive care during the last six months of life, for example, neither extend life expectancy nor provide high quality of life for the patient). Care is often described as "poor" if the *process* of care is poor; this study looks not at whether the thing was done right, but on whether the decision to provide the hospitalization or procedure was the correct decision to begin with.

8. Will patients pay more out of pocket expenses with an inefficient hospital?

Possibly, if copayments are required for services such as hospitalizations and procedures that might have been avoided had the patient been treated more efficiently.

9. What explains the differences in efficiency among different regions? Is it supply driven?

The supply of such resources as hospital beds and specialist physicians does drive utilization – where there are more hospital beds per capita, more people will be admitted (and will be readmitted more frequently) than in areas where there are fewer beds per capita. Economically, it is important for hospitals to make sure that all available beds generate as much revenue as they can, since an unoccupied bed costs nearly as much to maintain as an occupied bed. Similarly, where there are more medical specialist physicians per capita, there are more visits and revisits to medical specialists. Other

reasons for the variations in efficiency are related to practice style – the way physicians in the region practice medicine (using more or fewer prescriptions or tests, for example).

- 10. The study points out that frequent use of services is not associated with either better performance on technical measures of care or marginal improvements in survival and functional status. How can people be convinced they don't need additional care and how do you convince doctors not to recommend it?**

A recent study reported that almost three-quarters of Americans say they have declined interventions that were recommended by their physicians, because they thought that it was unnecessary or the benefits did not outweigh the risks or side effects. Other studies have confirmed that informed patients want much less surgery, on average, than surgeons are inclined to perform. Making patients aware of the risks and trade-offs associated with treatment choices is one good way of reducing demand for such things as hospital admissions, redundant or unnecessary testing, and surgery when there are other options. Because physicians are reimbursed for activities, the system encourages them to do more. Paying physicians to spend more time advising patients about treatment alternatives (for example, lifestyle changes and medications, rather than bypass surgery), without penalizing them economically for doing less, is another important strategy for reducing utilization.

- 11. Evidence in this study points out that more aggressive care in managing patient populations with chronic illness does not lead to longer length of life or improved quality of life. Does this mean that we shouldn't do everything we can to save a life?**

Ironically, research has found that in patients with chronic illnesses, more aggressive interventions result in *shorter* life expectancy, probably because of the risks associated with hospitalization. This indicates that the best strategy for extending the life of people with chronic illness is to focus on those activities that provide a survival benefit – better control of diabetics' blood pressure, for example – rather than on “heroic” end-of-life admissions to intensive care units.

- 12. The study points out that Medicare payments or hospital reimbursements were highest in Los Angeles. Is this because costs associated with care there are higher? And if so, why are costs higher there?**

There might be some differences in local costs of doing business, but we have not found a correlation between such costs and total reimbursements. The wage index, for example, is higher in San Francisco than in Los Angeles, even though total reimbursements in Los Angeles were higher. Differences in local prices of such things as real estate and wages have much less effect on total spending than differences in the volume of services provided.

- 13. The study draws attention to the additional referrals and physician visits of decedents in LA. While we know the outcome is the same – did these patients live longer?**

No. There is no evidence that more physician visits or referrals have the effect of extending life. There is strong evidence in specific cohorts that have been studied by Dr.

Fisher that chronically ill people who have more specialist visits and see more different specialists have slightly shorter life expectancy than those who see fewer specialists. Since many of these specialist services are delivered to hospital inpatients, these patients are spending more time in hospitals, with the associated risks. They might also have a lower quality of life if an excessive amount of time, energy and stress is expended by a person in fragile health making multiple trips to specialists during the last six months of life.

14. The research projects savings in health care utilization if Los Angeles health care providers could conform to the style of practice of other locations. If this occurred, would there be adverse affects such as the loss of jobs in health care, lower hospital revenues and reduced access to care?

By reducing the capacity of the health care resources in Los Angeles, the system might be forced to allocate resources more appropriately (reducing extremely aggressive interventions such as ICU admissions for people at the end of life, for example). Other systems with far less capacity manage patients in other ways that do not diminish the quality or length of life, at far lower cost. Reducing the specialist workforce and closing hospital beds ought not to threaten appropriate access to care for those who need it, if the remaining resources are allocated appropriately. There would be a loss of employment for some physicians, who might move their practices to areas where there is less excess capacity. There could also be loss of employment among other health care workers; however, all areas are experiencing acute shortages in many health care fields so this could actually have a beneficial effect of reducing these labor shortages.

15. UCLA is ranked first in geriatric care by *U.S. News & World Report*. In the study, UCLA also uses the most acute and ICU beds. Does this suggest that there is a positive correlation between quality and aggressive treatment? Is there also a positive correlation with money spent?

U.S. News & World Report, relies on highly unscientific subjective measures, e.g., asking specialists which hospitals they personally recommend. We believe that scientifically valid measurements yield better information about quality measures, such as inappropriate use of ICU beds. On almost every dimension, the amount of money spent does not correlate with more use of high-quality care, such as evidence-based care and end of life care.

16. If payers utilize this data, as the study suggests, and direct their chronic disease populations to low cost and low utilization hospitals, will patients' life-saving options be reduced?

Quite the contrary. The evidence is that higher utilization does not extend life expectancy, and might be correlated with shorter life expectancy, compared to lower utilization. Therefore, sending people with chronic diseases to higher-efficiency, lower-utilization hospitals for their care could result in both lower spending and increased quality and length of life.

17. This research suggests savings that can be realized within the Medicare system. Don't we need to look at the whole picture to truly realize savings?

Obviously more information about the non-Medicare population would add to our knowledge about what is going on in the system and how it could be improved. Lacking

that information, however, we can say two things. The first is that, even if we redirected *only* Medicare patients into high-quality, high-efficiency patterns of resource allocation and utilization, we would realize tremendous gains in quality and reductions in spending. The second is that, in several state-based studies of all health insurance claims (both Medicare and commercial) we have determined that the variations in resources and quality in the non-Medicare populations closely resemble those in the Medicare population. So the experience of Medicare enrollees is a reliable predictor of the experience of the non-Medicare population.

However, a hospital's ranking in terms of per capita spending may vary substantially for commercial payers based on market-negotiated (rather than CMS-set) unit prices and the greater spending on non-chronic conditions such as pregnancy. The best strategy for addressing these limitations would be for *all* payers and self-insured employers to work together to produce resource input and utilization data for cohorts across Medicare, Medicaid and commercially insured patients. The recently announced partnership between CalPERS and the Pacific Business Group on Health to build stakeholder consensus on a standard set of metrics for evaluating hospital efficiency of California hospitals is a very encouraging development.