

## Shaky Data? No. Shaky Reporting

Comments on the article “Data Used to Justify Health Care Reform can be Shaky,” by Reed Abelson and Gardiner Harris, *The New York Times* (June 3, 2010)

Elliott Fisher

[Elliott.fisher@dartmouth.edu](mailto:Elliott.fisher@dartmouth.edu)

Jonathan Skinner

[Jonathan.skinner@dartmouth.edu](mailto:Jonathan.skinner@dartmouth.edu)

We were frankly disappointed by the tone and tenor of the recent article on the Dartmouth Atlas data, but most concerned about at least 5 factual errors, and several misrepresentations. We begin with the factual errors (with the original newspaper sentences in italics)

*1. For all anyone knows, patients could be dying in far greater numbers in hospitals in the beige regions than hospitals in the brown ones, and Dartmouth’s maps would not pick up that difference.*

False. For maps that do reflect quality of care – such as the quality of treatments for diabetics, patient satisfaction, and the quality of hospitals, see the Atlas website ([here](#)):

*2. Neither patients’ health nor differences in prices are fully considered by the Dartmouth Atlas.*

False. We have presented risk-adjusted measures of spending for chronically ill patients near the end of life, and in our published research (for example a recent *New England Journal of Medicine* study) estimated risk-adjusted spending for heart attack patients. There may not be a perfect approach to risk adjustment in all cases, but we have fully considered all feasible approaches.

More worrisome is the claim that differences in prices are not “fully considered.” Since 1996, our Atlas reports have published actual measures of utilization – ranging from hospital days to physician visits to surgery rates. These rates clearly do not need price adjustment! As well, we have recently developed fully price-adjusted expenditure measures, they are freely available on the Atlas website ([here](#) under Gottlieb et al, 2010).

*3. But even those who defend Dartmouth say that failing to make basic data adjustments undermines the geographic variations the atlas purports to show. David Cutler, a professor of economics at [Harvard](#), likens it to failing to account for inflation when looking at [gross domestic product](#). “Nobody in their right mind would talk about G.D.P. growth without adjusting for prices,” he said.*

And we don't. As we stated in (2) above, all of our data reports actual measures of utilization – ranging from hospital days to physician visits to surgery rates. As well, we have developed fully price-adjusted expenditure measures (see link above).

*4. Because some regions spent nearly a third more than other regions without any apparent benefit, the Dartmouth team concluded that at least one dollar in three was wasted by Medicare.*

This error may seem like a quibble, but it is reflective of a general lack of accuracy throughout. The 2003 article read: “If the United States as a whole could safely achieve spending levels comparable to those of the lowest-spending regions, annual savings of up to 30% of Medicare expenditures could be achieved.” *Not at least one-in-three*. Up to 30%. This is an easily verifiable fact that was not verified.

*5. But as it began publicly discussing its research, the Dartmouth team often extrapolated beyond this basic finding. Not only do high-spending regions fail to provide better care, the Dartmouth team began to argue, but those regions actually offer worse care.*

This is again a misstatement of the facts. The 2003 articles actually showed that more spending was associated with generally worse outcomes (for heart attack and colorectal cancer, the results were statistically significant, for other conditions the results were marginally significant but all in the same direction), worse patient satisfaction, and poorer measures of quality of care. A much-cited 2004 [article](#) showed a strong and clear negative correlation. So to say that the Dartmouth team “often extrapolated beyond this basic finding” is just plain wrong.

The next two statements are not so much factually incorrect as hopelessly confused.

*6. But the atlas's hospital rankings do not take into account care that prolongs or improves lives. If one hospital spends a lot on five patients and manages to keep four of them alive, while another spends less on each but all five die, the hospital that saved patients could rank lower because Dartmouth compares only costs before death.*

As we have explained in an earlier posting on the New York Times Economix blog ([here](#))

Some believe that end-of-life measures could penalize hospitals providing potentially costly but life-saving procedures. This is true of *any* cost measure, and is why we have always emphasized measuring quality, such as patient satisfaction, avoidable-readmission rates or health outcomes. Hospitals trying to save money by skimping on quality would therefore be penalized, not rewarded. The lower-cost hospital systems that are often held up as a national model, in part because of the Dartmouth data, appear to get results that are as good as — if not better than — higher-cost systems.

For measures of quality, see the link in (1) above.

*8. And yet, for the quality of care offered in New Jersey, independent of cost, federal health officials rank New Jersey second only to Vermont.*

This statement is a classic example of cherry-picking – find the one quality measure that supports the author’s tenuous point. According to the most comprehensive [study](#) using data from the Robert Wood Johnson Foundation, New Jersey ranked 43<sup>rd</sup> in states in terms of health care quality during 2000-2001. More recently, both the Dartmouth Atlas data on diabetic testing ranks New Jersey below the median ([here](#)) while the 2009 Commonwealth Fund [study](#) ranks New Jersey 21<sup>st</sup> among states for prevention and treatment, and 30<sup>th</sup> overall. Again, this is not to say that one set of quality measures is always better than another – just that the casual reader would clearly be misled by this seemingly definitive statement.

In sum, readers who wish to understand the problems confronting the U.S. health care system will have to look further than this superficial piece in the Times. An accurate understanding of our work can best be gained by reading the written [response](#) that the Times kindly posted with the article. More importantly, the Times article leaves the impression that we have somehow backed off on our conclusions. We have not.

Our research shows the following. There are marked variations in spending observed across both hospitals and regions that are largely due to how much time similar patients spend in the hospital, how many specialists they see, and how many diagnostic test they receive. On average – across the United States – health systems that spend more on these services are less likely to deliver safe and effective care. Our findings point to important opportunities to improve not only the quality of care (by ensuring that effective care is reliably delivered) but also to reduce the costs of care (by reducing avoidable hospitalizations and unnecessary specialist visits).

What is truly unfortunate is that the Times missed an opportunity to help educate the American public about what our research actually shows -- or about the breadth of agreement about what our findings mean for health care reform.