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Bigger spending, healthier people?

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As many medical services are designed not to extend but to improve life quality, mortality is not the best indicator for developed countries.

Comparing medical care systems across countries has become a preoccupation of policymakers. Does a country that spends more than others necessarily have a better medical system? How could medical systems in different countries be compared? The issue is more complex than it seems. Implicit in such comparisons is the idea that mortality is a good summary for the output of the medical care system. But this is not necessarily the case, as many medical services are designed not to extend life, but to improve the quality of it.

In their paper "Comparing Non-Fatal Health Across Countries: Is the US Medical System Better?" Professor David Cutler of Harvard Business School and Research Associate Núria Mas of IESE propose a methodology to compare non-fatal health outcomes across countries and present a preliminary comparison of health differences in the US, Canada, the UK, and Spain.

The methodology does not make a comparison of absolute levels of self-reported health. Rather, it compares the relative health of those persons with and without a specific disease. The analysis is focused on the health of the elderly, which, in the developed countries, are virtually the only group with significant health impairments. Because data are somewhat limited, the comparisons are made only between eleven diseases: heart disease, strokes, asthma or bronchitis, diabetes, arthritis, hypertension, migraine, back problems, hearing impairments, cataracts, and glaucoma.

The countries selected exhibit big differences in their medical care systems:

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- The primary focus is whether the US, which spends significantly more than any other country does on medical care, has better health outcomes. The US's spending on medical care amounts to 13.2% of GDP in 1994. The medical care system is a mix of public and private insurance. The elderly enjoy near universal coverage under Medicare, but also private insurance for the health impairments from conditions occurring earlier in life.
- Canada is the second most expensive system among the four countries selected, spending more than 9% of GDP in the mid-1990s. Canada has a national insurance system (Medicare), which covers people from cradle to grave.
- The UK is a negative outlier in almost all medical spending comparisons. Spending on medical care is only about 7% of GDP. Given the fact that spending as a share of GDP typically rises with income, and that the UK is relatively wealthy, this makes spending particularly low. All legal residents are eligible for health care coverage and, in addition to this, people can purchase supplemental private insurance, or pay physicians privately for services.
- Spain spends about the same percentage of GDP as the UK. The medical system covers primary health care and specialized care, both free of charge. There is a 40% co-payment for pharmaceuticals, but this is waived for the elderly and those with permanent disabilities. On many measures (accessibility, no need for a referral from the GPs to see a specialist, etc.), the Spanish system works very well.

Overall, the results lead to the conclusion that higher spending in the US does not buy significantly improved health across the board. The findings indicate that the US system does better, but only on some conditions. People suffering from heart problems, asthma or bronchitis, and arthritis are found to be in better health in the US than people with these conditions in the other three countries. Spain is the country with the best treatment for diabetes and the worst treatment for arthritis, while Canadians with hearing problems are worse off than in any other country. However, the Americans with stomach problems and diabetes report themselves in substantially worse health than citizens in Canada, Spain, or the UK.

Cutler and Mas take into consideration three possible explanations for this discrepancy. First, the authors hypothesize that the US does better for the richer, well-insured people than for poorer, uninsured, people, and these differences are reflected in the prevalence of particular conditions. However, the results show this is not the case.

Another explanation is that people in some countries may be less likely to report themselves

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in poor or excellent health then people in other countries, even with the same "true" quality of life. After repeating the analysis with a more objective measure of health (the number of impairments in basic Activities of Daily Living), the authors reject this hypothesis, too.

The explanation Cutler and Mas propose, and provide limited evidence for, is that the US does better in conditions where high-tech medicine is the key to better health. The country spends the most on medical care and uses these intensive procedures the most, far more than do other countries. The US does poorly, in contrast, for conditions requiring substantial chronic disease management. Countries that focus on this type of treatment seem to do much better.

This hypothesis draws some directions for further research: How are medical systems organized to treat various types of conditions? Do countries that focus on chronic disease care do so because they are aware of the limits on acute care and this is a reasonable substitute? Or because it is easier to focus on non-high tech treatments outside of the private market, where the financial incentives are much less important etc.?

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