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Comment J. Steven Landefeld

This chapter by Schreyer and Mas, "Measuring Health Services in the National Accounts: An International Perspective," is an important step in efforts to improve the consistency and relevance of health data used for public policy. Cross-country comparisons of health care spending and outcomes are common reference points in debates on the efficacy of alternative

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health care debates. Discussions of the US health care system, for example, often start by noting that the United States spends more on health care (per capita and as a share of GDP) than any other nation, yet it ranks last in the quality of health among major developed economies. Although, in broad terms these cross-country “facts” may be correct, for purposes of public policy, more nuanced, consistent, and relevant measures on health care spending, the distribution of that spending across the population, the drivers of cost by type of provider and disease, and the productivity (or quality-adjusted real output) of spending are needed.

One example of an important difference across countries, pointed out by Mas and Schreyer, is the inconsistent treatment under international accounting rules—the System of National Accounts (SNA)—of the costs of private relative to those of publicly provided and nonprofit health care institutions. The SNA counts all the costs for private for-profit hospitals, including their capital costs, but only counts the depreciation component of capital costs and excludes the interest component for government and nonprofit institutions. The result is to lower health care costs in countries with a higher share of publicly provided services relative to countries with higher privately owned and operated share. One might also expect that there are problems in decomposing the administrative costs of governmentally run health systems between health-care and non-health-care costs relative to systems more reliant on private (for profit and nonprofit) institutions.

As Schreyer and Mas point out, other differences in measuring nominal health care expenditures are the inclusion of medical research and development and training and education expenditures by a number of countries. According to the SNA, such costs should be excluded from health care costs (and included in other GDP categories), but are included in health care costs for the majority of European countries covered by the authors’ survey of metadata.

In addition to differences across countries in the measurement of nominal spending, there are large differences in the measurement of real output. Some countries use input-based output measures and others use output-based measures. Input-based measures of costs give no indication of the value of one medical outcome as compared to another and produce zero measured productivity growth in medical care as real inputs grow at the same rate as real output. As a result, output-based measures are essential to comparing the efficacy and productivity of medical care spending across countries.

Fortunately, as Mas and Schreyer observe, there is increasing use of disease-based price indexes that price out the cost of treating an episode of illness by disease categories. This method captures the impact on the total cost of treating an illness by the switch from one mode of treatment to another mode, for example, from high-cost talk therapy in the treatment of mental illness to lower-cost drug therapy, from expensive bypass surgery to drug therapy, or from inpatient to outpatient treatment. The impact of

such switches from high to low cost (or low to high) are difficult to capture in conventional medical care price indexes, which tend to produce a weighted average of inflation rates for the various bundle of medical services used to treat a disease.

An interesting example of this work on pricing the cost of disease at the individual country level, using administrative claims microdata for the United States, is the work by Aizcorbe et al., described in chapter 6 of this volume. The cross-country results reported by Schreyer and Mas, using administrative data for representative and comparable hospital procedures for comparable diagnosis, are an important first step in applying this approach to comparisons of the costs and efficacy of medical services across countries.

Such disease-based indexes, using commercial and administrative “big” data, are likely to be essential to international health care debates. When combined with consistent reporting within and across countries, such data will be important in going beyond top-down projections of health care costs and case studies of efficacy by enabling a consistent breakdown of the drivers of costs at the national level by disease, by type of treatment, and by regions.

Despite progress in better measuring of medical care prices, considerable work remains in measuring the quality of care, or quality-adjusted price indexes. While one can envision adding measures of the indirect costs of health, such as work loss days, or adding such measures as quality-adjusted life years, overall methods for developing quality-adjusted price indexes are, as Schreyer and Mas note, “still in the research domain.” Hopefully, the research on such adjustments can be accelerated. While the introduction of disease-based price indexes offers the potential for significant progress in measuring and controlling health care costs, further progress will require consistent valuation of the quality and quantity of health care outcomes produced by alternative modes of treatment.