Defining Disease Episodes and the Effects on the Components of Expenditure Growth

By
Abe Dunn, BEA
Eli Liebman, BEA
Adam Shapiro, Federal Reserve Bank of San Francisco

Abstract

As health care spending has become an increasing share of GDP, many health economists and policy makers have advocated reporting greater detail on the health component of GDP. One area that has received particular attention (e.g. Berndt et al. (2000)) is the formation of healthcare indexes based on spending by disease. From the consumer's perspective, spending per disease episode may be a preferred measure of inflation in the health sector, since consumers ultimately seek treatment for medical conditions. In addition, payers are turning toward disease episodes to measure efficiency of health care delivery. Several methods for allocating disease episodes exist, but little work has been done to understand how different algorithms (or "groupers") may affect the expenditures per disease episode (See Rosen et al. (2012)). Even less is known about how these different algorithms may affect the various components of expenditure growth. In this paper, we compare various methodologies for allocating claims to disease episodes and their effect on the components of health care expenditure growth, such as, growth in prevalence, growth in spending per person, service prices and service utilization. We study the effects of commercial groupers: Episode Treatment Group (ETG) by Symmetry and Medical Episode Groups (MEGs) by Truven Health Analytics, but also look at alternative methods of allocating expenditures, such as the primary diagnosis code and expenditure regressions. Overall, we find that disease prevalence and the underlying service prices are important contributors to expenditure growth (confirming the basic pattern of Dunn, Liebman and Shapiro (2012)), but there are also some important observable differences, which are highlighted in greater detail in our paper.