

## Taking Account...

### Paper calculates MCE price indexes for more years

The Bureau of Economic Analysis (BEA) released its widely anticipated health care satellite account in January, the culmination of years of research and collaboration with academics and other federal agencies.

A key contribution of the new account: it redefines the commodity provided by the health sector to patients as the actual treatment of diseases. In contrast, the conventional approach defines the commodity as specific types of medical procedures that individuals purchase (such as visits to a doctor's office or specific drugs).

To supplement BEA's health care account, economists Ana Aizcorbe, formerly chief economist at BEA and now at the Social and Decision Analytics Lab at Virginia Tech, and Tina Highfill, of BEA and Virginia Commonwealth University, authored a paper that calculated disease-based medical care expenditure (MCE) price indexes for the U.S. economy for 1980–2006. These data extend the MCEs calculated in the BEA health care account, which covered 2000–2010.

Comparing their MCE price indexes to the producer price indexes (PPIs) from the Bureau of Labor Statistics—which are considered the official price measures—the authors found that their disease-based indexes sometimes show slower price growth and sometimes faster price growth.

The disease-based price indexes grew at a compound annual rate of 9.2 percent from 1980–87, close to the 8.9 percent price increases currently shown in the official national accounts.

In 1987–96, the author's indexes grew 2.9 percent, substantially slower than the 6.4 percent growth rate in the national accounts. This is consistent with the fact that indexes that improve on the official statistics typically find slower price growth than the official indexes.

However, for the 1996–2006 period, the result is reversed: the MCE price indexes grow faster than the official price index over this period—5.3 percent, compared with 2.7 percent.

The authors developed a simple decomposition to parse out differences in their disease-based MCEs and the official price indexes used in the national accounts. That allowed them to attribute the differences to three components: differences from shifts in treatments across industry lines, differences from shifts in patients across varying types of insurance plans, and a residual category that captures changes in utilization. Their data show that industry shifts hold down growth in the MCE indexes relative to PPIs in all three periods, with more pronounced effects in the earlier period than in later periods.

With regard to the other two effects, the net effect of insurance shifts and utilization changes are positive in the first

and last periods and very small in 1987–2001. The authors argue that the well-known shift from relatively generous fee-for-service plans to more restrictive managed care plans in the late 1980s and early 1990s and the backlash that began in the early 2000s were likely significant.

Their results are consistent with the notion that the sharp growth in managed care plans in 1987–2001 likely held down growth in the MCE indexes, as the arrival of less generous managed care plans held down utilization growth and generated spillovers that held increases in utilization in check in other insurance segments as well.

The data only allow the authors to break out the effect of shifts across insurance types in the last period (2001–2006). They found that this effect was very small, despite the managed care backlash that prompted patients to switch back to more generous plans. Instead, most of the growth in the MCE indexes was accounted for by growth in utilization, a result consistent with previous research at BEA. The authors argue that this makes it unlikely that insurance shifts account for much of the differences in MCE and PPI during the earlier run-up.

*(This summarized version of the paper "Medical Care Expenditure Indexes for the U.S., 1980–2006" was prepared by the SURVEY OF CURRENT BUSINESS staff in conjunction with the authors. The paper is on the BEA Web site.)*