

The more than two-fold difference in the estimates—37 percent explained and 77 percent explained—rests in how they are constructed and probably overstates the level of disagreement of the two sets of authors.

Cutler and Sahni create a macro model of spending growth based on 40 years of national data on GDP and health spending. Based on that model, and assuming that GDP growth had remained constant at its 2007 rate, they predict health spending growth through 2012. Next, they predict spending growth using the actual (lower) rates of recent GDP growth. Predicted average annual spending growth over the 2003-2012 period and based on actual rates of GDP growth was 0.7 percentage points lower than predicted growth assuming GDP growth had remained at its 2007 rate. *Actual* annual spending growth over this period, however, was 1.9 percentage points lower than predicted. Thus, slower GDP growth during the recession explains 37 percent ($0.7/1.9$) of the slowdown in spending growth.

Similar to Cutler and Sahni, KFF also runs a macro model of health spending based on historical data. Using that model, and based on current and lagged GDP and inflation, they predict spending growth over the 1965-2012 period. Predicted average annual growth rates over the 2008-2012 period are 3.6 percentage points lower than for the 2001-2003 period. KFF observes that *actual* average annual health spending growth over the 2008-2012 period was 4.6 percentage points lower than over the 2001-2003 period. Therefore, according to KFF, changes in GDP growth and inflation explain 77 percent ($3.6/4.6$) of the slowdown in growth.

One reason the two sets of estimates differ is that the authors use different measures of “slowdown in growth.” For Cutler and Sahni the slowdown is the difference between actual spending growth over 2007-2012 and what it would have been in the absence of the recession. For KFF it is the difference in spending between a pre-recessionary period (2001-2003) and the recessionary period (2008-2012). Both are legitimate ways of measuring changes in growth.

In addition, their macro models are constructed using different years of data (KFF’s goes back to 1965; Cutler and Sahni’s to 1970) and different “look back” periods for GDP and inflation (KFF’s uses GDP growth as far as five years back, and inflation two years back; Cutler and Sahni use a five year average of GDP growth, but exclude inflation). These differences, though they may seem minor, also affect the authors’ estimates. Key, though, is that in both models, the recent recession does not fully explain the slowdown in health spending.

If not only the current recession, then what?

Cutler and Sahni explore three possible causes for the 55 percent of the recent slowdown in spending that is left unexplained by their model and other identified factors. First, they posit that a changed technological landscape may have been at play. Here, they include that recent years have seen fewer new blockbuster drugs, that a number of drugs have come off patents, the increased use of tiered formularies by health plans, and the leveling off of growth in magnetic resonance imaging and computed tomography. Second, they explain that increased patient cost sharing (higher deductibles, higher copays) may have also led to a reduction in consumer demand for health care services. Finally, Cutler and Sahni discuss a number of improvements in provider efficiency that may have slowed spending, including reduced hospital readmissions and hospital acquired infections.



KFF does not go into as great of detail, but they too point to increased patient cost sharing as a possible reason for the slowdown in growth.

Holahan and McMorro argue that many of these factors were not spontaneous changes but rather are related to declining real incomes of the past decade or are a result of coverage shifts from the private to the public sector. They argue that as declines in income and shifts to the lower paying public sector have reduced provider revenues, providers have sought ways to reduce expenses, resulting in efficiency gains such as those cited by Cutler and Sahni.

What is the take-away for future growth in health spending?

Health spending will grow faster than it has over the past few years, but not as fast as it has in the past, say, prior to 2003. Most economists would agree that growth will accelerate as the economy continues its recovery. The relationship between underlying economic factors and health spending is undeniable, and spending growth since 2008 has been at its lowest rate in over 50 years. With that in mind, it is unlikely that CMS' 2012-2021 forecast for public sector health spending is off (too high) by \$770 billion as the title of Cutler and Sahni's article suggests. This assumes that growth continues through 2021 at the historically low rate of the past three years.

KFF estimates "excess growth"—the growth in health spending over and above that predicted by the recent business cycle (lagged GDP growth and inflation). What's interesting is that with the exception of a three year period in the early 2000s, excess growth has averaged about 1 percent per year since 1993 compared to over 3 percent per year from 1965 through 1992. Based on KFF's model, economic recovery alone (changes in the GDP and inflation) will gradually add 3.5 percentage points to annual health spending growth by 2019. If the "excess growth" rate remains at its 10 year average (1.6 percent), health spending growth could climb to an annual rate of 7.1 percent. Their projected growth rates including excess growth are close to those from CMS.

Holahan and McMorro explain that as the economy recovers, provider motivation to continue the cost cutting efforts in place over the past decade may wane. This would place upward pressure on spending growth beyond that predicted solely based on recovery related changes in demand. They too, however, cautiously speculate that with the efficiency gains of the previous decade, along with those that may result from changes to the delivery system stemming from the Affordable Care Act, that while spending growth will accelerate, it will not return to its historical highs.



References

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