The Center for Medicare and Medicaid Innovation (CMMI) estimated that more than 30 percent of Medicare fee-for-service (FFS) payments were attributed to alternative payment models (APMs) as of January 1, 2016. I have reviewed the methodology and calculations used to determine that estimate, and I believe that they are reasonable.

**Actuarial Analysis**

CMMI estimated the percentage of Medicare FFS payments attributed to APMs by taking the product of the expected number of beneficiaries for each of the APMs and the cost per beneficiary. This amount was adjusted to account for the overlap between the programs and for the estimated attrition during the year. The final total was then compared to the total Medicare FFS spending estimate from the President’s Fiscal Year 2017 Budget. The programs included in the calculation are as follows: the Medicare Shared Savings Program (MSSP), the Pioneer Accountable Care Organization (ACO) Program, the Next Generation ACO Program, the Bundled Payments for Care Initiative (BPCI; models 2, 3, and 4), the Comprehensive Primary Care Model, the Medicare Advanced Primary Care Program, the End-Stage Renal Disease (ESRD) Prospective Payment System, the Comprehensive ESRD Care Model, the Maryland All-Payer Model, and the Medicare Care Choices Model.

To determine the number of beneficiaries in each of these programs, CMMI started with the latest estimates from 2015 and trended to 2016 based on the number of participants. For example, MSSP had roughly 7 million attributed beneficiaries in 2015. Based on the number of ACOs expected to join in 2016 less those expected to drop out of the program, the number of attributed beneficiaries is estimated to grow to about 7.7 million. Per capita costs were estimated by applying a projected trend factor supplied by the Office of the Actuary to the actual amount from 2015. Note that for the BPCI models, only the costs for the episode of care were included.
For the non-ACO models, the estimates were reduced by 22 percent to account for the possible overlap with the ACO models. This percentage was derived by determining the share of Medicare FFS payments in ACOs. Due to data limitations, it was not possible to determine the exact degree of overlap, and the actual figure may be greater than 22 percent. In addition, there is likely some small overlap between the other non-ACO models.

The estimates were also adjusted by a small amount to account for attrition in the number of participants in these models during the year. The estimate for each of the models was based on the historical drop-out rates. While this adjustment is reasonable, it is unnecessary since the goal was to estimate the percentage of Medicare FFS payments attributed to APMs at the beginning of the year.

Using this methodology, CMMI estimated that more than 30 percent of Medicare FFS payments were attributed to APMs. We have identified two small concerns related to the estimate: reducing the number of participants by an assumed attrition in 2016 would bias the estimate downward, while this outcome would be offset by the potentially greater degree of overlap that would bias the estimate upward. Because the potential estimate biases are small and offsetting, and because a small reduction would still yield an estimate greater than 30 percent, it is reasonable to assume that more than 30 percent of Medicare FFS payments were attributed to APMs as of January 1, 2016.

Please do not hesitate to contact me if you have any questions or need any further assistance.

John Shatto