

## **Detailed Methodology of State Profiles: Potential Variation and Impact of Cuts in Medicare Payment**

The estimates in the tables and maps are payment reduction projections modeled on 2008 Medicare rates and bonuses. These bonuses apply to each census block group according to its status as a geographic Primary Care Health Professions Shortage Area (HPSA) and/or Physician Scarcity Area (PSA). The base payment estimates are also adjusted for that block group's Geographic Practice Cost Index (GPCI).

HPSA and PSA bonuses were applied to final reimbursement, so to simulate the loss of these designations, the extra payment each area would receive was simply subtracted from the total to leave the base reimbursement. Both the 10.6% reduction of the Conversion Factor (CF), and the GPCI factor are embedded in the calculation of the base payment. We therefore calculated the Medicare payment for a typical visit of a Medicare beneficiary to a primary care physician prior to July 1, 2008 and then calculated the effects of a 10.6% CF reduction. This meant reducing the current CF of \$38.087 by 10.6% and multiplying by a typical Relative Value Unit (RVU). We used a roughly average work RVU of 2.0 and set the other two RVU components to 1.0. This work RVU is comparable to the average for a Medicare Evaluation and Management visit in primary care, roughly between the value of a 99213 and 99214 visit, which are the two most frequently used billing codes in primary care. We then modeled the loss of the GPCI floor, and loss of HPSA and PSA incentives with effects based on the relevant geographies that define the GPCI areas (called "localities") and HPSAs/PSAs.

To determine which geographic areas would be affected, we first assigned each U.S. census block group the appropriate GPCI score, and whether or not it was a geographic primary care HPSA, and/or primary care PSA. Then we calculated the Medicare payment without and with the potential payment reductions that were proposed. For a typical Medicare payment we use CMS formula<sup>1</sup>:

2008 Non-Facility Pricing Amount =

$$[((\text{Work RVU} * \text{Budget Neutrality Adjustor (0.8806)}) (\text{round product to two decimal places}) * \text{Work GPCI}) + (\text{Transitioned Non-Facility PE RVU} * \text{PE GPCI}) + (\text{MP RVU} * \text{MP GPCI})] * \text{Conversion Factor}$$

GPCI = Geographic Practice Cost Index; PE = Practice Expense; RVU = Relative Value Unit; MP = Malpractice

(Note: The floor of 1.0 for the GPCI only applies to the work component (work RVU), meaning that rural regions that would normally receive a reduced work value without the floor are instead stabilized at the RVU level. Medicare does not impose a floor on the other practice cost adjusters in the fee schedule - the practice expense and malpractice GPCI components.)

After calculating the amount represented in the box above without cuts, we simulated loss of the GPCI floor by estimating the reduction in the GPCI for the specific carrier locality. That result became the new "base" total reimbursement used for modeling the losses from HPSA and PSA de-designation.

Given the risk of this de-designation for HPSAs, we removed the 10 percent Medicare Incentive Payment based on the March, 2008 geographic HPSA layer obtained from HRSA. The 5 percent PSA bonus loss (which actually did expire at the end of 2008) was calculated based on primary care PSA data obtained from CMS. The final calculation produced a geography-specific estimate of the per-visit Medicare payment that would have (and in the case of PSA bonus, did) result from the loss of designation.

To calculate an annual fiscal impact per “typical” physician, we used 1,800 patients as an average primary care physician panel (0.80 FTE physician)<sup>2</sup>, and based on the 2006 National Ambulatory Medical Care Survey estimated that 23 percent of visits would be for Medicare beneficiaries. The full range of annualized impact was then estimated by the location of primary care physicians.

## References

1. Centers for Medicare & Medicaid Services. Physician Fee Schedule Overview. July 17, 2008. <http://www.cms.hhs.gov/PhysicianFeeSched/> . Accessed August 26, 2008
2. Murray M, Davies M, Boushon B. Panel size: How many patients can one doctor handle? *Fam Pract Manag* 2007 April;(44):51.