

\*\*Weights from 1989 AMA survey.

\*\*\*Weights from 1997 AMA survey

\*\*\*\*Weights from Physician Socioeconomic Statistics, 2000–2002 Edition (SMS Survey), Physician Socioeconomic Statistics, 2003 Edition (PCPS Survey), Center for Health Policy Research, American Medical Association; 2003 Employment Cost Index, U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau Economic Analysis 1997 Benchmark Input Output Tables, and U.S. Department of Commerce, Bureau of the Census, 2002 Current Population Survey. (See section III.A. Rebasing and Revising of the Medicare Economic Index.)

The Medicare economic index (MEI) is a measure of the average increases in the price of inputs used in operating a private medical practice and is used in the annual update of the MPFS CF. Because the GPCIs and the MEI use the same resource inputs to measure the costs of a private medical practice (the GPCIs measure relative costs among areas while the MEI measures the national average rate of increase in prices), as in the past, the same weights will be used for both the MEI and the GPCIs.

Once the components and their weights were determined, we had to find data sources that were widely and consistently available to measure costs in all MPFS payment areas. After examining many sources, the following proxies were selected as the best available sources for measuring each component of the original 1992 through 1994 GPCIs:

- Physician work—The median hourly earnings, based on a 20 percent sample of 1980 census data, of workers in six professional specialty occupation categories (engineers, surveyors, and architects; natural scientists and mathematicians; teachers, counselors, and librarians; social scientists, social workers, and lawyers; registered nurses and pharmacists; writers, artists, and editors) with 5 or more years of college. Adjustments were made to produce a standard occupational mix in each area. The actual reported earnings of physicians were not used to adjust geographical differences in fees because these fees are, in large part, the determinants of the earnings. We believe that the earnings of physicians will vary among areas to the same degree that the earnings of other professionals vary.

- Employee wages—Median hourly wages of clerical workers, registered nurses, licensed practical nurses, and health technicians were also based on a 20 percent sample of 1980 census data.

- Office rents—Residential apartment rental data produced annually by the Department of Housing and Urban Development (HUD) were used because there were insufficient data on commercial rents across all physician fee schedule areas.

- Equipment, supplies, other expenses—The Urban Institute and the Center for Health Economics research

assumed that a national market represents this component and that costs do not vary appreciably among areas. This component's index is 1.000 for all areas to indicate no variation from the national average.

- Malpractice—Premiums in 1985 and 1986 for a mature “claims made” policy (a policy that covers malpractice claims made during the covered period) providing \$100,000 to \$300,000 of coverage were used. Adjustments were made to incorporate the costs of \$1 million to \$3 million coverage and mandatory patient compensation fund (PCF) requirements. Some States legally require physicians to join a PCF that provides coverage for catastrophic claims. Premium data were collected for physicians in three risk classes: low-risk (general practitioners who do not perform surgery), moderate risk (general surgeons), and high-risk (orthopedic surgeons).

The areas selected for measurement purposes were the MSAs. Non-MSA areas within a State were aggregated into one residual area. Using MSAs for measurement satisfied our criteria to have (1) areas in which resource input prices were homogenous, and (2) areas of a large enough size so that market areas are self-contained to minimize border crossing; that is, physicians would probably not move their offices a few miles to secure higher payments and patients who would tend to receive services within their area.

The Act requires, however, that the GPCIs reflect cost differences among MPFS payment areas. Thus, it was necessary to map Medicare localities to the MSA and non-MSA aggregation of GPCI data. Where localities crossed MSA boundaries, MSA indices were converted to Medicare locality indices by population weights.

Detailed discussions of the methodology and data sources of the 1992 through 1994 GPCIs can be obtained by requesting studies from the National Technical Information Service by calling 1–800–553–NTIS, or, for residents of Springfield, Virginia, (703) 487–4650. The studies are as follows:

- The Urban Institute report “The Geographic Medicare Index: Alternative Approaches,” NTIS PB89–216592;
- The supplement to “The Geographic Medicare Index: Alternative Approaches,” NTIS PB91–113506. This

was published in the **Federal Register** in the September 4, 1990 notice (55 FR 36238) for the model fee schedule; and

- The Urban Institute report, “Refining the Malpractice Geographic Practice Cost Index,” February 1991, NTIS PB91–155218. The related diskette is NTIS PB91–507491. This is the final version of the 1992 through 1994 GPCIs as published in the **Federal Register** in the November 25, 1991 final rule (56 FR 59785).

#### 5. Revised 1995 Through 1997 Geographic Practice Cost Indices

The main criticism of the original GPCIs, that existed from 1992 until 1994, was that they were outdated because they were based on old data; for example, 1980 census data and 1985 and 1986 malpractice premium data, was the most recent data available when the GPCIs were established. The revised 1995 through 1997 GPCIs were based on the most current data available when they were developed in 1993 and 1994. We also made some minor changes from the original GPCI methodology in calculating some of the revised 1995 through 1997 indices.

One methodological change was made that applied across all indices. As mentioned earlier, under the original GPCIs, where Medicare payment localities crossed MSA boundaries, MSA indices were converted to locality indices by population weights. Medicare expenditure weights were not used because the expenditures under the reasonable charge system contained large differences unrelated to actual resource cost differences among areas. In calculating the revised GPCIs, where payment localities crossed MSA boundaries, locality indices were calculated by weights based on full MPFS RVUs, which reflect resource cost differences among areas. Full MPFS RVUs were used rather than actual 1993 payments because 1993 fee schedule payments still reflected some reasonable charge payment levels. The advantages of RVU weighting are (1) the GPCIs will more closely reflect physician practice costs in the area where the services are provided rather than where the population lives, and (2) budget neutrality is preserved when we combine multiple payment localities into larger areas, such as statewide localities.