

# Geographic Practice Cost Indices (GPCIs)

A geographic practice cost index (GPCI) has been established for every Medicare payment locality for each of the three components RVU components. The GPCIs are applied in the calculation of a Medicare payment schedule amount by multiplying the RVU for each component times the GPCI for that component. GPCIs allow for considerably less variation in physicians' costs of practice than under historic Medicare prevailing charges.

- The work GPCIs are designed to reflect the relative cost of physician labor by Medicare locality and are measured from salary information of individuals with higher education.

To address physician workforce needs, the United States Congress has set a floor of 1.00 for physician work RVUs and incentivizes Alaska by establishing a permanent work floor of 1.50 (the highest work GPCI). The remaining work GPCIs range from 1.002 (Virginia) to 1.100 (San Jose, California). Because the cost-of-living GPCI (work) accounts for only one quarter of geographic differences, the range is small.

- The Practice Expense (PE) GPCIs are designed to measure geographic variation in the prices of inputs to medical practice (eg, office rent per square foot and hourly wages of staff). The PE GPCIs are comprised of four component indices: employee wages, purchased services, office rent and equipment, supplies and other miscellaneous expenses.

Congress established the following states as "Frontier states" and requires a PE GPCI floor of 1.0: Montana, Nevada, North Dakota, South Dakota and Wyoming. The remaining PE GPCIs range from 0.852 (Mississippi) to 1.435 (San Jose, California).

- The Professional Liability Insurance (PLI) GPCIs (which Medicare regulations refer to as the "malpractice" GPCI) are geographic practice cost indices that account for geographic differences in PLI premium costs. The PLI GPCIs have the most variation, from 0.30 (Minnesota) to 2.50 (Miami).

36 States & Territories have a single set of GPCIs. The remaining states differentiate GPCIs by urban and rural areas. California has the most differentiation, with 29 different geographic localities. Below is a specific link to the current GPCIs in the Medicare Physician Payment Schedule (PFS):

## [Geographic Practice Cost Indices \(Downloads CY 2025 PFS Final Rule Addenda \(E\)\)](#)

The next proposed GPCI update is anticipated for CY 2026. For further information on the CY 2023 GPCI update, refer to the "Final Report for the CY 2023 Update of GPCIs and MP RVUs for the Medicare PFS" which is available on the CMS website under Final rule (CMS-1770-F) downloads "[CY 2023 PFS Final Rule GPCI-MP Update Report](#)".

**Geographic Adjustment Factor** The three GPCI components can be combined into a composite GPCI or geographic adjustment factor (GAF) by weighting each by the share of Medicare payments accounted for by the work, practice cost, and PLI components. GAF indicates how Medicare payments in a locality differ from the national average (with the national average cost being 1.00). GAFs are not used for payment under the MFS but are a useful measure to illustrate the overall effect of geographic adjustments under the PFS across Medicare fee schedule areas. The current weights used to calculate the CY 2025 GAFs for work, PE, and PLI are available via the following link:

## [Geographic Adjustment Factor Table \(Downloads CY 2025 PFS Final Rule Addenda \(D\)\)](#)

For the purposes of the PFS, GAFs are an analysis tool for comparing approximate aggregate geographic payment adjustment among PFS localities. Changes in the GPCIs do not affect total Medicare physician payments but redistribute payments among localities.

# History of Geographic Adjustment Provisions

Support for adopting a nationally standardized payment schedule that would reduce geographic variation in Medicare payment levels developed independently of the movement for a resource-based relative value scale (RBRVS). The American Medical Association's (AMA's) House of Delegates adopted policy on reducing geographic variations before setting policy on an RBRVS-based Medicare payment schedule. Even after establishing its policy on the RBRVS, the House of Delegates sought to reduce geographic inequities before implementing the RBRVS. For example, at its December 1989 meeting, the AMA adopted policy to support pegging minimum Medicare prevailing charge levels at 80% of the national average prevailing charge level.

The Omnibus Budget Reconciliation Act of 1989 (OBRA 89) provision for and implementation of geographic adjustments often has drawn as much attention to the RBRVS payment system as did the relative values. This overview describes the geographic adjustment provision in OBRA 89, revisions made to the GPCIs in 1995, 1998, 2001, 2004, and 2005, and how and to what extent payments vary geographically under the Medicare RBRVS payment system. It also explains a revised configuration of Medicare payment localities that became effective January 1, 1997. Finally, this overview discusses the changes to the GPCIs resulting from federal legislation.

## OBRA 89 Provision for Geographic Adjustment

Most health policymakers understand rural communities face physician recruitment and retention problems and that people living in these communities find it difficult to obtain high-quality care. Many rural community hospitals have closed since Medicare implemented prospective pricing, emphasizing the impact that changes in government policy may have in rural areas and underscoring the health care needs of these communities.

Wide disparities in Medicare payments for the same service, with twofold to threefold differences in some cases, provoked physicians nationwide to call for a more equitable policy. For many physicians, the issue was not the wide variation in earnings, but whether Medicare payment levels were sufficient to even cover their costs of practicing in rural areas. Rural communities often have a higher proportion of Medicare and Medicaid patients, providing fewer opportunities for physicians to recover costs through higher charges to private sector patients.

In response, physicians in several predominantly rural states proposed a single national payment schedule with no geographic variation in payments. This proposal did not receive widespread support, however, because it would have merely shifted the underpayment problem to urban areas. In large cities where average Medicare payments based on customary, prevailing, and reasonable (CPR) exceeded the national average by 37%, overall shifting to a single national schedule would have reduced average payment levels by 27%.

Many other physicians believed that a policy adjusting the entire RBRVS to reflect geographic differences would be inequitable and provide insufficient relief for rural areas. Most physicians agreed that the practice expense (PE) and professional liability insurance (PLI) components of the RBRVS should be varied to reflect geographic differences, but they disagreed about whether the physician work component should be adjusted. While variation in the PE component would have reflected differences among localities in office rents and the wages of nonphysician office personnel in Medicare payments, variation in the work component would have reflected differences in physicians' costs of living.

Because the work component is valued according to the physician time and effort involved in a service, it may be viewed as the physician earnings component of the schedule. Earnings variations reflect costs of living and amenities. If costs of living and amenities are relatively high, then employers must pay higher wages to cover their employees' higher costs of living, but the amenities level will offset the degree to which wages must be higher. Likewise, professional workers such as lawyers, engineers, and physicians must charge higher payments to cover these higher costs, but the need for these higher payment levels is partially offset by the amenities.

Physicians who supported varying Medicare payments according to cost-of-living differences believed that higher payments were needed to offset these higher costs. Other physicians objected to variation based on cost-of-living differences, believing that the cultural, environmental, and other amenities of high-cost communities adequately compensated for their higher costs. Others objected because such variation would preserve existing payment disparities to a greater extent than variation based on overhead only.

OBRA 89 provided for adjusting the PE and PLI components of the payment schedule to fully reflect geographic differences in these costs, while adjusting the physician work component to reflect only one quarter of geographic differences in costs of

living.

According to this provision, each component of each service provided in a locality is adjusted for geographic cost differences. Because the proportion of relative value units (RVUs) that comprise the work, PE, and PLI components are different for every service, the effect of this provision varies the amount of geographic adjustment for every service. For example, if the work adjustment in a state is 3% less than the national average, the PE adjustment is 10% less, and the PLI adjustment is 10% less, then, in that state, a service for which practice and PLI costs represent 75% of the total RVUs will be 8.5% less than the unadjusted payment schedule. In contrast, a service for which physician work RVUs represent 75% of the total RVUs will only be 5.5% less than the unadjusted schedule.

## Geographic Practice Cost Index (GPCI)

The OBRA 89 legislation made three geographic adjustment factors the basis for the three GPCIs developed by researchers at the Urban Institute, the Center for Health Economics Research, and JIL Systems, Inc, with funding from the Centers for Medicare & Medicaid Services (CMS) (formerly known as the Health Care Financing Administration [HCFA]). The resources involved in operating a medical practice were identified by CMS as physician work or net income; employee wages; office rents; medical equipment, supplies, and other miscellaneous expenses; and professional liability insurance. Employee wages, office rents, medical equipment, medical supplies, and miscellaneous expenses are combined to comprise the PE GPCI. Each component within the PE GPCI is weighted according to its percentage of practice costs. These weights are obtained from the AMA's Socioeconomic Monitoring System Survey. The original GPCIs, in effect from 1992 through 1994, used practice cost weights from the AMA's 1987 survey.

The Omnibus Budget Reconciliation Act (OBRA) of 1990 requires that the GPCIs be updated at least every 3 years. This is codified in Section 1848(e)(1)(C) of the Social Security Act (Act), which requires the Secretary to review and, if necessary, adjust the indices at least every 3 years.

The data used to measure each of the three component GPCIs are more fully described in the following sections.

### Physician Work GPCI (Cost-of-Living)

The work GPCIs are designed to reflect the relative cost of physician labor by Medicare locality. The physician work or "cost-of-living" GPCI is not based on differences in physicians' earnings, which some researchers and CMS argue have been affected by physicians' Medicare earnings under the previous CPR payment system. The 1995 to 1997 work GPCI measures geographic differences in the earnings of all college-educated workers, based on 1990 census data. In updating the work GPCIs for 1998 to 2000 and again for 2001 to 2004, no changes were made to the data sources. For the updates in 2005 and 2008, the physician work GPCIs were based on 2000 decennial US census data, by county, of seven professional occupations (architecture and engineering; computer, mathematical, and natural sciences; social scientists, social workers, and lawyers; education, library, and training; registered nurses; pharmacists; writers, artists, and editors). For the 2011 update, the physician work GPCIs were based on the 2006–2008 Bureau of Labor statistics (BLS) Occupational Employment Statistics (OES) data. CMS reevaluated this data and stated that the agency continues to believe it is the best source of data for calculating GPCIs because of its reliability, public availability, level of detail and national scope. For the 2014 update, the physician work GPCIs were based on the 2009–2011 BLS OES data. For the CY 2023 GPCI update, CMS used updated BLS Occupational Employment and Wage Statistics (OEWS) (formerly known as OES) data (2017 through 2020) as a replacement for the 2014 through 2017 data used in the CY 2020 update to compute the work GPCIs.

The Medicare Prescription Drug, Improvement, and Modernization Act (MMA) required all work GPCIs in 2004 through 2006 to be set at least at the national average of 1.00. A provision to increase the work GCPI to 1.00 for any locality for which such work GCPI is less than 1.00 has been extended under Section 1848(e)(1)(E) of the Social Security Act (42 U.S.C.1395w–4(e)(1)(E)) through yearly legislation since 2004. This important provision continues to be extended through legislative action, typically on an annual basis as part of annual Consolidated Appropriations Acts signed into law each year.

### Practice Expense GPCI

The PE GPCI is designed to measure geographic variation in the prices of inputs to medical practice (eg, office rent per square foot and hourly wages of staff). While the physician work and PLI GPCIs are comprised of a single index, the PE GPCIs are comprised of four component indices: employee wages, purchased services, office rent and equipment, supplies and other miscellaneous expenses. It does not, therefore, reflect geographic differences in the amount of space that physicians rent or in

the number of nonphysician personnel they employ. It is important to distinguish between the PE component of the relative value scale and the PE GPCI. The PE relative value reflects average direct and indirect expenses. The PE GPCI reflects only the differences in these costs across geographic areas relative to the national average.

Prior to 2012, the office rent portion of the PE GPCI was based on apartment rental data from the Department of Housing and Urban Development (HUD). CMS had concerns about the use of HUD rental data because it was not updated frequently, and the Census discontinued the collection of the necessary base year rents for the HUD Fair Market Rent (FMR) data in 2010. Therefore, CMS analyzed the US Census Bureau American Community Survey (ACS) rental data to replace the HUD data. For 2020, the office rent component of the PE GPCI was updated using 2013–2017 ACS five-year estimates. As it did in calculating the original GPICs, CMS continues to use proxy data to update this index, stating that no national data for physician office rents are available. After reviewing alternative sources of commercial rental data, CMS does not believe that there are national data sources that would more accurately reflect rent costs, and CMS will continue to use the ACS five-year office rent data. The PE GPCI does not reflect geographic differences in medical equipment and supply costs. CMS has stated its belief that a national market exists for these components and that input prices do not vary specifically across geographic areas.

For 1995 to 1997, GPICs were updated to reflect data from the 1990 census; the cost shares attributable to employee wages, rent, and miscellaneous expenses also were updated. The same 1990 census data sources were used to update GPICs for 1998 to 2000 and 2001 to 2004, although updated (1996 and 2000, respectively) HUD fair market residential rent data were used. The 2000–2010 PE GPICs were based on 2000 census data for employee wages and the residential apartment rental data produced annually by HUD as a proxy for physician office rents. For the 2011 update, the PE GPICs were based on the AMA Physician Practice Information Survey data, BLS OES data and American Community Survey (ACS) rental data. Beginning January 1, 2011, the Affordable Care Act established a permanent 1.00 floor for the PE GPCI for the frontier states, which include Montana, Nevada, North Dakota, South Dakota, and Wyoming.

For the update to the GPICs implemented in CY 2020, CMS used 2014 through 2017 BLS Occupational Employment and Wage Statistics (OEWS), formerly known as OES, data to calculate the employee wage and purchased services indices for the PE GPCI. The Agency believes the BLS OEWS is the most appropriate data source for collecting wage and employment data because of its reliability, public availability, level of detail, and national scope. Accordingly, CMS uses updated BLS OEWS data every three years for purposes of calculating the employee wage component and purchased service index component of the PE GPCI for the GPCI updates.

## PLI GPCI

The PLI GPICs are geographic practice cost indices that account for geographic differences in PLI costs. They reflect geographic differences in premiums for mature claims made policy providing \$1 million/\$3 million of coverage. Adjustments are made for mandatory patient compensation funds.

Critics of the original GPICs were particularly dissatisfied with CMS' calculations of the PLI GPICs, which were based on outdated premium data drawn largely from a single nationwide carrier. Each of the subsequent updates, however, used more recent premium data, as well as data collected on 20 medical specialties and from insurers representing the majority of the market in each state. The 1995 to 1997 GPICs were based on premium data for 1990 to 1992, while the 1998 to 2000 GPICs were based on 1992 to 1994 data. The 2001 to 2003 PLI GPICs were based on 1996 to 1998 data. A three-year average was used, rather than data from the most recent single year, to achieve a more accurate indication of historic PLI premium trends.

The 2004 to 2006 PLI GPICs were based on actual premium data from 2001–2002 and projected data for 2003. The 2010 PLI GPICs were based on actual premium data from 2004, 2005, and 2006. For the 2011 update, the PLI GPICs were based on 2006 and 2007 premium data. For the 2014 update, CMS used 2011 and 2012 premium data. For the 2017 update, the PLI GPICs were based on 2014 and 2015 premium data. For 2020, the update reflected premium data presumed in effect as of December 30, 2017. The CY 2023 PLI GPCI update reflects premium data presumed in effect no later than December 31, 2020.

CMS adjusts the GPICs every three years based on actual PLI premium data, so a sudden increase in PLI costs in a particular region of the country may not be reflected for several years. For CY 2020, this required three-year review of the GPICs coincided with the statutorily required five-year review of the PLI RVUs. Considering that the PLI premium data used to update the GPICs are the same data used to determine the specialty-level risk factors for the calculation of PLI RVUs, CMS finalized a proposal to align the update of PLI premium data with the update to the PLI GPICs to every three years. CMS continues to perform mandated comprehensive reviews and updates to the PLI RVUs every three years.

## Variation in the GPICs

GPCIs allow for considerably less variation in physicians' costs of practice than under historic Medicare prevailing charges. In an effort to provide greater consistency in the calculation of GPCIs in island territories, CMS finalized a policy in 2017 to treat the Caribbean Island territories (the Virgin Islands and Puerto Rico) in a consistent manner by assigning the national average of 1.0 to each GPCI index for both Puerto Rico and the Virgin Islands.

Because of this narrow range of variation, most Medicare payments under the fully transitioned RBRVS payment system are within 10% of the national average, rather than the twofold and threefold difference in payment common under CPR. For many areas in which physicians' payments were only 60% to 70% of the national average under CPR, payments increased to 80% to 90% of the national average under the payment schedule. Conversely, in areas in which Medicare's payments under CPR were twice the national average, payments declined to only 15% to 20% above the national average.

This pattern means that GPCIs do not necessarily indicate the impact of the payment schedule on Medicare payments in an area. In fact, the opposite may be true: many areas with the lowest GPCIs experienced the highest payment increases and many areas with the highest GPCIs experienced the most severe payment reductions.

**Geographic Adjustment Factor** The three GPCI components can be combined into a composite GPCI or geographic adjustment factor (GAF) by weighting each by the share of Medicare payments accounted for by the work, practice cost, and PLI components. GAF indicates how Medicare payments in a locality differ from the national average (with the national average cost being 1.00). GAFs are not used for payment under the MFS but are a useful measure to illustrate the overall effect of geographic adjustments under the PFS across Medicare fee schedule areas.

Changes in the GPCIs do not affect total Medicare physician payments but redistribute payments among localities. The overall redistributive effects of the revisions to GPCIs for 1995 to 1997, as compared to the 1992 GPCIs, were modest. A CMS analysis indicated that 75% of localities experienced GPCI changes of about 3% or less. An AMA analysis, comparing the GAFs for 1994 and 1996, showed that revisions in the practice cost GPCIs caused a variance of over 2% in the GAFs for about 60 localities. Revisions to the PLI GPCIs led to GAF changes of over 2% in 52 localities.

The impact of the GPCI revisions for 1998 to 2000 was even less pronounced than for the previous update, as the only data changes made were to the indices for office rent and PLI. Seventy-six of the 89 localities experience payment changes of less than 1% for the average service over the two-year transition period, while payment changes in 58 localities will be less than 0.5%. The largest gain for an area is 2.4% and the largest loss is 2.2% for the average service. Several localities experienced PLI GPCI changes of about 30%, reflecting the volatility in PLI premiums that occurs from year to year. Because the weight of the PLI GPCI is about 5% of the total GPCI, a 30% change in the PLI GPCI causes only a 1.5% change in payments. Two thirds of the localities, however, experience PLI GPCI changes of less than 10%.

The impact were also minimal in 2001 to 2003 as CMS again only updated the indices for office rent and PLI. Only 14 of the 89 localities changed by at least 2%. Sixteen areas changed from 1% to 1.9%. The remaining 59 areas experienced payment changes of less than 1% under the revised GPCIs.

In 2004, CMS revised the PLI GPCIs. To account for the volatility in the PLI premium data, CMS reduced the change in the PLI GPCIs by 50%. Apart from Detroit, Michigan, no locality experienced an increase of more than 1% in total payments due to the revised PLI GPCIs in 2004. These revised GPCIs led to no decreases in payment greater than 1%. The MMA provisions to establish a floor of 1.00 in the work GPCIs and increase all Alaska GPCIs to 1.67 led to payment increases for 58 Medicare payment localities in 2005.

The 2005–2006 updates to the work and PE GPCIs resulted in an overall increase of no more than 3.5% or a decrease of no more than 1.6% for any locality. Only 10 of the 89 localities changed by more than 1% in 2005–2006.

As part of the seventh GPCI update for 2014, CMS finalized changes to the GPCI cost share weights consistent with the revised 2006-based MEI cost share weights finalized in the same year. Therefore, for the work GPCI the weight was increased from 48.27 to 50.87, the PE GPCI the weight was revised down from 47.44 to 44.84 and the PLI GPCI weight was unchanged at 4.30. For purposes of calculating GPCI values, the revised MEI weights only resulted in changes to the relative weighting within the PE GPCI (because there are no subcomponent cost share weights for the work GPCI or PLI GPCI). As CMS is statutorily required by law to do, if more than one year has elapsed since the date of the last adjustments to GPCIs, the current adjustments must be phased in over two years. Therefore, 2015 marked the second year of this transition to implement the 2014 GPCI changes as stated above. For the eight GPCI updates for 2017, CMS maintained the same work, PE, and PLI GPCI weights of 50.87, 44.84, and 4.30, respectively.

For CY 2023, CMS refined the method used to calculate each locality's GAF. GAFs are calculated as the weighted composite of the three GPCIs (work, PE, and PLI). Instead of the 2006-based MEI cost-share weights, which were used to calculate GAFs in previous GPCI updates, CMS calculated the CY 2023 GAFs using weights that reflect the share of total RVUs that each component (work, PE, and PLI) accounts for, based on Medicare-utilization data from CY 2020. CMS believes that using the share of RVUs reflected in recent Medicare-utilization data as weights when calculating the CY 2023 GAFs results in GAFs that more accurately reflect the composite effect of geographic adjustment on payment, year over year, compared to GAFs calculated using the 2006-based MEI cost-share weights. This change also allows the use of current Medicare-utilization data that are available each year, as opposed to the MEI cost-share weights that are not updated as frequently. CMS also made three other methodological refinements to the GPCIs involving changes to the occupation group and occupation codes that will provide for "a more accurate, full landscape of occupations" that should be accounted for in the work and PE GPCIs.

## Evaluating GPCIs

Because the geographic adjustments to the payment schedule and the resulting payment changes are such a critical part of Medicare's RBRVS payment system, GPCIs continue to be the focus of considerable debate and critical review. Physicians in places such as Puerto Rico, Texas, New York, and Florida have argued that GPCIs do not capture important dimensions of their practice costs, making the resulting adjustments too low.

The most serious charge leveled against the GPCIs, however, is that they fail to measure what they purport to measure. Physicians in several states argue that the GPCIs have no place in the RBRVS payment system because they do not accurately measure the geographic cost differences physicians face. Others feel that payments across geographic areas should be the same.

To assess how well GPCIs measure differences in physicians' practice costs, the AMA's Center for Health Policy Research compared data reported by physicians in its SMS surveys for 1991 and 1992 with the original GPCIs.<sup>1</sup>

The study found generally positive results:

- Although there is room for improvement, GPCIs do, in fact, measure a significant amount of the geographic difference in physicians' practice costs.
- The GPCIs measure variation in office expenses and personnel costs quite well, despite concerns about the representativeness and/or age of the data used to construct these GPCIs.
- Adjusting payments based on GPCIs reflects physicians' practice costs more accurately than a single national payment schedule.
- There are measurable geographic differences in the costs of supplies that should be reflected in the practice cost GPCI.

The study concluded that using GPCIs in the RBRVS payment system was appropriate but that improving the data sources as part of the updating process is critical, particularly the data used to construct the PLI GPCI. (The PLI GPCI was not highly correlated with physicians' reported PLI expenses.) The study recommended that with the collection of new data, the magnitude of changes in geographic cost differences over time should be determined to aid in assessing how frequently GPCIs should be updated.

The MMA required the General Accounting Office (GAO) to study GPCIs and issue a report by 2005. This study was published in March 2005. The GAO stated that the physician work GPCI, PE GPCI and professional liability insurance GPCI are valid in their fundamental design as tools to account for variations in geographic costs, however, the data used to calculate these indices needs to be refined due to the fact that the work and PE GPCIs are not current, and the data used in the PLI GPCI are incomplete. In addition, the GAO reported that GPCIs have a negligible impact on physicians' decisions to locate in rural areas citing that a spouse's employment opportunities, quality of local schools, and the availability of other physicians within the area to share in their delivery of care (ie, taking call) have just as much of an impact.

In 2013, the Institute of Medicine (IOM) completed a review of the GPCI methodology and underlying data and released two reports related to its work. Based in part on recommendations from the IOM, CMS finalized proposal to make certain modifications in 2013, including:

- Used the 2006 Medicare Economic Index (MEI) data to determine the relevant shares of work, PE, and PLI within the GPCI computation.
- Created a purchased services category within the PE GPCI to recognize that these costs vary regionally.

- Rental data from the 2006–2008 American Community Survey were used in lieu of the current US Department of Housing and Urban Development (HUD) data as a proxy for physician rental costs.
- Revised the nonphysician employee wage data using Bureau of Labor Statistics (BLS) with consistent occupations used in physicians’ offices.

## Medicare Payment Localities

Medicare payment localities are geographic areas defined by CMS for use in establishing payment amounts for physician services. Localities may be entire states, counties, or groups of counties. 34 States have statewide payment localities, which means that the same geographic adjustment applies to MFS payments throughout the State without any differential between rural and urban areas.

Prior to 1992, there were 240 localities, largely reflecting historic circumstances of the CPR payment system. The number dropped to 210 with RBRVS implementation, as a number of states with multiple localities converted to single payment areas. CMS implemented a more systematic approach to defining payment localities in 1997. The new policy achieved several goals, including administrative simplicity, reducing urban/rural payment differences among adjacent areas, and stabilizing payment updates resulting from periodic GPCI revisions.

The policy increased the number of statewide payment localities to 34 from 22 and further reduced the overall number of localities to 89. To define the new payment localities, the CMS compared the GAF of a locality to the average GAF of lower-cost localities in the state in an iterative process.

If the difference exceeded 5%, the locality remained a distinct payment area. Otherwise, it was combined with other payment areas or the state converted to a single locality. The 5% threshold automatically eliminated subcounty areas in all but three states, aggregating them into statewide or residual state localities. The subcounty approach, however, could not be applied in Pennsylvania, Massachusetts, and Missouri, wherein a major redesign to payment localities was required.

In addition to the new methodology for defining payment localities, CMS indicated that it would continue to consider physician requests for conversion to statewide localities. CMS has emphasized that such requests must demonstrate support for the change from both physicians whose payments would increase as well as those who would experience payment losses.

In the August 15, 2003, Proposed Rule, CMS indicated that it would consider comments on changes to the Medicare physician payment localities. CMS has indicated that it will continue to consider this issue as part of future rulemaking.

Beginning in CY 2017, PAMA required that the Medicare Physician Payment Schedule (MFS) areas used for payment in California be Metropolitan Statistical Areas (MSAs), as defined by the Office of Management and Budget (OMB) as of December 31 of the previous year, and that all areas not located in an MSA be treated as a single rest-of-state MFS area. The resulting modifications to California’s locality structure increased its number of localities from 9 under the current locality structure to 27 under the MSA-based locality structure. PAMA defines transition areas as the MFS areas for 2013 that were the rest-of-state locality and locality 3, which was comprised of Marin County, Napa County, and Solano County. PAMA specifies that the GPCI values used for payment in a transition area be phased in over six years, from 2017 through 2021, using a weighted sum of the GPICs calculated under the new MSA-based locality structure and the GPICs calculated under the current MFS locality structure. That is, the GPCI values applicable for these areas during this transition period are a blend of what the GPCI values would have been under the current locality structure and what the GPCI values would be under the MSA-based locality structure. This incremental phase-in is only applicable to those counties that are in transition areas that are now in MSAs, which are only some of the counties in the 2013 California rest-of state locality and locality 3. Pursuant to implementation of the new MSA-based locality structure for California, the total number of MFS localities was increased from 89 to 112 in CY 2017.

PAMA established a hold harmless for transition areas beginning with CY 2017 whereby the applicable GPCI values for a year under the new MSA-based locality structure may not be less than what they would have been for the year under the current locality structure. Of the 58 counties in California, 50 were in transition areas and subject to the hold-harmless provision. The eight counties that are not within transition areas are Orange, Los Angeles, Alameda, Contra Costa, San Francisco, San Mateo, Santa Clara, and Ventura. While the phase-in for transition areas is no longer applicable, the hold harmless requirement is not time-limited, and therefore, is still in effect.

For CY 2024 and on, the GPICs will reflect the retirement of 3 California localities, finalized in the CY 2023 PFS final rule, for a total of 29 different geographic localities in CA.

## Bonus Payments for Health Professional Shortage Areas

In addition to the geographic adjustment provision for all services, there are special payment provisions for physician services when provided in designated Health Professional Shortage Areas (HPSAs). The HPSAs are rural and inner-city areas, defined by the Public Health Service (PHS), as having a shortage of health care personnel. To help attract and retain physicians in HPSAs, Congress adopted a Medicare bonus payment program, effective in 1989. The program initially provided an incentive payment of 5% for all services furnished by physicians in rural HPSAs. In 1991, the bonus was increased to 10% and extended to services furnished by physicians in both urban and rural HPSAs.

The PHS identifies three separate types of HPSAs, each corresponding to shortages of three different categories of health personnel: primary medical care professionals, dental professionals, and mental health professionals. Separate sets of criteria are used to designate each type of HPSA. Only geographic areas with shortages of primary care physicians (defined as general or family practice, general internal medicine, pediatrics, and obstetrics and gynecology) are eligible for the Medicare bonus payments. Three criteria must be met for a geographic area to be designated as an HPSA with a shortage of primary care medical professionals:

- It must be a rational delivery area for primary medical care services.
- There must be at least 3500 people per full-time-equivalent primary care physician, or at least 3000 people per full-time equivalent primary care physician in areas with “unusually high needs for primary care services” or “insufficient capacity of existing primary care providers.”
- Primary care physicians in contiguous areas must be overutilized, excessively distant, or inaccessible.

Although the ratio of primary care physicians to population is a criterion used to designate areas to receive the bonus payments, such payments are not restricted to primary care physicians or to primary care services. They apply to any Medicare covered service provided in a designated HPSA regardless of physician specialty.

Carriers make quarterly bonus payments to physicians in addition to the allowed amount under the payment schedule. To receive the bonus payment, prior to 2005, the claim form must have indicated that the service was provided in an HPSA. The MMA legislation shifts responsibility from the physicians to the secretary. Therefore, these 10% bonus payments will be made automatically.

The MMA legislation also added a bonus payment for services performed between 2005 and 2008 in newly established scarcity areas. CMS is required to calculate the ratios of primary and specialty care physicians to Medicare beneficiaries in each county. Physicians who provide care to beneficiaries in counties that fall in the bottom 20% of these ratios automatically qualify for the bonus. CMS has posted these scarcity areas on its cms.gov website. A service furnished in an area that qualifies for both the shortage bonus (10%) and scarcity bonus (5%) may receive both incentive bonuses.

The HPSA and scarcity bonus payments are calculated based on the amount Medicare paid for the covered physician service, and the beneficiary copayment is unaffected. When a physician furnishes a covered service in an area that is certified as a HPSA and scarcity bonus area, he or she will receive an additional payment of 15% based on what Medicare paid the physician for the service under the MFS. This program was extended through June 30, 2008, by the Medicare, Medicaid, and SCHIP Extension Act of 2007.

Beginning July 1, 2008, and extending through -December 31, 2009, MIPPA provided for an additional 10% bonus payment for physician's services furnished in a year to a covered individual in an area that is designated as a geographic Health Professional Shortage Area (HPSA) prior to the beginning of such year. In the 2009 *Proposed Rule*, CMS clarified that physicians who furnish services in areas that are designated as geographic HPSAs as of December 31 of the prior year but not included on the list of zip codes for automated HPSA bonus payments should use the AQ modifier to receive the HPSA bonus payment.

The Affordable Care Act of 2010 created an incentive payment to general surgeons, who perform major procedures (with a 010- or 090-day global service period) and to primary care practitioners, who provide primary care services in a HPSA. These physicians were eligible for a bonus payment equal to 10% of the Medicare Payment Schedule payment for the surgical services furnished by the general surgeon for these services from January 1, 2011, to December 31, 2015.