

CHAPTER

# 2

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**Assessing payment adequacy  
and updating payments in  
traditional Medicare**

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# R E C O M M E N D A T I O N S

## Section A: Accounting for changes in input prices

- 2A** The Secretary should use the wage and benefit proxies that most closely match the training and skill requirements of health care occupations in all input price indexes used for updating payments. In determining index weights, measures specific to the health sector and to occupation categories in which health care plays a major role should be emphasized.

YES: 15 • NO: 0 • NOT VOTING: 0 • ABSENT: 2

## Section B: Hospital inpatient and outpatient services

- 2B-1** The Congress should gradually eliminate the differential in inpatient payment rates between hospitals in large urban and other areas.

YES: 16 • NO: 0 • NOT VOTING: 0 • ABSENT: 1

- 2B-2** The Congress should increase the base rate for inpatient services covered by Medicare's prospective payment system in fiscal year 2003 by market basket minus 0.55 percent for hospitals in large urban areas and by market basket for hospitals in all other areas.

YES: 16 • NO: 0 • NOT VOTING: 0 • ABSENT: 1

- 2B-3** For calendar year 2003, the Secretary should increase the payment rates for services covered by the outpatient prospective payment system by the rate of increase in the hospital market basket.

YES: 16 • NO: 0 • NOT VOTING: 0 • ABSENT: 1

## Section C: Physician services

- 2C-1** The Congress should repeal the sustainable growth rate system and instead require that the Secretary update payments for physician services based on the estimated change in input prices for the coming year, less an adjustment for growth in multifactor productivity.

YES: 16 • NO: 0 • NOT VOTING: 0 • ABSENT: 1

- 2C-2** The Secretary should revise the productivity adjustment for physician services and make it a multifactor instead of labor-only adjustment.

YES: 16 • NO: 0 • NOT VOTING: 0 • ABSENT: 1

- 2C-3** The Congress should update payments for physician services by 2.5 percent for 2003.

YES: 16 • NO: 0 • NOT VOTING: 0 • ABSENT: 1

**Section D: Skilled nursing facility services**

**2D-1** The Secretary should develop a new classification system for care in skilled nursing facilities.

YES: 13 • NO: 0 • NOT VOTING: 0 • ABSENT: 4

.....  
**2D-2** If the Centers for Medicare & Medicaid Services refines the classification system for care in skilled nursing facilities, the temporary payment increase, previously implemented to allow time for refinement, will end. The Congress should retain this money in the base payment rate for skilled nursing facilities.

YES: 13 • NO: 0 • NOT VOTING: 0 • ABSENT: 4

.....  
**2D-3** For fiscal year 2003, the Congress should update skilled nursing facility payments as follows. For freestanding facilities, no update is necessary. For hospital-based facilities, update payments by market basket and increase payments by 10 percent until a new classification system is developed.

YES: 12 • NO: 1 • NOT VOTING: 0 • ABSENT: 4

**Section E: Home health services**

**2E-1** The Congress should extend for two years the 10 percent add-on payments for home health services provided in rural areas.

YES: 14 • NO: 0 • NOT VOTING: 0 • ABSENT: 3

.....  
**2E-2** The Congress should update home health payments by market basket for fiscal year 2003.

YES: 14 • NO: 0 • NOT VOTING: 0 • ABSENT: 3

.....  
**2E-3** The Congress should eliminate the payment cut for home health services scheduled for October 2002 in current law.

YES: 14 • NO: 0 • NOT VOTING: 0 • ABSENT: 3

**Section F: Outpatient dialysis services**

**2F** For calendar year 2003, the Congress should update the composite rate payment for outpatient dialysis services by 2.4 percent.

YES: 14 • NO: 0 • NOT VOTING: 1 • ABSENT: 2



## Assessing payment adequacy and updating payments in traditional Medicare

**M**edPAC has developed a new approach for updating fee-for-service payments that breaks the process into two parts: assessing the adequacy of current payments and accounting for the increase in efficient providers' costs in the coming year. The approach is not fundamentally different from what the Commission has done in the past, but we expect formalizing the two parts of our process will lead to greater emphasis on the broad question of whether the amount of money in the system currently is right and less emphasis on the role of specific cost-influencing factors. Barring compelling evidence that other factors should be explicitly addressed, our allowance for cost increases in the next payment year will normally equal the forecasted increase in the appropriate measure of input price inflation. This approach emphasizes the need for accurate measures of input prices; accordingly, we recommend Medicare's price indexes be tailored as closely as possible to the relevant health care sector (Section 2A). We applied our updating model to services in six health sectors: hospital inpatient and outpatient (considered together), physician, skilled nursing facility, home health, and outpatient dialysis (Sections 2B through 2F). We generally found no evidence that payments are either too high or too low, but we recommend payments for hospital inpatient and skilled nursing services be redistributed as they are updated.

### In this chapter

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- Accounting for changes in input prices
  - Hospital inpatient and outpatient services
  - Physician services
  - Skilled nursing facility services
  - Home health services
  - Outpatient dialysis services
-

The goal of Medicare payment policy is to align payments with the efficient costs of providers, and in so doing help ensure beneficiaries' access to high-quality health care services. The adequacy of payments relative to efficient costs for any given service has three dimensions: the distribution of payments, the current payment level, and the payment increase for the coming year. Distributional issues are important, but have traditionally been handled separately. The level and updating of payments, on the other hand, have frequently been considered together, causing confusion if not tension. Ideally, policymakers would settle on an appropriate base rate first, and then consider the need for an update (as well as distributional changes that might be implemented at the same time).

Multiple factors can contribute to a gap between current payments and costs, such as unbundling of the payment unit, error in past forecasts of input price inflation, or changes in coding practices. In the past, we have attempted to determine which factors have contributed to payments being too high or too low and in what proportions. Given the difficulty of measuring cost-influencing factors, however, we believe it will be more productive to focus on *whether* payments are too high or too low rather than on *how* they became so.

Similarly, in looking to the next payment year, we have previously tended to focus on narrow issues, such as the impact of technological advances, productivity improvements, or the year 2000 computer problem. Because these factors are often offsetting and also present measurement problems, we believe that we should focus on the largest factor in the growth of unit costs: increases in the prices providers must pay for the goods and services they use in delivering patient care.

We explain our two-part model for updating payments in the introductory part of this chapter. In Section 2A, we review the nature and role of input price measures and consider a measurement issue with major payment implications—the treatment of labor compensation in the

price indexes that the Centers for Medicare & Medicaid Services (CMS) uses in updating payments. In Section 2B, we apply our updating model to hospital inpatient and outpatient services, after assessing the adequacy of current payments for all services hospitals provide to Medicare beneficiaries. Physician services are addressed in Section 2C, and in this case we recommend changing the payment system so that updating can be done with an approach similar to that used for facility-based services. In Sections 2D through 2F, we consider updates for two post-acute services with relatively new prospective payment systems—skilled nursing and home health—and for outpatient dialysis, the service with the longest-running payment system.

## Model for assessing payment adequacy and updating payments

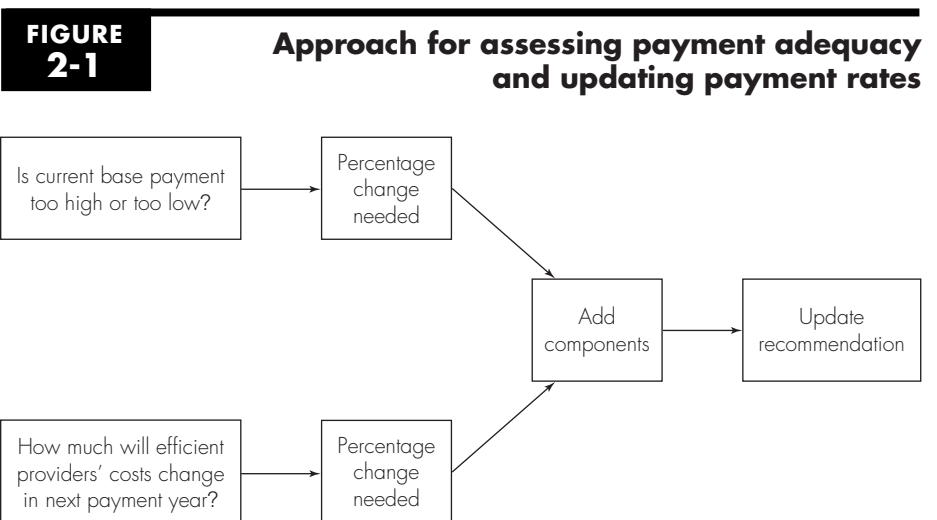
MedPAC uses a two-part approach for updating payments in the traditional Medicare program (Figure 2-1). In the first step, we consider whether base payment rates for a particular service are appropriate. If evidence suggests that base payments are too high or too low, then our update recommendation will include an adjustment to the base rate. In the second step, we predict the change in efficient providers' costs in the next payment year.

Each part of the process results in a percentage change; they are summed to determine the final update recommendation.

## Assessing payment adequacy

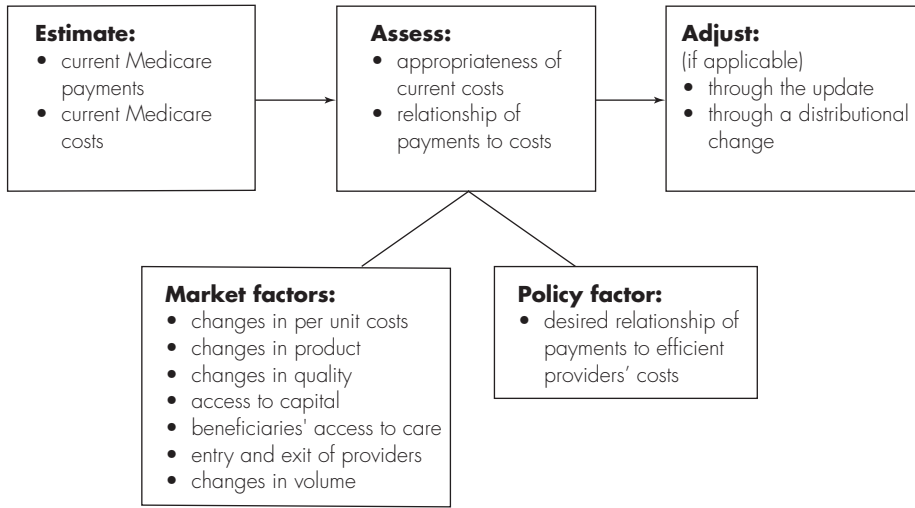
In most cases, we assess payments for the services covered by a single payment system (for example, home health or physician services). When a single organization provides services across multiple payment systems, however, commingling of revenues and inaccurate allocation of costs among services may distort our measures of payments and costs for individual services. This can result from past incentives to load costs into services covered by cost-based payment, such as the outpatient, home health, and skilled nursing facility (SNF) services that hospitals provide. It also can result from vastly different payment adequacy among services used by most patients, such as higher payments relative to costs for the drugs used in outpatient dialysis than for dialysis facility services.

In these instances, the best way to assess the adequacy of payments is to consider all the Medicare services that one type of provider furnishes. When a decision is made that payments in aggregate are too high or too low, however, a second decision must be made about how to distribute the resulting payment



**FIGURE  
2-2**

## Steps and factors in assessing payment adequacy



adjustment among services. Moreover, even if the amount of money in the system is about right across all services a provider furnishes, it may be necessary to shift payments from one service to another.

With some customizing, MedPAC's approach can be used to assess the adequacy of payments in any Medicare service for which a prospective payment system (PPS) has been implemented. As shown in Figure 2-2, the approach includes three steps. The first step is to estimate current Medicare payments and costs; on the payment side, we can view this as determining how much money is in the system.<sup>1</sup> The second step is to assess the adequacy of current payments relative to costs, or determining how much money should be in the system. This includes assessing the appropriateness of the cost base that is compared with aggregate payments. The last step is to adjust current payments, which determines how to get to the appropriate level of funding. These steps—estimate, assess, and adjust—are explained in more detail in the following subsections.

### Estimating current payments and costs

Our assessment for any given service begins by estimating total Medicare payments nationally, along with the corresponding costs of treating Medicare beneficiaries. The relationship between costs and payments is typically expressed as a margin.<sup>2</sup> The base margin estimate covers the year preceding the year to which our update recommendation will apply—in this case, we estimate payments and costs in fiscal year 2002 (calendar year as appropriate) to inform our update recommendation for 2003.

Except for outpatient dialysis services, the latest data available to us from providers' Medicare cost reports are from fiscal year 1999. We hoped to have preliminary data for fiscal year 2000 in time for this report, but CMS's processing has been delayed by the need to make numerous changes in the cost reporting forms to implement Congressionally mandated changes in payment policy. Consequently, we have had to estimate the changes in both

payments and costs (assuming a constant volume of service) between 1999 and 2002.

On the payment side, we first applied the annual payment updates specified in law through 2002 to our base numbers and then modeled the effects of other policy changes that have affected the level of payments. For changes other than updates, we also included provisions scheduled to go into effect in the decision year (fiscal year 2003). This approach allows us to consider the revenue constraints providers will face in the decision year as we assess the adequacy of current payments. Examples of payment policies scheduled to go into effect in fiscal year 2003 are a reduction in the indirect medical education (IME) adjustment for hospital inpatient services and the elimination of two temporary payment add-ons to the rates for SNF services.<sup>3</sup>

On the cost side, we estimated the increases in costs per unit of output over the same period—a difficult task, given that fiscal year 2002 was just starting and the available cost report data lagged two years behind. For hospital services in fiscal years 2000 and 2001, preliminary data on rates of cost growth were available from the American Hospital Association's Annual Survey of Hospitals and the National Hospital Indicators Survey co-sponsored by CMS and MedPAC. For all other services, as well as for hospital services in fiscal year 2002, we assumed that unit costs increased at the rate of input price inflation as measured by the applicable CMS market basket index. Although payment updates are based on a forecast of the market basket, we used actual index changes for 2000 and 2001 along with more recent estimates for 2002 in our modeling.

The assumptions we must make in estimating payments and costs result in an increasingly large margin of error as we extend further from actual data. As

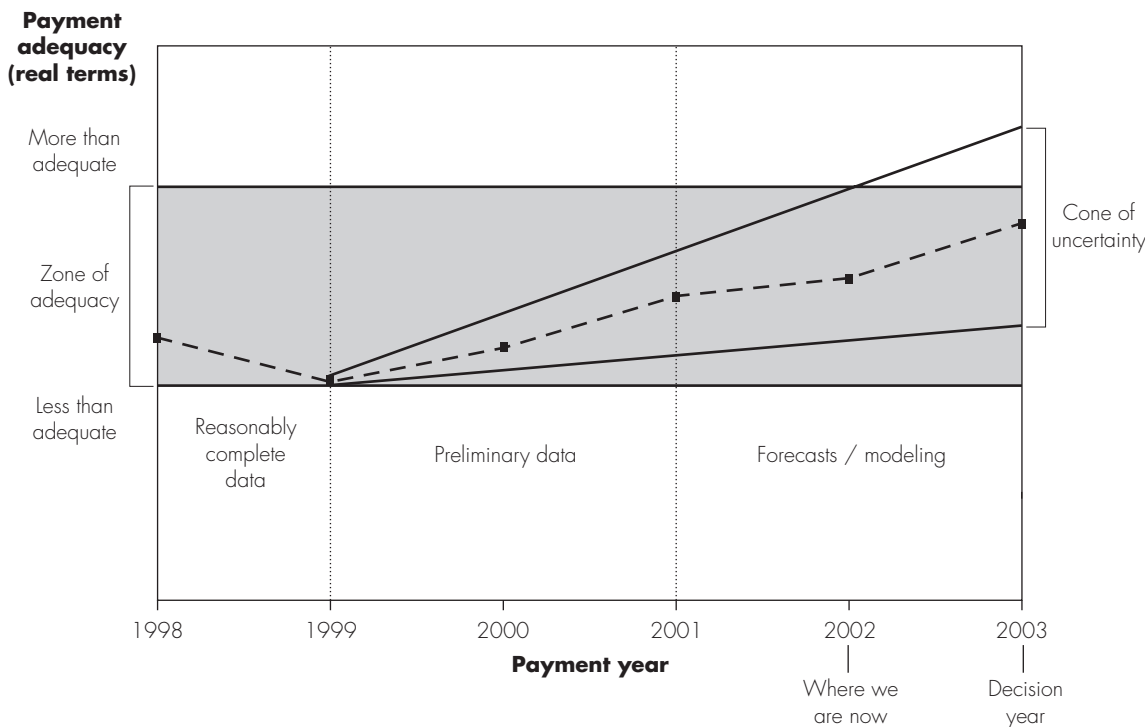
1 For physician services, only payment data will be available.

2 A margin is calculated as payments less costs divided by payments. Alternatively, the data can be expressed as a ratio of payments to costs.

3 We do not forecast costs and payments out to 2003 because that would entail making an assumption about the update—which is the subject policy decision. In effect, we estimate what payments would have been in 2002 if payments had been made using 2003 payment rules and both the volume of services and unit costs remained the same.

**FIGURE  
2-3**

## Uncertainty in assessing payment adequacy



Note: Assessing payment adequacy begins by measuring the relationship between payments and costs (typically expressed as a margin) in the latest period for which reasonably complete data are available (1999 in this example). Then the annual changes in payments and costs are estimated so that margin points can be plotted through to the current year (2002 in this example). Preliminary data sources are used when available in this estimation; forecasting and modeling techniques must otherwise be used. If the cost base is considered appropriate, then the estimated margin for the current year provides a basis for assessing the current adequacy of payments and determining the appropriate update for the decision year. (Of course, other indicators, such as trends in volume and entry and exit of providers, may also be considered in this decision.) The margin estimate for the decision year results from applying the recommended payment update while forecasting the increase in costs.

In this hypothetical example, projected payments relative to the costs in the decision year are toward the high side of the "zone of adequacy." Therefore our confidence that the actual value will not be too low is greater than our confidence that it will not be too high.

depicted in Figure 2-3, we refer to this concept as the “cone of uncertainty.” The uncertainty widens (perhaps exponentially) as we move from the reasonably complete cost report data of 1999, to preliminary data sources (in some cases) for 2000 and 2001, and then to forecasts and modeling efforts for 2002. Nonetheless, the resulting estimates provide a useful starting point for consideration of payment adequacy.

One last consideration is the definition of costs. Medicare has always related payments to “allowed costs,” with certain cost elements disallowed altogether (such as direct advertising or lobbying

expenses) and others constrained (such as rules limiting salaries that can be counted for certain therapists and medical directors and how much depreciation can be taken). When Medicare paid on the basis of its share of treatment costs, it was critical that the program impose reasonable limits on the costs that would be covered. However, with the majority of payment rates now developed prospectively and the policies of a wide range of public and private payers providing revenue pressures on providers, it may be time to reconsider the role of Medicare’s rules of allowability. Prospective payment itself gives providers incentives to control costs by putting them at financial risk.

Because this issue has not been settled, the Commission continued to use only Medicare-allowable costs in modeling current costs this year. However, we plan a comprehensive study to document the impact of non-allowable costs for hospitals as well as the relative contributions of various types of non-allowables.<sup>4</sup> When the results of this study are available, the Commission intends to review the use of cost report data in assessing payment adequacy and to consider the potential for lessening providers’ reporting requirements.

4 Over time, this study may also be extended to other facility-based services, such as dialysis, home health care, and SNF services.



## Assessing the adequacy of current payments relative to costs

The second step in the process of assessing payment adequacy involves two interrelated issues: the appropriateness of providers' costs—that is, whether actual costs provide a reasonable representation of the costs of efficient providers—and the relationship of payments to efficient providers' costs. In addition to assessing the adequacy of Medicare payments directly, we also consider broader measures of the market conditions providers face.

In examining the cost base (aggregate current costs), we generally treat the volume of services as given. At a certain volume, total costs are driven by the average cost per unit of output, which then becomes the focal point of our analysis. If this unit cost is considered appropriate, then we proceed to the question of whether payments are adequate to cover costs and to provide sufficient funds for keeping plant and equipment up to date. If, on the other hand, costs are too high (implying that Medicare is paying more than necessary) or too low (implying that additional spending is needed to ensure appropriate quality and access to care), then an adjustment to reported costs may be needed before we decide whether payments are adequate relative to costs. This step is needed to avoid the prospect of declaring that the current margin is too low and therefore current payments must be increased, or vice versa, when the costs for which Medicare should be paying are different than those used in the margin calculation.

Assessing the appropriateness of the cost base and the adequacy of payments is an inherently judgmental task. Although available information is invariably limited, several types of data about the market conditions that providers face may provide useful clues (Figure 2-2). We use two indicators to assess the appropriateness of costs:

- the trend in average costs per unit of output, and
- evidence of product change.

Although it is nearly impossible to know whether costs are “efficient” in the absolute, if the cost base was considered appropriate at the time a PPS was enacted, then the rate of change in unit costs provides evidence of whether the initial level of appropriateness has been maintained. We would generally expect average cost growth to approximate the rate of increase in the applicable market basket index, though other cost-influencing factors, such as the introduction of major technological innovations, might appropriately alter this outcome. In addition, changes in product can have a major effect on unit costs. For example, substantial reductions in hospital length of stay during the 1990s, accompanied by more frequent and extensive use of such post-acute services as home health and rehabilitation, would be expected to reduce hospital costs per case (inflation adjusted). Similarly, changes in the characteristics of patients receiving home health services would be expected to affect unit cost growth in that sector.

Several other changes may suggest that payments are too high or too low relative to efficient costs, even in the absence of any direct evidence as to whether the cost base is appropriate. These are:

- changes in access to or quality of care,
- changes in the volume of services or number of providers, and
- changes in providers' access to capital.

Although difficult to measure, deteriorating quality or access to care may indicate that revenues (either specific to Medicare or across all payers) are inadequate. It is less likely, however, that quality or access measures would provide the basis for concluding that payments are too high because more assessment activities are focused on underuse and misuse of services than on overuse.

Reductions in the volume of services provided or in the number of providers may indicate that revenue flows are

inadequate for providers to continue operating or to provide the same level services. Facilities closing is the extreme outcome, although it is often difficult to differentiate closures that have serious implications for access to care in a community from closures that result from excess capacity. Private-practice physicians refusing to accept new Medicare patients is a less drastic but still important example. By the same token, substantial increases in volume or the number of providers may indicate that payments are more than sufficient to cover providers' financial needs, potentially leading to unnecessary services being provided.

Changes in bond ratings may indicate that providers' access to needed capital has deteriorated or improved, although the data are difficult to interpret because rating decisions depend on a variety of factors besides Medicare revenue flows and access to capital depends on more than just bond ratings.

One last consideration in assessing the adequacy of current payments is the desired relationship between payments and efficient providers' costs (Figure 2-2). Policymakers generally agree that payments should at least modestly exceed efficient costs so as to provide a way for providers to generate sufficient capital over time to replace worn-out plant and equipment and stay abreast of technological innovation. Although any measure of efficient costs would include depreciation as a way to recognize the costs of plant and equipment, investing depreciation payments over the life of capital assets rarely produces enough revenue to replace them. However, research and policy discussion have not produced consensus on what rate of return, whether expressed as a return on equity or return on revenue (margin), is required to maintain long-term financial viability. In fact, the range of adequate return undoubtedly differs from service to service and even over time for the same service. Consequently, the Commission does not plan to specify a “standard margin,” although we will take the need

for a small positive margin into account as we assess the adequacy of various fee-for-service payments.

### Adjusting current payments

In most situations, a finding that current payments are too high or too low should lead to a percentage adjustment to the payment update that otherwise would apply. If the required adjustment is large, then it should typically be phased in over two or more years to avoid too large an impact on provider operations. Alternatively, policymakers may wish to increase or decrease the amount of money in the system in a way that simultaneously redistributes payments. A timely example is the Congress' decision to target an increase in the level of payments for SNF services to specific categories of patients with complex care requirements. In the course of this year's deliberations on payment adequacy and updates, the Commission has considered the merits of several policy options that would affect both the level and distribution of payments.

Often, policymakers focus on a perceived need to redistribute payments rather than on a conclusion that aggregate payments are too high or too low. In this situation, analyzing whether a change should be made with new money (or savings) or made in a budget neutral manner is an important part of the decision-making process. Two recent policy changes for hospital inpatient payments illustrate this issue. In the Balanced Budget Refinement Act of 1999, the Congress sought to improve the equity of disproportionate share (DSH) payments between urban and rural hospitals, and decided that the change should be implemented with new monies (that is, rural hospitals became eligible for higher DSH payments while the formula governing payments for most urban hospitals remained the same). In contrast, the Congress required a budget-neutral adjustment for the occupational mix of hospital workers in the wage index, which on average will raise

payments for rural hospitals and reduce them for hospitals in large urban areas.

### Accounting for providers' cost changes in the coming year

The Commission accounts for expected cost changes in the coming payment year primarily through a forecast of input price inflation, which estimates how much providers' costs would rise in the coming year if the quality and mix of inputs they use to furnish care and the types of patients they treat remain constant. Other factors that may affect providers' costs in the next payment year include:

- *Scientific and technological advances*—This factor is intended to raise payment rates to accommodate the expected effects of new technologies that improve quality of care but also increase costs.
- *Improvements in productivity*—This factor reflects the expectation that, in the aggregate, providers should be able to reduce the quantity of inputs required to produce a unit of service by at least a modest amount each year while maintaining service quality.
- *One-time factors*—This factor adjusts payments for one-time factors affecting the cost of providing services, when the factors are systematic and substantial and will improve care for beneficiaries.

Our update recommendation is anchored by the estimate of price inflation because it is the most important factor influencing providers' costs in the next payment year. Other factors will be reflected in our update recommendation only when credible and compelling analysis suggests that they are expected to change providers' costs significantly. This approach modifies our previous update decision-making process by increasing reliance on measures of changes in input prices in the next payment year, and

decreasing reliance on measures estimating changes in providers' costs in the forthcoming year due to technological advances, productivity improvements, and one-time factors. To the extent that these factors are not addressed when updating payments in a given year, their effects can be considered in the analysis of payment adequacy in the next payment cycle.<sup>5</sup>

### Estimating inflation in input prices

For most Medicare services, we estimate the changes in providers' input prices in the next payment year using available projections from CMS. For many institutional providers, including inpatient hospital, outpatient hospital, SNF, and home health, we use the forecasted increase in an industry-specific index of national input prices called a market basket. For physician services, we use a similar index, known as the Medicare Economic Index. These indexes, developed by CMS, track national average price levels for labor and other inputs, weighted to reflect the relative importance of each input category in the specific industry. A detailed discussion of how we account for changes in providers' input prices in the coming year can be found in the next major section of this chapter (Section 2A).

### Estimating scientific and technological advances

The Commission believes that Medicare's payment rates should be high enough to allow providers to adopt quality-enhancing, cost-increasing innovations when the current system does not do so automatically. The Commission monitors industry trends and has informal discussions with industry representatives in each service area. When sufficient evidence suggests that one or more scientific advances in a specific service area are playing an unusually large role in increasing providers' costs, we will attempt to estimate the cost impact of these advances.

<sup>5</sup> For example, if cost increases are unusually high or low due to a technological advancement, that will be reflected in our next year's estimate of current margins, unless the effect is offset by other factors or provider cost responses.

