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Fact Sheet

PPS INPATIENT PAYMENT AND THE AREA WAGE INDEX

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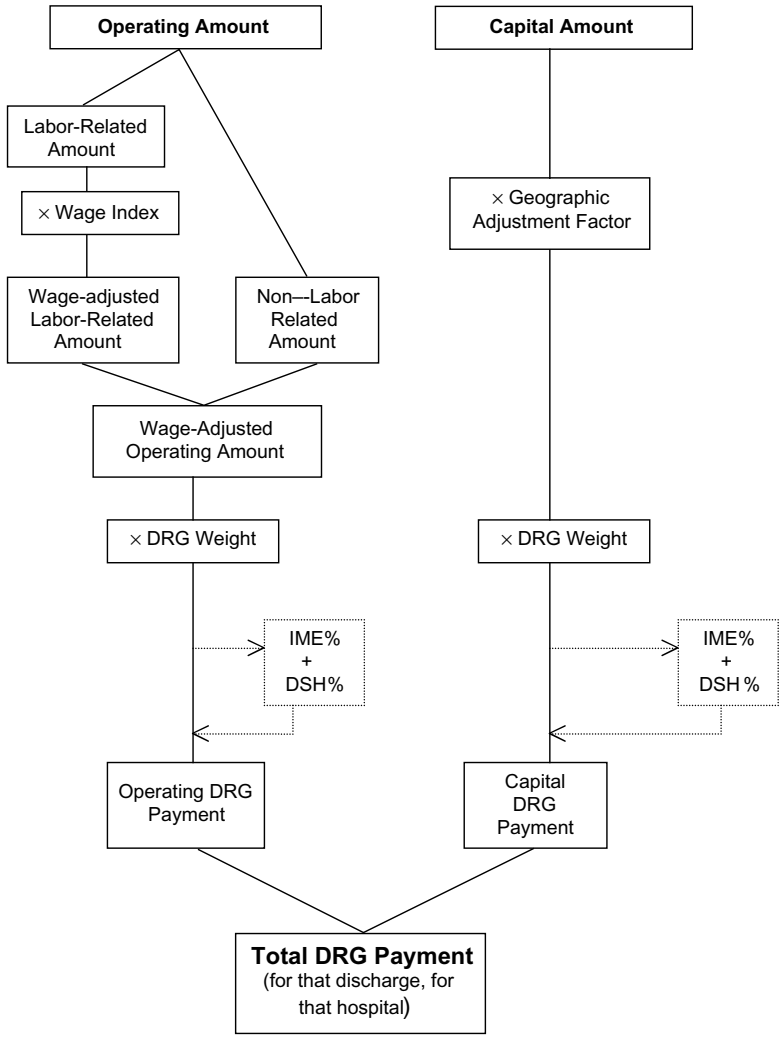
Almost all short-stay general hospitals in the United States are reimbursed by Medicare under the Prospective Payment System (PPS). Under PPS, the hospital wage index is used by the Health Care Financing Administration (HCFA) to adjust inpatient payment rates. This Fact Sheet discusses how inpatient rates are calculated, the role of the wage index, and issues surrounding the wage index and reimbursement to rural hospitals.

CALCULATION OF INPATIENT PAYMENT PER CASE

Hospitals operating within the PPS system are paid for inpatient care based on the sum of two fixed amounts per Medicare discharge called the standardized payment amounts. Each case receives both an operating payment and a capital payment. The operating standardized amount is separately computed for hospitals located in large urban areas and for those located in all other areas (i.e. smaller urban and rural combined). Both the operating and the capital standardized payment amounts are multiplied by a resource weight according to the diagnosis-related group (DRG) that is assigned to each discharge (Figure 1). Other special adjustments are made to the standardized amounts for teaching hospitals (the Indirect Medical Education [IME] percent add-on) and hospitals serving a "disproportionate share" of indigent patients (the DSH percent add-on).

Figure 1: Determining PPS Inpatient Payments



The standardized amount for operating costs is also made up of two components, one that is considered "labor-related" and one that is not. HCFA computes its own hospital industry wage index to adjust the labor-related component for regional variation in the cost of labor, which is thought to reflect market conditions that are beyond the individual hospital's control. A new index is computed by HCFA each year, from average hourly wage data reported by hospitals on their Medicare cost reports filed four years earlier.

The portion of the standardized amount for operating costs that has been identified as labor-related is the same for all hospitals paid under PPS. It has been as

high as 75% (during the 1980s) but is currently just over 71%. The standardized amount for capital costs is also adjusted by a geographic adjustment factor (GAF), but this adjustment applies to the full capital payment rate. Although the GAF is indirectly derived from wage index data, it has a relatively small effect on total payments.

CONSTRUCTION OF THE WAGE INDEX

To construct the wage index, hospitals are first grouped into labor markets that are defined either by Metropolitan Statistical Area (MSA) or by state-level aggregates of rural areas that include data for all hospitals located outside of an MSA. Non-MSA hospitals account for approximately 44% of hospitals paid under the PPS system (although only 14% of PPS payments). A special exception process allows hospitals to be re-designated to neighboring labor markets if certain conditions can be met. In the federal fiscal year ending September 30, 2000 (FY 2000) 17% of all rural hospitals were re-designated to urban labor markets for purposes of assigning their wage index.

Within each labor market, a weighted average hourly wage (AHW) is computed from the sum of the wage costs of all hospitals in that market divided by the sum of the hours worked in all hospitals in the market. The wage index values are then computed by dividing the AHW for each labor market by the national AHW. If a particular wage market has an index value of 0.80, this means that the hourly hospital wages paid in that market area average 20% less than the hourly wages for all employees in PPS hospitals in the Medicare system for that year. Because the index value is less than one, the standardized rate for hospitals in that market will be reduced.

Table 1 shows two actual operating payment calculations using the rates that were published in the final PPS rules for FY 2001. For simplicity, a DRG weight of 1.10 is used in both cases and no teaching, disproportionate share or other special PPS adjustments are made. The example illustrates payments to two hospitals with the same operating standardized amount (located in a rural or "other urban" area), one with a wage index of 1.200, and the other with an index of 0.800.

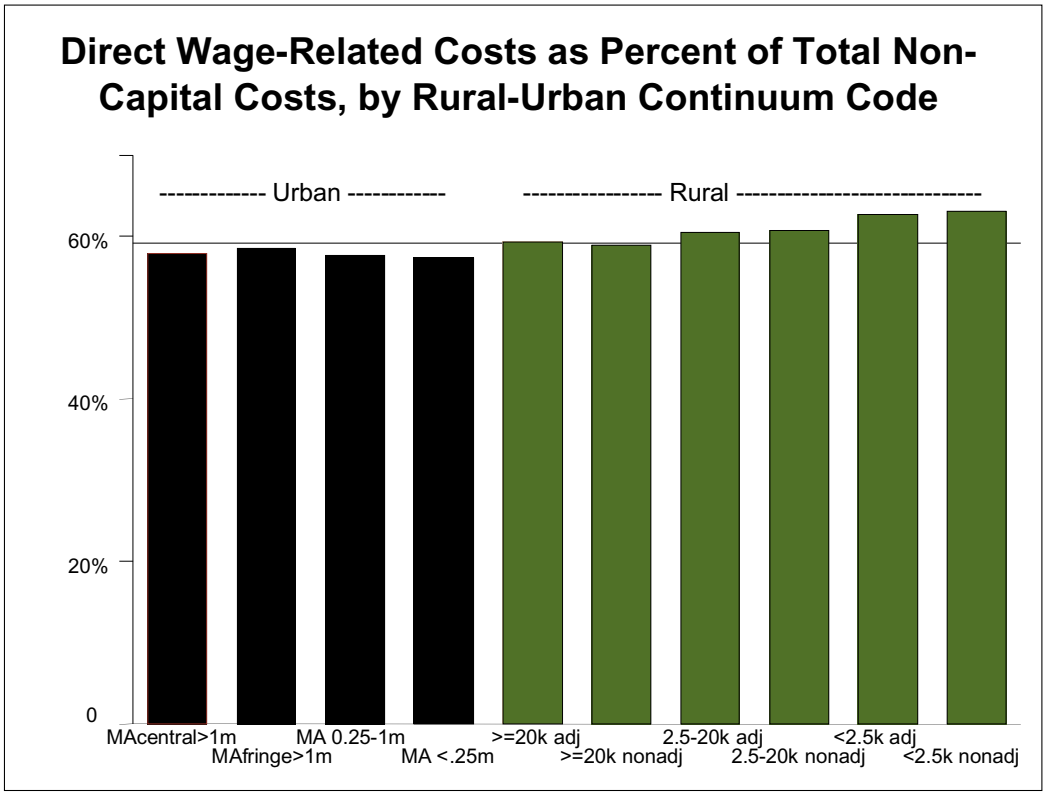
Table 1:
Sample Calculation of Operating DRG Payment for Hospitals in Rural or "Other Urban" Areas

	Hospital 1		Hospital 2	
	Labor-Related	Non Labor-Related	Labor-Related	Non Labor-Related
National Adjusted Operating Standardized Amount	$2,818.85	$1,145.78	$2,818.85	$1,145.78
× Wage Index Adjustment	1.200	Not applicable	0.800	Not applicable
= Wage-adjusted Operating Standardized Amount	$3,382.62	$1,145.78	$2,255.08	$1,145.78
Combined Operating Standardized Amount	$4,528.40		$3,400.86	
× DRG Weight	1.10		1.10	
= Total Operating DRG Payment	$4,981.24		$3,740.95	

DETERMINING THE LABOR-RELATED PORTION OF THE OPERATING AMOUNT

In theory the labor-related portion of the operating amount should represent the total proportion of expenses that can be expected to vary as regional wage rates vary. It is derived from the PPS Hospital Input Price Index (also called the hospital market basket) and is computed from the sum of the weights for all labor-related components of the price index. The current figure of 71% was computed in 1997, based on data from 1992. Since FY 1998, the five components of the market basket that are identified as "labor-related" have been wages and salaries (50.244%), employee benefits (11.146%), non-medical professional fees (2.124%), postal services (0.272%), and "all other" labor-related (7.277%). The "all other" category includes items such as purchased business, computer and data processing services. Some of the source data are taken from filed cost reports, and some are taken from surveys conducted by the Bureau of the Census. Direct wages and benefits as reported on the hospital wage surveys average only 60% of total non-capital expenses. The percent is slightly lower in urban hospitals than it is in rural hospitals (Figure 2). The percent of the standardized operating payment amount that is identified by HCFA as labor-related, however, is the same for all hospitals.

Figure 2:



Source: Author's calculations from hospital cost report data and annual wage surveys

There may be a perception among hospital administrators in general that the labor-related portion is too high. This may be due in part to the inclusion of the last two market basket components that are not normally identified as wage-related costs in hospital accounting records. The "all other labor-related" category includes items such as purchased accounting, legal or data processing services. An argument could be made that prices of purchased services do not vary geographically, at least not to the same extent that local wages vary, and that this component overstates the total appropriate labor-related portion. Overstatement of the labor-related portion would systematically disadvantage hospitals in areas with hourly wages below the national average. If a hospital is located in an area where the wage index is less than 1.00, the higher the labor-related portion, the more the hospital's payment is reduced. With the exception of a few states in New England, all rural wage index values are less than 1.00; rural providers should, therefore, be especially concerned that the wage-related portion is defined accurately.

OCCUPATIONAL MIX ADJUSTMENT

The wage index as currently defined reflects regional differences in both the price of labor and the mix of occupations and skill levels within a given institution. It is, technically, a "labor cost index" rather than a pure price index. Some analysts have argued that the wage index should only reflect market differences in the price of labor. They have suggested eliminating the effects of occupational differences from the wage index by computing the average hourly wage for each hospital based on a standard or average mix of job categories, rather than on the actual mix experienced by that hospital. The wage index as it is currently calculated can range from as low as 0.65 to as high as 1.55. The effect of controlling for occupational mix differences would be a reduction in this total variation, although it is difficult to predict by how much. Smaller hospitals tend to use a less expensive mix of employees than do larger hospitals, and rural hospitals tend to be smaller than urban hospitals. Consequently, eliminating occupational differences from the wage index would also reduce the urban/rural differential in the wage index. However, controlling for occupation mix would also eliminate the sensitivity of the wage index to any regional trends in occupation mix over time. With the current labor cost index, if some rural markets were to upgrade their average skill mix relative to other markets (for example, in response to reductions in local professional labor shortages) their index values would increase. In a pure price index, however, there would be no corresponding change.

The wage data that are now collected are not sufficiently detailed to allow for occupational mix adjustment. Until this year, HCFA has taken the position that the additional costs of collecting data by occupational category could not be justified, and that there is little empirical basis on which to establish an optimum occupational mix to which all hospitals should be standardized. The Benefits Improvement and Protection Act of 2000, however, now requires them to begin collecting occupation-specific data at least once every three years, beginning in FY 2004.

USE OF THE HOSPITAL WAGE INDEX FOR PROSPECTIVE RATES IN NON-HOSPITAL SETTINGS

Recently HCFA has begun to use the hospital wage index to adjust rates for hospital outpatient, skilled nursing and home health services under their new Medicare prospective payment rules, and soon it will also be applied to inpatient rehabilitation facilities. The wage and hour data, on which the hospital index is based, derives only from in- and outpatient services in the hospitals covered by inpatient PPS. HCFA's position has been that hospital demand for health care workers is so much greater than the demand from other providers that the local markets are likely to be dominated by hospital hiring practices, and the relative values computed by the hospital index should fairly represent the labor market conditions in which other health care providers operate. Even if it is true that hospital workforce demand dominates labor markets overall, occupation mix may be less varied in these other settings; if so, the total variation that is measured by the hospital index may overstate regional differences in other health care settings.

There are some other important differences in the way in which the index is used in these other settings. For example, the labor-related portion of the standard rates varies across the different care settings, based on the component weights used in input price indices that HCFA maintains for different types of health care providers. Another major difference is that the labor markets are assigned strictly according to geographic location, without the reclassifications allowed for certain hospitals. HCFA is in the process of collecting wage data from home health, skilled nursing and rehabilitation facilities, although the data are thought to be not as accurate as those collected from hospital cost reports. In its published rules for these recent prospective payment systems HCFA has stated that they are exploring the appropriateness of developing separate wage indices for non-acute care services.

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