## **Occupational Mix Adjustment**

This survey will collect data on the mix of employees for a limited number of hospital occupational categories from each hospital. These categories (nursing, therapy, medical and clinical laboratory, dietary, and pharmacy) each include several standard occupational categories (SOCs), as defined by the Bureau of Labor Statistics (BLS), that may be used by hospitals in different mixes to provide specific aspects of patient care.

For example, hospitals may choose to employ different combinations of registered nurses, licensed practical nurses, nurses' aides for the purpose of providing nursing care to their patients. The varying labor costs associated with these choices reflect hospital management decisions rather than geographic differences in the costs of labor.

The data collected on the survey will be used to adjust hospitals' wage data for the effect of each hospital's SOC mix within the general occupational categories. Section 304 of the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 requires these data be used to adjust the wage index by October 1, 2004 (the FY 2005 wage index).

The survey requests the number of full-time equivalent (FTE) employees within each SOC of the general occupational categories identified. It also requests the number of all other hospital FTEs. To calculate the occupational mix adjustment, the percentage of the category total attributable to each SOC is first multiplied by the national average hourly rate for that SOC using data from the BLS Occupational Employment Statistics (OES) survey. The weighted hourly rate for each SOC within the general category is then summed to calculate each hospital's adjusted hourly rate for the category.

For example, the national average hourly rate for registered nurses from the OES survey is \$23.19. This amount would be multiplied by each hospital's percentage of the general category total attributable to registered nurses, so that if 55 percent of a hospital's nursing category is made up of registered nurses, the hospital's weighted hourly rate for RNs would be \$12.75. This calculation is performed for each SOC within the category, and the results summed as described above.

After calculating each hospital's adjusted hourly rate for the category, this amount is then compared to the national average adjusted hourly rate for the category (calculated in a similar manner), to calculate the occupational mix adjustment factor. This is done by dividing the national adjusted rate by each hospital's adjusted rate. If the hospital's adjusted rate is less than the national adjusted rate (indicating the hospital employs a less costly mix of employees within the category), the occupational mix adjustment factor will be greater than one, and vice versa if the hospital's adjusted rate is greater than the national adjusted rate.

## Occupational Mix Example

	Average Hourly Wage <sup>1</sup>	Number of Employees	Percentage of Total Occupations	Weighted Average Hourly Wage
NATIONAL				
Nursing Services				
RNs	\$23.19	2,217,990	53%	\$12.29
LPNs	\$15.14	683,790	16%	\$2.42
CNAs, Aides,				
Orderlies, &				
Attendants	\$9.54	1,307,600	31%	\$2.96
Total		4,209,380	100%	\$17.67
HOSPITAL A				
Nursing Services				
RNs	\$23.19	4,000	57%	\$13.22
LPNs	\$15.14	1,000	14%	\$2.12
CNAs, Aides, Orderlies, &				
Attendants	\$9.54	2,000	29%	\$2.77
Total	ψο.ο ι	7,000	100%	\$18.11
Occupational Mix Adjustment <sup>2</sup>		7,000	10070	0.9757
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HOSPITAL B				
Nursing Services				
RNs	\$23.19	3,500	50%	\$11.60
LPNs	\$15.14	1,500	21%	\$3.18
CNAs, Aides,				
Orderlies, &				
Attendants	\$9.54	2,000	29%	\$2.77
Total		7,000	100%	\$17.55
Occupational Mix				
Adjustment <sup>2</sup>				1.0068

<sup>&</sup>lt;sup>1</sup> Based on Bureau of Labor Statistics Data <sup>2</sup> Calculated by comparing hospital weighted average hourly wage to national weighted average hourly wage.