Section 3: Wage Index

Since the inception of the Medicare SNF PPS in 1998, the area wage index calculated for the hospital Inpatient Prospective Payment System (IPPS) also has been applied to the SNF PPS. Wage index values are assigned to Core-Based Statistical Areas (CBSAs) as determined by the U.S. Census Bureau and represent the hourly wage amount for all Medicare certified acute care hospitals in a designated CBSA divided by the national hourly wage amount for all Medicare certified acute care hospitals. Misstatement of an individual hospital's data can contribute to an erroneous wage index for an entire CBSA and impact other providers, including SNFs.

Depending on the SNF's assigned CBSA, the area wage index is applied to the labor-related portion of the SNF PPS rate, or Resource Utilization Group (RUG) rate, and added to the non-labor related portion of the rate. Since the labor-related portion of the rate is often close to 70 percent of the total RUG rate, the wage index has a significant impact on the final RUG rates for each CBSA and, of course, each SNF. An area wage index less than a 1.00 can result in a PPS rate that is below the full federal rate as published in the Federal Register and is meant to indicate that an area's wages are lower than the national average.

AHCA has long advocated for establishment of a SNF-specific wage index based upon SNF-specific labor data from SNF cost reports. Every year, we become more convinced that use of aggregate hospital wage and benefit data is an inaccurate and inappropriate proxy for computing SNF wage indices. And over the years, the Association has repeatedly highlighted this concern. In turn, CMS has indicated SNF data is unreliable for a SNF-specific wage index and that CMS does not have the manpower to audit SNF labor data.

Summary of AHCA/NCAL Recommendations and Requests

- Trim hospital wage data to exclude certain job categories that do not exist in the SNF environment so it is more appropriate for developing the SNF wage index.
- Phase in implementation of the new methodology over a three- to five-year period.
- Apply a 5 percent cap to wage index fluctuations (positive or negative) during the phase-in period.

Detailed Discussion

This year, AHCA has developed an approach we believe aligns with CMS's preferred approach to using hospital wage data. Specifically, we suggest trimming hospital wage data to exclude certain job categories that just do not exist in the SNF environment so it is more appropriate for developing the SNF wage index.

In terms of analysis, AHCA found that nearly 76 percent of instances in which the wage index in our "trimmed hospital data modelling" declined by more than 5 percent, it was an elevated hospital percentage of employee benefits (e.g., greater than 30 percent) in relation to wages that drove the change in the overall wage index. The Association then compared the distribution of employee benefits as a percentage of wages between hospitals (using the data in the CMS PUF) and SNFs (using data available on SNF Medicare cost reports Worksheet S-4). We found that

SNF data is far more tightly clustered with very few outliers greater than 30 percent associated with benefit costs.

As a result, AHCA utilized the July 2015 CMS public use (PU) file audited acute care hospital wage data. We created two separate wage index models as part of examining alternative methods in applying alternative wage indices to the labor portion of SNF RUG rates. Each of these two separate versions included two subsets. These subsets were: 1) wage index without occupational mix adjusters and 2) with an occupational mix adjuster utilizing SNF national Bureau of Labor Statistics (BLS) data and regional health care BLS data. The application of the occupational mix adjusters is consistent between both wage index models and is outlined by "steps" in the detailed models (see below). Both models and subsets excluded categories not prevalent in SNFs (e.g. physicians, offsite clinics, private physician practices, etc.)

The first wage index model created excluded core benefits from the PU file in calculating the unadjusted wage index. This was due to the wide percentage range of benefit ratios to salaries (by CBSA) based off the PU file's hospital data versus a more concentrated range of benefit ratios to salaries (by CBSA) for SNFs. SNF FY 2014 Healthcare Cost Report Information System (HCRIS) data based on Worksheet S-3, Pt IV benefits to Worksheet A salaries resulted in 75 percent of benefit ratios ranging from 15-25 percent. However, hospital PU file data reflected benefit ratio ranges of 15-25 percent for 32.49 percent of the CBSA population, 26-35 percent for 49.48 percent and 35 percent or more for 11.53 percent. The lowest hospital CBSA benefit ratio was 13.2 percent versus the highest at 49.82 percent. Hospital benefit ratios to salaries were determined by taking the sum of Worksheet S-3, Pt II Lines 17-25 divided by Line 1 Total Salaries for all PU file hospital providers, aggregated by CBSA.

The second wage index model includes core benefits using a ratio of PU file benefits to salaries by hospital provider. This ratio was determined by taking the sum of Worksheet S-3, Pt II Lines 17-25 divided by Line 1 Total Salaries for all PU file hospital providers, aggregated by CBSA. Each hospital's ratio then was applied to allowable salaries for the SNF-specific wage index as defined by outlined "steps" below.

Detailed Discussion

Since 1997, CMS has applied a pre-floor, pre-reclassification hospital wage index (without accounting for occupation mix or outmigration) to inpatient rehabilitation facilities, inpatient psychiatric facilities, long-term care hospitals, SNFs, Hospital Outpatient Department, ambulatory surgical centers, home health agencies, and hospice facilities.

The wage index used for the SNF PPS is calculated using IPPS wage index data on the basis of the labor market area in which the acute care hospital is located, but without the following:

- Geographic reclassifications under section 1886(d)(8) and (d)(10) of the Social Security Act,
- IPPS rural floor under section 4410 of the BBA,
- imputed rural floor under 42 CFR 412.64(h), and

- Outmigration adjustment under section 1886(d)(13).[1]

The current area wage index methodology for adjusting Medicare payments is ripe for improvement. Specifically, the current methodology does neither appropriately nor adequately adjust Medicare payments for differences in wage rates across geographic regions for LTPAC providers. While the solutions for replacing the current system set forth by several major research institutions differ somewhat in approach, they leave no question that the current wage index is not accurate.

The deficiencies in the wage index methodology for adjusting Medicare payments have been known for many years. The issues have been identified by several leading analytic/research institutions including Medicare Payment Advisory Commission (MedPAC), Acumen LLC, RTI International, and the Institute of Medicine (IOM). These institutions have described the deficiencies with the current data and methodology, and made recommendations for systems reform.[2] MedPAC and RTI research clearly delineate the key problems of the current system and recommend extensive modifications. The research conducted for CMS by Acumen, LLC, shows promise in terms of refining the area wage index itself by moving to a more market-based approach focusing on staff commuting distances. IOM work suggests numerous implementable reforms that significantly could improve the hospital wage index, as well as a wage index for various LTPAC settings.

Among many deficiencies in the current wage index, the commenters collectively found:

- Large differences in wage indices between adjoining geographic areas that have led to the establishment of numerous exceptions, which allow hospitals to be reclassified to other geographic areas.
- Circularity in the establishment of the wage index, whereby hospitals located in markets with few providers have the ability to set or influence the wage index for their geographic area through business practices.
- Year-to-year volatility of the wage index within a geographic area that does not appear to be related to underlying changes in local labor market conditions.
- A hospital wage index that is not geographically representative of other types of facilities such as home health agencies and SNFs. Stated another way, facilities other than short term acute care hospitals may be located in areas where there are no short-term acute care hospitals.

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[1] See the FY 2006 SNF PPS proposed rule, 70 Federal Register 29090 through 29092, and 79 **Federal Register** 25779, FY 2014, SNF PPS Proposed Rule.

[2] See MedPAC (2007), *Report to the Congress: Promoting Greater Efficiency in Medicare*, June; RTI International and MedPAC, *Potential Refinements to Medicare's Wage Indexes for Hospitals and Other Sectors*, June 2007, No. 07-3; Acumen LLC (2008), *Impact Analysis for the 2009 Final Rule: Interim Report: Revision of Medicare Wage Index*, August; Acumen LLC (2009), *Revision of Medicare Wage Index: Final Report: Part 1*, (April); Acumen LLC (2010), *Revision of Medicare Wage Index: Final Report: Part 2*, (March); Acumen LLC (2011), *Revising the Medicare Wage Index to Account for Commuting Patterns*, (April); and IOM (2011). *Geographic Adjustment in Medicare Payment: Phase 1: Improving Accuracy*. (June).

- The use of only IPPS hospital wages to calculate a wage index for nonmetropolitan areas in which most employees work at smaller establishments does not accurately reflect the type of labor that facilities other than short-term acute care hospitals provide or the wages that they pay.

The commenters examined and analyzed massive amounts of data in their efforts to develop the best approaches to a new and very much improved wage index. The Association believes it is notable that MedPAC, Acumen, and IOM all found that a system based solely on hospital labor cost data is inappropriate.

The problems inherent in the current wage index methodology ignore basic guiding principles developed by the above institutions in their quest for wage index reform. These system fairness principles require that such a system should, for example be:

- Theoretically sound.
- Seen as fair by providers in other sectors as well as by hospitals.
- Less volatile year to year.
- Implemented so that large changes in wage index values are phased in over a transition period.
- A system that does not require reclassifications and a myriad of other adjustments that favor one provider over another and one provider sector over another and fail to improve the application of the wage index.

Modified Hospital Wage Index Approach. Area wage indices are based on labor data reported on the hospital Medicare Cost Report, Worksheet S-3 Part II and III. While similar data is reported on the SNF Medicare Cost Report, CMS has long maintained that the hospital data is more reliable, in part because it has been audited by Medicare contractors for many years. Despite being provided evidence that SNF wage data as reported on the SNF Medicare Cost Report is no less variable than the hospital data, CMS continues to resist developing a SNF specific index citing the additional audit resources that would be required.

The expansion of hospital services in response to health care reform, including the acquisition of physician practices, has made the use of the hospital wage index in the SNF PPS even more problematic and volatile. Some acquired practices are considered hospital-based and are included in the wage index, while others are not. In instances where the clinics are included, it is often only the non-physician employees whose wage and benefits information is reported, thereby eroding the relative wage for the hospital to the national average.

Further, there are provisions within hospital regulations that allow hospitals to reclassify to another area for purposes of the wage index and limit the application of wage indices to payment rates when they are below the rural index of the state. No such relief is afforded SNFs. This issue, when combined with the issue of acquired physician practices, seems like a double penalty because the provider that caused the wage index decline was able to escape its effect while leaving all the other providers to deal with the implications.

Given these inequities, AHCA urges CMS explore the development of an alternative SNF wage index. Specifically, AHCA suggests that CMS develop a SNF wage index based on the portion of the hospital staffing and labor data that are similar for both hospitals and nursing facilities, while removing labor data that is specific to hospitals, only. The resulting index could be further tailored to SNFs by weighting it by publicly available occupational mix data for SNFs published by the Bureau of Labor Statistics (BLS).

AHCA/NCAL under took the following steps to model this approach:

1. Using the latest available final wage index Public Use File (PUF) posted on the CMS website which contains wage data from more than 3,400 acute care hospitals, AHCA removed the dollars and hours related to positions that are mostly applicable to hospitals. These include physicians, CRNAs, interns & residents and other teaching physician costs, and excluded or non-reimbursable cost centers not normally present in skilled nursing facilities. The related portion of fringe benefits and overhead was also removed.

2. Using the formula and processes established by CMS and delineated in the Federal Register, AHCA calculated the SNF-specific wage index for each CBSA based on the above modified data. These indices were compared to the current computation using all hospital data.

3. AHCA then "weighted" each CBSA's SNF specific wage index by BLS occupational mix data for nursing facilities. The resulting wage indices were again compared to the methodology currently used for computing SNF wage indices.

Two Possible Options. CMS should modify use of hospital wage index data to better align with SNF labor costs. We offer two approaches, one with occupational mix and one without. The Association requests CMS' reaction to both possible approaches.

<u>Option 1</u> – **Alternative Method for Computing the Unadjusted Acute Care Hospital (IPPS hospitals) Wage Index to be Applied to Skilled Nursing Facility (SNF) Without an Occupational Mix Adjustment Factor.** The alternative method used to compute the unadjusted IPPS hospitals' wage index, without an occupational mix adjustment factor, to be applied to the labor portion of the SNF RUGs' published rates follows:

- *Step 1* – **Use the audited IPPS hospital wage and hour data from Worksheet S-3, Parts II and III of the Medicare cost report (contained in the CMS Public Use file) to arrive at an alternative method in applying the wage index to SNF RUG rates.** Using the audited IPPS hospital data from Worksheet S-3, Parts II and III of the Medicare cost report, an alternative method will be used to calculate the unadjusted wage index to be applied to the labor portion of the SNF RUGs' published rates beginning October 1 of each federal fiscal year.

- *Step 2* – **Exclude cost centers more prevalent in IPPS hospitals versus SNFs from the**

wage index calculation. The method of calculating the unadjusted wage index excludes non-reimbursable cost centers (freestanding clinics and physician private practices), Part A and Part B physicians, Interns & Residents, and the overhead cost centers Cafeteria, Central Services & Supply and Pharmacy. Additional exclusions comprise of core benefits as outlined at Step 3 and home office which differs between IPPS hospitals and SNFs and whose wages and benefits are allocated between direct reimbursable, non-reimbursable and overhead cost centers in arriving at the IPPS hospital wage index.

- *Step 3* – **Using hospital data from the PU File, calculate an overhead factor, excluding Cafeteria, Central Services & Supply and Pharmacy to be applied to direct reimbursable salaries.** Calculate overhead salaries excluding Cafeteria, Central Services & Supply and Pharmacy (Step 2) by first subtracting Worksheet S-3, Pt II Salaries on Lines 36, 39 and 40 from Worksheet S-3, Pt III Total Overhead Cost Salaries on Line 7. Next, arrive at adjusted total salaries less Cafeteria, Central Services & Supply and Pharmacy by subtracting aforementioned excluded overhead salaries from S-3, Pt II Line 1 Total Salaries. Adjusted overhead salaries (adjusted Worksheet S-3, Pt III Total Overhead Cost Salaries on Line 7) divided by adjusted total salaries (adjusted Worksheet S-3, Pt I Total Salaries on Line 1) equals the overhead factor to be applied to direct reimbursable salaries at the following steps.

- *Step 4* – **Using hospital data from the PU File, calculate direct reimbursable salaries, excluding overhead and Physician Part A, for which the overhead factor (Step 3) will be applied.** Calculate direct reimbursable salaries excluding overhead (factor to be applied per Step 3) and Physician Part A Salaries. Using Worksheet S-3, Pt III, Line 3 Subtotal Salaries, subtract S-3, Pt II Lines 36, 39 & 40 (excluded overhead per Step 3). This results in reimbursable salaries per the unadjusted hospital wage index and includes applicable overhead and Physician Part A salaries. Next, subtract adjusted overhead calculated at Step 3 (Worksheet S-3, Pt III Total Overhead Cost Salaries on Line 7 less Worksheet S-3, Pt II Lines 36, 39 and 40 Cafeteria, Central Services & Supply and Pharmacy Salaries) and Worksheet S-3, Pt II, Line 4 Physician Part A salaries. This results in direct reimbursable salaries less overhead and Physician Part A salaries.

- *Step 5* – **Apply the calculated overhead factor to direct reimbursable salaries to arrive at adjusted reimbursable salaries including overhead.** Using the overhead factor calculated at Step 3, multiply this factor + 1.0 to calculated direct reimbursable salaries at salaries for each IPPS hospital in the CMS PU File.

- *Step 6* – **Using hospital data from the PU File, calculate a benefit factor to be applied to calculated direct reimbursable salaries and applicable overhead at Step 5.** Calculate a benefit factor by summing core-related benefits from Worksheet S-3, Pt II Lines 17 - 25 and dividing this amount by Total Salaries (adjusted) at Worksheet S-3, Pt II Line 1.

- *Step 7* – **Multiply the benefit factor at Step 6 (plus 1.0) times the direct reimbursable salaries and calculated overhead at Step 5 to arrive at adjusted salaries plus benefits by hospital.**

- *Step 8* – **Arrive at the contracted patient care wages using Worksheet S-3, Pt II, Line 11.**

- *Step 9* – **As a result of Steps 7 and 8, arrive at calculated reimbursable wages, prior to adjustments for the midpoint and partial year hospitals included in the PU File.** Calculated reimbursable salaries and wages, adjusted for benefits as described at Step 6, are the result of adding direct reimbursable salaries from Step 7 and contracted patient care wages from Step 9. These wage amounts are subsequently adjusted for the midpoint and for partial year cost reporting periods contained in the CMS PU File.

- *Step 10* – **Compute direct reimbursable, overhead (factor) and contracted patient care hours following Steps 4 through 8.**

- *Step 11* – **The result of Step 9 divided by Step 10 is the unadjusted salary and wage rate by IPPS hospital provider.**

- *Step 12* – **Using Step 5 through Step 9 as outlined in the August 18, 2011 Federal Register (final IPPS rule), calculate the midpoint and alternative wage index, by CBSA, as the result of preceding Steps 3 through 10.**

<u>Option 2</u> – **Alternative Wage Index Application Steps for SNFs – Occupational Mix Adjusted.** Alternative Method for Computing the Unadjusted Acute Care Hospital (IPPS hospitals) Wage Index to be Applied to Skilled Nursing Facility (SNF) Resource Utilization Group (RUGs) published rates which includes regional CBSA occupational wage mix (OWM) factors. Occupational wage mix factors are applied only to the wage portion of the wage index.

- *Step 1* – **Using Bureau of Labor and Statistics (BLS) data, arrive at the national SNF Hourly Mean Wage rates and Employment Statistics to be applied to the regional Core-Based Statistical Area (CBSA) occupational wage mix.** Using selected periodical BLS data, arrive at listed nursing and therapist employment statistics and hourly mean wage rates by category. Next, list total occupational SNF employment statistical data which encompasses nursing, therapists and all other SNF category employment statistics. Finally, compute the national SNF occupational wage mix ratios by category using employment statistics by category as the numerator.

Example:
National Bureau of Labor Statistics data obtained (from AHCA) for SNF occupations (May 2015)

Occupation	Employment Stat	Hourly Mean Wage	SNF OWM
Occupational Therapists (291122)	11,420	$42.63	0.69%
Physical Therapists (291123)	13,220	$43.98	0.80%
Respiratory Therapists (291126)	5,010	$28.94	0.30%
Speech Language Pathologists (291127)	5,770	$44.02	0.35%
Registered Nurses (291141)	154,060	$30.53	9.32%
Licensed Practical and Licensed Vocational Nurses (292061)	212,980	$21.66	12.88%
Nursing Assistants (311014)	612,120	$12.36	37.02%
			61.37%
All Occupations	**1,653,320**		

- *Step 2* – **Using BLS published data, obtain health care CBSA wage rates for nursing and therapists by category and CBSA.** Using the same SNF assigned occupational wage codes, regional (CBSA) "mean" wage rates were retrieved from published BLS data under categories 29-0000 Healthcare Practitioners and Technical Occupations and 31-0000 Healthcare Support Occupations. These wage rates were posted for each nursing and therapists' category by CBSA.

- *Step 3* – **Using the results of Steps 1 and 2, calculate the occupational mix adjustment factors for nursing and therapists' categories and by CBSA.** Using the

Example:

	CBSA	SNF Nat'l Rate (May 2015)	Healthcare Regional Rate (May 2015)	Category Mix Adjustment Factor
Registered Nurses (291141)	12580	$30.53	$35.45	86.12%

BLS data obtained at Steps 1 and 2, calculate the occupational mix adjustment factors for the nursing and therapists' categories by dividing the national SNF mean rates (numerator) by regional CBSA health care mean rates (denominator) by category.

- *Step 4* – **Obtain the unadjusted wage index by CBSA for which the occupational mix adjustment factors will be applied.** The unadjusted wage index amounts by CBSA are dependent on the methods used to calculate the wage index (CMS or alternative methods). This wage index has been adjusted for the midpoint and any partial reporting periods included in the CMS PU File.

- *Step 5* – **Calculate the occupational wage mix salaries by nursing and therapist's categories and CBSA.** Calculate the occupational wage mix salaries by nursing and

Example:

	CBSA	Sample Unadjusted Wage Index	Category Mix Adjustment Factor	SNF Nat'l Occupational Mix	CBSA 12580 RN OWM
Registered Nurses (291141)	12580	$3,172,832,259	86.12%	9.32%	$254,663,701

therapists' categories by multiplying the unadjusted wage index in Step 4 by the category mix adjustment factor in Step 3 and then by the BLS SNF national percentage of occupation category to total SNF in Step 1. This calculation is to be completed for each nursing and therapists' category and summed to arrive at the aggregate nursing and therapists' occupational wage mix adjusted wages by CBSA.

- *Step 6* – **Calculate all other occupational mix categories (non-nursing and non-therapists) to be added to the nursing and therapists' occupational wage mix amounts calculated at Step 5.** Using the BLS SNF national labor statistic data, arrive at a percentage of all other categories employment statistics by subtracting the sum of the nursing and therapists' category employment statistic ratios from 100 percent. This will result in an all other occupational category employment statistical ratio to be multiplied times the unadjusted wage index amounts at Step 4 to arrive at the all other occupational wage mix adjusted wages.

- *Step 7* – **Arrive at calculated occupational wage mix adjusted wages by CBSA as a result of the nursing and therapists' wage mix adjusted wages (Step 5) and the all other category occupational wage mix adjusted wages (Step 6).**

- *Step 8* – **Obtain the unadjusted wage index hours from the unadjusted wage index amounts by CBSA referred to at Step 4.**

- *Step 9* – **The occupational wage mix adjusted rates by CBSA divided by the aggregate occupational wage mix rates resulted in OWM adjusted wage indices.**