U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

**Secretary Kathleen Sebelius**

## Executive Summary

Section 3137(b) of the Affordable Care Act requires the Secretary of Health and Human Services to submit to Congress a report that includes a comprehensive plan to reform the Medicare wage index applied under section 1886(d) of the Social Security Act (the Act), commonly known as the Medicare hospital inpatient prospective payment system (IPPS). In developing the plan, the Secretary was directed to take into consideration the goals for reforming the wage index that were set forth by the Medicare Payment Advisory Commission (MedPAC) in its June 2007 report entitled, "Report to Congress: Promoting Greater Efficiency in Medicare." As delegated by the Secretary, the Centers for Medicare & Medicaid Services (CMS) contracted with Acumen LLC (Acumen) to review the June 2007 MedPAC report and develop the methodology for an improved Medicare wage index system. To address the directive that the Secretary "consult with relevant affected parties," a special Medicare wage index Open Door Forum was held. Hospital and hospital association representatives presented several concerns, including: issues with commuting data availability, potential distortions in hospital employment patterns, the continuation of certain exceptions and adjustment policies, and the impacts of the commuting-based wage index (CBWI) - which uses commuting data to define hospital labor market areas - on other non-hospital payment systems.

This report outlines the recent history of analysis and proposed reforms to the Medicare wage index system. The current wage index methodology relies upon metropolitan statistical area (MSA) labor market definitions established by the Office of Management and Budget (OMB). The current system establishes wage indices for hospital labor market areas, not for individual hospitals. Many parties have argued that these definitions often do not reflect the true cost of

labor for any given hospital, particularly for hospitals located on the periphery of labor markets or at labor market boundaries. Multiple exceptions and adjustments (described in this report) have been implemented in an attempt to correct perceived inequities. However, many of these exceptions and adjustments may have created or further exacerbated distortions in labor market values. The issue of "cliffs", or significant differences in wage index values between proximate hospitals, can often be attributed to one hospital benefitting from such an exception and adjustment when another cannot.

This report also describes the concept of a Commuting Based Wage Index (CBWI), which takes into account hospital hiring patterns in calculating the wage index by using commuting data to establish a labor market area and wage index value for each hospital (as opposed to labor market areas). The CBWI would use smaller, more discrete labor market areas and only incorporates wage data from hospitals that actually employ workers in that area. The result would be a wage index specific to an individual hospital based upon the labor markets from which that hospital hires its workers. Thus, the CBWI could accomplish the major goals of moving towards a wage index system that yields greater accuracy and less distortion - in particular, one that is focused on eliminating large differences, or "cliffs." The report describes implementation challenges and issues raised during consultations with relevant affected parties. Specifically, the report discusses five issues to consider in moving forward with implementation of a CBWI system for IPPS: (1) the availability of accurate and up-to-date commuting data, (2) the potential for labor market distortions (endogeneity) due to hospitals altering hiring patterns in direct response to changes in wage index methodology, (3) its portability to other Medicare payment systems, (4) the need for exceptions, and (5) a transition to the new wage index system.

We include the following findings, including advantages and disadvantages, relevant to implementation of a CBWI:

1. Since the CBWI accounts for specific differences in hospitals' geographic hiring patterns, it would yield wage index values that more closely correlate to actual labor costs than either the current wage index system (with or without geographic reclassification) or a system that attempts to reduce wage index differences across geographic boundaries based on Bureau of Labor Statistics (BLS) data for healthcare industry workers.
2. While a CBWI can be constructed with the most recent Census commuting data, were CBWI to be adopted, a more up-to-date reporting system for collecting commuting data from hospitals would have to be established so that the wage index calculations would accurately reflect the commuting patterns of hospital employees. Specific commuting data was not updated during the last decennial census, and it is unclear whether any current or future survey by the Census Bureau would provide enough specificity to successfully implement a CBWI. We believe that creating a system of more up-to-date commuting data could be achieved with a modest addition to the current wage index reporting requirements.
3. Concerns about a CBWI leading to hospitals altering hiring patterns and distorting labor markets do not appear to be worse than those under the current system and could be managed with minimal policy adjustments.
4. Because current statutory provisions governing the Medicare wage index and exceptions to that wage index were designed for the current MSA-based wage index system, their applicability would need to be reviewed if a CBWI were to be adopted. In particular, there are several statutory provisions that enable a hospital to receive a wage index other

than that which is computed for its geographic area. These existing statutory exceptions to the wage index may likely no longer be applicable and should therefore be reviewed for their continued relevance.

5. Barring any special considerations, the Medicare statute has traditionally applied payment changes in a budget neutral manner. If a CBWI were to be adopted in a budget neutral manner, payments for some providers would increase and payments for others would decrease.

Implementation of a CBWI may require both statutory and regulatory changes. In addition, we believe other intermediate steps for implementation, including the collection of commuting data, may be necessary.

**Report to Congress: Plan to Reform the Medicare Wage Index**

## Contents

# Chapter I: Introduction.

*The Current Medicare Hospital Wage Index System*

On March 23, 2010, the Patient Protection and Affordable Care Act (Pub. L.111-148), commonly referred to as the Affordable Care Act, was enacted. Section 3137(b) required the Secretary of Health and Human Services to submit to Congress a report that includes a plan to reform the Medicare wage index applied under the Medicare hospital inpatient prospective payment system (IPPS). In developing the plan, the Secretary was directed to take into consideration the goals for reforming the wage index that were set forth by the Medicare Payment Advisory Commission (MedPAC) in its June 2007 report entitled, "Report to Congress: Promoting Greater Efficiency in Medicare," including establishing a new system that:

- Uses Bureau of Labor of Statistics (BLS) data, or other data or methodologies, to calculate relative wages for each geographic area;
- Minimizes wage index adjustments between and within MSAs and statewide rural areas;
- Includes methods to minimize the volatility of wage index adjustments, while maintaining budget neutrality in applying such adjustments;
- Takes into account the effect that implementation of the system would have on health care providers and on each region of the country;
- Addresses issues related to occupational mix, such as staffing practices and ratios, and any evidence on the effect on quality of care or patient safety as a result of the implementation of the system; and
- Provides for a transition.

Furthermore, the Secretary was directed to "consult with relevant affected parties."

Section 1886(d)(3)(E) of the Act requires that Medicare's per-discharge payments to IPPS hospitals reflect geographic differences in the costs of labor. The Medicare wage index, a measure that reflects "the relative hospital wage level in the geographic area of the hospital compared to the national average hospital wage level," is used to allocate Medicare payments consistent with the relative cost of labor among IPPS hospitals in different geographic areas. The statute also provides for budget neutrality, requiring that adjustments resulting from the wage index (beginning with fiscal year 1991) "shall be made in a manner that assures that the aggregate payments … in the fiscal year are not greater or less than those that would have been made in the year without such adjustment".

Under the current wage index system, Medicare uses geographic areas based on OMB's Core-Based Statistical Area delineations (see U.S. Census Bureau's website for current OMB delineations at: http://www.census.gov/population/metro). CMS calculates an average hourly wage for each MSA or metropolitan division and a single statewide rural wage index for each state containing rural counties and micropolitan areas. Average hourly wage (AHW) data from each hospital is used to develop the wage index and is collected from each hospital's Medicare cost report (Form CMS-2552).

Section 1886(d)(13) of the Act also requires an occupational mix adjustment to the wage index to normalize variations in skill mix and hiring ratios of hospital employees (such as the ratio of licensed practical nurses to registered nurses) across different types of hospitals. The data for this adjustment is collected separately on the Medicare Hospital Wage Index Occupational Mix Survey (Form CMS-10079), and a new collection of survey data must occur at least every three

years. The intent of the occupational mix adjustment is to limit the impact of an individual hospital's decision to employ differing ratios of higher-waged specialty to lower-wage general staff on the calculation of the wage index. Such employment decisions do not reflect the real costs of labor in a particular labor market and reflect hospital management decisions rather than geographic differences in the cost of labor costs. The occupational mix adjustment is only applied to the portion of a hospital's wages associated with *nursing* staff (i.e. registered nurses, licensed practical nurses, surgical technologists, nursing aides, orderlies, attendants, and medical assistants). CMS considered broadening its occupational mix adjustment to additional non-nursing specialties but found the effect on wage rates to be minimal; therefore, CMS did not expand the occupational mix adjustment to non-nursing specialties.

Hospitals' occupational mix adjusted AHW data are aggregated by labor market area, and the cumulative AHW is divided by the national AHW, resulting in a wage index specific to that labor market area. An area having a wage index of greater than 1.0 has an average wage level that exceeds the national average, while an area wage index of less than 1.0 reflects an average wage level that is lower than the national average.

The final wage index is ultimately applied to a provider's labor-related portion of operating IPPS payments. The statute lessens the impact of the wage adjustment for hospitals with lower than average wage indexes. Under section 403 of Public Law 108-173, which amended section 1886(d)(3)(E)(iii) of the Act, for hospitals with a wage index less than 1.00, the labor-related portion is capped at 62 percent, whereas for hospitals with a wage index equal to or greater than

1.00, the labor-related portion is set through rulemaking. In fiscal year (FY) 2012, it was set at 68.2 percent.

Applicable Medicare laws and regulations permit exceptions that allow hospitals to obtain a wage index value that is greater than that of its geographic labor market area in certain situations. The most common method, authorized under 1886(d)(10) of the Act, is through geographic reclassification granted by the Medicare Geographic Classification Review Board (MGCRB) in which a hospital applies to be assigned a wage index based on a nearby area with similar wage characteristics. MGCRB reclassifications are granted for three-year periods. In general, to receive an MGCRB reclassification, a hospital must demonstrate that it is within a certain physical proximity to the desired area, pays significantly higher wages than other hospitals in its home area, and pays wages similar to hospitals in the desired area. Specially classified hospitals like Sole Community Hospitals or Rural Referral Centers are exempt from these requirements or receive special consideration regarding certain reclassification criteria. Hospitals may also apply as a county group to an adjacent labor market and waive certain AHW comparisons. Additionally, certain hospitals that do not meet regular geographic reclassification criteria may be assigned another area's wage index under additional exceptions, such as those authorized by section 508 of the Medicare Prescription Drug, Improvement, and Modernization Act and those authorized under 1886(d)(8)(B).

In addition to geographic reclassifications, hospitals can receive adjustments to their geographic area's wage index. Under section 1886(d)(13) of the Act, hospitals that are unable to achieve a reclassification may be eligible to receive an "outmigration adjustment" if commuting data show

that a significant number of workers in their county travel to other labor market areas for employment. Hospitals may also be eligible to receive an increased wage index value due to one of the three wage index floor provisions. The rural floor, established under section 4410 of Pub. L. 105-33, grants urban hospitals a wage index that is no less than that of the rural area in the same state. The imputed rural floor was implemented through regulation at 42 CFR 412.64(h) and established a wage-index floor for all-urban states. Finally, hospitals located in states that qualify as "Frontier States" under section 1886(d)(3)(E)(iii) of the Act may not receive a wage index of less than 1.00.

### *Concerns Regarding the Current System*

Since the national health care labor force is by no means restricted within a single labor market area, the fixed MSA boundary system might not in itself accurately define any particular hospital's available labor pool. MSA-based labor markets can define hospital labor markets either too broadly or too narrowly. If a hospital's labor market is defined too broadly, hospitals facing different prices for labor within the same geographic area would receive the same index value. MSAs also may define labor markets too narrowly, and hospitals facing similar prices of labor may receive very different index values if located across geographic boundaries. As IPPS has evolved, the various forms of reclassification and wage index adjustments (discussed above) have been implemented to assist in addressing these discrepancies.

In its 2007 Report to Congress, MedPAC determined that over one-third of IPPS hospitals receive a wage index based not upon their geographic location, but upon one of the many

exceptions and adjustment provisions permitted by existing statute and/or regulations. MedPAC found that these exceptions can overlap and lead to non-intuitive results. The provider community and other relevant parties have frequently expressed concern that the current wage index system does not effectively reflect the true variation of labor costs for a large cross-section of hospitals and requires substantial reform.

## Chapter II: Prior Medicare Wage Index Reform Actions

Congress initiated a review of the Medicare wage index system through Section 106(b)(1) of the Medicare Improvements and Extension Act, Division B of the Tax Relief and Health Care Act of 2006 (MIEA–TRHCA, Pub. L. 109–432), which required MedPAC to submit to Congress, not later than June 30, 2007, a report on the Medicare wage index classification system applied under the Medicare IPPS. Section 106(b) of MIEA–TRHCA required the report to include MedPAC's recommendations for any alternatives to the method for computing the wage index under section 1886(d)(3)(E) of the Act. In addition, section 106(b)(2) of MIEA–TRHCA instructed the Secretary of Health and Human Services, taking into account MedPAC's recommendations on the Medicare wage index classification system, to include in the FY 2009 IPPS proposed rule one or more proposals to revise the wage index adjustment applied under section 1886(d)(3)(E) of the Act for purposes of IPPS.

To implement the requirements of section 106(b) of the MIEA–TRHCA and respond to MedPAC's recommendations in its June 2007 report to Congress, CMS modified the following two policies relating to the hospital wage index in the FY 2009 IPPS final rule: (1) the reclassification AHW comparison criteria; and (2) the method for calculating budget neutrality for the rural and imputed floors.

In the FY 2009 IPPS final rule, CMS adopted a policy to adjust the standards comparing a reclassifying hospital's (or county hospital group) AHW relative to the AHW of the area to which it is seeking reclassification. A hospital seeking a standard wage index reclassification is

required to have a wage index value that is at least a certain percentage (e.g. 84 percent for urban hospitals) of the wage index of the desired labor market area. CMS created a three-year transition beginning in FY 2009, ultimately raising the standards from 82 percent to 86 percent for rural hospitals, from 84 percent to 88 percent for urban hospitals, and from 85 percent to 88 percent for county groups.

Additionally, in the FY 2009 IPPS final rule, CMS adopted state level budget neutrality (rather than a national budget neutrality adjustment) for the rural and imputed floors. A transition from the national budget neutrality adjustment to the state level budget neutrality adjustment was phased in over a three-year period, with a statewide adjustment to be fully in place by October 1, 2010.

While CMS acknowledged that further study and reform proposals were forthcoming, it implemented the preceding wage index reforms consistent with the requirements of section 106(b)(1) of the MIEA–TRHCA (Pub. L. 109–432). Consistent with MedPAC's overall conclusions, the basis and rationale for these revisions was explained in the FY 2009 IPPS rule. However, both the reclassification AHW comparison criteria modification and the application of within-state budget neutrality for the rural and imputed floor adjustments were subsequently reversed by the Affordable Care Act. Section 3137(c) of the Affordable Care Act restored the average hourly wage comparison standards that were in place for FY 2008 for reclassification decisions effective beginning in FY 2011. This provision will remain in effect for each subsequent fiscal year until the first fiscal year beginning on or after the date that is one year after the Secretary of Health and Human Services submits this report to Congress. Also, section

3141 of the Affordable Care Act restored the budget neutrality adjustment for the rural and imputed floors to a uniform, national adjustment, beginning with the FY 2011 wage index.

In addition to these policy changes, CMS initially contracted with Acumen LLC (Acumen) to further assist in reviewing the findings presented in MedPAC's June 2007 report. Acumen's final report addressing the issues in section 106(b)(2) of the MIEA–TRHCA is divided into two parts. The first part of Acumen's final report analyzed the strengths and weaknesses of the data sources used to construct the MedPAC and CMS wage indexes. Acumen also evaluated BLS data, including its use in developing the occupational mix adjustment. The first part of the report was published in April 2009 on Acumen's website after the publication of the FY 2010 IPPS proposed rule.[1] Acumen concluded that MedPAC's recommended methods for revising the wage index represented an improvement over the existing methods, and that the BLS data should be used so that the MedPAC approach can be implemented.[2]

The second part of Acumen's final report focused on the methodology of wage index construction and covered issues related to the definition of wage areas, methods of adjusting for differences among neighboring wage areas, and reasons for differential impacts of shifting to a new index. It was published on Acumen's website in March 2010.[3] In particular, the report analyzed MedPAC's recommended method of improving upon the definition of the wage areas used in the current wage index. MedPAC's method first blends MSA and county-level wages

[1] http://www.acumenllc.com/reports/cms/MWI_Report_5_1_09.pdf
[2] The Institute of Medicine (IOM) Committee on Geographic Adjustment Factors in Medicare Payment also examined the applicability of BLS OES data in its "Geographic Adjustment in Medicare: Phase I" (http://iom.edu/Reports/2011/Geographic-Adjustment-in-Medicare-Payment-Phase-I-Improving-Accuracy.aspx).
[3] http://www.acumenllc.com/reports/cms/Medicare_Wage_Index_Part_2.pdf

and then implements a ‘‘smoothing’’ step that limits differences in wage index values between adjacent counties to no more than 10 percent. Acumen found MedPAC’s method to be an improvement over the current wage index, but suggested that it does not guarantee an accurate representation of a hospital labor market and would not necessarily eliminate or reduce hospitals’ desire to reclassify to obtain a higher wage index. Acumen recommended further exploration of labor market area definitions using a wage area framework based on hospital-specific characteristics, such as commuting times from hospitals to population centers, to construct a more accurate hospital wage index. Acumen suggested that such an approach offers the greatest potential for replacing or greatly reducing the need for hospital reclassifications and exceptions.

For purposes of this report to Congress, CMS also contracted with Acumen. Acumen was charged with reviewing the June 2007 MedPAC report and developing a methodology for an improved Medicare wage index system. Acumen’s report is enclosed as Technical Appendix A.

## Chapter III: The Commuting-Based Wage Index (CBWI)

The commuting-based wage index (CBWI) attempts to improve upon Medicare's existing wage index method by using commuting data to define hospital labor market areas. In other words, the CBWI uses data on the number of hospital workers commuting from home to work to define a hospital's labor market. Further, to define benchmark area wages, the CBWI uses geographic units (such as ZIP codes or Census Tracts) that are smaller than the MSAs used in the current wage index system. In doing so, the CBWI can more precisely reflect wage differences within and across MSA boundaries. (See Technical Appendix A for more information about the methodology used to calculate the CBWI.)

To derive the CBWI, commuting flows are used to identify the areas from which a hospital hires its workers and to determine the proportion of its workers hired from each area. Whereas the current wage index system aggregates wage data within geographic locations where hospitals are located, the CBWI aggregates wage data based upon where the hospital workers reside. Wage levels for these areas can be calculated using the commuting information and existing wage data, such as that included in the Medicare cost report, as long as the Census Tract or ZIP Code location of each hospital worker is known.

Once the hiring proportions by area and area wage levels are determined, the numerator of the CBWI, which is the hospital's benchmark wage level, is calculated as the weighted average of these two elements. The denominator is the national average wage level. This calculation results in a hospital-specific value, which reflects wage levels in the areas from which a hospital hires,

accounting for variation in the proportion of workers hired from each area. A sample calculation scenario is described on pages 2-4 of Technical Appendix A.

Although the CBWI allows wage index values to vary *within* an MSA, the CBWI is less likely to produce large differences—or "cliffs"—between wage index values for nearby hospitals in adjacent MSAs. As nearby hospitals likely hire workers from areas in similar proportions, the wage index values of these nearby hospitals will be similar. The largest potential improvement in defining labor market areas would occur when multiple hospitals compete for the same employees, but happen to be located in different MSA-based labor market areas, and therefore may receive significantly different wage index values. Under the CBWI approach, in such situations, there would be little justification to reclassify hospitals to other wage areas since each hospital's wage area comprises the geographic areas from which it hires its workers.

Using these more precisely-defined labor markets, the CBWI system offers two key advantages compared to an MSA or county-based approach. First, since the CBWI uses smaller areas than the current MSAs (e.g., ZIP Codes or Census Tracts) to define benchmark wages, CBWI values can vary for hospitals within the same MSA or county and, thus, more precisely reflect wage differences within and across MSA boundaries and address intra-area variation. When compared to wage indexes based on MSAs and counties, CBWI values are not subject to sharp differences solely because nearby hospitals are located in different adjacent MSAs or counties. Second, the CBWI accounts for differences in the degree to which workers commute into and out of the hospital's area. In contrast, except for the outmigration adjustment, the current Medicare wage

index implicitly assumes that all hospitals in the MSA hire their workers from the same areas and in identical proportions.

The CBWI system, by defining labor markets to more accurately reflect commuting patterns of hospital employees, reduces the magnitude of "cliffs" between nearby hospitals in different MSAs to a greater degree than the current Medicare wage index system. These differences between nearby providers' wage indexes are often large and are frequently cited by hospital advocates as requiring additional forms of wage index reclassification exceptions. Acumen found in its analysis that the CBWI system would more closely reflect hospitals' actual wages than the current MSA system and the MedPAC proposal. A more detailed review of potential effects for various types of hospitals is included in Technical Appendix A. As MedPAC suggested in its proposal, the exceptions and adjustments to the wage index system are the primary cause of the often significant "cliffs" between wage indexes of nearby hospitals. The CBWI should reduce the need for exceptions, adjustments and further manipulation of wage index values to prevent these cliffs between labor market areas.

## Chapter IV: Medicare Implementation Challenges and Consultation with Affected Parties

In an April 2011 special wage index reform Open Door Forum, CMS solicited comments from hospitals, hospital associations, and other affected parties regarding the feasibility and effectiveness of implementing a CBWI system. A detailed summary of the input received as well as responses is included in Technical Appendix A. Implementation of the CBWI poses several challenges for Medicare.

First, a key requirement for implementation of the CBWI is the availability of detailed commuting and wage data. As described in Technical Appendix A, the CBWI methodology relies on predicted worker commuting patterns rather than fixed geographically-defined regions to approximate each hospital's relevant labor market. The hospital's wage index is based on the residential areas from which hospitals draw their workers.

We reviewed three options for data sources for commuting data: (1) Census Bureau data, (2) BLS data, and (3) hospital-reported data. Census Bureau commuting data could serve as a temporary proxy to predict expected labor market averages. This data is collected nationally and through a standard and validated process. However, the only Census data currently available at sufficient level of detail to support the CBWI is based on the 2000 Census. The annual American Communities Survey, which has replaced the long form of the decennial Census, is not sufficient to support commuting data at the ZIP Code or census tract level. Acumen also examined the feasibility of obtaining commuting data from the BLS Occupation Employment Survey (OES). However, stakeholders have expressed concern regarding the limited availability of individual

hospital data. Additional authority could be granted to establish a data reporting system to collect commuting data from hospitals. The system could require hospitals to report the numbers of employees by geographic area of residence (e.g., ZIP Code or Census Tract) and include policy safeguards to protect confidentiality as needed. While the reporting and auditing of this hospital data represents additional new burdens for hospitals and CMS relative to publicly-available data, it could be derived from employee payroll records, similar to current data collection processes for the Medicare wage index and occupational mix survey, and would not necessarily need to be collected annually.

Affected parties commented and expressed a general preference for having CMS derive commuting data from recent hospital-specific data. Many commenters were concerned with data collection requirements and the privacy concerns of collecting ZIP Code-specific data. However, we believe that since the CBWI system would only require the collection of anonymous employee counts by labor market area, the administrative burden would not be inordinate. Additional commuting pattern specificity could be gained by expanding data collection to include total hours worked by the labor market, but it is unclear whether the tradeoff of additional reporting requirements would result in significantly more accurate labor market definitions.

Second, affected parties expressed concern that the CBWI calculation system could lead to market distortions if hospitals altered hiring patterns in reaction to the CBWI. As hospital data is proportioned to labor market areas and then allocated back to the hospital to develop a wage index, commenters expressed confusion as to whether such a system could encourage hospitals

to selectively hire employees in a manner which exerts undue influence on an area AHW. Hospitals hiring a larger percentage of workers in relatively high wage labor market areas during their cost reporting period would receive higher values than hospitals hiring workers from lower wage areas. While the wages hospitals pay employees would factor into the labor market area wage index, the hospital's ability to influence the value of that area wage index would be inversely proportional to the amount of employees other hospitals employ in that same area. In other words, any individual hospital's ability to influence the value of the area wage index would be decreased if other hospitals also employed residents of that area. This methodology would appear to achieve a truer assessment of how competition between hospitals may result in an increase in AHW values in specific geographic areas, such as instances where healthcare employees are in short supply. We acknowledge that some considerations may need to be applied to certain labor market areas where a single hospital is the dominant employer of workers. This could be addressed by expanding or combining labor market areas (e.g. ZIP Code regions, Census Tracts) into larger areas to ensure that the area AHW includes data from more than one provider. However, we believe that any benefit that a hospital could potentially receive by attempting to inflate a given labor market area would be mitigated by the fact that such action would create a greater benefit (and competitive advantage) for any other provider that hires workers from that same area at a non-inflated rate. Likewise, any perceived advantage indicated by a hospital selectively hiring employees from comparatively high wage index areas would either be negated by the hospital paying inherently higher labor costs, or would result in a proportionate reduction of the original labor market rate. Therefore, the primary incentive under a CBWI would be to attempt to obtain labor at below-market rates, not to intentionally inflate any given labor market wage index or selectively hire employees based upon prior year labor

market wage index values. With this basic premise, we would expect that over time area wages would more realistically reflect the actual current costs a hospital incurs in hiring and retaining employees. Further discussion of this issue is addressed on page 9 of Technical Appendix A.

Third, many commenters requested that any CBWI system continue to include an exceptions process similar to the current MSA system. Geographic reclassification, Section 508 reclassification, and rural and frontier state floor provisions were specifically mentioned as examples. We disagree that such exceptions would continue to be necessary under the CBWI. Rather, since the current statutory provisions governing the Medicare wage index and exceptions to that wage index were designed for the current MSA-based wage index system, we believe that their applicability would need to be reviewed if the CBWI were to be adopted. This issue is discussed further in the next chapter.

Fourth, use of the CBWI for IPPS hospitals has implications for other Medicare payment systems, and the need for reform or changes in the wage index used by these other systems would need to be assessed and addressed separately. CMS did not evaluate the impact of the CBWI on other Medicare provider payment systems. Currently, with the exception of IPPS and OPPS, other Medicare fee-for-service payment systems use the "pre-reclassified" wage index (that is, the wage index that reflects the actual geographic location of each hospital before any reclassification adjustments are made). A CBWI-type approach may or may not be portable to the other payment systems. Since commuting patterns of hospital employees may be different from those of other health care providers, overlaying a CBWI value may not accurately or appropriately reflect the labor costs for another Medicare payment system. For instance, home

health employees travel to patients' homes, which may be spread across an area, rather than to their place of employment. While it would be possible to continue to calculate a pre-reclassified wage index for those payment systems on a temporary or permanent basis using hospital-reported data under the current MSA-based wage index system, it may be counter-intuitive to continue computing values from a wage-index system that is no longer in use for its intended purposes. Additional research and policymaking would be required to determine the need for reform in these systems and appropriate approaches to that reform.

Finally, CMS would also have to consider how to make the transition to a fully implemented CBWI system. It is a long standing CMS policy to phase in adjustments that may have significant fiscal impacts on hospitals. Since wage data are derived from past cost reports and many reclassification exceptions are granted for three-year periods, policies would need to be developed to ensure that hospitals have an adequate amount of time to adjust and adapt to a new wage index system. We note that any transition would be required to be implemented in a budget neutral manner, unless otherwise specified in statute. Stakeholders also supported an adequate transition period to allow hospitals to adjust to new wage index policies.

## Chapter V: Summary and Findings

The CBWI would improve upon Medicare's existing wage index method by using information on commuting flows between geographic units that are smaller than MSAs, such as Census Tracts or ZIP Codes. The current wage index system aggregates wage data within geographic locations where hospitals are located, whereas the CBWI aggregates wage data based upon where the hospital workers reside. Under the CBWI, commuting data would be used to identify areas from which a hospital hires its workers and to determine the proportion of its workers hired from each area. Wage levels for these areas can be calculated using the commuting information and existing wage data, such as that included in the Medicare cost report, as long as the Census Tract or ZIP Code location of each hospital is known. This CBWI calculation results in a hospital-specific value, which reflects wage levels in the areas from which a hospital hires, accounting for variation in the proportion of workers hired from each area. (See Chapter 3 and Technical Appendix A for more information.)

The following is a summary of key findings and necessary considerations required for a successful transition to a CBWI:

1. Since the CBWI uses smaller areas than the current MSAs (e.g., ZIP Codes or Census Tracts) to define benchmark wages, it can better define labor market areas than the current MSA-based system. CBWI values can vary for hospitals within the same MSA or county. Acumen stated that when compared to wage indexes based on MSAs and counties, CBWI

values are not subject to sharp differences, or "cliffs," solely because nearby hospitals are located in different adjacent MSAs or counties. The CBWI system, by defining labor markets more flexibly than the current Medicare wage index, reduces the magnitude of "cliffs" between nearby hospitals in different MSAs. Acumen found in its analysis that the CBWI system would more closely reflect hospitals' actual wages than the current MSA system or a system that uses BLS data. A more detailed review of potential effects by types of hospitals is included in Technical Appendix A. Also, the CBWI accounts for differences in the degree to which workers commute into and out of the hospital's labor market area. In contrast, with the exception of the outmigration adjustment, the current Medicare wage index implicitly assumes that all hospitals in the MSA hire their workers from the same areas and in identical proportions.

2. If a CBWI is adopted to calculate the wage index, a data reporting system for collecting commuting data would have to be established.

   While publicly available data sources exist for commuting data, we and relevant affected parties share concerns about the currency, accuracy, and availability of that data. Establishing a data reporting system, such as one similar to the system in place for hospital wage data, is a potential avenue for collecting commuting data to support the CBWI, as well as other adjustments and policies that rely on this data (e.g., outmigration adjustment in the current Medicare wage index). The lack of an up-to-date, accurate, and available data source for commuting data would delay any transition to a CBWI system.

If additional data requirements are included in any future proposal, CMS would need to reconsider whether alternative data sources would be a more feasible option.

3. As current statutory provisions governing the Medicare wage index and exceptions to that wage index were designed for the current MSA-based wage index system, their appropriateness and applicability to the CBWI would need to be reviewed if the CBWI were to be adopted. In particular, there are several statutory provisions that enable a hospital to receive a wage index other than that which is computed for its geographic area. These existing statutory exceptions to the wage index may likely no longer be applicable, and should therefore be reviewed for their continued relevance.

   The Secretary believes the CBWI methodology could be a viable alternative to the current Medicare wage index system. However, its adoption should be considered in conjunction with the statutorily required reclassifications and adjustments that are applicable to the current MSA-based wage index system. As discussed in Chapter 1 of this report, there are several statutory provisions that enable a hospital to receive a wage index other than that which is computed for its geographic area. We believe that these provisions, which were designed to ameliorate or correct perceived inequities in the current MSA-based wage index system, would counteract the purpose and intent of the CBWI, as well as complicate its implementation and lead to unintended consequences. For instance, it is unclear what "geographic reclassification" would mean in a system which has no geographically defined labor market areas but, instead, constructs a unique wage index for each hospital.

4. The Medicare statute has traditionally applied payment changes in a budget neutral manner. If a CBWI were to be adopted budget neutrally, it would increase payments for some providers and decrease payments for others. Barring any additional special considerations for certain hospitals, the analysis suggests that a CBWI will reduce payments to some providers, particularly those that currently benefit from some form of reclassification. We refer readers to Technical Appendix A for a more detailed estimate of CBWI impacts on different types of hospitals.

Implementation of a CBWI may require both statutory and regulatory changes. In addition, we believe that other intermediate steps to implementation, including the collection of commuting data, may be required.