Department of Health and Human Services
OFFICE OF
INSPECTOR GENERAL

SIGNIFICANT VULNERABILITIES EXIST IN THE HOSPITAL WAGE INDEX SYSTEM FOR MEDICARE PAYMENTS

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The designation of financial or management practices as questionable, a recommendation for the disallowance of costs incurred or claimed, and any other conclusions and recommendations in this report represent the findings and opinions of OAS. Authorized officials of the HHS operating divisions will make final determination on these matters.
Why OIG Did This Review
We observed significant vulnerabilities in the wage index system while conducting 41 reviews of hospitals’ wage data, with reports issued from 2004 through 2017.

The Centers for Medicare & Medicaid Services (CMS) uses area wage indexes to adjust hospital payments annually to reflect local labor prices. CMS calculates each area’s wage index based on wage data submitted by acute-care hospitals in their Medicare cost reports. Medicare administrative contractors (MACs) perform limited reviews of these data.

Federal law requires that the area wage indexes applied to urban hospitals in a State cannot be lower than the wage index for the rural hospitals in that State. This provision is called the “rural floor.”

Federal law allows some hospitals to reclassify to areas with higher wage indexes to receive higher payments. “Hold-harmless” provisions in Federal law and CMS policy protect hospitals from having their wage indexes lowered because of the geographic reclassification of other hospitals.

Our objective was to describe significant vulnerabilities we observed in the wage index system.

How OIG Did This Review
We reviewed and analyzed laws and policies relevant to the vulnerabilities in the wage index system that we observed during our previous reviews of individual hospitals’ wage data.

Significant Vulnerabilities Exist in the Hospital Wage Index System for Medicare Payments

What OIG Found
We identified these significant vulnerabilities in the wage index system: (1) absent misrepresentation or falsification, CMS lacks the authority to penalize hospitals that submit inaccurate or incomplete wage data; (2) MAC limited reviews do not always identify inaccurate wage data; (3) the rural floor decreases wage index accuracy; and (4) hold-harmless provisions in Federal law and CMS policy pertaining to geographically reclassified hospitals’ wage data decrease wage index accuracy. As a result of these vulnerabilities, wage indexes may not always accurately reflect local labor prices and, therefore, Medicare payments to hospitals and other providers may not be appropriately adjusted to reflect local labor prices.

What OIG Recommends and CMS’s Comments
We recommend that (1) CMS and the Secretary of Health and Human Services revisit the possibility of comprehensive reform, including the option of a commuting-based wage index. In the absence of movement toward comprehensive reform, we recommend that (2) CMS seek legislative authority to penalize hospitals that submit inaccurate or incomplete wage data in the absence of misrepresentation or falsification; (3) seek legislation to repeal the law creating the rural floor; and (4) seek legislation to repeal the hold-harmless provisions in Federal law, allowing CMS to calculate each area wage index based on the wage data of hospitals that reclassify into the area and hospitals geographically located in the area provided that they do not reclassify out. Additionally, we recommend that (5) CMS rescind its hold-harmless policy relating to geographically reclassified hospitals’ wage data and (6) work with the MACs to develop a program of in-depth wage data audits at a limited number of hospitals each year, focusing on hospitals whose wage data have high levels of influence on the wage index of their area.

In written comments on our draft report, CMS concurred with recommendation 6. CMS did not concur with recommendation 5, stating that its current hold-harmless policy promotes stability in wage indexes for hospitals in the reclassifying hospitals’ original geographic areas. We responded that promoting stability for those hospitals decreases wage index accuracy and suggested that if CMS will not rescind its policy, it should consider revising it to increase accuracy.

CMS also stated that it will consider whether to recommend for inclusion in the President’s next budget the statutory proposals mentioned in recommendations 1 through 4.

The full report can be found at https://oig.hhs.gov/oas/reports/region1/11700500.asp.
INTRODUCTION

WHY WE DID THIS REVIEW

The Centers for Medicare & Medicaid Services (CMS) uses wage indexes when it adjusts Medicare hospital payments annually to reflect labor prices in local labor markets. We conducted 41 reviews of the wage data of individual acute-care hospitals from 2004 to 2017 and observed certain vulnerabilities in the wage index system that are significant enough to warrant a separate report to CMS, especially considering that the Medicare Payment Advisory Commission (MedPAC) and the Institute of Medicine (IOM) have both recommended comprehensive reform of the wage index system.

OBJECTIVE

Our objective was to describe significant vulnerabilities we observed in the wage index system.

BACKGROUND

Medicare Payments in the Inpatient Prospective Payment System

Under the inpatient prospective payment system (IPPS), Medicare pays hospitals predetermined rates for patient discharges. The primary objective of the IPPS is to create incentives for hospitals to operate efficiently, while ensuring that payments are adequate to compensate hospitals for their reasonable costs in furnishing necessary high-quality care to Medicare beneficiaries.

Wage Data

In support of the IPPS, CMS collects wage data from hospitals annually through their Medicare cost reports. Wage data include wages, associated hours, and wage-related costs. In addition, CMS collects occupational mix survey data from hospitals every 3 years and uses it to adjust the annual wage data for management’s staffing decisions. CMS uses wage data in several ways to help determine IPPS payments.

1 We issued 36 reports on individual hospitals from 2004 through 2009 and 5 in 2016 and 2017. Appendix B contains a list of all the reports.

2 The occupational mix adjustment controls for the effect of hospitals’ employment choices on the wage index. For example, to provide nursing care, hospitals choose to employ different combinations of registered nurses, licensed practical nurses, nursing aides, and medical assistants. The varying labor costs associated with these choices reflect hospital management decisions rather than geographic differences in the price of labor.
Inpatient Prospective Payment System Base Payments and Wage Data

CMS sets two IPPS base payment rates annually, one for operating costs and one for capital costs. These two pieces make up the per-discharge payment made to an IPPS hospital. The operating base payment is meant to cover labor and supply costs, while the capital base payment is meant to cover depreciation, interest, rent, and property-related insurance and taxes. These base payments are multiplied by a diagnosis-related factor to adjust for costs that vary by the patient’s illness.

CMS uses wage data, among other data, to periodically recalculate the “market basket” index used to adjust Medicare base payments annually for price inflation. CMS also uses wage data to periodically determine what percentage of the operating payment relates to labor, as opposed to supply costs. This piece of the operating payment is known as the “labor-related share.”

Inpatient Prospective Payment System Base Payments and Wage Indexes

CMS must annually adjust Medicare hospital payments to reflect labor prices in local labor markets (the Act § 1886(d)(3)(E)). CMS uses area wage indexes derived from wage data to make these adjustments. The local wage index is applied to the labor-related share of the operating base payment. A wage index is determined by dividing the average hourly wage (AHW) for acute-care hospitals in a geographic area by the national AHW for acute-care hospitals. CMS adjusts IPPS payments upward for areas with wage indexes greater than 1 (local AHWs higher than the national AHW) and downward for areas with wage indexes lower than 1 (local AHWs lower than the national AHW). Variations of the hospital wage index also affect payments to other types of providers under other prospective payment systems.

Additionally, CMS uses the wage index to adjust each capital base payment. Specifically, the capital base payment is multiplied by a “geographic adjustment factor,” which is the local wage index raised to the power of 0.6848 (42 CFR § 412.316).

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3 The Social Security Act (the Act) § 1886(d)(3)(E) states that the labor related share is 62 percent for hospitals located in areas with a wage index of less than or equal to 1.0, so that hospitals receive payment based on a 62 percent labor share, or the labor share periodically estimated by CMS, whichever results in higher payments. See 69 Fed. Reg. 48915, 49069-49070 (Aug. 11, 2004).

4 The hospital wage index used on inpatient and outpatient hospital payments includes the occupational mix adjustment, plus two other adjustments we discuss later in the Background section: the rural floor and geographic reclassification. Other prospective payment systems use variations of the hospital wage index without one or more of those adjustments. These other systems include those for inpatient rehabilitation facilities, inpatient psychiatric facilities, long-term-care hospitals, home health agencies, hospices, end-stage renal disease dialysis facilities, ambulatory surgical centers, and skilled nursing facilities. As an example, the wage index for skilled nursing facilities uses a variation of the hospital wage index without any of the three aforementioned adjustments.
Accuracy in Wage Data

For IPPS base payments to be set and adjusted accurately, hospitals must submit accurate wage and occupational mix data. Inaccurate wage data could lead to an inaccurate market basket index or to an inaccurate labor-related share for operating payments. Inaccurate wage data could also lead to inaccurate wage indexes and geographic adjustment factors.

Hospitals are responsible for submitting accurate wage and occupational mix data. During wage index development, hospitals, Medicare administrative contractors (MACs), and CMS have the opportunity to identify and correct inaccurate wage data. CMS sets deadlines for correction requests. Typically, MACs have an 11-week timeframe (September 1 to November 15) to conduct “desk reviews” of the wage data of all hospitals assigned to them. Desk reviews are more limited in scope than audits, focusing on quickly detecting aberrant wage data for possible correction.

Except in certain very limited circumstances, if inaccurate wage data are not identified by the specified deadlines before the payment year starts, the original data are used by CMS to calculate wage indexes for the payment year. This decreases payment accuracy. Because of the prospective nature of current payment systems, CMS has no mechanism to retroactively adjust final wage indexes and recover overpayments or remedy underpayments resulting from inaccurate wage data. Additionally, in the absence of misrepresentation or falsification, CMS has no authority to penalize hospitals that submit inaccurate or incomplete wage or occupational mix data.

Budget Neutrality and Wage Indexes

CMS must update wage indexes annually in a manner that ensures that aggregate payments to hospitals are not affected by changes in the indexes (that is, wage index adjustments must be “budget neutral” on a nation-wide basis) (the Act §1886(d)(3)(E)).

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5 Federal regulations specify that CMS may make a prospective midyear correction to a hospital’s wage index only if the hospital shows that its MAC or CMS made an error in tabulating its data and that the hospital either could not have known about the error or did not have the opportunity to correct the error before the beginning of the Federal fiscal year (42 CFR § 412.64(k)).

6 In our reports, we referred to payments calculated on the basis of inaccurate wage data as “overpayments” or “underpayments,” even though we were referring to improper payments caused by incorrect rates rather than by questionable claims submission or claims processing (the more usual connotation of “overpayment” or “underpayment”).
Rural Floor Wage Index

In addition to calculating wage indexes for contiguous geographic areas, CMS generally calculates a “rural area” wage index for each State, based on the wage data of the State’s rural hospitals, regardless of their location with respect to each other (that is, the “rural area” of the rural area wage index is not necessarily one contiguous area).

The wage indexes applied to urban hospitals in a State cannot be lower than the rural area wage index for that State. This provision is called the rural floor. The stated legislative intent of the rural floor was to correct the “anomaly” of “some urban hospitals being paid less than the average rural hospital in their states.” However, MedPAC, an independent congressional advisory board, has since stated that it is “not aware of any empirical support for this policy” and that the policy is built on the false assumption that hospital wage rates in all urban labor markets in a State are always higher than the average hospital wage rate in rural areas of that State.

CMS must apply rural floor wage indexes in a manner that is budget neutral on a national level. Accordingly, to balance the increase in wage indexes for hospitals receiving the benefit of their States’ rural floors, CMS must lower wage indexes nationally by applying a rural floor budget neutrality factor. For example, in fiscal year 2018, hospitals (including those not benefiting from the rural floor) had their wage indexes lowered by approximately 0.67 percent to maintain national budget neutrality with respect to the rural floor. Inaccuracies in wage data reported by rural hospitals affect the computation of the rural floor budget neutrality factor.

Hospital Geographic Reclassification and Wage Indexes

In 1989, Congress created a geographic reclassification system wherein IPPS hospitals can be reclassified to a higher wage index area for the purpose of receiving a higher payment rate if

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7 CMS calculates wage indexes for the “core-based statistical areas” (CBSAs) designated by the Office of Management and Budget. In general, a CBSA consists of one or more counties (or equivalents) oriented around a population center of 10,000 people or more, together with adjacent communities having a high degree of economic and social integration with that core.


10 Medicare Payment Advisory Commission, Report to the Congress, Medicare Payment Policy, March 2012.


they meet certain criteria related to proximity and AHW. Hospital reclassification is effective for 3 years, unless the hospital elects to terminate the reclassification. In a 2012 report, IOM, a unit of the National Academy of Sciences that addresses health policy, found that almost 40 percent of eligible hospitals reclassified to receive a higher wage index.

The Act protects hospitals from having their wage indexes lowered because of the reclassification of other hospitals. Additionally, whenever it does not conflict with the specific requirements of the Act, CMS enforces its own protective policy of including the wage data of a reclassified urban hospital in the wage index calculations of both the urban area to which the hospital is reclassified and the urban area from which the hospital is reclassified.

These protective measures of both law and policy can result in a hospital’s wage data contributing to more than one wage index, being excluded from the wage index for the area into which the hospital is reclassifying, or being included in the wage index for the area from which the hospital is reclassifying.

Reforming the Current Wage Index System

In 2007, MedPAC recommended that Congress repeal the existing hospital wage index statute and give the Secretary of Health and Human Services (the Secretary) authority to establish a new wage index system that would increase payment accuracy. MedPAC said that policies added onto the wage index system over time, such as those that dealt with geographic reclassification and the rural floor wage index, resulted in distortion of area wage indexes. In a June 17, 2011, letter to CMS, MedPAC stated that “[t]he flaws of the existing hospital wage index system continue to erode the accuracy of Medicare’s hospital payment system . . . .”

13 In general, the distance from the hospital to the requested geographic area must be no more than 35 miles for hospitals in rural areas and no more than 15 miles for hospitals in urban areas, or at least 50 percent of hospital employees must reside in the requested area. For hospitals geographically located in rural areas, the hospital’s AHW must be at least 106 percent of the AHW of other hospitals located in its rural area and at least 82 percent of the AHW of hospitals in the requested area. For hospitals geographically located in urban areas, the hospital’s AHW must be at least 108 percent of the AHW of the other hospitals located in its urban area and 84 percent of the AHW of hospitals located in the requested area. The proximity and wage level criteria are waived in certain instances for hospitals having Rural Referral Center (RRC) or Sole Community Hospital (SCH) status.


15 The Act § 1886(d)(8)(C). As described in footnote 13, unless they receive waivers as RRCs or SChs, reclassifying hospitals’ AHWs are higher than the AHW of other hospitals in their geographic areas. Therefore, removing their wage data from the calculation of their original areas’ wage indexes would tend to lower those wage indexes. Additionally, the AHWs of reclassifying hospitals are sometimes lower than the AHW of the other hospitals in the areas into which they are reclassifying. When this is the case, adding their wage data to the calculation of the wage indexes for the areas into which they are reclassifying would tend to lower those wage indexes.


IOM found that the wage and occupational mix data used by CMS “do not produce an index that reflects the prevailing wages that hospitals face in their respective markets.” IOM recommended large-scale changes to the wage index system, including legislation to allow CMS to use data from the U.S. Bureau of Labor Statistics in place of hospitals’ Medicare cost report wage data.\(^\text{18}\)

The Patient Protection and Affordable Care Act required the Secretary to submit to Congress a plan to comprehensively reform the hospital wage index system (§ 3137). In 2012, the Secretary submitted a plan describing the potential for a new wage index system based on commuting data. In the executive summary to this report, the Secretary stated:

> 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 . . . 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 . . .

> (T)he concept of a Commuting Based Wage Index (CBWI) . . . 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.”\(^\text{19}\) [Emphasis added.]


\(^\text{19}\) The Secretary, *Report to Congress: Plan to Reform the Medicare Wage Index*, April 2012.
Although Congress did not take action to implement the commuting-based wage index system described by the Secretary in the 2012 plan, comprehensive reform of the wage index system remains an option.

HOW WE CONDUCTED THIS REVIEW

To accomplish our audit objective, we reviewed and analyzed laws and policies relevant to the vulnerabilities in the wage index system that we observed during our previous reviews of individual hospitals’ wage data. We did not review the overall internal control structure of CMS, its Medicare contractors, or hospitals submitting wage data as part of their cost report because our objective did not require us to do so. Rather, we limited our review to CMS controls surrounding vulnerabilities identified in our prior wage index reports.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix A contains the details of our audit scope and methodology.

FINDINGS

In conducting our prior reviews, we identified significant vulnerabilities in the wage index system. Specifically:

- in the absence of misrepresentation or falsification, CMS lacks the authority to penalize hospitals that submit inaccurate or incomplete wage or occupational mix data;
- MAC desk reviews do not always identify inaccurate wage data;
- the rural floor decreases wage index accuracy; and
- certain requirements of the Act and CMS policy decrease wage index accuracy.

As a result of these vulnerabilities, wage indexes may not always accurately reflect local labor prices; therefore, Medicare payments to hospitals and other providers may not be appropriately adjusted to reflect local labor prices.
THE CURRENT WAGE INDEX SYSTEM HAS SIGNIFICANT VULNERABILITIES

CMS Lacks Authority To Penalize Hospitals

In the absence of misrepresentation or falsification, CMS lacks authority to penalize hospitals for submitting inaccurate wage or occupational mix data. Additionally, CMS has no authority to penalize hospitals that do not submit occupational mix data. In the most recent occupational mix survey year (2016), approximately 6 percent of hospitals required to submit surveys did not do so (187 hospitals). CMS’s ability to promote hospital accountability for submitting accurate and complete data is hampered by its lack of authority to penalize hospitals, which may result in less accurate wage indexes.

From 2004 through 2017, OIG conducted reviews of 41 hospitals’ wage data and in each case found material inaccuracies. In our 5 most recent reports, we estimated that a total of $140.5 million in overpayments to 272 hospitals resulted from the inaccurate wage data. Because of budget neutrality, those net overpayments resulted in approximately the same amount of underpayments to other hospitals nation-wide. Although the net effect to the Medicare program was approximately null because of budget neutrality, some hospitals experienced underpayments because of inaccurate wage data. Additionally, although we did not audit the market basket index or labor-related share, both could have been made less accurate by the errors we found in our reviews.

Desk Reviews by Medicare Administrative Contractors Do Not Always Identify Inaccurate Wage Data

The MACs conduct limited-scope desk reviews of the wage data of all hospitals assigned to them, regardless of each hospital’s impact on wage indexes. The MACs do not generally conduct in-depth audits of wage data. The inaccurate wage data we found in our five most recent audits were not detected during the MACs’ desk reviews. As a result, CMS calculated wage indexes based on inaccurate wage data and wage index accuracy was decreased. While

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20 In contrast, CMS has authority to impose penalties, in the form of Medicare payment reductions, in other areas, including meaningful use of electronic health records, inpatient quality reporting, hospital-acquired conditions, and hospital readmissions.

21 These hospitals were not selected through statistical sampling, and we make no estimate of an error rate. The reports are listed in Appendix B.

22 The market basket and labor-related share are not recalculated on an annual cycle, so not every year of wage data is used for those recalculations.

23 In the 36 earlier reviews, we reviewed “as-filed” wage data, the preliminary wage data submitted by hospitals, which they are allowed to revise before the MAC desk review period starts around September 1 of each year. We recommended to the hospitals that they correct the errors that we found. Our reports did not estimate the effect of the recommended corrections on payments.
desk reviews may be effective for finding certain types of errors, a program of in-depth audits targeted at hospitals with a high level of impact on their area wage indexes may be more effective in identifying the types of errors we found in our prior reviews.

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**An Example of Inaccurate Wage Data Not Detected by a MAC Desk Review**

We estimated that as a result of Danbury Hospital’s overstating wages by approximately $5 million and hours by approximately 9,900 in its cost report, Medicare overpaid Danbury Hospital and 5 other hospitals in its area $990,000 during FY 2014. Danbury Hospital’s inaccurate wage data were not detected during the MAC desk review process.

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**The Rural Floor Wage Index Decreases Wage Index Accuracy**

Although the law creating the rural floor works as intended to ensure the wage indexes applied to urban hospitals are never lower than the rural wage indexes for the hospitals’ States, the effect is that urban hospitals receiving the benefit of the rural floor receive payments adjusted to wage levels not reflective of their own areas. Therefore, the rural floor wage index is an exception to section 1886(d)(3)(E) of the Act that requires payments to be adjusted to reflect wage levels in the hospitals’ own areas.

Because CMS is required by law to apply rural floor wage indexes in a manner that is budget neutral on a national level, all hospitals’ wage indexes are lowered to allow for some hospitals to have their wage indexes raised by the application of the rural floor. The lowered payments resulting from the budget neutrality provision are also less accurate with respect to wage levels in those hospitals’ geographic areas.

CMS has stated that the rural floor creates a benefit for a minority of States that is then funded by a majority of States, including States that are overwhelmingly rural in character. Further, CMS has stated that “as a result of hospital actions not envisioned by Congress, the rural floor is resulting in significant disparities in wage index and, in some cases, resulting in situations where all hospitals in a State receive a wage index higher than that of the single highest wage index urban hospital in the State.”

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24 Danbury Hospital Reported Overstated Wage Data Resulting in Medicare Overpayments (A-01-14-00506).


An Example of the Application of the Rural Floor Wage Index

In the IPPS final rule for fiscal year 2018, CMS estimated that 366 urban hospitals would receive the benefit of the rural floor.\textsuperscript{27} The increase in the wage indexes of urban hospitals receiving the benefit of the rural floor would be offset by a nation-wide decrease in all hospitals’ wage indexes of approximately 0.67 percent. In Massachusetts, that meant that 36 urban hospitals would receive a wage index based on hospital wages in Nantucket, an island 30 miles off the coast and home to the only rural hospital contributing to the State’s rural floor wage index. CMS estimated that those 36 hospitals would receive an additional $44 million in inpatient payments for the year.\textsuperscript{28} These increased payments were not based on actual local wage rates but on the requirements of the rural floor wage index law. These increased payments would be offset by decreased payments to hospitals nation-wide, and those decreases would be not be based on actual local wage rates but on the requirements of the rural floor wage index law.

Additionally, because the effects of the rural floor are nation-wide, errors in one rural hospital’s wage data can have state-wide and national impact.

An Example of How Inaccurate Wage Data From One Hospital Had State-wide and Nation-wide Effects Because of the Rural Floor

For 2015, inaccurate wage data submitted by Nantucket Cottage Hospital was used by CMS to set the rural floor wage index for Massachusetts. We estimated, as a result, that Medicare overpaid all 56 acute-care hospitals\textsuperscript{29} in Massachusetts a total of $133.7 million, including $95.1 million for inpatient services and $38.6 million for outpatient services. We did not estimate the total underpayments to hospitals in other States resulting from national budget neutrality.\textsuperscript{30}


\textsuperscript{28} 82 Fed. Reg. at 38557.

\textsuperscript{29} Each year, wage indexes are recalculated with new wage data. Each year, the rural floor wage index for a State may change and the number of hospitals receiving the benefit of the rural floor wage index may change. That is why 36 hospitals received the benefit of the rural floor in Massachusetts in 2018 and 55 received it in 2015. (The 56\textsuperscript{th} hospital that received overpayments in 2015 was Nantucket Cottage Hospital itself.)

\textsuperscript{30} Nantucket Cottage Hospital Did Not Accurately Report Certain Wage Data, Resulting in Overpayments to Massachusetts Hospitals (A-01-15-00502).
Certain Legal Requirements and CMS Policy Decrease Wage Index Accuracy

Section 1886(d)(8)(C) of the Act and a separate CMS policy\(^\text{31}\) protect hospitals from having their wage indexes lowered because of the geographic reclassification of other hospitals. (Please see Appendix C for details.) These are known as “hold-harmless” provisions.

This section of the Act can cause reclassifying hospitals’ wage data to be excluded from the wage index for the hospitals geographically located in the area into which they are reclassifying or to be included in the wage index for the area from which they are reclassifying to protect the hospitals in those areas from having their wage indexes lowered.

The CMS policy, which is imposed whenever it does not conflict with the requirements of the Act, is to use a reclassifying urban hospital’s wage data to calculate the wage indexes of its original and new CBSAs, as if the reclassifying hospital drew 100 percent of its labor from each of two labor markets. This policy protects the hospitals in the reclassifying hospital’s original CBSA from having their wage index lowered as a result of the reclassification. This policy decreases wage index accuracy, because it is not possible for one hospital to have obtained 100 percent of its labor from each of two labor markets.

Because of nation-wide budget neutrality for wage indexes, every hospital nation-wide has its wage index lowered slightly to balance (1) the wage index increases that result from reclassifications and (2) the protections afforded by the hold-harmless provisions of law and policy. Therefore, reclassifying or protected hospitals receive a benefit and a detriment, but non-reclassifying, non-protected hospitals receive only a detriment.

An additional effect of the hold-harmless provisions is that when a reclassifying hospital submits inaccurate wage data that is not detected during the wage data review process, the inaccurate wage data may affect the calculation of two wage indexes rather than just one.

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**An Example of How Wage Data From a Reclassified Hospital Affected Two Wage Indexes**

For 2014, Alta Bates Medical Center (Alta Bates) was reclassified from its geographical area to another urban area. Because of CMS policy, Alta Bates wage data was used to calculate the wage index for its original geographic area and its reclassification area, as if it had participated 100 percent in both labor markets, which is not possible. Additionally, because Alta Bates submitted inaccurate wage data, Medicare overpaid $154,000 to Alta Bates, $1.85 million

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to the other 13 hospitals in its original geographic area, and $3.4 million to the other 19 hospitals in its reclassification area for 2014.\(^\text{32}\)

**RECOMMENDATIONS**

Given the continuing and significant vulnerabilities described in our findings, we recommend that CMS and the Secretary revisit the plan to comprehensively reform the hospital wage index system, including the previously researched option of a commuting-based wage index.

If there is no movement toward comprehensive reform, we recommend that CMS:

- seek legislative authority to penalize hospitals that submit inaccurate or incomplete wage data in the absence of misrepresentation or falsification;
- work with the MACs to develop a program of in-depth wage data audits at a limited number of hospitals each year, focusing on hospitals whose wage data has a high level of influence on the wage index of their area;
- seek legislation to repeal the law creating the rural floor wage index;
- seek legislation to repeal the hold-harmless provisions in the Act relating to the wage data of reclassifying hospitals, which would allow CMS to calculate each area wage index based on the wage data of hospitals that reclassify into the area and the wage data of hospitals geographically located in the area if they do not reclassify out; and
- rescind its own hold-harmless policy to use the wage data of a reclassified hospital to calculate the wage index of its original geographic area.

**CMS COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE**

In written comments on our draft report, CMS concurred with our recommendation to work with the MACs to develop a program of in-depth wage data audits.

CMS did not concur with our recommendation to rescind its hold-harmless policy relating to geographically reclassified hospitals’ wage data. CMS stated that it is appropriate to use a reclassifying urban hospital’s wage data to calculate the wage index of its original area because it believes that using data “from the most hospitals to calculate the average wages for an area provides the most accurate and stable measure.” In response, we note that promoting stability for the hospitals in a reclassifying hospital’s original area conflicts with promoting accuracy in wage indexes. We reiterate that, because it is not possible for one hospital to have obtained 100 percent of its labor from each of two labor markets, using 100 percent of a reclassifying

\(^{32}\) *Alta Bates Medical Center Inaccurately Reported Wage Data, Resulting in Medicare Overpayments* (A-09-14-02035).
hospital’s wages and hours in the calculation of each of two areas’ wage indexes tends to decrease the accuracy of the wage indexes. If CMS could determine what percentages of the reclassifying hospital’s labor comes from its original and its reclassified area, allocating the hospital’s wages and hours by those percentages would result in a higher degree of accuracy than counting the same wage data twice.

Finally, CMS stated that it will consider whether to recommend for inclusion in the President’s next budget the statutory proposals mentioned in our other four recommendations.
APPENDIX A: AUDIT SCOPE AND METHODOLOGY

SCOPE

Our review was based on 41 prior OIG reviews of individual hospitals’ wage data, listed in Appendix B.

METHODOLOGY

To accomplish our objective, we:

- reviewed and analyzed the observations we made during our prior reviews;
- reviewed applicable Federal laws, regulations, standards, and guidance;
- reviewed CMS controls relating to vulnerabilities identified in our prior wage index reports; and
- discussed our observations with CMS.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.
### APPENDIX B: OFFICE OF INSPECTOR GENERAL REVIEWS OF HOSPITALS’ WAGE DATA

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<tr>
<th>Report Title</th>
<th>Report Number</th>
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<tbody>
<tr>
<td>Sierra Nevada Memorial Hospital Did Not Accurately Report Certain Wage Data, Resulting in Overpayments to California Hospitals</td>
<td>A-09-16-02044</td>
<td>September 2017</td>
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<tr>
<td>Alta Bates Medical Center Inaccurately Reported Wage Data, Resulting in Medicare Overpayments</td>
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<tr>
<td>Nantucket Cottage Hospital Did Not Accurately Report Certain Wage Data, Resulting in Overpayments to Massachusetts Hospitals</td>
<td>A-01-15-00502</td>
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<tr>
<td>Dominican Hospital Reported Overstated Wage Data, Resulting in Medicare Overpayments</td>
<td>A-09-14-02032</td>
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<tr>
<td>Danbury Hospital Reported Overstated Wage Data, Resulting in Medicare Overpayments</td>
<td>A-01-14-00506</td>
<td>January 2016</td>
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<tr>
<td>Review of the Altoona Regional Health System’s Reported Fiscal Year 2006 Wage Data</td>
<td>A-03-08-00019</td>
<td>August 2009</td>
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<tr>
<td>Review of Via Christi Regional Medical Center’s Reported Fiscal Year 2005 Wage Data</td>
<td>A-07-07-02726</td>
<td>December 2008</td>
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<tr>
<td>Review of Thomas Jefferson University Hospital’s Reported Fiscal Year 2006 Wage Data</td>
<td>A-03-07-00024</td>
<td>November 2008</td>
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<tr>
<td>Review of Kaiser Foundation Hospital-Vallejo’s Reported Fiscal Year 2005 Wage Data</td>
<td>A-09-07-00083</td>
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<tr>
<td>Review of Ochsner Foundation Hospital’s Reported Fiscal Year 2005 Wage Data</td>
<td>A-01-08-00519</td>
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<td>Review of Touro Infirmary’s Reported Fiscal Year 2005 Wage Data</td>
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<td>Review of West Jefferson Medical Center’s Reported Fiscal Year 2005 Wage Data</td>
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<tr>
<td>Review of Tulane Medical Center’s Reported Fiscal Year 2005 Wage Data</td>
<td>A-01-08-00518</td>
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<tr>
<td>Review of Broward General Medical Center’s Reported Fiscal Year 2006 Wage Data</td>
<td>A-04-07-06034</td>
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<tr>
<td>Review of East Jefferson General Hospital’s Reported Fiscal Year 2005 Wage Data</td>
<td>A-01-08-00515</td>
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<tr>
<td>Review of Methodist Hospital Wage Data for the Fiscal Year 2009 Wage Indexes</td>
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<tr>
<td>Review of Duke University Medical Center’s Reported Fiscal Year 2006 Wage Data</td>
<td>A-01-07-00511</td>
<td>April 2008</td>
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<tr>
<td>Review of St. Peter's University Hospital’s Reported Fiscal Year 2005 Wage Data</td>
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<td>February 2008</td>
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<tr>
<td>Review of UMass Memorial Medical Center’s Reported Fiscal Year 2006 Wage Data</td>
<td>A-01-07-00509</td>
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<tr>
<td>Review of Hospital Wage Data Used To Calculate Inpatient Prospective Payment System Wage Indexes</td>
<td>A-01-05-00504</td>
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<tr>
<td>Review of University of California, Davis Medical Center’s Reported Fiscal Year 2004 Wage Data</td>
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<tr>
<td>Review of University of California, Irvine Medical Center’s Reported Fiscal Year 2004 Wage Data</td>
<td>A-09-06-00025</td>
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<tr>
<td>Review of University of California, Los Angeles Medical Center’s Reported Fiscal Year 2004 Wage Data</td>
<td>A-09-06-00026</td>
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<tr>
<td>Review of University of California, San Diego Medical Center’s Reported Fiscal Year 2004 Wage Data</td>
<td>A-09-06-00027</td>
<td>September 2006</td>
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<tr>
<td>Review of University of California, San Francisco Medical Center’s Reported Fiscal Year 2004 Wage Data</td>
<td>A-09-05-00039</td>
<td>September 2006</td>
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33 This report consolidates the results of our first 21 reviews of hospitals’ wage data.
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<tr>
<td>Review of the North Shore University Hospital’s Controls to Ensure Accuracy of Wage Data Used for Calculating Inpatient Prospective Payment System Wage Indexes</td>
<td>A-02-05-01008</td>
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<tr>
<td>Review of Valley Baptist Medical Center’s Reported Fiscal Year 2003 Wage Data</td>
<td>A-06-06-00037</td>
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<tr>
<td>Review of the Hospital Wage Index at Baylor University Medical Center</td>
<td>A-06-06-00038</td>
<td>May 2006</td>
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<tr>
<td>Review of the Saint Francis Hospital’s Controls to Ensure Accuracy of Wage Data Used for Calculating Inpatient Prospective Payment System Wage Indexes</td>
<td>A-02-05-01004</td>
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<tr>
<td>Review of Medicare Inpatient Wage Rate Assignment at Lehigh Valley Hospital, Allentown, Pennsylvania</td>
<td>A-03-05-00003</td>
<td>April 2006</td>
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<tr>
<td>Review of St. Joseph Hospital’s Reported Fiscal Year 2004 Wage Data</td>
<td>A-09-05-00040</td>
<td>April 2006</td>
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<tr>
<td>Review of Riverside Medical Center’s Reported Fiscal Year 2003 Wage Data</td>
<td>A-05-05-00022</td>
<td>March 2006</td>
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<tr>
<td>Review of Medicare Inpatient Wage Rate Assignment at Hackettstown Regional Medical Center, Hackettstown, New Jersey</td>
<td>A-03-05-00005</td>
<td>March 2006</td>
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<tr>
<td>Review of Day Kimball Hospital’s Controls to Ensure Accuracy of Wage Data Used for Calculating Inpatient Prospective Payment System Wage Indexes</td>
<td>A-01-05-00506</td>
<td>November 2005</td>
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<tr>
<td>Review of Condell Medical Center’s Controls to Ensure Accuracy of Wage Data Used for Calculating Inpatient Prospective Payment System Wage Indexes</td>
<td>A-05-05-00021</td>
<td>August 2005</td>
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<tr>
<td>Review of Hartford Hospital’s Controls to Ensure Accuracy of Wage Data Used for Calculating Inpatient Prospective Payment System Wage Indexes</td>
<td>A-01-04-00524</td>
<td>June 2005</td>
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<tr>
<td>Review of Windham Hospital’s Controls to Ensure Accuracy of Wage Data Used for Calculating Inpatient Prospective Payment System Wage Indexes</td>
<td>A-01-04-00511</td>
<td>April 2005</td>
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<tr>
<td>Review of Cape Cod Hospital’s Wage Data Used for Calculating Inpatient Prospective Payment System Wage Indices</td>
<td>A-01-04-00501</td>
<td>November 2004</td>
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APPENDIX C: HOSPITAL GEOGRAPHIC RECLASSIFICATION
AND WAGE INDEX CALCULATION

RECLASSIFICATION INTO URBAN AREAS

When hospitals reclassify into an urban area (into a CBSA), section 1886(d)(8)(C) of the Act requires CMS to take different actions depending on the hypothetical effect of the reclassified hospitals’ wage data on the wage index of the CBSA into which they are reclassifying:

Table 1: Calculation of a CBSA’s Wage Index

<table>
<thead>
<tr>
<th>If including the wage data of the hospitals reclassifying into the CBSA would:</th>
<th>Then*:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Increase the CBSA’s wage index</td>
<td>The hospitals reclassifying into the CBSA and the hospitals original to the CBSA receive a “combined” wage index based on the wage data of the reclassified hospitals and the hospitals original to the CBSA.</td>
</tr>
<tr>
<td>B. Reduce the CBSA’s wage index by 1% or less</td>
<td>The hospitals reclassifying into the CBSA and the hospitals original to the CBSA receive a wage index based on the wage data of the hospitals original to the CBSA.</td>
</tr>
<tr>
<td>C. Reduce the new CBSA’s wage index by &gt;1%</td>
<td>The hospitals reclassifying into the CBSA receive a “combined” wage index based on the wage data of the reclassified hospitals and the hospitals original to the CBSA. The hospitals original to the CBSA receive a wage index based only on the wage data of the hospitals original to the CBSA.</td>
</tr>
</tbody>
</table>

* It is CMS policy to include the wage data of a reclassified urban hospital in both the wage index calculation of the urban area to which it is reclassified and the wage index calculation of the urban area where the hospital is physically located. Therefore, in all scenarios above, “the hospitals original to the CBSA” include those hospitals geographically located in the CBSA even if they reclassified to another CBSA.

RECLASSIFICATION INTO AND OUT OF RURAL AREAS

When hospitals reclassify out of a State’s rural area under section 1886(d)(8)(B) or section 1886(d)(10) of the Act, the Act requires CMS to take different actions depending on the hypothetical effect of the reclassifying hospitals’ wage data. CMS must calculate two potential wage indexes, one excluding and one including the reclassifying hospitals’ wage data. Rural areas whose wage indexes would be reduced by excluding the wage data for reclassifying hospitals have their wage index values calculated as if no reclassification had occurred (the Act
§1886(d)(8)(C)(ii). Otherwise, reclassifying rural hospitals’ wage data are excluded from the calculation of the wage index for the rural area in which they are geographically located.

Additionally, it is CMS policy to include in the rural wage index calculation the wage data of hospitals reclassifying into the rural area, unless doing so would reduce the rural wage index. The effect of this policy, in combination with the requirements of the Act, is that rural areas receive a wage index based upon the highest of (1) wage data from hospitals geographically located in the rural area but excluding the data of hospitals reclassifying out of the rural area; (2) wage data from hospitals geographically located in the rural area, including those reclassifying out; or (3) wage data from hospitals geographically located in the area plus all hospitals reclassified into the rural area.
The Centers for Medicare & Medicaid Services (CMS) appreciates the opportunity to review and comment on the Office of Inspector General’s (OIG) draft report.

Section 1886(d)(3)(E) of the Social Security Act requires that Medicare’s per-discharge payments to inpatient prospective payment system 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 inpatient prospective payment system hospitals in different geographic areas.

The Social Security Act further requires that CMS update the wage index annually, based on a survey of wages and wage-related costs of short-term, acute care hospitals. Data required to be included in the wage index derive from the Medicare Cost Report, the Hospital Wage Index Occupational Mix Survey, hospitals’ payroll records, contracts, and other wage-related documentation. In computing the wage index, CMS derives an average hourly wage for each labor market area and a national average hourly wage. A labor market area’s wage index value is the ratio of the area’s average hourly wage to the national average hourly wage. The wage index adjustment factor is applied only to the labor portion of the standardized amounts.

We appreciate the OIG’s efforts to ensure the accuracy of the wage index and subsequent Medicare payment adjustments to hospitals. The OIG’s recommendations and CMS’ responses are below.

**OIG Recommendation**
The OIG recommends that CMS and the Secretary revisit the plan to comprehensively reform the hospital wage index system, including the previously researched option of a commuting-based wage index.

**CMS Response**
Section 3137(b) of the Affordable Care Act 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 Inpatient Prospective Payment System. The Secretary submitted this
Report to Congress, “Plan to Reform the Medicare Hospital Wage Index” on April 11, 2012. The
report describes the concept of commuting-based wage index as one potential replacement for
the current Medicare wage index methodology. The complete report can be accessed on the CMS
website at: http://www.cms.gov/Medicare/Medicare-Fee-for-Service-
Payment/AcuteInpatientPPS/Wage-Index-Reform.html.

CMS evaluates the hospital wage index system on an annual basis. This year, as part of this
process, CMS explicitly solicited comments, suggestions, and recommendations for future
regulatory and policy changes to the Medicare wage index during the comment period for the
Fiscal Year 2019 Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals
proposed rule. CMS looks forward to continuing to work on geographic payment disparities,
particularly for rural hospitals, and will take the public's comments, and OIG’s
recommendations, into account when determining appropriate next steps, to the extent possible
under current law.

In addition, CMS will consider whether to recommend a statutory proposal to implement a
commuting-based wage index for inclusion in the next President’s budget.

**OIG Recommendation**
If there is no movement toward comprehensive reform, the OIG recommends that CMS seek
legislative authority to penalize hospitals that submit inaccurate or incomplete wage data in the
absence of misrepresentation or falsification.

**CMS Response**
In the absence of authority under current law or legislative reform, CMS will consider whether to
recommend this proposal for inclusion in the next President's budget.

**OIG Recommendation**
If there is no movement toward comprehensive reform, the OIG recommends that CMS work
with the MACs to develop a program of in-depth wage data audits at a limited number of
hospitals each year, focusing on hospitals whose wage data has a high level of influence on the
wage index of their area.

**CMS Response**
CMS concurs with this recommendation. CMS continuously evaluates the wage data audit
process and will take the OIG’s recommendation into account when determining appropriate
next steps.

**OIG Recommendation**
If there is no movement toward comprehensive reform, the OIG recommends that CMS seek
legislation to repeal the law creating the rural floor wage index.

**CMS Response**
In the absence of authority under current law or legislative reform, CMS will consider whether to
recommend this proposal for inclusion in the next President’s budget.

**OIG Recommendation**
If there is no movement toward comprehensive reform, the OIG recommends that CMS seek
legislation to repeal the hold-harmless provisions in the Act relating to the wage data of
reclassifying hospitals, which would allow CMS to calculate each area wage index based on the wage data of hospitals that reclassify into the area and the wage data of hospitals geographically located in the area if they do not reclassify out.

**CMS Response**
In the absence of authority under current law or legislative reform, CMS will consider whether to recommend this proposal for inclusion in the next President's budget.

**OIG Recommendation**
If there is no movement toward comprehensive reform, the OIG recommends that CMS rescind its own hold-harmless policy to use the wage data of a reclassified hospital to calculate the wage index of its original geographic area.

**CMS Response**
CMS does not concur with this recommendation. CMS believes that using data from the most hospitals to calculate the average wages for an area provides the most accurate and stable measure. Therefore, CMS believes that it is appropriate to include the salaries and hours of all hospitals in an area even if they are reclassifying to another area.