

# Medicare Wage Index Trends in Rural and Urban Hospitals Before and During the Low Wage Index Policy, 2018–2022

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## BACKGROUND

The hospital wage index is an important component of the Medicare Inpatient Prospective Payment System (IPPS), adjusting standardized Medicare payments to reflect geographical differences in labor costs. Under IPPS, hospitals are reimbursed based on a national standardized payment amount that is adjusted for local wage levels as required by Section 1886(d)(3)(E) of the Social Security Act.<sup>1</sup> The wage index is calculated by comparing each labor market's average hourly hospital wage with the national average.<sup>2</sup> It is updated annually and plays a critical role in determining hospital reimbursement levels, shaping financial capacity, and impacting long-term sustainability, especially for hospitals located in historically low-wage regions.

Wage index values vary across labor markets based on differences in hospital-reported wage levels, and these geographic patterns tend to be stable over time due to long-standing labor market characteristics. Because the wage index incorporates wage data from four years earlier, its year-to-year changes typically reflect longer-term, underlying labor market conditions rather than short-term fluctuations in labor costs. As a result, wage index patterns from 2018 through 2022 largely represent established wage differentials across regions and effects of earlier policy decisions, rather than the immediate responses to emerging economic or workforce pressures.

A key development influencing wage index values during this period was the Low Wage Index Policy (LWIP). Implemented in FY 2020, LWIP increased the wage index for hospitals in the lowest quartile by raising their values halfway toward the 25<sup>th</sup> percentile.<sup>2</sup> The policy was designed to mitigate long-standing geographic differences in Medicare payment levels and strengthen the financial position of hospitals in historically low-wage areas. LWIP remained in effect through FY 2024 before being discontinued in FY 2025 following a federal court decision.<sup>3</sup>

## KEY FINDINGS

The purpose of this study is to describe the **pattern of wage index values** for rural Prospective Payment System (Rural PPS) hospitals and urban PPS hospitals (Urban PPS) from 2018 to 2022. The Low Wage Index Policy (LWIP), implemented in FY 2020, aimed to increase the wage index for hospitals in the lowest quartile by raising their wage index values toward the 25th percentile. Key findings include:

- *For most hospitals, there was little change in wage index values over the five-year period but for the hospitals with low wage indexes, there was a considerable increase.* Rural PPS hospitals experienced increases in median and mean wage index values, while Urban PPS hospitals saw small decreases.
- *LWIP produced the expected distribution of effects by raising the minimum and reducing the maximum wage index values.* During LWIP implementation, the minimum wage index increased, and the maximum decreased for both Rural PPS and Urban PPS hospitals, consistent with the policy's design and budget neutrality requirements.
- *Variation in wage index values was greater among urban hospitals than rural hospitals.* Rural PPS consistently demonstrated a smaller interquartile range than Urban PPS, indicating less variation across rural labor markets compared to the wider wage index distribution among urban hospitals.

Although not reflected in the wage index values examined in this brief, hospitals faced substantial labor cost pressures in later years, including those intensified by the COVID-19 pandemic, such as workforce shortages, increased turnover, and greater reliance on high-cost contract labor. Because the wage index uses wage data from four years prior, the effects of these pressures will appear only in future wage index updates beyond the study period.

The purpose of this study is to describe the trajectories of wage index values for rural and urban PPS hospitals from 2018 to 2022. The analysis examines how wage index values evolved over time and presents these trends within the broader policy and labor market context that influences geographic variation and hospital reimbursement.

## METHODS

Wage index values and hospital characteristics were obtained from the Centers for Medicare & Medicaid Services (CMS) Impact Files used in the annual IPPS Final Rule. These files contain occupational mix-adjusted average hourly wage data derived from CMS's Healthcare Cost Report Information System (HCRIS) – *often referred to as* the hospital cost report and the CMS Occupational Mix Survey.

The analysis included all PPS hospitals with available wage index data for federal fiscal years 2018 through 2022. Hospitals were categorized as rural location or urban location using the 2022 Federal Office of Rural Health Policy definition.<sup>4</sup> Critical Access Hospitals were not included because they are not reimbursed under IPPS and therefore do not receive wage index values.

Because wage index calculations rely on wage data from four years earlier, the values examined reflect wage patterns established prior to the study period. Descriptive statistics, including medians and interquartile ranges, were used to compare wage index values across rural and urban PPS hospitals over time. Table 1 shows the number of hospitals in each category for the years analyzed.

**Table 1. Number of Hospitals by Year and Category**

Year label	Start date	End date	Rural PPS	Urban PPS	Total
2018	10/1/2017	9/30/2018	858	1,954	2,812
2019	10/1/2018	9/30/2019	831	1,927	2,758
2020	10/1/2019	9/30/2020	832	1,884	2,716
2021	10/1/2020	9/30/2021	808	1,827	2,635
2022	10/1/2021	9/30/2022	773	1,699	2,472
<b>Total Hospital-year Observations<sup>a</sup></b>			4,102	9,291	13,393
<b>Total Hospitals<sup>b</sup></b>			920	2,091	3,011

<sup>a</sup> Total number of hospital cost reports over all study years.

<sup>b</sup> Number of unique hospitals that provided cost reports.

## RESULTS

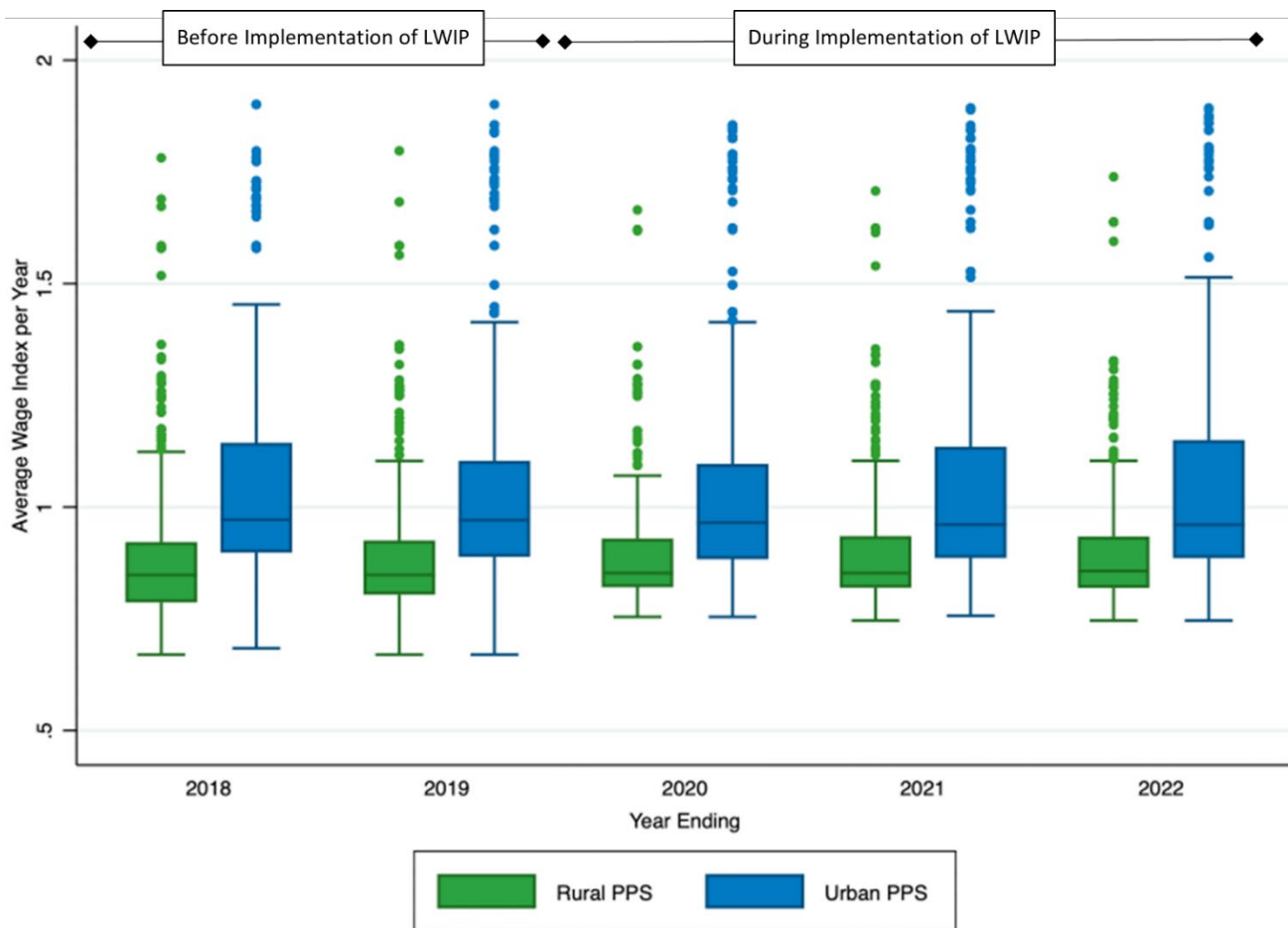
Table 2 presents measures of central tendency (median and mean) and variation (minimum, maximum, and range) of the wage index value for Rural PPS and Urban PPS hospitals from 2018 to 2022. There were small increases in the median and mean wage index for Rural PPS hospitals and small decreases for Urban PPS hospitals across all years. During the LWIP implementation, the minimum wage index increased, and the maximum wage index decreased for both Rural PPS and Urban PPS hospitals. This is the expected effect of the LWIP – an increase in the minimum and a decrease in the maximum, to ensure budget neutrality. The range in wage index values for Rural PPS was smaller than that of Urban PPS hospitals.

**Table 2. Descriptive Statistics of the Wage Index for Rural PPS and Urban PPS Hospitals Before LWIP Implementation (2018 And 2019) and During LWIP Implementation (2020-2022)**

Wage Index for Rural PPS Hospitals	2018	2019	2020	2021	2022
Minimum	0.6844	0.6699	0.7543	0.7461	0.7461
Median	0.8480	0.8482	0.8523	0.8523	0.8567
Mean	0.8759	0.8828	0.8932	0.8947	0.8938
Maximum	1.7814	1.7972	1.6649	1.7073	1.7391
Range	1.0970	1.1273	0.9106	0.9612	0.9930
Wage Index for Urban PPS Hospitals	2018	2019	2020	2021	2022
Minimum	0.6841	0.6699	0.7543	0.7568	0.7461
Median	0.9715	0.9707	0.9653	0.9607	0.9604
Mean	1.0300	1.0268	1.0273	1.0355	1.0352
Maximum	1.9011	1.9011	1.8551	1.8931	1.8931
Range	1.2170	1.2312	1.1008	1.1363	1.1470

Figure 1 presents a box plot of the wage index per year for Rural PPS and Urban PPS hospitals from 2018 to 2022. The interquartile range (the middle 50% of the data) for Rural PPS hospitals is smaller (less variation) than that of Urban PPS hospitals.

**Figure 1. Box Plots of the Wage Index for Rural PPS and Urban PPS hospitals from 2018 to 2022**



**Suspension of the Low-Wage Index Hospital Policy.** In *Bridgeport Hospital v. Becerra* (D.C. Cir. 2024), plaintiff hospitals argued that CMS lacked statutory authority to implement the LWIP and related budget neutrality adjustments. The D.C. Circuit Court ruled on July 23, 2024, that CMS did not have this authority, compelling the agency to vacate the policy.<sup>5</sup> In response to the court’s decision, CMS posted an interim final rule addressing the FY 2025 IPPS payment rate and LWIP. The interim final rule rescinds the LWIP and introduces a transitional payment for impacted hospitals. For hospitals with a FY 2026 wage index that would decline by more than 9.75 percent from their FY 2024 value, CMS will assign a floor equal to 90.25 percent of the FY 2024 wage index. CMS estimated that 52 hospitals will benefit from this safeguard, with a total payment impact of \$27 million in FY 2026.<sup>6</sup>

## DISCUSSION

We examined wage index patterns for rural and urban PPS hospitals from 2018 to 2022 and found that for most hospitals, there was little change but for the hospitals with low wage indexes, there was a considerable increase. Rural PPS hospitals experienced increases in both median and mean wage index values, while urban PPS hospitals experienced small decreases. Because the wage index is calculated using wage data from four years earlier, the values observed in this study reflect wage patterns that existed well before the study period, not the more recent labor market pressures hospitals faced.

The results also show that during the years in which the LWIP was in effect, the minimum wage index increased, and the maximum wage index decreased for both rural and urban PPS hospitals. This pattern is consistent with the expected

directional impact of LWIP, which raised wage index values for hospitals in the lowest quartile while requiring offsetting budget-neutral adjustments across all hospitals. Variation in wage index values also differed between rural and urban PPS hospitals. Throughout the study period, rural PPS hospitals consistently exhibited a smaller interquartile range than urban PPS hospitals, indicating less variation in wage index across rural labor markets.

The discontinuation of LWIP beginning in FY 2025 may have important implications for hospitals in historically low-wage areas. Without the upward adjustments LWIP provided, wage index values may decline for many of these hospitals, reducing Medicare reimbursement and potentially exacerbating financial pressures for providers already operating with limited resources. Transitional payments for FY 2025 and FY 2026 may offer short-term relief, but their temporary nature means that hospitals previously supported by LWIP could face renewed challenges in maintaining financial stability and sustaining access to care in their communities.

Overall, wage index patterns from 2018 to 2022 reflect long-standing geographic wage differentials across PPS hospitals, modest shifts associated with the LWIP period, and changes driven by the wage index. As wage index values in future years begin to incorporate more recent wage data, including labor cost increases during and after the COVID-19 pandemic, more pronounced changes may emerge.

Taken together, these findings highlight the importance of continued monitoring of wage index trends, particularly as future updates begin to reflect more recent wage data and the effects of policy changes such as the end of LWIP. Understanding how these factors shape geographic payment adjustments will be critical for assessing the financial outlook of hospitals operating in diverse labor markets.

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