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DO UNIONS WORSEN CALIFORNIA HOSPITAL PERFORMANCE?

Analyzing the Impact of SEIU-Affiliated Nurses on California Hospital Ratings

EXECUTIVE SUMMARY

In November 2024, a Service Employees International Union (SEIU) local took to X to celebrate a union victory at Anaheim Regional Medical Center and claimed that the union would "look forward to fixing major retention problems & improving patient care at their hospital."

This begs the question, does the representation of registered nurses by the SEIU improve patient care at hospitals in California?

According to the Centers for Medicare and Medicaid Services (CMS) annual hospital rating data, that answer appears to be a resounding "no."

Based on the CMS rating system that assigns scores of one to five stars (five being the best and one being the worst) to Medicare-registered facilities, hospitals staffed by SEIU-represented registered nurses were rated (on average) over half-a-star lower than hospitals with other union-affiliated nurses or non-unionized nurses featured in this report.

Worse yet, a regression analysis—adjusted for average household income in the hospitals' zip code showed that being staffed by SEIU-represented registered nurses correlated with a lower hospital rating by as much as -0.88 stars compared to hospitals with non-union and other union-registered nurses.

Despite the SEIU's claim that it improves patient care, the CMS data—which factors in metrics on mortality, safety, timely & effective care, readmission, and patient experience—conclusively shows that hospitals with SEIU-registered nurses are performing worse than other facilities in California.

In fact, hospitals with SEIU-represented registered nurses accounted for 26.7% of all 1-star rated hospitals in California despite being staffed in just under 11% of Medicare-registered hospitals in the state. Hospitals staffed by SEIU-represented registered nurses also failed to score a 5-star rating, the only group in this study that failed to do so.

Based on these findings, we hypothesize factors that may contribute to the sub-par ratings correlated with hospitals staffed by SEIU-represented registered nurses.

	Non-Union	SEIU	NNU	UNAC	All Non-SEIU Unions
Average Hospital Star Rating (Out of 5)	3.14	2.37	3.10	3.33	3.12

2024 Overall Star Rating for Comparison Groups in California

TABLE OF CONTENTS

Executive Summary	2
Statewide Key Findings	
Summary	4
Descriptive Statistics: California Acute Care Hospitals	4
Comparing Overall Star Ratings, By Union	
Non-union v. SEIU	5
National Nurses United (NNU) v. SEIU	6
United Nurses Associations of California (UNAC) v. SEIU	7
All Other Unions v. SEIU	8
Regression Analysis, By Union	9
Overall Results	9
Non-union v. SEIU	9
National Nurses Union (NNU) v. SEIU	9
United Nurses Associations of California (UNAC) v. SEIU	10
All Other Unions v. SEIU	10
Los Angeles County Key Findings	
Summary	
Descriptive Statistics: Los Angeles Acute Care Hospitals	
Comparing Overall Star Rating, By Union	
Non-union v. SEIU	
NNU v. SEIU	
Other Union v. SEIU	14
Conclusion	
Appendices	
California Descriptive Tables Appendix	16
Los Angeles Descriptive Tables Appendix	17
Regression Tables Appendix	18
Methodology	
Terms & Analysis	22
Hospital Classification	22
Hospital Care Categories	23
Regression Analysis	24
Rating System	25
Measures	

STATEWIDE KEY FINDINGS

SUMMARY

- Service Employees International Union (SEIU) representation for nurses correlates with a lower overall hospital rating by as much as -0.95 stars (out of five stars) compared to hospitals with nurses represented by no unions or other unions.
- Despite accounting for less than 11% (27¹ out of 251) of California hospitals, SEIUunionized hospitals account for 26.7% of all 1-star hospitals in California.
- SEIU-unionized hospitals failed to record a single 5-star rating in California, while 17.4% of non-unionized hospitals and 12.3% of hospitals represented by other nurses' unions achieved a 5-star rating.

DESCRIPTIVE STATISTICS: CALIFORNIA ACUTE CARE HOSPITALS

The analysis of acute care hospitals based on registered nurses' union affiliation includes 251 Medicareregistered hospitals in California. The average star rating of all hospitals is 3.05 stars.



Average Rating: 3.05 / 5 stars Sample Size: 251

Rating	Count (%)
****	31 (12.4%)
****	65 (25.9%)
$\star\star\star$	70 (27.9%)
**	55 (21.9%)
*	30 (12.0%)

1 A vast majority of SEIU-unionized hospitals were unionized well before the beginning of the study period, giving them plenty of time to improve hospital ratings.

COMPARING OVERALL STAR RATINGS, BY UNION

Non-union v. SEIU

Across California, CMS ratings were higher for non-unionized hospitals compared to SEIU-represented hospitals. While SEIU-unionized hospitals averaged a score over half-a-star below (2.37 stars) the California hospital average (3.05 stars), non-unionized hospitals averaged slightly above the state average (3.14 stars).



In addition to having a lower average CMS star rating, SEIU-unionized hospitals performed markedly worse than non-unionized hospitals in several categories. No SEIU-unionized hospitals received a 5-star rating while 17.4% of non-unionized hospitals received a 5-star rating. SEIU-unionized hospitals had over twice the rate of 1-star ratings (29.6%) compared to non-unionized hospitals (13%).

Rating	Non-Union	SEIU
****	17.4%	0.0%
****	27.5%	18.5%
$\star \star \star$	20.3%	29.6%
**	21.7%	22.2%
*	13.0%	29.6%

National Nurses United (NNU) v. SEIU

CMS star ratings were higher for NNU-unionized hospitals compared to SEIU-unionized hospitals statewide. While SEIU-unionized hospital ratings averaged half-a-star lower (2.37 stars) than the California hospital average (3.05 stars), NNU-represented hospitals scored slightly above (3.10 stars).



Compared to 13.0% of NNU-unionized hospitals receiving the 5-star ratings, 0.0% of SEIU-unionized hospitals achieved the same. SEIU-unionized hospitals also had nearly three times the percentage of the worst 1-star ratings (29.6%) compared to NNU-unionized hospitals (9.8%).

Rating	NNU	SEIU
****	13.0%	0.0%
****	23.6%	18.5%
***	33.3%	29.6%
**	20.3%	22.2%
*	9.8%	29.6%

United Nurses Associations of California (UNAC) v. SEIU

CMS ratings were higher for UNAC-unionized hospitals compared to SEIU-unionized hospitals statewide. While SEIU-unionized hospitals averaged a score over half-a-point below (2.37 stars) the California hospital average (3.05 stars), UNAC-unionized hospitals scored slightly above the state average (3.33 stars).



Compared to 5.6% of UNAC-unionized hospitals receiving the best 5-star ratings, 0.0% of SEIU-unionized hospitals achieved the same. While 29.6% of SEIU-unionized hospitals received the worst 1-star rating, 0.0% of UNAC-unionized hospitals received this rating.

Rating	UNAC	SEIU
****	5.6%	0.0%
****	44.4%	18.5%
***	27.8%	29.6%
**	22.2%	22.2%
*	0.0%	29.6%

All Other Unions v. SEIU

CMS ratings were higher for hospitals represented by other, non-SEIU unions compared to those with nurses represented by SEIU unions. While SEIU-unionized hospitals averaged a score over half-a-star below (2.37 stars) the California hospital average (3.05 stars), hospitals with nurses represented by other, non-SEIU unions scored slightly above the state average (3.12 stars).



Compared to 12.3% of non-SEIU unionized hospitals receiving the best 5-star ratings, 0.0% of SEIUunionized hospitals achieved the same. While 29.6% of SEIU-unionized hospitals received the worst 1-star rating, just 8.4% of non-SEIU unionized hospitals received this rating.

Rating	Other	SEIU
****	12.3%	0.0%
****	26.5%	18.5%
$\star\star\star$	31.0%	29.6%
**	21.9%	22.2%
*	8.4%	29.6%

REGRESSION ANALYSIS, BY UNION

Overall Results

In a regression analysis of unionization status and household income on all acute care hospitals statewide, all coefficients were statistically significant at least at 95% confidence.

The effects of SEIU-unionization of hospital nurses compared to non-SEIU-unionized hospitals and nonunionized hospitals are shown below.²

Geography	Non-Union v. SEIU	NNU v. SEIU	UNAC v. SEIU	Other Union v. SEIU
California	-0.7904**	-0.6600**	-0.9516**	-0.6894***
Los Angeles County ³	-0.5699	-0.7450	-0.4552	-0.6803

* indicates statistical significance at 90% confidence

** indicates statistical significance at 95% confidence

*** indicates statistical significance at 99% confidence

Non-union v. SEIU

Regressing overall hospital star rating on SEIU unionization status and median household income resulted in a coefficient of -0.7904 with 95% confidence the estimate is between -1.3440 and -0.2368.

This result means SEIU-unionization of a hospital's nurses correlates with a lower overall hospital rating of nearly eight-tenths of a star (on a 5-star scale) compared to non-unionized hospitals.

Research Note: Two non-unionized hospitals were removed from sample size for the regression analysis as ZCTA data was not available for these zip codes.

National Nurses Union (NNU) v. SEIU

Regressing overall hospital ranking on SEIU unionization status and median household income resulted in a coefficient of -0.6600 with 95% confidence the estimate is between -1.1295 and -0.1904.

This result means SEIU unionization of a hospital's nurses correlates with a lower overall hospital rating by more than six-tenths of a star (on a 5-star scale) compared to NNU-unionized hospitals.

Research Note: Three NNU-unionized hospitals were removed from sample size for the regression analysis as ZCTA data was not available for these zip codes.

² We also ensured these results were not meaningfully altered by controlling for government ownership of hospitals statewide. All coefficients remained negative and statistically significant at least at 95% confidence. See methodology.

³ The sample sizes were too small when limiting to just Los Angeles County to determine any statistically significant effects.

United Nurses Associations of California (UNAC) v. SEIU

Regressing overall hospital ranking on SEIU unionization status and median household income resulted in a coefficient of -0.9516 with 95% confidence the estimate is negative between -1.6003 and -0.3029.

This result means SEIU unionization of a hospital's nurses correlates with a lower overall hospital rating by nearly one star (on a 5-star scale) compared to UNAC-unionized hospitals.

All Other Unions v. SEIU

Regressing overall hospital ranking on SEIU unionization status and median household income resulted in a coefficient of -0.6894 with 95% confidence the estimate is negative between -1.1456 and -0.2332.

This result means SEIU unionization of a hospital's nurses correlates with a lower overall rating by nearly seven-tenths of a star (on a 5-star scale) compared to hospitals where nurses are represented by other unions.

Research Note: Three "other unionized" hospitals were removed from sample size for the regression analysis as ZCTA data was not available for these zip codes.

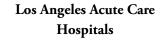
LOS ANGELES COUNTY KEY FINDINGS

SUMMARY

- While Los Angeles County hospitals are rated slightly below the statewide average (2.91 stars), SEIU-unionized hospitals in the county were rated nearly half-a-star lower (2.35 stars).
- SEIU-unionized hospitals are responsible for a disproportionate share of the lowest-rated hospitals: 11.8% of Los Angeles hospitals were rated 1-star, while 35.3% of SEIU hospitals in Los Angeles County scored 1-star.
- SEIU-unionized hospitals failed to record a single 5-star rating in Los Angeles County, while 15.7% of non-unionized hospitals and 6.3% of hospitals represented by other nurses' unions achieved a 5-star rating.

DESCRIPTIVE STATISTICS: LOS ANGELES ACUTE CARE HOSPITALS

The analysis of acute care hospitals based on registered nurses' union affiliation includes 68 Medicareregistered hospitals in Los Angeles County. The average star rating of these hospitals is 2.91 stars.





Average Rating: 2.91 / 5 stars Sample Size: 68

Rating	Count (%)
****	5 (7.4%)
****	17 (25.0%)
***	21 (30.9%)
**	17 (25.0%)
*	8 (11.8%)

COMPARING OVERALL STAR RATINGS, BY UNION

Non-union v. SEIU

CMS ratings were higher for non-unionized hospitals compared to those with nurses represented by SEIU unions in Los Angeles County. While SEIU-unionized hospitals averaged a score roughly half-a-star below (2.35 stars) the Los Angeles County hospital average (2.91 stars), hospitals with nurses represented by other, non-SEIU unions scored slightly above the county hospital average (3.11 stars).



SEIU hospitals were outperformed for the percentage of the best-rated 5-star hospitals (0.0%) than nonunionized hospitals (15.7%). While 35.3% of SEIU-unionized hospitals received the lowest 1-star rating, just 10.5% of non-unionized hospitals received this rating.

Rating	Non-Union	SEIU
****	15.8%	0.0%
****	26.3%	23.5%
***	21.1%	23.5%
**	26.3%	17.6%
*	10.5%	35.3%

NNU v. SEIU

CMS ratings were higher for NNU-unionized hospitals compared to SEIU-unionized hospitals in Los Angeles County. While SEIU-unionized hospitals averaged a rating seven-tenths below the hospital average in Los Angeles County (2.35 stars), NNU-unionized hospitals scored slightly above the county hospital average (3.16 stars).



SEIU-unionized hospitals were outperformed for the percentage of the best-rated 5-star hospitals (0.0%) than NNU-unionized hospitals (8%). While 35.3% of SEIU-unionized hospitals received the worst 1-star ranking, 0.0% of NNU-unionized hospitals recorded a 1-star rating.

Rating	NNU	SEIU
****	8.0%	0.0%
****	24.0%	23.5%
***	44.0%	23.5%
**	24.0%	17.6%
*	0.0%	35.3%

Other Unions v. SEIU

CMS ratings were higher for hospitals unionized by other, non-SEIU unions compared to SEIU-unionized hospitals. While SEIU-unionized hospitals averaged a rating over half-a-star below the Los Angeles County hospital average (2.35 stars), hospitals unionized by non-SEIU unions scored slightly above the county hospital average (3.09 stars).



SEIU-unionized hospitals were outperformed for the percentage of 5-star hospitals (0.0%) than hospitals unionized by non-SEIU unions (6.3%). While 35.3% of SEIU hospitals received the worst 1-star rating, hospitals unionized by non-SEIU unions did not receive this rating.

Rating	Other	SEIU
****	6.3%	0.0%
****	25.0%	23.5%
***	40.6%	23.5%
**	28.1%	17.6%
*	0.0%	35.3%

CONCLUSION

What could be the reason for the poor performance of hospitals with SEIU-represented registered nurses?

The SEIU has a controversial history that includes hospital strikes and alleged mistreatment of its own employees that may contribute to the union's possible neglect of its hospitals and members.

SEIU 721 was forced to pay nearly \$7 million to a former employee who claimed to be fired for alleging the union was ignoring its own members' arbitration cases.⁴ The SEIU employee claimed that the union would close requests without even notifying its dues-paying members.

SEIU 721 isn't the only California local allegedly involved in misconduct, SEIU 121RN was sued after an employee of the union died in his office after being screamed at by his superior. The employee's wife would later allege her husband had been diagnosed with several stress related ailments because of the abuse he took while working at the union.

With these kind of employee issues at the SEIU, it may be hard for the union's workers to properly take care of its represented registered nurses and make good on its promise to improve hospital conditions.

The SEIU also chose to have strikes take place during the COVID-19 pandemic, an issue that could have impacted hospital scores.

In 2020, SEIU 121RN launched a ten-day strike that was declared unlawful by a federal judge due to violating the terms of the union's contract with the hospital. SEIU 121RN was forced to pay the hospital over \$6 million in damages. Not only did this hurt the hospital, but valuable registered nurses were taken away from patients at a time when they needed them most.⁵

Instead of caring for patients, many hospitals are forced to utilize resources and money towards mitigating damages of any strike the SEIU may impose, this has included hiring a backup registered nursing staff to reduce its risk in the case of an SEIU strike.⁶

Although it's clear that SEIU-unionized hospitals received lower ratings by CMS in 2024, there could also be a variety of factors at play that are out of the SEIU's control. While household income by zip code was controlled for, scores could also be impacted by hospital ownership type, the ownership system (i.e. Kaiser), and patient demographics.

⁴ Buckley. "SEIU Called Out for Mistreating Own Employees." California Globe. Nov. 8, 2023

⁵ Riverside Community Hospital. Press Release. June 12, 2024.

⁶ Los Robles Hospital. Press Release. Nov. 20, 2023

APPENDICES

CALIFORNIA DESCRIPTIVE TABLES APPENDIX

All Data

Sample Size	251
Overall Star Rating	3.05
Rating	Count (%)
5-Star	31 (12.4%)
4-Star	65 (25.9%)
3-Star	70 (27.9%)
2-Star	55 (21.9%)
1-Star	30 (12.0%)

SEIU

Sample Size Overall Star Rating	27 2.37
Rating	Count (%)
5-Star	0 (0.0%)
4-Star	5 (18.5%)
3-Star	8 (29.6%)
2-Star	6 (22.2%)

NNU

Sample Size Overall Star Rating	123 3.10
Rating	Count (%)
5-Star	16 (13.0%)
4-Star	29 (23.6%)
3-Star	41 (33.3%)
2-Star	25 (20.3%)
1-Star	12 (9.8%)

UNAC

Sample Size	18
Overall Star Rating	3.33
Rating	Count (%)
5-Star	1 (5.6%)
4-Star	7 (44.4%)
3-Star	5 (27.8%)
• •	(22.20/)
2-Star	4 (22.2%)

All Other Union*

Sample Size Overall Star Rating	155 3.12
Rating	Count (%)
5-Star	19 (12.3%)
4-Star	41 (26.5%)
3-Star	48 (31.0%)
2-Star	34 (21.9%)
1-Star	13 (8.4%)

Non-Union

Sample Size	69
Overall Star Rating	3.14
Rating	Count (%)
5-Star	12 (17.4%)
4-Star	19 (27.5%)
3-Star	14 (20.3%)
2-Star	15 (21.7%)
1-Star	9 (13.0%)

* Excluding SEIU

LOS ANGELES DESCRIPTIVE TABLES APPENDIX

All Data

Sample Size	68
Overall Star Rating	2.91
Rating	Count (%)
5-Star	5 (7.4%)
4-Star	17 (25.0%)
2.0	
3-Star	21 (30.9%)
3-Star 2-Star	21 (30.9%) 17 (25.0%)

SEIU

Sample Size	17
Overall Star Rating	2.35

Rating	Count (%)
5-Star	0 (0.0%)
4-Star	4 (23.5%)
3-Star	4 (23.5%)
2-Star	3 (17.6%)
1-Star	6 (35.3%)

NNU

Sample Size	25
Overall Star Rating	3.16
Rating	Count (%)
5-Star	2 (8.0%)
4-Star	6 (24.0%)
3-Star	11 (44.0%)
2-Star	6 (24.0%)
1-Star	0 (0.0%)

All Other Union*

Sample Size	32
Overall Star Rating	3.09
Rating	Count (%)
5-Star	2 (6.3%)
4-Star	8 (25.0%)
3-Star	13 (40.6%)
	0 (00 10)
2-Star	9 (28.1%)

* Excluding SEIU

Non-Union

Sample Size	19
Overall Star Rating	3.11
Rating	Count (%)
5-Star	3 (15.8%)
4-Star	5 (26.3%)
3-Star	4 (21.1%)
2-Star	5 (26.3%)
1-Star	2 (10.5%)

REGRESSION TABLES APPENDIX

Non-union Hospitals v. SEIU Hospitals

Multiple R	0.3572
R Square	0.1276
Adjusted R Square	0.1084
Standard Error	1.2188
Observations	94

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	2.1371	0.4124	5.1821	0.0000	1.3180	2.9563
ZCTA Household Income	0.0000	0.0000	2.5152	0.0137	0.0000	0.0000
SEIU dummy	-0.7904	0.2787	-2.8358	0.0056	-1.3440	-0.2368

Multiple R	0.4125
R Square	0.1701
Adjusted R Square	0.1425
Standard Error	1.1953
Observations	94

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	2.2790	0.4098	5.5610	0.0000	1.4648	3.0931
Government Ownership dummy	-0.7898	0.3677	-2.1479	0.0344	-1.5203	-0.0593
ZCTA Household Income	0.0000	0.0000	2.3671	0.0201	0.0000	0.0000
SEIU dummy	-0.6522	0.2808	-2.3227	0.0225	-1.2101	-0.0943

NNU Hospitals v. SEIU Hospitals

0.3297
0.1087
0.0963
1.1139
147

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	2.3162	0.2707	8.5558	0.0000	1.7811	2.8513
ZCTA Household Income	0.0000	0.0000	2.9912	0.0033	0.0000	0.0000
SEIU dummy	-0.6600	0.2376	-2.7780	0.0062	-1.1295	-0.1904

Multiple R	0.3646
R Square	0.1329
Adjusted R Square	0.1147
Standard Error	1.1025
Observations	147

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	2.3833	0.2700	8.8258	0.0000	1.8495	2.9171
Government Ownership dummy	-0.4868	0.2436	-1.9985	0.0476	-0.9683	-0.0053
ZCTA Household Income	0.0000	0.0000	3.0456	0.0028	0.0000	0.0000
SEIU dummy	-0.6065	0.2367	-2.5628	0.0114	-1.0743	-0.1387

UNAC Hospitals v. SEIU Hospitals

Multiple R	0.4237
R Square	0.1796
Adjusted R Square	0.1405
Standard Error	1.0488
Observations	45

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	3.5022	0.6220	5.6305	0.0000	2.2469	4.7574
ZCTA Household Income	0.0000	0.0000	-0.2958	0.7689	0.0000	0.0000
SEIU dummy	-0.9516	0.3215	-2.9603	0.0050	-1.6003	-0.3029

Multiple R	0.4725
R Square	0.2233
Adjusted R Square	0.1665
Standard Error	1.0328
Observations	45

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	3.4833	0.6127	5.6856	0.0000	2.2460	4.7206
ZCTA Household Income	0.0000	0.0000	-0.2037	0.8396	0.0000	0.0000
SEIU dummy	-0.8259	0.3272	-2.5241	0.0156	-1.4866	-0.1651
Government Ownership dummy	-0.6351	0.4180	-1.5193	0.1364	-1.4793	0.2091

Other Union Hospitals v. SEIU Hospitals

Multiple R	0.3110
R Square	0.0967
Adjusted R Square	0.0864
Standard Error	1.1052
Observations	179

	Coefficient	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 99.0%	Upper 99.0%
Intercept	2.4075	0.2486	9.6841	0.0000	1.9169	2.8981	1.7601	3.0548
Household Income	0.0000	0.0000	2.9809	0.0033	0.0000	0.0000	0.0000	0.0000
SEIU Status	-0.6894	0.2312	-2.9821	0.0033	-1.1456	-0.2332	-1.2914	-0.0874

Multiple R	0.3403
R Square	0.1158
Adjusted R Square	0.1007
Standard Error	1.0965
Observations	179

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 99.0%	Upper 99.0%
Intercept	2.4511	0.2477	9.8965	0.0000	1.9623	2.9399	1.8061	3.0961
ZCTA Household Income	0.0000	0.0000	3.0781	0.0024	0.0000	0.0000	0.0000	0.0000
SEIU dummy	-0.6348	0.2311	-2.7473	0.0066	-1.0909	-0.1788	-1.2366	-0.0331
Government Ownership dummy	-0.4424	0.2274	-1.9455	0.0533	-0.8913	0.0064	-1.0347	0.1498

METHODOLOGY

TERMS & ANALYSIS

Hospital Classification

This analysis strictly focused on analyzing hospitals based on union status. Hospitals were grouped based on the status of their registered nurses' union affiliation.

When using comparison groups looking at Los Angeles County, UNAC was dropped from the analysis due to a sample size that was under ten hospitals.

Hospitals were categorized based upon publicly available information and may not be 100% accurate due to the information available at the time of this report.

The list below describes each of the groups that were used for comparisons, the abbreviations will be used throughout the report in the comparison tables:

SEIU-unionized Hospital: Hospitals in which registered nurses were affiliated with the Service Employees International Union (SEIU) within at least a portion of the CMS study period.

Non-unionized Hospital: Hospitals in which the registered nurses were not affiliated with any union during a portion of the CMS study period. Hospitals where no known union presence could be found were included as part of this category.

NNU-unionized Hospital: Hospitals in which registered nurses were affiliated with the National Nurses Union (NNU) within at least a portion of the CMS study period.

UNAC-unionized Hospital: Hospitals in which registered nurses were affiliated with the United Nurses Associations of California (UNAC) within at least a portion of the CMS study period.

Other Union Hospitals (Other Union): Hospitals in which registered nurses were affiliated with any union—excluding the SEIU—within at least a portion of the CMS study period.

Hospital Care Categories

For this analysis of the performance of California hospitals based on CMS ratings, we focused solely on acute care hospitals. Acute care is the most abundant category of hospitals and provided the largest sample size to work with.

The following list provides a description of all the hospitals from the raw CMS spreadsheet. Hospitals outside of acute care represent a small segment of the Medicare-registered hospitals in the United States and were not included for that reason.

Acute Care Hospitals: Any hospital that provides short-term medical treatment for patients with severe or urgent health issues. All 251 Acute care hospitals in California were included in this analysis.

Acute Care, Department of Defense: Any hospital run by the Department of Defense that provides short-term medical treatment for patients with severe or urgent health issues. There are only five acute care—Department of Defense facilities in the raw CMS dataset for California.

Acute Care, Veterans Administration: Any hospital run by the Veterans Administration that provides short-term medical treatment for patients with severe or urgent health issues. There are only eight acute care—Veterans Administration facilities in the raw CMS dataset for California.

Critical Access Hospitals: Small rural hospitals that provide essential healthcare services to local residents. There are 38 Critical Access hospitals in the raw CMS rating dataset and only six of these were given a rating in California.

Psychiatric: Hospitals that focus specifically on mental health issues and emotional wellbeing. There are 41 psychiatric hospitals in the raw CMS rating dataset and none of these are given a rating.

Children's: Facilities that specialize in the treatment of children. There are ten Children's hospitals in the raw CMS rating dataset for California and none of these are given a rating.

REGRESSION ANALYSIS

A regression analysis was utilized for each of the state-wide comparisons. The analysis regressed hospital overall star rating on unionization status (a dummy variable indicating "1" for SEIU unionization and "0" for each other "outgroup" in each comparison. The regression also controlled for local household income as indicated by the U.S. Census Bureau's 2022 5-Year American Census Survey ZCTA5 (Zip Code) Census ID.

Although ZCTA (Zip Code Tabulations Areas) are not an exact representation of mail designated zip code areas, they are a generalized representation that should closely represent median household income in each zip code.⁷

The linear regression was as follows:

 $y = \beta_1 x_1 + \beta_2 x_2 + \beta_0$

where X_1 represents unionization status (SEIU = "1", outgroup = "0") and X_2 represents median household income

Geography	Non-Union v. SEIU	NNU v. SEIU	UNAC v. SEIU	Other Union v. SEIU
California	-0.7904**	-0.6600**	-0.9516**	-0.6894***
Los Angeles County ⁸	-0.5699	-0.7450	-0.4552	-0.6803

We also ensured these results were not meaningfully altered by controlling for government ownership of hospitals statewide. All coefficients remained negative and statistically significant at least at 95% confidence. The additional linear regression was as follows:

 $y = \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_0$ where x_1 represents unionization status (SEIU = "1", outgroup = "0") and x_2 represents median household income and x_3 represents ownership type (government ownership = "1", outgroup = "0")

Geography	Non-Union v. SEIU	NNU v. SEIU	UNAC v. SEIU	Other Union v. SEIU
California	-0.6522**	-0.6065**	-0.8259**	-0.6348***

* indicates statistical significance at 90% confidence

** indicates statistical significance at 95% confidence

*** indicates statistical significance at 99% confidence

All regression results were analyzed based on a 95% confidence interval, except in designated circumstances where 99% confidence intervals were used.

The sample sizes for Los Angeles comparisons were too small to discern any statistically significant effects.

⁷ ZCTA. Census. Acc. 2024.

⁸ The sample sizes were too small when limiting to just Los Angeles County to determine any statistically significant effects.

RATING SYSTEM

Hospitals are assigned a rating of 1 star (worst rating) to 5 stars (best rating) based on an analysis conducted by CMS of 47 measures under five different categories, including mortality, readmission, safety, patient experience, and timely & effective care. Measures under these categories were weighted according to the following system.

CMS noted that an asterisk denotes measures that would have normally included reporting periods in 1Q and 2Q in 2020.⁹

Measure Group	Weight Used in CMS Calculation
Mortality	22%
Safety	22%
Readmission	22%
Patient Experience	22%
Timely & Effective Care	12%

According to CMS, "if a hospital reports no measures for a given measure group, CMS considers that group to be 'missing.' When a hospital is missing one or more measure groups, CMS applies the Hospital Value-Based Purchasing (HVBP) approach of re-proportioning the weight of the missing group(s) across the groups for which the hospital does report measures. See the table below for examples of how the weighting scheme is adjusted for a hospital that is missing the Patient Experience measure group."¹⁰

Measure Group	Standard Weight	Re-Proportioned Weight
Mortality (1+ measures)	22%	28.2%
Safety (1+ measures)	22%	28.2%
Readmission (1+ measures)	22%	28.2%
Patient Experience (0 measures)	22%	-
Timely & Effective Care (1+ measures)	12%	15.4%

9 Overall Star Rating. CMS. 2024.

10 Overall Star Rating QUS. 2024.

MEASURES

Mortality was measured by CMS using seven different parameters that included the death rates/deaths for seven different measure groups. The measures for heart attack, CABG, COPD, heart failure, pneumonia, and stroke were scored using mortality rate within thirty days of treatment. Deaths among patients with serious treatable complications after surgery were scored using deaths per one-thousand patients (PSI_04).¹¹

Mortality Measures	Data Collection Period
Death rate for heart attack patients	7/1/2019 – 6/30/2022*
Death rate for coronary artery bypass graft (CABG) surgery patients	7/1/2019 – 6/30/2022*
Death rate for Chronic obstructive pulmonary disease (COPD) Patients	7/1/2019 - 6/30/2022*
Death rate for heart failure patients	7/1/2019 – 6/30/2022*
Death rate for pneumonia patients	7/1/2019 - 6/30/2022*
Death rate for stroke patients	7/1/2019 - 6/30/2022*
Deaths among patients with serious treatable complications after surgery	7/1/2020 - 6/30/2022*

Safety measures largely include—six out of eight measures—a range of infections that can occur after treatment at a hospital. Two of the measures—complications for hip/knee replacement patients and serious complications—are also measured in this category.

Safety Measures	Data Collection Period
Central line-associated bloodstream infections	4/1/2022 – 3/31/2023
Catheter-associated urinary tract infections (CAUTI)	4/1/2022 - 3/31/2023
Surgical site infections from colon surgery (SSI: Colon)	4/1/2022 - 3/31/2023
Surgical site infections from abdominal hysterectomy (SSI: Hysterectomy)	4/1/2022 - 3/31/2023
Methicillin-resistant Staphylococcus aureus (MRSA) Blood Laboratory-identified Events (Bloodstream infections)	4/1/2022 - 3/31/2023
Clostridium difficile (C. diff) Laboratory-identified Events (Intestinal infections)	4/1/2022 - 3/31/2023
Rate of complications for hip/knee replacement patients	4/1/2019 - 3/31/2022*
Serious complications	7/1/2020 – 3/31/2023

11 Mortality Measures. Measure ID. 2024.

Hospital Readmission Measures show rates, ratios, and return days for several health issues and procedures. These measures include scores for heart failure, heart attacks, colonoscopies, cancer and other issues/treatments.

Readmission Measures	Data Collection Period
Hospital return days for heart attack patients	7/1/2019 – 6/30/2022*
Rate of readmission for coronary artery bypass graft (CABG) patients	7/1/2019 – 6/30/2022*
Rate of readmission for Chronic obstructive pulmonary artery disease (COPD) Patients	7/1/2019 - 6/30/2022*
Hospital return days for heart failure patients	7/1/2019 - 6/30/2022*
Rate of readmission after hip/knee surgery	7/1/2019 - 6/30/2022*
Hospital return days for pneumonia patients	7/1/2019 - 6/30/2022*
Rate of readmission after discharge from hospital (hospital-wide)	7/1/2019 - 6/30/2022
Rate of unplanned hospital visits after an outpatient colonoscopy	1/1/2022 – 12/31/2022*
Rate of unplanned hospital visits for patients receiving outpatient chemotherapy	1/1/2022 - 12/31/2022
Rate of emergency departments visits for patients receiving outpatient chemotherapy	1/1/2022 - 12/31/2022
Ratio of unplanned hospital visits after hospital outpatient surgery	1/1/2022 - 12/31/2022

Patient Experience includes eight measures that are gleaned from a patient survey meant to gauge their experiences with surgery or procedure preparation, check-in process, cleanliness, and staff communication at each hospital.¹²

Patient Experience Measures	Data Collection Period
Patients who reported that their nurses communicated well	4/1/2022 – 3/31/2023
Patients who reported that their doctors communicated well	4/1/2022 – 3/31/2023
Patients who reported that they received help as soon as they wanted	4/1/2022 - 3/31/2023
Patients who reported that staff explained about medicines before giving it to them	4/1/2022 - 3/31/2023
Patients who reported that their room and barroom were clean/patients who reported that the area around their room was quiet at night	4/1/2022 - 3/31/2023
Patients who reported that they were given information about what to do during their recovery at home	4/1/2022 - 3/31/2023
Patients who understood their care when they left the hospital	4/1/2022 - 3/31/2023
Patients who gave their hospital a rating on a scale from 0 (lowest) to 10 (high- est)/Patients who would recommend the hospital to the friends and family	4/1/2022 - 3/31/2023

12 Patient Experience Measures. 2024.

Timely and Effective Care includes twelve measures that are meant to indicate how quickly hospitals respond with the proper treatment in a timely manner. This category also includes how many health care workers are vaccinated. This is the category weighted the least in the CMS study (12%).

Timely & Effective Care Measures	Data Collection Period
Percentage of healthcare workers given influenza vaccination	10/1/2022 - 3/31/2023
COVID-19 vaccination coverage among health care providers	1/1/2023 - 3/31/2023
Percentage of patients who left the emergency department before being seen	1/1/2022 – 12/31/2023
Percentage of patients who came to the emergency department with stroke symptoms who received brain scan results within 45 minutes arrival	4/1/2022 - 3/31/2023
Percentage of patients receiving appropriate recommendation for follow-up screening colonoscopy	1/1/2022 – 12/31/2022
Percentage of mothers whose deliveries were scheduled too early (1-2 weeks early), when a scheduled delivery was not medically necessary	4/1/2022 - 3/31/2023
Percentage of patients who received appropriate care for severe sepsis and septic shock	4/1/2022 - 3/31/2023
Percentage of outpatients with chest pain or possible heart attack who got drugs to break up blood clots within 30 minutes of arrival	4/1/2022 - 3/31/2023
Average (median) number of minutes before outpatients with chest pain or possible heart attack who needed specialized care were transferred to another hospital	4/1/2022 - 3/31/2023
Average (median) time patients spent in the emergency department before leaving from the visit	4/1/2022 - 3/31/2023
Percentage of outpatients with low-back pain who had an MRI without trying recommended treatments first, such as physical therapy	7/1/2021 - 6/30/2022
Percentage of outpatient CT scans of the abdomen that were "combination" (double) scans	7/1/2021 - 6/30/2022
Percentage of outpatients who got cardiac imaging stress tests before low- risk outpatient surgery	7/1/2021 – 6/30/2022

