



Nursing Home Five-Star Ratings and the COVID-19 Pandemic (January 2021)

Prepared by
Kiran Sreenivas, MS
Michael Leitson, MS

Jan 27, 2021

Key Takeaways

- On January 27, 2021, nursing home Five-Star ratings were updated for the first time to reflect quality and survey data from 2020 and during the COVID-19 pandemic.
- Five-Star ratings did not change for most centers. Of the 15,340 nursing homes in the January 2021 release for the nation, 9,937 (65%) saw no change in their Overall rating. Meanwhile, 2,565 (17%) had a decrease of one or more stars and 2,613 (17%) saw an increase in their Overall rating.
- The distribution of Overall, Survey, Staffing, and Quality ratings also similar between December 2020 and January 2021. For example, 61% of nursing homes in the nation have a 4- or 5-Star Quality rating in both December 2020 and January 2021.
- Of the 22 quality measures that were updated to include data through June 2020, the national average showed little absolute change for the vast majority. Only three measures had an absolute change of greater than or equal to one percentage point (long-stay depression worsened from 5.1% to 6.1%, long-stay mobility worsened from 17.1% to 18.5% and short-stay functional improvement improved from 68.0% to 69.0%)

Background

On January 27, 2021, nursing home Five-Star ratings were updated for the first time to reflect quality and survey data during the COVID-19 pandemic and 2020.¹ Five-Star ratings were held constant during most of 2020 to prioritize infection control efforts to prevent and mitigate the impact of COVID-19 in nursing homes.

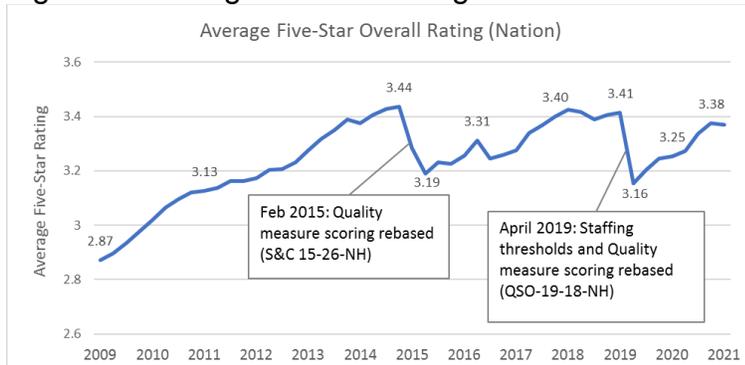
From an enforcement and regulation perspective to prevent and mitigate COVID-19, state survey agencies prioritized infection control focused surveys over routine annual standard surveys and ad-hoc complaint surveys. CMS held up incorporating these survey findings into Five-Star until a fairer comparison of nursing home compliance could be made. At this point, most nursing homes have had at least one infection control focused survey. For the January 27 update to Five-Star, infection control focused survey deficiencies were counted as complaint surveys for methodological scoring and rating purposes.²

From a resident-level perspective to prevent and mitigate COVID-19, non-essential visits from family and friends were not allowed or restricted for most of the year. Additionally, group activities, such as communal dining and group therapy, were not allowed or restricted. These efforts take a physical and mental toll on residents.³ Increased depression and worsening mobility were expected with the January 27 Five-Star release.

The aim of this brief is to show the change in Five-Star ratings that occurred on January 27, 2021 and provide historical context on the performance.

Five-Star Ratings and Quality Measures

Figure 1: Average Overall Rating Over Time



Overall Five-Star Ratings

The Overall Five-Star rating is the composite star rating of Survey, Staffing, and Quality. The Jan 2021 ratings are the first with Survey and Quality data during 2020 and the COVID-19 pandemic.

Newest Overall Ratings (Jan 2021)

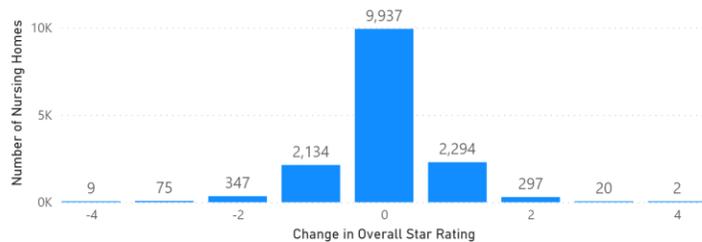
15,340
Total Number of Nursing Homes

4,041
5 Star Centers

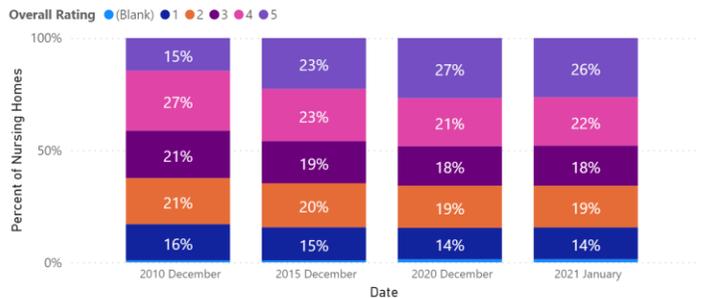
3,313 4 Star Centers	2,743 3 Star Centers
2,853 2 Star Centers	2,172 1 Star Centers

Source: CMS Care Compare. Updated: January 27, 2021.

Change in Overall Rating from Dec 2020 - Jan 2021



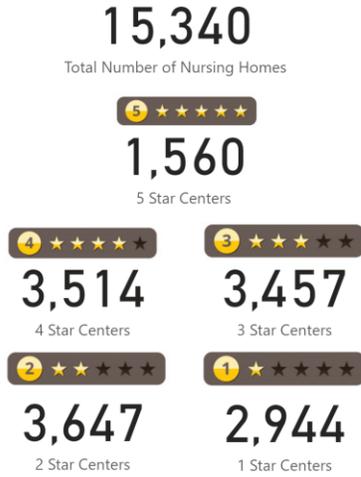
Overall Rating Distribution Over Time



Survey Five-Star Ratings

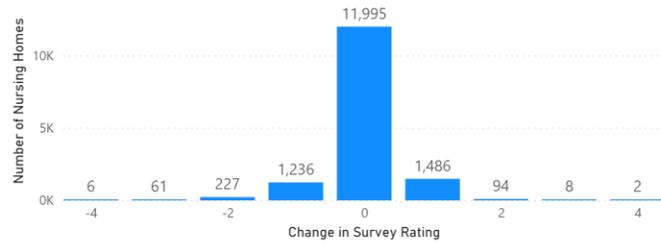
Survey ratings are based on a state-level fixed distribution. The top 10% within a state are 5-stars, the bottom 20% are 1-star, and the rest are evenly split between 2-, 3-, and 4-stars. Thus, Survey ratings do not improve over time. Jan 2021 ratings include 2020 infection control focused survey findings for the first time.

Newest Survey Ratings (Jan 2021)



Source: CMS Care Compare. Updated: January 27, 2021.

Change in Survey Rating from Dec 2020- Jan 2021



Survey Rating Distribution Over Time



Staffing Five-Star Ratings

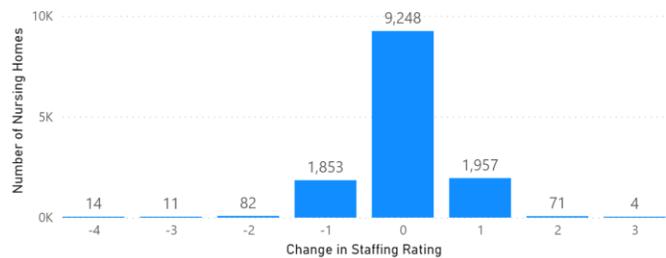
Staffing Ratings are based on RN, LPN, and CNA nursing hours per resident day adjusted for patient case-mix. Ratings in Jan 2021 are based on staffing during Jul 2020-Sep 2020 (Q3 2020), while Dec 2020 ratings are based on data from Apr 2020-Jun 2020 (Q2 2020). Because of COVID, ratings have been suppressed if data is missing or incomplete in 2020.

Newest Staffing Ratings (Jan 2021)

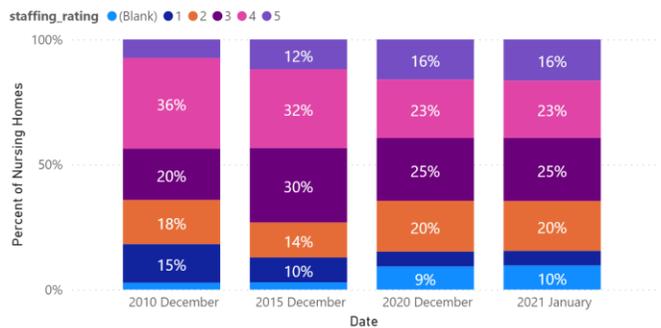


Source: CMS Care Compare. Updated: January 27, 2021.

Change in Staffing Rating from Dec 2020 - Jan 2021



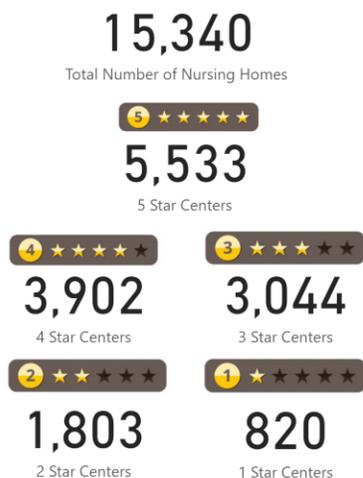
Staffing Rating Distribution Over Time



Quality Five-Star Ratings

Quality Ratings are based on a mix of short- and long-stay measures. Over time, additional measures have been added and rating thresholds have been raised. Jan 2021 ratings include some measure data up to June 2020.

Newest Quality Ratings (Jan 2021)

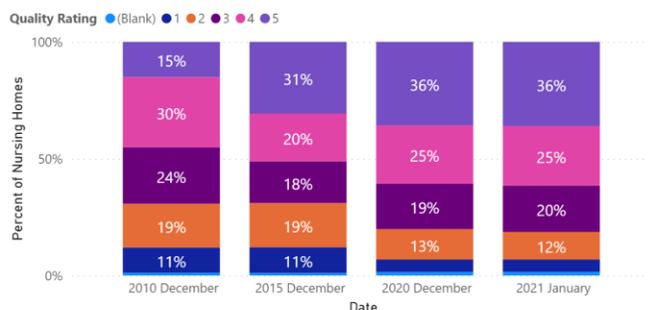


Source: CMS Care Compare. Updated: January 27, 2021.

Change in Quality Rating from Dec 2020 - Jan 2021



Quality Rating Distribution Over Time



Long-Stay Quality Measures Trends

Long-stay measures are for residents who reside in a nursing homes for 100 days or longer. Nine long-stay measures contribute to Five-Star Ratings. Some measures have been collected since 2011, while others were developed more recently have data since 2015 or 2018. The latest rate is through June 2020 for most measures.

Used in Five-Star Rating Calculation

	Most Historic	Latest Rate	Trend
Antipsychotics	23.9%	14.0%	
Falls	3.4%	3.4%	
Pressure Ulcers	7.4%	7.4%	
Urinary Tract Infection	7.8%	2.5%	
Catheter	4.3%	1.6%	
Activities of Daily Living	16.8%	15.4%	
Mobility Worsened	18.2%	18.5%	
Hospitalizations	1.70	1.69	
ED Visits	1.03	0.83	

Other Measures

	Most Historic	Latest Rate	Trend
Restraints	2.4%	0.2%	
Incontinence	41.5%	48.1%	
Weight Loss	7.2%	5.9%	
Depression	7.2%	6.1%	
Antianxiety or Hypnotic Medication	23.6%	19.5%	
Flu Vaccine <i>Higher Rate is Better</i>	91.0%	96.1%	
Pneumonia Vaccine <i>Higher Rate is Better</i>	94.0%	94.1%	

Source: CMS Care Compare. Updated on January 27, 2021

Short-Stay Quality Measures Trends

Short-stay measures are for residents who receive less than 100 days of care. Six short-stay measures contribute to Five-Star Ratings. Some measures have been collected since 2011, while others were developed more recently have data since 2015, 2018, or 2019. The latest rate is through June 2020 for most measures.

Used in Five-Star Rating Calculation

	Historic Rate	Latest Rate	Trend
Antipsychotics	3.0%	1.8%	
Pressure Ulcers*	3.9%	3.9%	
Hospital Readmissions	21.1%	21.7%	
ED Visits	11.5%	9.8%	
Discharge to Community <i>Higher Rate is Better</i>	49.3%	50.8%	
Functional Improvement <i>Higher Rate is Better</i>	63.5%	69.0%	

* Pressure Ulcer measure changed in October 2020 and has only one period of performance, so no trend data is available.

Other Measures

	Historic Rate	Latest Rate	Trend
Falls	0.9%	0.9%	
Functional Assessment <i>Higher Rate is Better</i>	96.4%	98.7%	
Flu Vaccine <i>Higher Rate is Better</i>	80.6%	82.6%	
Pneumonia Vaccine <i>Higher Rate is Better</i>	80.6%	83.7%	

Source: CMS Care Compare
Updated on January 27, 2021
Unless specified, lower rate is better

Works Cited

1. CMS. Updates to the Nursing Home Compare website and Five Star Quality Rating System. QSO-21-06. Dec 4, 2020. <https://www.cms.gov/files/document/qso-21-06-nh.pdf>
2. CMS. Design for Care Compare Nursing Home Five-Star Quality Rating System. 2021; January 2021. <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/downloads/usersguide.pdf>
3. Seegert L. COVID-19 is taking a huge emotional toll on nursing home residents. *PBS Newshour*. 2020-10-20. <https://www.pbs.org/newshour/health/covid-19-is-taking-a-huge-emotional-toll-on-nursing-home-residents>