

U.S. Department of Health and Human Services  
**Office of Inspector General**



# **CMS Use of Data on Nursing Home Staffing: Progress and Opportunities To Do More**

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# Office of Inspector General

## Report in Brief

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### Why OIG Did This Review

This review focuses on the Centers for Medicare & Medicaid Services' (CMS's) use of data on nursing home staffing from April 2018 through March 2019—before the COVID-19 pandemic. We also noted recent CMS actions through December 2020.

Since November 2016, CMS has required nursing homes to submit payroll-based staffing data, including data on nurses and non-nurses. In April 2018, CMS began updating staffing measures on Nursing Home Compare, a public website, with these staffing data. In December 2020, CMS replaced Nursing Home Compare with a new website called Care Compare. Care Compare includes the same staffing information that had been found on Nursing Home Compare. Specifically, consumers can search nursing homes on the basis of location and compare quality of care and staffing. The usefulness of this information to consumers depends on the extent to which it is complete and accurate.

Further, CMS also works with State survey agencies to monitor nursing home compliance with Federal requirements, including those for staffing.

### How OIG Did This Review

We analyzed staffing information reported by nursing homes, conducted in-depth interviews with subject-matter experts at CMS, and reviewed CMS documentation.

We also surveyed State survey agencies to understand how CMS works with them to monitor compliance with requirements for nursing home staffing and to identify any gaps in oversight of nursing home staffing.

## CMS Use of Data on Nursing Home Staffing: Progress and Opportunities To Do More

### Key Takeaway

CMS has taken important steps to expand use of new staffing data reported by nursing homes. However, CMS can better leverage staffing data to provide consumers with required information and to help State survey agencies protect nursing home residents.

### What OIG Found

CMS has taken important steps to build a new source for data on nursing home staffing and to use these data to better inform consumers and improve nursing home oversight. CMS provides the public with some of this staffing information on the Care Compare website. There, consumers can use Staffing Star Ratings to compare nurse staffing between nursing homes. Additionally, CMS has implemented a robust process to ensure the reliability of this nurse staffing information.

However, CMS has opportunities to better use the staffing information that nursing homes report. Specifically, the staffing information that CMS provides on Care Compare could be more useful to consumers if it included data on nurse staff turnover and tenure, as required by Federal law. CMS reported that the COVID-19 pandemic delayed its progress to implement these requirements.

Additionally, CMS can take steps to increase the reliability of the *non-nurse* staff information (i.e., information on physical therapists) that CMS publicly reports on Care Compare. Non-nurse staff play a critical role in providing quality care.

Further, CMS has taken an important step to target its oversight of nurse staffing by sharing information with State survey agencies. Specifically, to help State survey agencies target weekend inspections, CMS now informs the agencies as to which nursing homes reported lower weekend staffing. However, CMS can take additional steps to improve the effectiveness of State survey agencies' weekend inspections and strengthen oversight of staffing in nursing homes.

### What OIG Recommends and How the Agency Responded

OIG acknowledges the impact that COVID-19 has had on nursing home oversight and on CMS's priorities to help improve the quality of care that nursing homes provide. We note that the pandemic also reinforces the importance of having adequate staffing to respond to outbreaks of infectious diseases. We recommend that CMS (1) provide data to consumers on nurse staff turnover and tenure, as required by Federal law; (2) ensure the accuracy of non-nurse staffing data used on Care Compare; (3) consider residents' level of need when identifying nursing homes for weekend inspections; and (4) take additional steps to strengthen oversight of nursing home staffing. CMS concurred with all four of our recommendations.

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# BACKGROUND

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## Objectives

1. To assess CMS's progress toward publicly reporting statutorily required data on nursing home staffing.
  2. To determine the steps CMS has taken to ensure the quality of nursing-home-reported data before CMS shares these data on public websites, including Care Compare.
  3. To determine the extent to which CMS uses nursing homes' self-reported staffing data to monitor staffing requirements for nursing homes.
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This review focuses on staffing data reported by nursing homes from April 2018 through March 2019.<sup>1</sup> We collected and analyzed data about this time period, which preceded the emergence of the COVID-19 pandemic. However, the COVID-19 pandemic reinforces the importance of sufficient staffing for nursing homes, as inadequate staffing can make it more difficult for nursing homes to respond to outbreaks of infectious diseases like COVID-19.<sup>2, 3</sup> We also include recent CMS actions up until December 2020, when CMS replaced the Nursing Home Compare website with Care Compare.

To help consumers make care decisions, CMS provides nursing home staffing information on its Care Compare website.<sup>4</sup> The information includes Staffing Star Ratings and the amount of nurse and therapist time per resident per day (see Exhibit 1). CMS provides such staffing information to the public because it has long identified nurse staffing as a vital component of a nursing home's ability to provide quality care.<sup>5</sup> Until 2018, CMS relied on nursing homes' self-reported staffing levels

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<sup>1</sup> Nursing homes refers to both Medicare Skilled Nursing Facilities and Medicaid Nursing Facilities.

<sup>2</sup> Mathews, AW, and Kamp, J, "Coronavirus Hits Nursing Homes Hard, as Staff Combat Infections, Shortages," *Wall Street Journal*, <https://www.wsj.com/articles/coronavirus-hits-nursing-homes-hard-as-staff-combat-infections-shortages-11585250841?ns=prod/accounts-wsj>. Accessed on April 7, 2020.

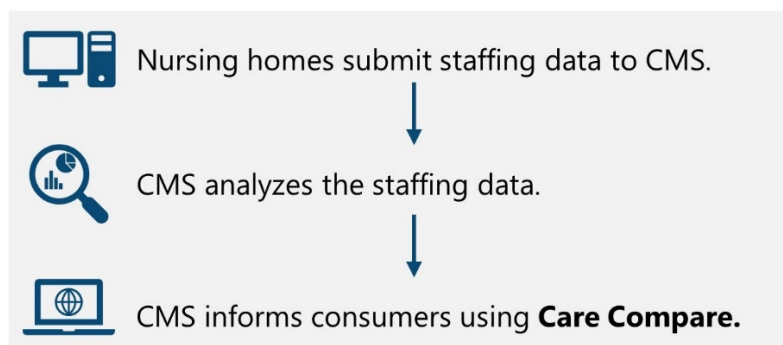
<sup>3</sup> Kenan, J, Roubein, R, and Luthi, S, "How Public Health Failed Nursing Homes," *Politico*, <https://www.politico.com/news/2020/04/06/public-health-failed-nursing-homes-167372>. Accessed on April 7, 2020.

<sup>4</sup> On December 1, 2020, Nursing Home Compare was replaced by Care Compare (<https://www.medicare.gov/care-compare/>), a website that allows comparison of several provider types, including nursing homes.

<sup>5</sup> Kramer, AM, and Fish, R, "The Relationship Between Nurse Staffing Levels and the Quality of Nursing Home Care," in *Appropriateness of Minimum Nurse Staffing Ratios in Nursing Homes: Phase II Final Report*, Abt Associates, Inc., Winter 2001. CMS, *Nursing Home Compare Technical Users' Guide—October 2020*, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/downloads/usersguide.pdf>. Accessed on November 17, 2020.

approximately once a year for the 2 weeks before an inspection to provide consumers with information on each nursing home's average staffing level.<sup>6</sup>

### Exhibit 1: CMS uses nursing home staffing data to inform consumers.



However, CMS was concerned about the accuracy of nursing homes' self-reported staffing data. To improve the accuracy of publicly reported staffing data, CMS created a new data collection system called the Payroll-Based Journal (PBJ).<sup>7, 8</sup> Nursing homes are required to use the PBJ to report daily staffing information based on payroll information every 3 months (i.e., quarterly).

In addition to using the PBJ to capture and report payroll staffing information, CMS intends to use the system to better understand how staffing relates to quality of care.<sup>9</sup> For instance, CMS research found that the presence of a registered nurse (RN) improves quality of care and outcomes for nursing home residents.<sup>10</sup> Furthermore, in 2018, news organizations analyzed the publicly available PBJ data and raised concerns about residents' quality of care after finding substantial variability in nursing homes' staffing levels from one day to another.<sup>11</sup> Additionally, members of Congress

<sup>6</sup> Nursing homes used to provide their staffing data using two CMS forms (i.e., CMS-671 and CMS-672). CMS, QSO-18-17-NH Memorandum, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/QSO18-17-NH.pdf>. Accessed on September 6, 2019.

<sup>7</sup> The CMS Staffing Studies indicated that staffing data based on payroll records—in contrast to the staffing data that nursing homes self-reported—were more likely to be complete and accurate because payroll records may be audited. CMS, *Appropriateness of Minimum Nurse Staffing Ratios in Nursing Homes: Phase II Final Report*, Abt Associates, Inc., Winter 2001.

<sup>8</sup> CMS, QSO-18-17-NH Memorandum, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/QSO18-17-NH.pdf>. Accessed on September 6, 2019.

<sup>9</sup> When finalizing new regulations in 2016, CMS stated that collecting and analyzing this mandatory, payroll-based staffing information could greatly assist it in evaluating whether and how it should establish minimum staffing ratios. CMS, *Medicare and Medicaid Programs; Reform of Requirements for Long-Term Care Facilities* (final rule), 81 Fed. Reg. 68755–68756 (Oct. 4, 2016).

<sup>10</sup> Ibid.

<sup>11</sup> Rau, J, "‘It’s Almost Like a Ghost Town.’ Most Nursing Homes Overstated Staffing for Years," *The New York Times*, July 7, 2018. Accessed at <https://www.nytimes.com/2018/07/07/health/nursing-homes-staffing-medicare.html> on September 14, 2018.

expressed concern about nursing home staffing and interest in how CMS uses the PBJ staffing information.<sup>12</sup>

## Federal Requirements for Staffing in Nursing Homes

Nursing homes are federally required to ensure adequate staffing to promote high-quality care for their residents. Federal staffing requirements address both nurse staff and other types of staff (i.e., non-nurse staff) that contribute to residents' care.

Federal law requires that all nursing homes provide sufficient nurse services to safely care for and meet their residents' needs.<sup>13, 14</sup> More specifically, Federal law requires (unless these requirements are waived) that nursing homes provide on each day at least (a) 8 consecutive hours of RN services and (b) around-the-clock services from licensed nurses and aides. Nurse staff are a critical component of the quality of care residents receive because nurse staff implement residents' care plans to meet their needs and provide most of the day-to-day care for residents (e.g., assisting them in activities like eating, bathing, grooming, dressing, transferring, and toileting).<sup>15</sup>

Federal law also requires that all nursing homes have certain non-nurse staff, including nursing home administrators, medical directors, and dietitians.<sup>16</sup> Administrators exercise operational or managerial control over the nursing home and conduct day-to-day operations.<sup>17</sup> Medical directors implement resident care policies

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<sup>12</sup> House Energy and Commerce Subcommittee on Oversight and Investigations, *Examining Federal Efforts To Ensure Quality of Care and Resident Safety in Nursing Homes*, September 6, 2018, <https://energycommerce.house.gov/committee-activity/hearings/hearing-on-examining-federal-efforts-to-ensure-quality-of-care-and>. Letter from Senator Blumenthal and Representative Schakowsky, [https://schakowsky.house.gov/sites/schakowsky.house.gov/files/migrated/uploads/2018.07.31\\_Letter\\_to\\_CMS\\_on\\_Nursing\\_Home\\_Staffing\\_Levels\\_FINAL\\_SIGNED.pdf](https://schakowsky.house.gov/sites/schakowsky.house.gov/files/migrated/uploads/2018.07.31_Letter_to_CMS_on_Nursing_Home_Staffing_Levels_FINAL_SIGNED.pdf) and letter from Senator Wyden, [https://www.finance.senate.gov/imo/media/doc/081418\\_SNF\\_Staffing\\_Quality\\_Letter.pdf](https://www.finance.senate.gov/imo/media/doc/081418_SNF_Staffing_Quality_Letter.pdf). Accessed on September 14, 2018.

<sup>13</sup> 42 CFR § 483.35. Nursing homes must also have sufficient hours of nurse services to meet residents' needs to attain or maintain practical physical, mental, and psychological well-being for each resident.

<sup>14</sup> Nursing homes must assess their residents' needs. Social Security Act, §§ 1819(f)(6)(A-B) and 1919(f)(6)(A-B), as amended by the Omnibus Budget Reconciliation Act of 1987. Residents' needs are assessed with a core set of Minimum Data Set (MDS) assessments that measure several aspects of residents' needs. CMS, *Long-Term Care Facility Resident Assessment Instrument 3.0 User's Manual*, Version 1.17.1, October 2019, [https://downloads.cms.gov/files/mds-3.0-rai-manual-v1.17.1\\_october\\_2019.pdf](https://downloads.cms.gov/files/mds-3.0-rai-manual-v1.17.1_october_2019.pdf). Accessed on February 20, 2020.

<sup>15</sup> CMS, *Staffing for nursing homes*, <https://www.medicare.gov/care-compare/resources/nursing-home/staffing>. Accessed on December 8, 2020. Additionally, RNs are responsible for overseeing the delivery of residents' overall care, while licensed practical and vocational nurses care for residents under an RN's direction. Nurse aides work under the supervision of licensed nurses and assist residents with the many activities of daily living.

<sup>16</sup> 42 CFR §§ 483.70(d), 483.70(h), and 483.60(a). In lieu of a dietitian, nursing homes may fulfill this requirement with another clinically qualified nutrition professional.

<sup>17</sup> 42 U.S.C. 1320a-5(b).

and coordinate medical care within the nursing home.<sup>18</sup> Dietitians or certified dietary or food service managers provide food and nutrition services.<sup>19</sup>

Further, Federal law requires nursing homes to perform or obtain additional critical services to safely care for and meet their residents' needs. For example, if residents require physical therapy or other specialized rehabilitative services, the facility must provide the required services or obtain the required services from a Medicare and/or Medicaid provider.<sup>20</sup> Additionally, nursing homes must employ or obtain the services of a pharmacist to provide expertise and manage the records of controlled drugs and perform monthly reviews of residents' drug regimens.<sup>21</sup>

## Federal Requirement for Nursing Homes To Submit Staffing Data to the Payroll-Based Journal

Nursing homes must submit accurate information on direct-care staffing to PBJ each quarter.<sup>22, 23</sup> This information must be based on payroll and other verifiable and auditable data in a uniform format as specified by CMS. The required staffing information includes the hours and category of work an employee performs.<sup>24</sup> CMS allows nursing homes to submit staffing information for 40 different types of direct-care staff, including both nurse staff (e.g., RNs; licensed practical and vocational nurses; and aides) and non-nurse staff (e.g., therapists and pharmacists).<sup>25</sup> CMS requires reporting for all 9 types of nurse staff and for 23 types of non-nurse staff, while allowing for voluntary reporting of 8 additional types of non-nurse staff.

For most staff types, CMS expects nursing homes to report hours that can be verified with a nursing home's payment records. This includes contracted staff that are paid through a contracted entity. This does not include staff paid by Medicare or another payer (e.g., physicians, nursing practitioners, hospice nurses).<sup>26</sup> However, for therapy

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<sup>18</sup> 42 CFR § 483.5

<sup>19</sup> 42 CFR § 483.60(a)(2)-(3).

<sup>20</sup> 42 CFR § 483.65.

<sup>21</sup> 42 CFR § 483.45.

<sup>22</sup> Section 6106 of the Patient Protection and Affordable Care Act instructed the Department of Health and Human Services (HHS) to require nursing homes to electronically submit these data as codified in 42 U.S.C. 1320a-7j(g) and implemented in 42 CFR 483.70(q).

<sup>23</sup> Direct care staff does not include individuals whose primary duty is maintaining the nursing home (e.g., housekeeping). CMS, *Electronic Staffing Data Submission Payroll-Based Journal: Long-Term Care Facility Policy Manual Version 2.5*, <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/PBJ-Policy-Manual-Final-V25-11-19-2018.pdf> Accessed on May 22, 2020.

<sup>24</sup> 42 U.S.C. 1320a-7j(g)

<sup>25</sup> CMS, *Electronic Staffing Data Submission Payroll-Based Journal: Long-Term Care Facility Policy Manual*, <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/PBJ-Policy-Manual-Final-V25-11-19-2018.pdf>. Accessed on May 22, 2020.

<sup>26</sup> Ibid.



staff (i.e., physical, occupational, speech, and respiratory therapists), CMS requires nursing homes to submit all hours regardless of payer.<sup>27</sup>

Additionally, nursing homes must submit resident daily census data and information on residents' case needs. CMS collects these data through resident assessments submitted to the Minimum Data Set (MDS).<sup>28</sup>

## Care Compare and Nursing Homes

### Federal Requirements for Nursing Home Staffing Information in Care Compare

The Social Security Act sets out requirements for Nursing Home Compare or a successor website, including that it provide consumers with "information in a manner that is prominent, updated on a timely basis, easily accessible, readily understandable to consumers of long-term care services, and searchable."<sup>29, 30</sup> Care Compare—which replaced Nursing Home Compare in December 2020, and to which the Social Security Act requirements listed above still applies—must include data about the staffing in each nursing home to help consumers understand the data, as described in Exhibit 2:

#### Exhibit 2. By law, Care Compare must provide consumers with three aspects of staffing data.

Care Compare must provide:

- data for each facility about the number of residents and the hours of care provided per day;
- a way for consumers to compare differences in staffing between nursing homes and the State average and national average; and
- data on staffing turnover and tenure.

Source: 42 U.S.C. 1395i-3(i)(1)(A)(i).

<sup>27</sup> CMS, *Electronic Staffing Data Submission Payroll-Based Journal: Long-Term Care Facility Policy Manual*, <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/PBJ-Policy-Manual-Final-V25-11-19-2018.pdf>. Accessed on May 22, 2020.

<sup>28</sup> MDS assessments record aspects of residents' needs, such as mental and physical functioning; pain; medical diagnoses and health conditions; and medication use. CMS, *Long-Term Care Facility Resident Assessment Instrument 3.0 User's Manual*, Version 1.17.1, October 2019, [https://downloads.cms.gov/files/mds-3.0-rai-manual-v1.17.1\\_october\\_2019.pdf](https://downloads.cms.gov/files/mds-3.0-rai-manual-v1.17.1_october_2019.pdf). Accessed on February 20, 2020.

<sup>29</sup> 42 U.S.C. 1395i-3(i)(1)(A)(i) [The Social Security Act § 1819(i)(1)(A)(i)]. Care Compare allows consumers to review information only about nursing homes participating in Medicare and/or Medicaid.

<sup>30</sup> On December 1, 2020, Nursing Home Compare was replaced by Care Compare (<https://www.medicare.gov/care-compare/>), a website to compare providers, including nursing homes.



## CMS provides a Five-Star Quality Rating System as part of Care Compare

The Five-Star Quality Rating System includes a set of quality ratings for every nursing home that participates in Medicare or Medicaid.<sup>31</sup> CMS's rating system—updated monthly—gives each nursing home an overall rating between 1 and 5 stars (see Exhibit 3).<sup>32</sup> Each nursing home's overall quality rating is based on individual star ratings of its performance in three areas: Health Inspections, Staffing, and Quality Measures. Consumers can compare nursing homes using the Overall Star Rating; the star ratings for each of these three areas; and additional information that CMS provides about each of these areas.<sup>33</sup> The public can also access Data.CMS.gov to obtain the full datasets previously used on Care Compare and previously used on Nursing Home Compare.<sup>34</sup>

**The Staffing Star Ratings.** CMS displays a Staffing Star Rating, which contributes to the overall quality rating that a nursing home receives. Additionally, CMS provides information on RN staffing with an RN Star Rating. The Staffing Star Rating is based on two separate measures of nurse staff hours per resident that are associated with quality of care: (1) the RN Star Rating and (2) the number of total nurse staff.<sup>35</sup> For both RNs and all nurse staff, CMS obtains the average amount of staff hours per resident day (HPRDs) during a recent 3-month period. To make the Staffing Star Ratings more comparable across different nursing homes, CMS then adjusts the HPRD amounts by the acuity (i.e., the relative level of care needs among residents) of each

### Exhibit 3: Star Ratings in Care Compare



Source: CMS Care Compare website.  
<https://www.medicare.gov/care-compare/>

<sup>31</sup> Abt Associates, *Nursing Home Compare Five-Star Quality Rating System: Year Three Report*, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/Downloads/FSQRS-Report.pdf>. Accessed on May 11, 2020.

<sup>32</sup> CMS, *Overall star rating for nursing homes*, <https://www.medicare.gov/care-compare/resources/nursing-home/overall-star-rating>. Accessed on December 8, 2020.

<sup>33</sup> CMS, *Nursing Home Compare Technical Users' Guide—October 2020*, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/downloads/usersguide.pdf>. Accessed on November 17, 2020.

<sup>34</sup> These archived datasets include the information previously presented in Care Compare and Nursing Home Compare and additional information that CMS uses to calculate the Staffing Star Ratings, such as the acuity-adjusted staff HPRDs for individual nursing homes. Source: CMS, *Nursing Home including rehab services data archive*, <https://data.cms.gov/provider-data/archived-data/nursing-homes/>. Accessed on June 22, 2020.

<sup>35</sup> CMS does not separately report the total nurse measure on Care Compare.

nursing home.<sup>36</sup> The RN Star Rating and the total nurse measure do not assess compliance with Federal staffing requirements.

**Other Staffing Information.** CMS also provides the public with additional details about the average amount of staff HPRDs on Care Compare. For example, CMS presents the RN HPRDs, total nurse HPRDs, and physical therapist HPRDs.

## Requirements That CMS Ensure the Completeness and Accuracy of Staffing Data

CMS must adhere to guidelines that ensure the information it provides to the public is objective (i.e., accurate, reliable, and unbiased).<sup>37</sup> Guidelines from the Department of Health and Human Services (HHS) specify a variety of techniques (e.g., checks for completeness, internal controls, checks for consistency, and audits) that CMS takes to promote the completeness and accuracy of information provided by third parties, such as nursing homes.<sup>38</sup>

## State Survey Agencies Monitor Nursing Homes' Compliance With Staffing Requirements

State survey agencies (SSAs) monitor compliance with nursing home Federal staffing requirements by conducting health inspections that determine whether facilities provide sufficient nursing staff with the appropriate training and skills to provide adequate care.<sup>39</sup> SSAs are required to conduct health and safety inspections at least every 15 months on behalf of CMS and may inspect nursing homes more often if a nursing home is performing poorly, or if there are complaints or facility-reported incidents. Using the Federal government's requirements, SSA inspection teams review many aspects of quality of life in the nursing home, such as (a) the care of residents

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<sup>36</sup> CMS, *Nursing Home Compare Technical Users' Guide—October 2020*, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/downloads/usersguide.pdf>. Accessed on November 17, 2020.

<sup>37</sup> OMB Final Rule. 67 Fed. Reg. 8451 (Feb. 22, 2002). *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies*; Republication.

<sup>38</sup> HHS, *HHS Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated to the Public*, October 1, 2002, <https://aspe.hhs.gov/report/hhs-guidelines-ensuring-and-maximizing-quality-objectivity-utility-and-integrity-information-disseminated-public>. Accessed on May 20, 2020.

<sup>39</sup> The Federal requirement to have sufficient nurse staffing is at 42 CFR 483.35. CMS provides State inspectors with a survey pathway to guide their oversight of this requirement. CMS, *LTC Survey Pathways* (ZIP file): *Sufficient and Competent Nurse Staffing Review*, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes>. Accessed on March 4, 2020.

and the processes used to give that care; (b) how the staff and residents interact; and (c) the overall nursing home environment.<sup>40</sup>

During health inspections, the SSA inspection team considers whether staffing levels can be linked to resident complaints, quality of care, or quality-of-life concerns.<sup>41</sup> For instance, the SSA inspection team may observe how nurse staff transfer and position residents or whether nurse staff use appropriate infection-control techniques.<sup>42</sup> The SSA inspection team also interviews a portion of each nursing home's residents to determine whether there are enough staff to meet the residents' needs and concerns. If the SSA inspection team identifies potential deficiencies, then a designated team member will interview nurse staff and may review documents to decide whether a nursing home meets or does not meet Federal staffing requirements.<sup>43</sup>

## Prior OIG Work on Nursing Home Staffing

In August 2020, OIG issued the report *Some Nursing Homes' Reported Staffing Levels in 2018 Raise Concerns; Consumer Transparency Could Be Increased*.<sup>44</sup> This report found that 7 percent of nursing homes reported staff levels that fell below required Federal staffing levels on at least 30 total days in 2018. Additionally, the report noted that daily staffing variations are not transparent to consumers because CMS's Star Rating System ranks nursing homes on their *average* staffing levels each quarter.

## Methodology

We analyzed multiple data sources from CMS that pertain to staffing data and its oversight of nursing home staffing. While our primary period of review was April 1, 2018, to March 31, 2019, we also included recent CMS actions up until December 2020.

As part of data collection efforts for our three objectives, we conducted two interviews with subject-matter experts at CMS in March 2019 and July 2019 to better

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<sup>40</sup> The Federal requirements for nursing homes are at 42 CFR pt. 483, subpt. B. A CMS manual provides guidance to State inspectors in how to oversee the Federal requirements. CMS, *State Operations Manual—Appendix PP*, 430, [https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap\\_pp\\_guidelines\\_ltc.pdf](https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltc.pdf). Accessed on February 26, 2020. This manual refers the State inspectors to use various survey pathways to guide their oversight of these requirements. CMS, *LTC Survey Pathways* (ZIP file), <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes>. Accessed on March 4, 2020.

<sup>41</sup> CMS, *LTC Survey Pathways* (ZIP file): *Sufficient and Competent Nurse Staffing Review*, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes>. Accessed on March 4, 2020.

<sup>42</sup> Ibid.

<sup>43</sup> Ibid.

<sup>44</sup> OIG, *Some Nursing Homes' Reported Staffing Levels in 2018 Raise Concerns; Consumer Transparency Could Be Increased*, OEI-04-18-00451, August 2020. <https://oig.hhs.gov/oei/reports/oei-04-18-00450.asp>

understand how CMS uses the staffing information and to determine what documentation we would collect from CMS.

To assess CMS's progress toward publicly reporting data on nursing home staffing, we reviewed (1) information on CMS's Care Compare website and (2) CMS documentation from its engagement with technical experts and stakeholders.

To describe the steps CMS has taken to ensure the quality of nursing home staffing data, we reviewed (1) information on CMS's Care Compare website and (2) CMS documentation on quality of provider-reported data on nurse staffing. We also used public-use files from CMS's website to determine how many nursing homes did not submit any hours for specific types of non-nurse staff. We focused our review on the following kinds of non-nurse staff:

- physical therapists (a staffing type that CMS prioritizes for inclusion in Care Compare)
- non-nurse staff that we categorized as other types of critical non-nurse staff:
  - non-nurse staff required by all nursing homes (administrators, medical directors, and dietitians)
  - workers who provide required services (pharmacists)

In addition, we included other non-nurse staff, such as social workers and activity staff, in our analysis.

To determine the extent to which CMS uses nursing home staffing data to help monitor staffing requirements, we reviewed (1) information on CMS's website and (2) CMS documentation regarding the inspections conducted by SSAs. We also surveyed 10 selected SSAs to understand their perspectives regarding the inspection process and the use of nursing home staffing information to inform inspections. Additionally, we conducted analysis of CMS datasets, including public-use files with nurse staffing data and both public and nonpublic datasets about SSA inspections.

See the Detailed Methodology for more information.

## Limitations

Part of this analysis is based on staffing data that nursing homes submitted to the Payroll-Based Journal. We did not verify the accuracy of this self-reported information.

Additionally, we did not independently verify SSA responses to our survey.

## Standards

We conducted this study in accordance with the *Quality Standards for Inspection and Evaluation* issued by the Council of the Inspectors General on Integrity and Efficiency.

# FINDINGS

## CMS provides consumers with most—but not all—required information about staffing in nursing homes

Federal law requires CMS to provide specific aspects of staffing data for each nursing home on Care Compare. These aspects include (1) data about the number of residents and hours of care provided per day; (2) a way for consumers to compare staffing data; and (3) data on staffing turnover and tenure.<sup>45</sup> CMS provides consumers with the first two aspects of this required staffing information, with some limitations, but has not yet provided consumers with data on turnover and tenure. CMS reported that the lack of data on staff turnover and tenure is due in part to the COVID-19 public health emergency. Specifically, CMS noted that COVID-19 delayed its planned updates for 2020.

## CMS provides consumers with most required data about staffing in nursing homes, but the data could be improved to enable more effective comparisons

Via Care Compare, CMS provides consumers with two required aspects of staffing data. Specifically, Care Compare provides consumers with (1) staffing data for individual nursing homes, presenting it in (2) a way that enables consumers to compare differences among nursing homes.<sup>46</sup>

On Care Compare, CMS provides consumers with Staffing Star Ratings and summary staffing data for individual nursing homes, thereby generally addressing two of the required aspects of staffing data. The Staffing Star Ratings allow consumers to broadly compare nurse staffing across nursing homes. For example, CMS uses the Staffing Star Rating system to indicate both that higher star ratings result from higher staffing levels and that higher staffing levels may improve care for residents. CMS adjusts the ratings on the basis of acuity, which increases the comparability of the ratings for staffing. The summary staffing data include information about the number of residents and the average nurse staffing hours per resident per day (HPRDs),

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<sup>45</sup> For more details, see Exhibit 2 on page 5.

<sup>46</sup> CMS has provided this information nursing home staffing data since 2008. See CMS, *Nursing Home Compare: The First Four Years of the Five-Star Quality Rating System*, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/Downloads/2013-The-First-Four-Years-of-Five-Star.pdf>. Accessed on August 6, 2020. Additionally, CMS continued to provide this information about nursing home staffing once it transitioned to using the PBJ as the source of staffing data for nursing homes. See CMS, *QSO-18-17-NH Memorandum*, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/QSO18-17-NH.pdf>. Accessed on September 6, 2019.

as required. CMS updates the Staffing Star Ratings and summary data about staffing in Care Compare every 3 months using data from the Payroll-Based Journal (PBJ).

However, while Care Compare includes summary staffing data in HPRDs for each nursing home, the data may not allow consumers to see meaningful differences in staffing between nursing homes. This is because CMS does not adjust the HPRDs presented on Care Compare for acuity, which can limit the usefulness of these data for consumers to conduct comparisons.<sup>47</sup>

Additionally, consumers may not fully understand the relationship between nurse staffing and resident quality of care because CMS describes this relationship more generally on Care Compare than it does in other guidance. Specifically, on Care Compare, CMS explains that higher staffing levels “may mean” that residents receive higher quality of care.<sup>48</sup> However, in publicly available guidance to SSAs, CMS more definitively explains that “staffing in nursing homes has a substantial impact on the quality of care and outcomes residents experience.”<sup>49</sup> If consumers do not understand the direct relationship between staffing and quality of care, they are missing important information about how much importance to place on staffing levels when selecting a nursing home.

## CMS has not yet provided consumers with required data on turnover and tenure among nurse staff in nursing homes

While CMS has not yet provided consumers with the required data on turnover and tenure, CMS noted that it has made progress toward reporting these measures in the future. As of December 2020, CMS had not posted staff turnover or tenure data on Care Compare. A 2010 Federal law requires CMS to post turnover and tenure data in Care Compare, and CMS received funding in 2014 to start building the system necessary to calculate and report

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### The Difference Between Turnover and Tenure

*CMS may measure turnover over a shorter period (e.g., 3 or 6 months) than tenure (e.g., 12 months or longer). However, CMS has not yet published definitions of turnover and tenure.*

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<sup>47</sup> CMS provides public files at [Data.CMS.gov](https://data.cms.gov), which can be used to compare different nursing homes on their acuity “adjusted” staff hours per resident per day. These files do not provide the public with State averages that are acuity adjusted, which limits the ability of the public to understand the extent that average nurse staffing levels differ by State. CMS, *Provider information*, <https://data.cms.gov/provider-data/dataset/4pq5-n9py>. Accessed on December 8, 2020.

<sup>48</sup> CMS, *Care Compare*, <https://www.medicare.gov/care-compare>. Accessed on November 30, 2020.

<sup>49</sup> CMS, *QSO-18-17-NH Memorandum*, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/QSO18-17-NH.pdf>. Accessed on September 6, 2019. Additionally, CMS informs nursing homes that staffing is “one of the vital components of a nursing homes’ ability to provide quality care.” CMS, *Staffing Data Submission Payroll Based Journal (PBJ)*, <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Staffing-Data-Submission-PBJ>. Accessed on Oct. 27, 2020.



these data.<sup>50, 51</sup> CMS reported that it has not presented turnover and tenure data in Care Compare partially because of COVID-19—responding to COVID-19 became a top priority for CMS, thereby delaying its planned updates for 2020.

**CMS improved its data-reporting process to help it calculate turnover and tenure.**

CMS changed its data-reporting process in November 2017, allowing it to track when an individual employee worked at a nursing home. Doing so enabled CMS to overcome prior technical challenges and work toward calculating both turnover and tenure.<sup>52</sup> Before November 2017, the unique employee identification numbers at some nursing homes changed when nursing homes changed payroll vendors. Therefore, the data that such nursing homes submitted to CMS after changing their payroll vendors incorrectly implied that all employees were new. To address this problem, CMS added in November 2017 a voluntary data-submission step to allow nursing homes to link old employee identification numbers to new employee identification numbers. This linking capability resulted in employee identification numbers that track a worker within a single nursing home.<sup>53</sup>

Currently, CMS has gathered more than 2 years of data since nursing homes began submitting more reliable employee ID numbers (covering the time period from October 2017 through December 2019).<sup>54</sup> This ability to track individual employees across time is fundamental for CMS to be able to calculate turnover and tenure.

**CMS has taken additional steps to introduce turnover data but not tenure data.**

CMS has taken steps to introduce turnover data in Care Compare. Prior to the declaration of the COVID-19 public health emergency in early 2020, CMS anticipated releasing turnover data in late-2020. CMS now reports that it plans to introduce turnover data in 2021.<sup>55</sup> However, CMS has not taken steps to introduce tenure data in Care Compare.

*CMS has gathered more than 2 years of nurse staffing data to calculate turnover and tenure.*

<sup>50</sup> The U.S. Code (42 U.S.C. 1395i-3(i)(1)(A)(i)) requires turnover and tenure data to be posted to Care Compare no later than the date on which CMS implemented the requirement to collect staffing data. OIG interprets the statute as giving CMS the authority to decide when it fully implemented the requirement to collect staffing data.

<sup>51</sup> The Improving Medicare Post-Acute Care Transformation Act of 2014 provided funding for the creation of the PBJ.

<sup>52</sup> CMS previously required nursing homes to submit the end and start dates for each employee, but CMS no longer requires these data, in part because of concerns with the reliability of the reported data.

<sup>53</sup> However, a nurse who works in multiple nursing homes could have a different identification number for each nursing home. It is CMS's understanding that it does not have the authority to require nursing homes to use the same unique identifier for an employee who works at multiple nursing homes.

<sup>54</sup> CMS added this data-reporting feature in November 2017. By February 14, 2018, nursing homes used the updated system to submit staffing data covering the time period from October through December 2017. CMS required nursing homes to submit staffing data for each 3-month period from October 2017 through December 2019.

<sup>55</sup> Additionally, CMS did not require submissions of PBJ data for January to March 2020 because of COVID-19, although CMS reinstated the requirement to submit PBJ data for April 2020 and later. CMS,



During the period of our review (the staffing data from April 2018 to March 2019), CMS analyzed staffing data and continued to refine its data on staff turnover. In 2017, CMS presented outside experts with both (1) potential ways to define turnover and (2) preliminary data analysis. The experts provided feedback to CMS, including descriptions of how turnover among certain staff types can impact quality of care. In 2019, CMS continued refining its preliminary data on staff turnover.

Although CMS has made progress in defining and publicly posting data on staff turnover, CMS did not analyze data or work with these outside experts to define staff tenure. In interviews with OIG, CMS reported that it decided to first develop and introduce turnover data before working on tenure data. CMS prioritized turnover data before tenure data because the Payroll-Based Journal (PBJ) is a new source of staffing information and because turnover measures staff retention over a shorter amount of time.

## CMS has a robust process for ensuring the reliability of nurse staffing data, but it lacks similar processes for non-nurse staffing data

CMS uses several tools to check the accuracy and completeness of *nurse* staffing data. These actions include checks for highly improbable nurse staffing and targeted audits of the nurse staffing data that nursing homes submit. However, CMS does not take similar steps to ensure the accuracy and completeness of *non-nurse* staffing data. Because CMS publicly reports data on non-nurse staffing for consumers to consider in selecting a nursing home, it is important that these data be accurate and complete.

## CMS has a robust process to ensure the accuracy and completeness of nurse staffing information

CMS has instituted checks to ensure that reported nurse staffing data are accurate. For example, CMS checks for data abnormalities, such as nursing homes reporting improbably high or low levels for nurse staffing. CMS excludes nursing homes with these data abnormalities from the publicly reported PBJ data (i.e., the public use files) on Data.CMS.gov, to ensure the publicly provided information are accurate. On Care Compare, these nursing homes with data abnormalities do not have their average staff hours per resident published, nor do they receive a Staffing Star Rating based on

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*Long Term Care Facilities (Skilled Nursing Facilities and/or Nursing Facilities): CMS Flexibilities to Fight COVID-19*, <https://www.cms.gov/files/document/covid-long-term-care-facilities.pdf>, accessed on April 15, 2020; and CMS, *QSO 20-34-NH*, <https://www.cms.gov/files/document/qso-20-34-nh.pdf>, accessed on June 26, 2020.

their average staffing and acuity.<sup>56</sup> Additionally, CMS has contracted auditors to assess and improve the accuracy of nurse staffing data, and these auditors performed nurse staffing audits at an average of 390 nursing homes each quarter from Q2 2018 through Q1 2019. Nursing homes that do not pass the audit are downgraded to a 1-star Staffing Rating. For additional information on CMS's actions to improve the accuracy and completeness of the staffing information, see Appendix A.

CMS also uses Care Compare as a tool to improve the completeness of nurse staffing data. For example, CMS downgrades the Staffing Star Ratings to 1 star for nursing homes that do not successfully submit any nurse staffing data. Additionally, CMS downgrades the Staffing Star Ratings to 1 star for nursing homes that report 4 or more days per quarter with no RN hours.<sup>57</sup> CMS reported that this policy encouraged nursing homes to submit complete nurse data for each day. Additionally, a CMS policy memorandum says that the policy seeks to reduce the number of days when nursing homes do not have an RN.<sup>58</sup>

Additionally, CMS regularly monitors the completeness of the nurse staffing information that nursing homes submit. Specifically, CMS routinely reviews various measures of data completeness after nursing homes' quarterly submissions of data, monitoring trends across quarters. These measures focus on the number of nursing homes that submitted data about nurse staff. For example, CMS monitors how many nursing homes report 4 or more days in a quarter with no RN hours. According to CMS documentation, this number decreased by nearly 50 percent during the period of our review (i.e., from 1,491 nursing homes in Q2 2018 to 845 nursing homes in Q1 2019).<sup>59</sup>

## CMS does not have a robust process to ensure the accuracy and completeness of staffing information for non-nurse staff

It is important that the public receive reliable information on non-nurse staff, and Federal guidelines require CMS to ensure the reliability of the data that it provides to

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<sup>56</sup> Instead, these nursing homes have "Data Not Available" displayed on Care Compare for their average staff hours. Additionally, these nursing homes have "Data Not Available" displayed for their Staffing Star Ratings, unless a nursing home reported 4 or more days with no RN hours or did not pass an audit of its PBJ staffing data, in which case its Staffing Star Rating is downgraded to 1 star.

<sup>57</sup> In June 2018, CMS began its policy to downgrade nursing homes' Staffing Star Ratings if they reported 7 or more days in a quarter with no RN hours. In April 2019, CMS strengthened its criteria for downgrading nursing homes, from 7 days with no RN hours to 4 days with no RN hours. CMS, *QSO-18-17-NH Memorandum*, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/QSO18-17-NH.pdf>, accessed on September 6, 2019; and CMS, *QSO-19-08-NH Memorandum*, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/QSO19-08-NH.pdf>, accessed on Oct. 2, 2019.

<sup>58</sup> CMS, *QSO-18-17-NH Memorandum*, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/QSO18-17-NH.pdf>. Accessed on September 6, 2019.

<sup>59</sup> CMS provided documentation to OIG including Excel workbooks, which CMS uses to monitor various measures of completeness for the quarterly PBJ data submissions.

the public.<sup>60</sup> However, CMS does not take steps to ensure the accuracy of the physical therapist data that it publicly reports on Care Compare, nor does CMS ensure the completeness of data for other non-nurse staff data that the public can access.

**CMS does not take steps to ensure the accuracy of physical-therapist staffing information reported on Care Compare.** CMS uses a robust process to review nurse staffing information that it reports on Care Compare. However, CMS does not take similar steps for non-nurse staffing information also reported on the website; currently, this information includes only physical therapists.<sup>61</sup> For example, CMS does not audit the physical-therapist staffing information reported by nursing homes and included on Care Compare. Because CMS does not use any accuracy checks on these data, we cannot determine whether the data reported on Care Compare are accurate.

**Publicly reported staffing data for all therapists appear more complete than staffing data for other non-nurse staff.** CMS publicly reports staffing data for non-nurses on Data.CMS.gov, including all types of therapists. However, for non-nurse staff aside from therapists, these data may not reflect hours that staff were paid by third parties. According to CMS documentation, some non-nurse staff may be paid by third parties (e.g. physicians being paid by Medicare for physician services) instead of being paid either directly or indirectly by the nursing home.<sup>62</sup> These hours that such staff are paid by third parties are not included in the staff hours reported in the PBJ. This exception does not apply to therapists—i.e., physical, occupational, speech, and respiratory therapists. CMS requires nursing homes to report hours for therapists regardless of payer.<sup>63</sup>

As a result, publicly reported staffing data for therapists appear more complete than staffing data for other non-nurse staff. For example, in Q1 2019, approximately 94 percent of nursing homes (14,190 of 15,058) reported at least some physical therapy hours in CMS's public dataset on Data.CMS.gov. In contrast, 48 percent of nursing homes did not report any hours for at least one type of other critical non-nurse staff, including staff required by all nursing homes (i.e., administrators, medical directors, and dietitians) and workers who provide required services (i.e., pharmacists). This analysis of the publicly reported staffing data does not reveal whether these critical non-nurse staff were present in these nursing homes. See Appendix B for information about how many nursing homes did not report data for non-nurse staff types and for CMS requirements to submit these data.

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<sup>60</sup> For more details on the Federal requirements for CMS to ensure data reliability, see page 7 of this report.

<sup>61</sup> CMS does not report staffing hours on Care Compare for other types of therapists (i.e., occupational, respiratory, and speech therapists).

<sup>62</sup> CMS, *Electronic Staffing Data Submission Payroll-Based Journal: Long-Term Care Facility Policy Manual*, <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/PBJ-Policy-Manual-Final-V25-11-19-2018.pdf>. Accessed on May 22, 2020.

<sup>63</sup> Ibid.

## CMS has taken an important step by using staffing data to inform State inspections, but it has opportunities to better target oversight

CMS has taken an important step by using staffing information to target weekend inspections of nursing homes. However, we identified additional actions that CMS can take as it helps SSAs monitor nurse staffing requirements.

### CMS shares some staffing information with SSAs to target their weekend inspections

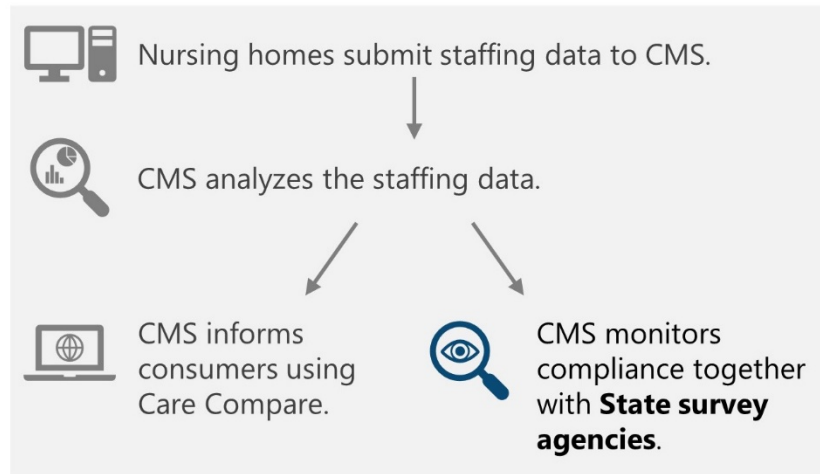
CMS has taken an important first step in using staffing data to help SSAs target their oversight. In January 2019, CMS began sharing a list with each SSA of nursing homes in that State that reported lower weekend staffing levels.<sup>64</sup> In this report, we will refer to these as “weekend lists” for targeted inspections. Eight of the 10 SSAs we surveyed reported that this step helps improve the effectiveness of their efforts to oversee compliance with staffing requirements.<sup>65</sup> Specifically, CMS identifies the nursing homes in the bottom 20 percent within each State on the basis of weekend average nurse staffing per resident. CMS instructs SSAs that 5 percent of standard inspections should occur on weekends, during which SSAs should consider citing these nursing homes for insufficient staffing. CMS allows SSAs discretion when selecting nursing homes from these lists. Exhibit 4 on the next page summarizes how CMS uses the staffing data, including to help monitor compliance with Federal staffing requirements. Although Federal requirements require CMS only to provide staffing information on Care Compare, CMS has made a proactive decision to also use the staffing data to help target a portion of State inspections of nursing homes.

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<sup>64</sup> OIG interview with CMS’s Director of the Division of Nursing Homes, July 2019, and CMS, QSO-19-02-NH Memorandum, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/QSO19-02-NH.pdf>, accessed on December 11, 2018.

<sup>65</sup> The remaining two SSAs did not indicate whether this step has had a positive or negative impact.

#### Exhibit 4. How CMS uses nursing home staffing data to inform consumers and monitor compliance with staffing requirements



#### However, CMS does not consider residents' relative level of care needs when targeting nursing homes for weekend inspections

CMS has taken an important step by sharing weekend lists with SSAs because doing so helps SSAs conduct targeted inspections of nursing homes that report lower levels of nurse staffing on weekends. However, CMS does not yet use information about acuity (i.e., residents' relative level of care needs) when it creates the weekend lists for targeted inspections.

When monitoring weekend staffing, CMS can use key information about acuity to better identify nursing homes for heightened attention. CMS currently uses this acuity information when calculating Staffing Star Ratings for Care Compare, but it does not do so for targeting potential weekend inspections.

Because CMS does not use information about acuity when identifying nursing homes for weekend lists, CMS may miss nursing homes that have sicker residents who require more care. If CMS were to use acuity information when generating each State's weekend list, CMS would likely identify different nursing homes to include. For example, we found that CMS's method for creating weekend lists would miss, on average, one in four of the nursing homes with lowest nurse staffing on weekends. These missing nursing homes have residents with a relatively greater level of need. For more information about how adjusting for acuity affects these weekend lists, see Appendix C.

## State survey agencies are optimistic that staffing information can help them to monitor nurse staffing requirements, but they are concerned about effects on their workload

SSAs expressed interest in using staffing information from the PBJ to help them increase the effectiveness of how they monitor nursing home staffing. Specifically, most SSAs (9 of 10) reported that the use of staffing data would increase the effectiveness of their oversight for nurse staffing requirements.<sup>66</sup> They also expressed interest in receiving from CMS additional information about nursing home staffing, including the following: lists of nursing homes that did not submit PBJ data (mentioned by seven SSAs), results from CMS's analyses (mentioned by six SSAs), and training on how to conduct their own State-led analysis (mentioned by four SSAs). No SSAs stated that the use of more staffing data would reduce the effectiveness of their efforts to oversee nurse staffing.<sup>67</sup>

However, SSAs also expressed concern that using nurse staffing data from the PBJ could negatively affect the efficiency of inspections and limit their ability to conduct other inspection tasks, such as monitoring for resident neglect and abuse. Some SSAs (2 of 10) reported concern that using CMS's staffing data would cause inspectors to inefficiently spend extra time and resources in monitoring staffing. An additional four SSAs echoed these concerns in open-ended comments. They reported that increased use of staffing data could add burden to existing tasks for inspectors (e.g., performing onsite observations and interviews), thereby reducing the time and resources available for other inspection tasks such as monitoring for neglect and abuse of residents.

CMS is aware of the need to consider the SSAs' workloads when providing staffing data. CMS expressed to OIG the need to balance the amount of inspection tasks that CMS requires of SSAs because adding an inspection task can result in other inspection tasks receiving less attention.<sup>68</sup> CMS also indicated that it has a responsibility to analyze the staffing data and provide inspectors with some of the resulting information in ways that inspectors can easily use. For example, CMS reported that it would like to integrate additional information into a new inspection system—currently in development—so that it can more efficiently provide useful staffing information directly to SSAs.

<sup>66</sup> OIG surveyed the SSAs in April 2019, after CMS had introduced the weekend inspection process. Eight of 10 SSAs reported that use of staffing data could increase the effectiveness of oversight for the requirement to have 8 RN hours every day and to have 24-hour licensed nursing. In addition, 6 of 10 SSAs reported that use of staffing data could increase the effectiveness of oversight for the requirement to have sufficient staffing.

<sup>67</sup> The remaining SSAs said that use of staffing data would have neither a positive nor negative impact.

<sup>68</sup> OIG interview with CMS's Director of the Division of Nursing Homes, July 2019.

## CMS can take additional steps to strengthen oversight of nursing home staffing

CMS helps oversee staffing in nursing homes in different ways, including using staffing data to help SSAs target weekend inspections. However, CMS can take additional steps that will help it ensure compliance with staffing requirements.

**CMS can inform SSAs of the dates on which the lowest staffing occurred to better target how SSAs monitor nurse staffing requirements.** When providing weekend lists to help SSAs target their inspections, CMS indicates whether a nursing home frequently reported days with no RN hours. However, CMS does not provide SSAs with dates on which nursing homes reported no hours for RNs. CMS told OIG that part of the reason why CMS does not provide inspectors with the specific dates is that State inspectors are not auditors and are generally unfamiliar with payroll systems.<sup>69</sup> However, not sharing this information prevents State inspectors from targeting their documentation reviews to the most relevant dates when working to identify low staffing from previous months.<sup>70</sup>

**CMS can inform SSAs when reported staffing was less than 8 RN hours or less than 24 licensed-nurse hours.** CMS does not inform SSAs whether nursing homes report fewer hours for RNs and licensed nurses than are federally required.<sup>71</sup> Specifically, that information would reveal whether nursing homes reported an RN onsite for 8 hours and licensed nursing services on site for 24 hours, both of which are required every day. From January through March 2019, 7 percent of nursing homes (1,100 of 15,058) reported fewer hours than required *more than twice per month* on average (i.e., on at least 7 occasions in the 3-month period). CMS does not identify these nursing homes for SSAs, unless the nursing home is included on CMS's weekend lists and the nursing home reported no RN hours at least four times per quarter, which on average is more than one time per month.

Additionally, CMS's oversight efforts could better identify nursing homes at risk of staffing below Federal requirements—CMS's current efforts do not target the subset of nursing homes that *frequently* report staffing levels that are below Federal requirements. Among the subset of nursing homes that reported fewer RN or licensed-nurse hours than required *at least 5 times per month* on average from January through March 2019 (466 of 15,058 nursing homes), nearly 3 in 5 of these nursing homes would be missing from CMS's weekend lists. Further, among the subset of these nursing homes that received a standard health inspection in the same

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<sup>69</sup> OIG interview with CMS's Director of the Division of Nursing Homes, July 2019.

<sup>70</sup> When reviewing the sufficiency of staffing, CMS suggests that inspectors may need to validate concerns by reviewing records—including the staffing schedule for the past month—and says that “it may be necessary to expand [their] review.” CMS Form 20062, February 2017, *Sufficient and Competent Nurse Staffing Review*.

<sup>71</sup> CMS has a policy to downgrade the Staffing Star Rating of a nursing home to 1 star if the nursing home reported no RN hours at least 4 times per quarter, which on average is more than 1 time per month.



quarter, less than one in six received a deficiency citation for their nurse staffing levels. For more information, see Appendix D.

**CMS can better leverage staffing data to help SSAs more easily identify nursing homes that are at risk of insufficient nurse staffing.** In our survey, SSAs frequently reported that it is *more difficult* to determine that staffing levels were insufficient than to determine whether nursing homes violated *other* parts of the Federal requirements for nurse staffing levels. Six of the 10 SSAs in our review reported difficulty in determining when a nursing home violates the requirement for sufficient staffing. Three of these six SSAs reported that using CMS staffing data could improve the effectiveness of their monitoring for sufficient staffing.<sup>72</sup> In contrast, 8 of the 10 SSAs in our review reported that it was straightforward to determine when to cite nursing homes for not providing 8 RN hours and around-the-clock licensed-nurse services every day.

CMS can help SSAs more efficiently oversee staffing in nursing homes by identifying nursing homes that are at risk of insufficient staffing. CMS currently does this in a limited capacity through its weekend lists for targeted inspections. CMS instructed SSAs to consider citing the nursing homes on those weekend lists if the nursing homes have insufficient nurse staff.<sup>73</sup> This is an important step to leverage the staffing data to help SSAs identify nursing homes that may not have sufficient staffing. However, CMS has not yet taken similar steps to better leverage the staffing data to help SSAs to strengthen oversight of insufficient nurse staffing during the 95 percent of standard inspections that do not occur on weekends.

CMS reports that Staffing Star Ratings can help SSAs monitor for insufficient nurse staffing because nursing homes with low Staffing Star Ratings might not provide sufficient staffing.<sup>74</sup> However, Staffing Star Ratings may be of limited use to help SSAs monitor for insufficient staffing because Care Compare does not clearly distinguish among the many potential causes for any specific 1-star Staffing Rating. For example, a nursing home may have a 1-star Staffing Rating because it reported low staffing throughout the quarter, because it reported no hours for RNs several days in a quarter, because it did not report any staffing data, or because an audit found that the nursing home had inaccurate nurse staffing information. Additionally, while the Staffing Star Rating and an RN Star Rating are available on Care Compare, the website does not provide a star rating for total nurse staffing (which includes

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<sup>72</sup> Overall, 6 of 10 SSAs said using CMS staffing data could improve the effectiveness of their monitoring for sufficient staffing.

<sup>73</sup> CMS, QSO-19-02-NH Memorandum, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/QSO19-02-NH.pdf>. Accessed on December 11, 2018.

<sup>74</sup> Documentation received from CMS's Director of the Division of Nursing Homes, October 2020. CMS considers the relationship between staffing and quality of care when establishing these cut points, but a 1-star rating is not an indication that staffing is insufficient. CMS, *Nursing Home Compare Technical Users' Guide—October 2020*, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/downloads/usersguide.pdf>. Accessed on November 17, 2020.

nurse aides).<sup>75</sup> As a result, the Staffing Star Ratings may be of limited use to help SSAs monitor for insufficient staffing with regard to nurse aides.

To target their inspection actions on insufficient staffing, SSAs may benefit from information that more clearly indicates the potential staffing problem. CMS publishes the underlying data used to calculate the Staffing Star Ratings on Data.CMS.gov. These data may be more useful than the Staffing Star Ratings to help SSAs monitor insufficient staffing because they clearly describe acuity-adjusted levels of RN staffing and total nurse staffing.

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<sup>75</sup> The Staffing Star Rating featured on Care Compare is an average of two other measures that CMS calculates: the RN Star Rating and a staffing rating for total nursing (which covers RNs, licensed practical nurses, and nurse aides). If the average of these two measures is not a whole number, the overall Staffing Star Rating “rounds towards” the RN staffing rating, resulting in situations in which a staffing rating for total nursing cannot be extrapolated from the information provided on Care Compare.

# RECOMMENDATIONS

This review focused on CMS's use of staffing data from April 2018 through March 2019, before the COVID-19 pandemic. We also included CMS actions up until December 2020. CMS has long identified staffing as a vital component of a nursing home's ability to provide quality care. The need for reliable information about staffing in nursing homes is one of the reasons CMS built the PBJ.

Using the PBJ, CMS has taken important steps to provide consumers with more comprehensive and accurate information about staffing at nursing homes. For example, CMS provides most—but not all—required information about staffing to the public via Care Compare. This public website enables residents of nursing homes and their families to make informed choices based on reported staffing levels and other information, such as results from SSA inspections and performance on CMS quality measures. CMS has implemented a robust process for reviewing the nurse staffing data to ensure the data's completeness and accuracy. Further, by targeting weekend inspections, CMS has taken an important step in leveraging staffing data to protect residents of nursing homes.

However, CMS has opportunities to further leverage the PBJ data to ensure that consumers have useful information to guide their decision-making. For example, consumers do not yet have information about nurse staff turnover or tenure, even though CMS is required to provide this information by Federal law. However, progress in 2020 on sharing this information has been delayed by CMS's focus on helping nursing homes combat COVID-19. Further, CMS can take steps to ensure the accuracy of the reported *non-nurse* staff information on Care Compare. The information that CMS collects and publishes about non-nurse staff lacks a robust process to ensure its accuracy. By taking steps to ensure the accuracy of non-nurse staffing data, CMS can improve the staffing data that it provides the public.

Finally, CMS has opportunities to better leverage nursing home staffing data to more effectively monitor staffing. For example, CMS does not factor in the relative care needs of residents when it identifies nursing homes with lower weekend staffing. Further, CMS does not inform SSAs when nursing homes report staffing that is substantially below requirements, nor does it inform SSAs of the dates on which reported staffing was unusually low. Addressing these issues would build on what CMS has already done to oversee staffing in nursing homes.

OIG acknowledges the impact that COVID-19 has had on nursing home oversight and on CMS's priority of improving the quality of care that nursing homes provide. We also note that the pandemic reinforces the importance of having adequate staffing to respond to outbreaks of infectious diseases. We offer CMS several recommendations as it continues to leverage nursing home staffing information from the PBJ.

## **We recommend that CMS:**

### **Provide data to consumers on nurse staff turnover and tenure, as required by Federal law**

To comply with Federal statute, CMS must publicly report data on both nurse turnover and tenure on Care Compare. CMS is not currently reporting either of these measures to the public. CMS has made progress toward being able to report turnover data—it has developed a definition for nurse turnover, a critical first step. To ensure safety and quality of care for nursing home residents, CMS should take similar steps to define nurse tenure, and to report on both turnover and tenure as soon as practicable given the many urgent needs that CMS is facing.

### **Ensure the accuracy of non-nurse staffing data used on Care Compare**

CMS should take steps to ensure the accuracy of PBJ data for non-nurse staff that it chooses to include in Care Compare. These steps may be comparable to those that CMS performs to ensure the accuracy of nurse staffing data. For example, CMS may wish to add physical therapists—the only type of non-nurse staff with data currently found on Care Compare—to its audits of PBJ data. CMS may also wish to explore other ways to improve the accuracy of non-nurse staffing data included on Care Compare.

### **Consider residents' level of need when identifying nursing homes for weekend inspections**

CMS should analyze and use information about the relative acuity (or level of need) of residents as it continues to compile lists of nursing homes with lower staffing to help SSAs target nursing homes for weekend inspections. CMS calculates acuity-adjusted staffing levels for the Staffing Star Ratings found in Care Compare. Acuity-adjusting the weekend staffing levels for nursing homes before identifying those with lower staffing will improve the quality of the nursing-home lists that CMS shares with SSAs for weekend inspections.

### **Take additional steps to strengthen oversight of nursing home staffing**

CMS should take additional steps to oversee staffing in nursing homes by more fully leveraging the staffing information that it collects and providing it to SSAs. Doing so could help SSAs more efficiently deploy their resources to target staffing reviews on those nursing homes at higher risk for staffing problems during those dates when

nurse staffing appeared most problematic. CMS currently does this in a limited manner by providing SSAs with a list of nursing homes that have potentially insufficient staffing on weekends. CMS can build on this effort in several ways. For example, CMS could inform SSAs which nursing homes reported frequently staffing below 8 RN hours or 24 licensed-nurse hours during a quarter and provide those dates to SSAs. CMS could also identify nursing homes at risk of insufficient nurse staffing, which SSAs reported was relatively difficult to determine. CMS may wish to use the underlying data from Staffing Star Ratings to strengthen oversight of nurse staffing. If CMS uses these existing data, it may need to share information with SSAs and guide them on how to use the data.

Additionally, CMS is currently updating its inspection system. OIG encourages CMS to ensure that staffing information is integrated into the future system so that SSA inspectors can easily access data about specific nursing homes.

# AGENCY COMMENTS AND OIG RESPONSE

CMS concurred with all four of our recommendations.

In response to our first recommendation—for it to provide data to consumers on nurse staff turnover and tenure, as required by Federal law—CMS stated that it will continue working to publicly report on nurse staff turnover and tenure. CMS described the actions that it has performed to enable it to report on nurse turnover, which CMS has prioritized over reporting on nurse tenure. CMS also reported that the COVID-19 pandemic delayed its plans to introduce data on nurse turnover.

In response to our second recommendation—for it to ensure the accuracy of non-nurse staffing data used on Care Compare—CMS stated that it will explore ways to improve the accuracy of these data by expanding its audits of Payroll-Based Journal data to include data submitted for non-nurse staff.

In response to our third recommendation—for it to consider residents' level of need when identifying nursing homes for weekend inspections—CMS stated that it will begin to use information about residents' level of need when targeting weekend inspections to nursing homes that may have staffing problems.

In response to our fourth recommendation—for it to take additional steps to strengthen oversight of nursing home staffing—CMS stated that it will work to more efficiently provide useful staffing information directly to State survey agencies. CMS reiterated that staffing is a vital component of the quality of care in nursing homes. CMS also emphasized its commitment to continually improve oversight of nursing homes.

OIG appreciates the efforts that CMS has taken to use the staffing data reported by nursing homes. We also acknowledge that CMS has faced a serious challenge—protecting nursing home residents during the COVID-19 pandemic—and that CMS reprioritized its efforts in response. OIG looks forward to collaborating with CMS as the agency continues to leverage nursing home staffing information to improve the quality of care that nursing homes provide. OIG will monitor CMS's progress in implementing these recommendations. For the full text of CMS's comments, see Appendix E.

# DETAILED METHODOLOGY

We based this study on analysis of interviews with subject-matter experts at CMS; documentation from CMS; publicly available data on staffing and citations for nursing homes; nonpublic information about staffing and inspection times for nursing homes; and a survey of SSAs. We reviewed information pertaining to staffing data from April 1, 2018, to March 31, 2019, but we also included updates on some of CMS's subsequent actions through December 2020. We collected these data between January 2019 and May 2020.

## Progress Toward Publicly Reporting Required Data on Staffing

We assessed CMS's actions to provide the public with required nurse staffing information and to enable effective comparisons of this information on Care Compare.<sup>76</sup> To do so, we reviewed publicly available information and analyzed interview responses. During our interviews with CMS, we asked how it uses Care Compare to inform consumers. We also reviewed public communication about the importance of staffing in nursing homes shared from CMS with nursing homes and State Survey Agencies.

We also assessed CMS's actions to introduce turnover and tenure data on Care Compare by analyzing interview responses and agency documentation. We asked CMS what it has done to introduce turnover and tenure data in Care Compare and what sorts of challenges it has encountered in doing so. Documentation that we collected and analyzed include presentation slides and meeting minutes from the Technical Expert Panel Teleconferences on Care Compare's Five-Star Quality Rating System, which were held intermittently in 2017 and 2018. Documentation also includes CMS's methods for calculating turnover and tenure and the agency's preliminary analysis of data on staffing turnover.

## Efforts To Ensure the Quality Staffing Data That Nursing Homes Report

We determined the extent to which CMS took steps to ensure the completeness and accuracy of staffing information for both nurse and non-nurse staff. We also performed quantitative analysis of PBJ public use files (PUFs) to assess data completeness.

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<sup>76</sup> During the course of our review, we collected and analyzed data from Nursing Home Compare, which was operational until December 1, 2020, when it was replaced by Care Compare. Throughout the detailed methodology, however, we refer only to Care Compare.



We conducted structured interviews and collected documentation from CMS and analyzed these data. During our interviews with CMS, we asked the agency about steps it takes to ensure the quality of staffing data that nursing homes submit to the PBJ and how CMS ensures the quality of the PBJ-based staffing information on Care Compare. We asked about CMS's ongoing and planned actions to improve the accuracy and reliability of the staffing data. We reviewed documentation of how CMS monitors and ensures the completeness and accuracy of nurse data through various steps. We reviewed 2018 and 2019 CMS policies and guidance documents, including SSA memorandums and technical user guides for the PBJ and Care Compare.

**Additionally, we determined how many nursing homes did not submit any hours for specific types of non-nurse staff.** We collected publicly available PBJ data directly from Data.CMS.gov. We used CMS's PUF for non-nurse staff from each quarter during the period of review, which included data on over 95 percent of nursing homes, and determined the percentage of nursing homes in each quarter that did not report any hours for each type of non-nurse staff. We focused our review upon non-nurse staff that CMS prioritized for inclusion in Care Compare (physical therapists) and that we categorized as other critical staff, including staff required for all nursing homes (administrators, medical directors, and dietitians) and workers who provide required services (pharmacists).

## Efforts To Coordinate with SSAs To Monitor Staffing Requirements

We determined the extent to which CMS uses PBJ data to help SSAs to monitor Federal requirements for nursing home staffing. To do so, we analyzed CMS interview responses, documentation from CMS, staffing information found on HHS websites, and SSA survey responses. To provide context for the results of this analysis, we performed several quantitative analyses that compare the State-specific weekend lists of nursing homes that CMS identifies with lower weekend staffing to other lists of nursing homes that report low staffing by different metrics.

During our interviews with CMS, we asked how it currently uses and/or plans to use PBJ data to help oversee and enforce Federal nursing home staffing requirements. We also asked CMS about any roadblocks for using the PBJ data to help oversee Federal nursing home staffing requirements. Additionally, we reviewed 2018 and 2019 CMS policies and guidance documents, including SSA memorandums.

To discuss SSAs experiences with the current health inspection process and the PBJ, we surveyed 10 purposively selected SSAs in 2019. We obtained their perspectives on the ways they use PBJ data to monitor staffing levels and requirements of participation, challenges they encounter when determining sufficient nurse staffing levels, and any future actions they would like CMS to take to improve their understanding and use of PBJ data. We selected SSAs from States of assorted sizes, with various State-specific staffing level standards, and that were in different parts of

the United States. All 10 SSAs—California, Colorado, Connecticut, Florida, Michigan, Missouri, New Mexico, New York, Utah, and Virginia—responded to our survey.

## Quantitative Analysis of How CMS Uses Staffing Information To Help Monitor Requirements

To understand how CMS uses and shares key information to help monitor staffing requirements, we conducted multiple quantitative analyses. We used public and nonpublic datasets on both nurse staffing and the citations issued by SSA inspectors. We downloaded publicly available staffing information directly from Data.CMS.gov and Data.Medicare.gov. From Data.Medicare.gov, we also downloaded publicly available information on SSA inspections with deficiency citations. Additionally, we collected a nonpublic dataset from CMS with information on the dates of SSA inspections at nursing homes.

**We determined how many nursing homes with lower staffing are missing from CMS weekend lists by comparing CMS’s method against an alternative method that adjusts for acuity (i.e., relative level of need).** To adjust nurse staffing according to resident acuity, we used CMS’s calculation of the case mix HPRD values for the applicable period, which CMS uses for Care Compare.<sup>77</sup> To calculate its case mix HPRD values, CMS relies on the Minimum Data Set assessments and information from CMS’s Staff Time and Resource Intensity Verification (STRIVE) Project.<sup>78</sup> STRIVE assessed the average amount of nursing time provided in nursing homes according to residents’ needs and was published in 2006.<sup>79</sup> We first determined a list of the bottom 20 percent of nursing homes in each State for weekend nurse staffing in HPRDs, while adjusting for acuity. We determined how many of these nursing homes (in our acuity-adjusted State lists) would not be included in CMS’s weekend lists (CMS’s lists contained the bottom 20 percent of nursing homes in each State not adjusted for resident acuity.)<sup>80</sup>

**We determined how many nursing homes reported staffing levels below Federal requirements.** We identified all RN hours and licensed-nurse hours on each day. We determined which days nursing homes reported less RN hours than Federal

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<sup>77</sup> We obtained the case mix HPRDs from the corresponding Provider Information files (e.g., PBJ data from Q2 2018 corresponds to the Provider Information file for October 2018). CMS makes this file publicly available at Data.CMS.gov for the most recent data on Care Compare. We accessed the archived datasets at <https://data.cms.gov/provider-data/dataset/4pq5-n9py>.

<sup>78</sup> CMS, *Nursing Home Compare Technical Users’ Guide—October 2020*, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/downloads/usersguide.pdf>. Accessed on November 17, 2020.

<sup>79</sup> CMS funded a national staff time measurement study on nursing homes (i.e., the STRIVE Project) to estimate daily care costs is nursing staff time. CMS counted the number of minutes that residents with similar needs received nurse care. CMS, STRIVE Project – Phase I Report, <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/SNFPPS/TimeStudy.html>. Accessed on November 13, 2019.

<sup>80</sup> To avoid burdening CMS by requesting additional nonpublic data, we opted to use the publicly available data in the analysis presented in this report.

requirements stipulate (i.e., less than 8 RN hours each day).<sup>81</sup> We also determined which days nursing homes reported having fewer licensed-nurse staff than Federal requirements stipulate (i.e., anything less than around-the-clock licensed-nurse staff).<sup>82</sup> We counted the number of days in each quarter that nursing homes reported staffing levels below either requirement.

**We determined how many nursing homes that frequently reported staffing levels below Federal requirements would have been included in CMS's weekend lists for weekend inspections.** First, we identified the nursing homes that reported *at least 15 days in the quarter* with staffing levels below Federal requirements. We determined how many of these nursing homes would be included on CMS's weekend lists of the bottom 20 percent of nursing homes in each State in terms of weekend nurse HPRDs.

**We determined how many nursing homes that frequently reported staffing levels below Federal requirements received deficiency citations for staffing.** First, we identified the nursing homes that reported *at least 15 days in the quarter* with staffing levels beneath Federal requirements. Then we narrowed this list to only those nursing homes that received a standard health inspection in the same quarter. We used nonpublic information from CMS to identify all nursing homes that received standard health inspections. Next, we determined how many of these nursing homes received deficiency citations for low staffing levels. We used public data on the SSA-issued deficiency citations available from Data.Medicare.gov. We identified deficiencies for staffing levels using F-tag 725 (sufficient nurse staffing, which includes 24-hour licensed nursing) and F-tag 727 (8 RN hours every day).

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<sup>81</sup> We categorized days when nursing homes staffed at least 7.5 RN hours as meeting this Federal requirement because CMS guidance indicates that an 8-hour RN shift should include a 0.5-hour meal break.

<sup>82</sup> We categorized days when nursing homes staffed at least 22.5 licensed-nurse hours as meeting this Federal requirement.

# APPENDIX A

## Information about CMS data checks and audits

Some nursing homes were not included in the public staffing information. These nursing homes either did not successfully submit their staffing information to the Payroll-Based Journal (PBJ), or—if they submitted highly improbable data—CMS excluded them from the public use file (PUF).<sup>83</sup>

**Exhibit A-1. Few nursing homes did not successfully submit data or had their data excluded by CMS from Q2 2018 through Q1 2019.**

Type of Nursing Home	2018 Q2		2018 Q3		2018 Q4		2019 Q1	
	Number	%	Number	%	Number	%	Number	%
Active Nursing Homes	15,616		15,613		15,578		15,563	
<i>Did Not Submit to PBJ</i>	440	2.8	351	2.2	350	2.2	308	2.0
<i>Exclusions From PUF*</i>	514	3.3	391	2.5	312	2.0	197	1.3
Nursing Homes in PUF	14,662	93.9	14,871	95.2	14,916	95.8	15,058	96.8

\*For 2019 Q1, CMS dropped one of the exclusion criteria (5+ days with residents and no nurse). CMS excludes nursing homes that reported highly improbable data, which CMS defines as a quarterly average of total nurse staffing less than 1.5 HPRDs, total nurse staffing greater than 12 HPRDs, or nurse aide staffing greater than 5.25 HPRDs. Note: Because of rounding, subtotals may not sum to 100 percent. In addition, CMS does not include nursing homes in the public use file if the nursing homes did not report information on the number of residents to the Minimum Data Set.

<sup>83</sup> CMS, *Nursing Home Compare Technical Users' Guide—October 2020*, <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/downloads/usersguide.pdf>. Accessed on November 17, 2020.

## Summary of the Audit Process and Findings for Data Submitted to the Payroll-Based Journal

Nursing homes could fail a staffing audit if (a) CMS found a significant discrepancy between reported and verified hours or (b) nursing homes did not respond to an audit. In January 2019, CMS began to automatically downgrade the Staffing Star Ratings to 1 star for nursing homes that failed a staffing audit.

The number of audits conducted by CMS decreased during our period of review, but the number of nursing homes reporting staffing that significantly varied from what they actually staffed remained the same (see Exhibit A-2). CMS lowered the threshold for significant variance during Q4 2018 and Q1 2019. That is to say, CMS defined significant variance as errors of 3.59 percent or greater change in HPRDs; previously (during Q2 and Q3) it was 4 percent or greater.

**Exhibit A-2. The number of audits decreased, and—except in Q3 2018—the number of nursing homes that failed audits (with a significant variance) did not vary substantially.**

Summary of Audit Findings:	Q2 2018		Q3 2018		Q4 2018		Q1 2019	
	Count	%	Count	%	Count	%	Count	%
Minimal or No Variance	201	46%	200	47%	165	48%	171	49%
Slight Variance	155	36%	143	33%	113	33%	100	29%
Significant Variance <sup>1</sup>	67	15%	44	10%	67	19%	68	19%
Other <sup>2</sup>	10	2%	43	10%	2	1%	11	3%
<b>Total Audits</b>	<b>433</b>		<b>430</b>		<b>347</b>		<b>350</b>	

<sup>1</sup> When comparing the reported nurse staff hours to what auditors verified by reviewing payment records, CMS defined “significant variance” as errors of 4 percent or greater in Q2 and Q3 2018 but modified this to 3.59 percent or greater for Q4 2018 and Q1 2019.

<sup>2</sup> The “other” category of audit findings captures instances in which audits were not completed for various reasons (nursing home in receivership, auditor unable to obtain all documentation, nonresponse, and the nursing home’s having self-disclosed significant errors).

Additionally, CMS used information from audits to issue guidance to nursing homes. This guidance highlighted common types of errors found in data submitted by nursing homes that failed an audit. For example, misreporting mealtimes was the most frequent error type found in data submitted by nursing homes that failed an audit (see Exhibit A-3). CMS published multiple memos and policy manuals to provide guidance to nursing homes on how to exclude time for meal breaks.<sup>84, 85</sup> Nursing homes can use this guidance to improve their reporting in submitted data to mitigate potential errors.

Exhibit A-3 provides a summary of the common types of errors found in data submitted by nursing homes that failed an audit during Q2 2018 through Q1 2019.

### Exhibit A-3. Summary of Errors Found in Data Submitted by Nursing Homes That Failed an Audit With a Significant Variance

<b>Error Type</b>	<b>Nursing Homes With the Error</b>		<b>Nursing Homes With This as Primary Error</b>	
	Count	%	Count	%
Mealtimes	193	78%	105	43%
XML <sup>1</sup> or Manual Entry <sup>2</sup>	56	23%	38	15%
Non-SNF <sup>3</sup> Hours	37	15%	33	13%
Paid Time Off	59	24%	21	9%
Unpaid Hours > 40	54	22%	5	2%
Training	7	3%	2	1%
Other	74	30%	31	13%

<sup>1</sup> XML—extensible markup language—is a computer language that helps transmit data.

<sup>2</sup> Among nursing homes that received an audit finding of “significant variance,” one in four nursing homes had errors in their XML submissions or manual data submissions, and only one in seven nursing homes that failed audits due to a significant variance had these types of errors as the most common error.

<sup>3</sup> “SNF” stands for “skilled nursing facility.”

<sup>84</sup> CMS, *QSO-18-17-NH Memorandum*.

<sup>85</sup> CMS, *PBJ Policy Manual*, v2.4, September 2017, and v2.5, October 2018.

# Appendix B

## Nursing homes reported no hours for some types of non-nurse staff.

Among non-nurse staff, CMS reports only physical therapists on Care Compare. CMS requires nursing homes to submit all hours for therapy staff (i.e., physical, occupational, speech, and respiratory therapists) regardless of payer. For other staff, nursing homes report hours that can be verified with payment records.

### Exhibit B-1. Some nursing homes did not report staff hours for therapy staff types.

	Q2 2018		Q3 2018		Q4 2018		Q1 2019	
<i>Total Nursing Homes</i>	14,662		14,871		14,916		15,058	
<b>Staff Types</b>	Count	%	Count	%	Count	%	Count	%
Physical Therapists	1,068	7.3%	1,021	6.9%	945	6.3%	868	5.8%
Occupational Therapists	1,188	8.1%	1,124	7.6%	1,051	7.0%	993	6.6%
Speech Therapists	1,567	10.7%	1,532	10.3%	1,468	9.8%	1,386	9.2%

Note: OIG analysis of PBJ data available at Data.CMS.gov. This table excludes respiratory therapists because approximately 86 percent of nursing homes did not report this category.

We defined other critical non-nurse staff according to the criteria below:

- Administrator Staff: Required under Federal regulation (42 CFR § 483.70(d))
- Medical Directors: Required under Federal regulation (42 CFR § 483.70(h))
- Pharmacists: For residents on prescription medications, pharmacists are federally required to perform monthly reviews of drug regimens (42 CFR § 483.45(c))
- Dietitians: Required under Federal regulation (42 CFR § 483.60(a))

### Exhibit B-2. Many nursing homes did not report staff hours for other critical staff types.

	Q2 2018		Q3 2018		Q4 2018		Q1 2019	
<i>Total Nursing Homes</i>	14,662		14,871		14,916		15,058	
<b>Staff Types</b>	Count	%	Count	%	Count	%	Count	%
"Other Critical"* staff types	7,182	49.0%	7,186	48.3%	7,233	48.5%	7,371	49.0%
<i>Pharmacists</i>	4,511	30.8%	4,448	29.9%	4,536	30.4%	4,634	30.8%
<i>Medical Directors</i>	4,198	28.6%	4,239	28.5%	4,309	28.9%	4,511	30.0%
<i>Dietitians</i>	2,735	18.7%	2,713	18.2%	2,769	18.6%	2,841	18.9%
<i>Administrators</i>	1,256	8.6%	1,229	8.3%	1,232	8.3%	1,170	7.8%
Social Workers	1,265	8.6%	1,251	8.4%	1,239	8.3%	1,293	8.6%
Activity Staff	1,066	7.3%	1,091	7.3%	1,116	7.5%	1,116	7.4%

\*We defined other critical non-nurse staff types as including administrators, medical directors, pharmacists, and dietitians. Note: We excluded mental health staff, feeding assistants, and medical specialists from this table. Between 78 percent and 94 percent of nursing homes did not report staff hours for these respective staff types, but not all nursing home residents may need these non-nurse staff types. In addition, some services provided by these specific types of non-nurse staff may instead be performed by other types of non-nurse staff or by nurse staff.



### Exhibit B-3. Nursing homes can report up to 40 staff types to the Payroll-Based Journal.

	<b>Mandatory Submission</b>	<b>Job Grouping</b>	<b>Job Description</b>	<b>Description of Services</b>
1	Yes	Administration Services	Administrator	Administrative staff responsible for facility management as required under 483.70(d) such as the administrator and the assistant administrator.
2	Yes	Physician Services	Medical Director	A physician designated as responsible for implementation of resident care policies and coordination of medical care in the facility in accordance with 483.70(h).
3	Yes	Physician Services	Other Physician	A salaried physician, other than the medical director, who supervises the care of residents when the attending physician is unavailable, and/or a physician(s) available to provide emergency services 24 hours a day.
4	Yes	Physician Services	Physician Assistant	A physician assistant who provides healthcare services typically performed by a physician, under the supervision of a physician.
5	Yes	Nursing Services	Registered Nurse Director of Nursing	Professional registered nurse(s) administratively responsible for managing and supervising nursing services within the facility.
6	Yes	Nursing Services	Registered Nurse with Administrative Duties	Nurses (RN) who perform the Resident Assessment Instrument function in the facility and do not perform direct care functions.
7	Yes	Nursing Services	Registered Nurse	Those persons licensed to practice as registered nurses. Includes geriatric nurse practitioners and clinical nurse specialists who primarily perform nursing, not physician-delegated tasks.
8	Yes	Nursing Services	Licensed Practical Nurse with Administrative Duties	Those persons licensed to practice as licensed practical/vocational nurses and do not perform direct care functions.
9	Yes	Nursing Services	Licensed Practical Nurse	Those persons licensed to practice as licensed practical/vocational nurses.
10	Yes	Nursing Services	Certified Nurse Aide	Individuals who have completed a training and competency evaluation program, or competency evaluation program, or have been determined competent as provided in 483.150 and who are providing nursing or nursing-related services to residents.
11	Yes	Nursing Services	Nurse Aide in Training	Individuals in the first 4 months of employment and who are receiving training in an approved Nurse Aide training and competency evaluation program and are providing nursing related services for which they have been trained and are under the supervision of a licensed or registered nurse.
12	Yes	Nursing Services	Medication Aide/Technician	Individuals, other than a licensed professional, who fulfill the State requirement for approval to administer medications to residents.
13	Yes	Physician Services	Nurse Practitioner	A registered nurse with specialized graduate education who is licensed to diagnose and treat illness, independently or as part of a health care team.
14	Yes	Nursing Services	Clinical Nurse Specialist	A registered nurse with specialized graduate education who provides advanced nursing care.
15	Yes	Pharmacy Services	Pharmacist	The licensed pharmacist(s) whom a facility is required to use for various purposes, including providing consultation on pharmacy services; establishing a system of records of controlled drugs; overseeing records and reconciling controlled drugs; and/or performing a monthly drug-regimen review for each resident.
16	Yes	Dietary services	Dietitian	A person(s) who is either registered by the Commission of Dietetic Registration of the American Dietetic Association or is qualified to be a dietitian based on experience in identification of dietary needs, planning and implementation of dietary programs.
17	Yes	Dietary services	Paid Feeding Assistant	Person who meets the requirements specified in CFR §§ 483.60(h)(1)(i) and 483.60(h)(1)(ii) and who is paid to feed residents by a facility, or who is used under an arrangement with another agency or organization. Paid feeding assistants can feed only residents who do not have complicated feeding problems.
18	Yes	Therapeutic Services	Occupational Therapist	Persons licensed/registered as occupational therapists.

continued on the next page

**Exhibit B-3 (continued). Nursing homes can report up to 40 staff types to the Payroll-Based Journal.**

	<b>Mandatory Submission</b>	<b>Job Grouping</b>	<b>Job Description</b>	<b>Description of Services</b>
19	Yes	Therapeutic Services	Occupational Therapy Assistant	Person(s) who have licenses/certification and specialized training to assist a licensed/certified/registered Occupational Therapist (OT) to carry out the OT's plan of care, without the direct supervision of the therapist.
20	Yes	Therapeutic Services	Occupational Therapy Aide	Person(s) who have specialized training to assist an OT to carry out the OT's plan of care under the direct supervision of the therapist.
21	Yes	Therapeutic Services	Physical Therapist	Persons licensed/registered as physical therapists.
22	Yes	Therapeutic Services	Physical Therapy Assistant	Person(s) who have licenses/certification and specialized training to assist a licensed/certified/registered Physical Therapist (PT) to carry out the PT's plan of care, without the direct supervision of the PT.
23	Yes	Therapeutic Services	Physical Therapy Aide	Person(s) who have specialized training to assist a PT to carry out the PT's plan of care under the direct supervision of the therapist.
24	Yes	Therapeutic Services	Respiratory Therapist	Persons(s) who are licensed as respiratory therapists.
25	Yes	Therapeutic Services	Respiratory Therapy Technician	Person(s) who provide respiratory care under the direction of respiratory therapists and physicians
26	Yes	Therapeutic Services	Speech/Language Pathologist	Persons licensed/registered to provide speech therapy and related services (e.g., teaching a resident to swallow).
27	Yes	Therapeutic Services	Therapeutic Recreation Specialist	Person(s) who are licensed/registered and are eligible for certification as a therapeutic recreation specialist by a recognized accrediting body.
28	Yes	Therapeutic Services	Qualified Activities Professional	Person(s) who meet the definition of an activities professional and who are providing an ongoing program of activities designed to meet residents' interests and physical, mental, or psychosocial needs.
29	Yes	Therapeutic Services	Other Activities Staff	Persons providing an on-going program of activities designed to meet residents' needs and interests.
30	Yes	Therapeutic Services	Qualified Social Worker	Person licensed to practice social work or persons with a bachelor's degree in social work or a bachelor's degree in a human services field and 1 year of supervised social work experience in a health care setting working directly with elderly individuals.
31	Yes	Therapeutic Services	Other Social Worker	Person(s) other than the qualified social worker who are involved in providing medical social services to residents.
32	Yes	Mental Health Services	Mental Health Service Worker	Staff who provide programs of services targeted to residents' mental, emotional, psychological, or psychiatric well-being.
33	No	Dental Services	Dentist	Persons licensed as dentists to provide routine and emergency dental care.
34	No	Podiatry Services	Podiatrist	Persons licensed/registered as podiatrists to provide podiatric care.
35	No	Vocational Services	Vocational Service Worker	Evaluation and training aimed at assisting the resident to enter, re-enter, or maintain employment in the labor force, including training for jobs in integrated settings (i.e., those which have both disabled and nondisabled workers) as well as in special settings such as sheltered workshops.
36	No	Clinical Laboratory Services	Clinical Laboratory Service Worker	Entities that provide laboratory services and are approved by Medicare as independent laboratories or hospitals.
37	No	Diagnostic X-ray Services	Diagnostic X-ray Service Worker	Radiology services, ordered by a physician, for diagnosis of a disease or other medical condition.
38	No	Administration & Storage of Blood Services	Blood Service Worker	Blood bank and transfusion services.
39	No	Housekeeping Services	Housekeeping Service Worker	Services, including those of the maintenance department, necessary to maintain the environment.
40	No	Other Services	Other Service Worker	Record total hours worked for all personnel not already recorded (for example, librarian).

Source: CMS, *Electronic Staffing Data Submission PBJ: Long-Term Care Facility Policy Manual*, <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/PBJ-Policy-Manual-Final-V25-11-19-2018.pdf>. Accessed on May 22, 2020.

# APPENDIX C

## State-by-State analysis to identify lower staffed nursing homes when adjusting for the relative care needs among residents

We identified the nursing homes in each State that would be in the bottom 20 percent of weekend nurse staffing per resident, while adjusting for acuity (i.e., the relative level of care needs). We then determined how many of these nursing homes would be missing from CMS's weekend lists.

**Exhibit C-1. CMS's weekend lists, which do not adjust for residents' care needs, miss some nursing homes that are identified by a method that adjusts for care needs.**

State	Q2 2018		Q3 2018		Q4 2018		Q1 2019	
	%	Count of Missing / Total	%	Count of Missing / Total	%	Count of Missing / Total	%	Count of Missing / Total
AK	50%	1 / 2	33%	1 / 3	33%	1 / 3	50%	1 / 2
AL	21%	9 / 43	23%	10 / 44	20%	9 / 44	20%	9 / 45
AR	26%	11 / 42	20%	8 / 41	27%	12 / 44	20%	9 / 44
AZ	17%	5 / 29	23%	7 / 30	21%	6 / 29	17%	5 / 29
CA	48%	106 / 221	46%	102 / 224	44%	101 / 227	42%	95 / 228
CO	25%	11 / 44	23%	10 / 44	20%	9 / 44	20%	9 / 44
CT	44%	16 / 36	36%	15 / 42	31%	13 / 42	29%	12 / 42
DC	0%	0 / 3	25%	1 / 4	25%	1 / 4	0%	0 / 4
DE	67%	6 / 9	44%	4 / 9	44%	4 / 9	22%	2 / 9
FL	50%	67 / 135	50%	68 / 136	49%	67 / 137	54%	74 / 137
GA	23%	16 / 69	30%	21 / 70	22%	15 / 69	23%	16 / 71
HI	22%	2 / 9	13%	1 / 8	13%	1 / 8	11%	1 / 9
IA	22%	19 / 85	20%	17 / 85	20%	17 / 83	20%	17 / 86
ID	31%	5 / 16	20%	3 / 15	25%	4 / 16	38%	6 / 16
IL	16%	22 / 137	17%	23 / 138	16%	22 / 139	16%	22 / 138
IN	26%	28 / 107	26%	28 / 107	25%	27 / 106	21%	23 / 108
KS	15%	9 / 61	21%	13 / 62	17%	11 / 64	22%	14 / 64
KY	27%	15 / 55	18%	9 / 51	25%	14 / 56	27%	15 / 56
LA	32%	17 / 53	25%	13 / 53	30%	16 / 54	25%	13 / 53
MA	20%	15 / 76	23%	17 / 75	26%	20 / 76	28%	21 / 76
MD	31%	14 / 45	27%	12 / 44	20%	9 / 45	20%	9 / 44
ME	5%	1 / 20	5%	1 / 19	22%	4 / 18	16%	3 / 19

continued on the next page

Exhibit C-1 (continued). CMS's weekend lists, which do not adjust for residents' care needs, miss some nursing homes that are identified by a method that adjusts for care needs.

STATE	Q2 2018		Q3 2018		Q4 2018		Q1 2019	
	%	Count of Missing / Total	%	Count of Missing / Total	%	Count of Missing / Total	%	Count of Missing / Total
MI	24%	20 / 84	19%	16 / 85	20%	17 / 86	23%	20 / 86
MN	18%	13 / 72	11%	8 / 73	13%	9 / 72	12%	9 / 74
MO	15%	14 / 96	16%	16 / 97	23%	23 / 99	14%	14 / 97
MS	28%	11 / 40	40%	16 / 40	25%	10 / 40	27%	11 / 41
MT	8%	1 / 13	15%	2 / 13	7%	1 / 14	13%	2 / 15
NC	24%	20 / 82	22%	18 / 82	17%	14 / 81	20%	16 / 82
ND	13%	2 / 16	19%	3 / 16	19%	3 / 16	13%	2 / 15
NE	16%	6 / 38	13%	5 / 40	13%	5 / 39	13%	5 / 40
NH	20%	3 / 15	27%	4 / 15	13%	2 / 15	20%	3 / 15
NJ	31%	22 / 71	27%	19 / 71	26%	18 / 69	26%	19 / 72
NM	14%	2 / 14	27%	4 / 15	7%	1 / 15	7%	1 / 15
NV	25%	3 / 12	18%	2 / 11	17%	2 / 12	17%	2 / 12
NY	28%	33 / 119	23%	28 / 121	23%	28 / 121	25%	30 / 120
OH	27%	49 / 184	25%	47 / 187	22%	42 / 187	30%	56 / 189
OK	30%	16 / 54	17%	9 / 53	11%	6 / 53	19%	10 / 52
OR	31%	8 / 26	25%	6 / 24	33%	8 / 24	42%	11 / 26
PA	28%	36 / 129	29%	40 / 136	34%	46 / 137	30%	41 / 136
RI	13%	2 / 16	24%	4 / 17	13%	2 / 16	25%	4 / 16
SC	16%	6 / 37	14%	5 / 37	25%	9 / 36	19%	7 / 37
SD	20%	4 / 20	14%	3 / 21	29%	6 / 21	10%	2 / 21
TN	28%	17 / 61	24%	15 / 62	21%	13 / 62	25%	16 / 63
TX	19%	44 / 227	23%	54 / 234	20%	47 / 235	22%	52 / 235
UT	10%	2 / 20	35%	7 / 20	15%	3 / 20	15%	3 / 20
VA	20%	11 / 56	27%	15 / 56	30%	16 / 54	26%	15 / 57
VT	43%	3 / 7	29%	2 / 7	25%	2 / 8	29%	2 / 7
WA	28%	11 / 40	28%	11 / 40	30%	12 / 40	32%	13 / 41
WI	18%	13 / 72	15%	11 / 73	13%	9 / 67	17%	12 / 70
WV	26%	6 / 23	25%	6 / 24	13%	3 / 24	28%	7 / 25
WY	29%	2 / 7	29%	2 / 7	38%	3 / 8	13%	1 / 8
USA	26%	775 / 2,948	26%	762 / 2,981	25%	743 / 2,988	25%	762 / 3,011

Note: OIG analysis of PBJ data available on Data.CMS.gov. OIG combined the CMS PUF data with CMS information on the differences in resident care needs available in the Provider Info File accessed from Data.Medicare.gov.

# APPENDIX D

## Data about the current oversight of nursing homes that frequently reported staffing levels lower than required levels

**Exhibit D-1. Some nursing homes frequently reported staffing data below requirements for RNs or licensed nurses.**

Number of days with either less than 8 RN hours or 24 licensed nurse hours:	<b>Q2 2018</b>		<b>Q3 2018</b>		<b>Q4 2018</b>		<b>Q1 2019</b>	
	14,662		14,871		14,916		15,058	
	Count	%	Count	%	Count	%	Count	%
7 or more days	1,425	9.7%	1,403	9.4%	1,419	9.5%	1,100	7.3%
15 or more days	565	3.9%	562	3.8%	609	4.1%	466	3.1%
30 or more days	175	1.2%	170	1.1%	250	1.7%	175	1.2%

Note: OIG analysis of the Payroll-Based Journal Public Use Files, available at Data.CMS.gov.

**Exhibit D-2. Most nursing homes that frequently reported staffing data below requirements (at least 15 days in 3 months) would not appear on CMS lists for potential weekend inspections.**

<i>Subtotal of Nursing Homes</i>	<b>Q2 2018</b>		<b>Q3 2018</b>		<b>Q4 2018</b>		<b>Q1 2019</b>	
	565		562		609		466	
	Count	%	Count	%	Count	%	Count	%
Nursing homes that CMS would not target for weekend inspections	342	60.5%	335	59.6%	333	54.7%	268	57.5%

Note: OIG analysis of the Payroll-Based Journal Public Use Files, available at Data.CMS.gov.

**Exhibit D-3. Among nursing homes that frequently reported staffing data below Federal requirements (at least 15 days in 3 months), few nursing homes received a deficiency citation for low staffing.**

<i>Subtotal of Nursing Homes (with an inspection in the quarter)</i>	<b>Q2 2018</b>		<b>Q3 2018</b>		<b>Q4 2018</b>		<b>Q1 2019</b>	
	151		135		143		111	
	Count	%	Count	%	Count	%	Count	%
Nursing homes that received citations for low staffing	18	11.9%	15	11.1%	18	12.6%	17	15.3%

Note: OIG analysis of the Payroll-Based Journal Public Use Files, available at Data.CMS.gov, and of CMS citation data (F-tags 725 and 727) available at Data.Medicare.gov and obtained by OIG from CMS.

# APPENDIX E

## Agency Comments



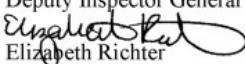
DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

Administrator  
Washington, DC 20201

**DATE:** February 18, 2021

**TO:** Suzanne Murrin  
Deputy Inspector General

**FROM:**   
Elizabeth Richter  
Acting Administrator

**SUBJECT:** Office of Inspector General (OIG) Draft Report: CMS Use of Nursing Home Staffing Data: Progress and Opportunities to Do More OEI-04-18-00451

The Centers for Medicare & Medicaid Services (CMS) appreciates the opportunity to review and comment on the Office of Inspector General's (OIG) draft report.

CMS is charged with developing and enforcing quality and safety standards across the nation's health care system, a responsibility that the Agency takes seriously. This duty is especially important when it comes to the care provided for some of the most vulnerable in our society, beneficiaries residing in nursing homes, and is especially critical now as we respond to the coronavirus disease 2019 (COVID-19) pandemic.

CMS has long identified staffing as a vital component of a nursing home's ability to provide quality care, and CMS has used staffing data to more accurately and effectively gauge its impact on quality of care in nursing homes. Through our Payroll Based Journal (PBJ) program, CMS began holding nursing homes accountable for their staffing levels through more precise staffing reporting. This monitoring system allows CMS to track nursing home staffing through auditable data, which nursing homes must submit on a quarterly basis. In response to the COVID-19 pandemic, CMS temporarily suspended PBJ reporting requirements, which is retrospective data, to redirect resources to patient safety. However, due to the importance of staffing and its relationship to quality care, CMS resumed the requirement to submit staffing data on June 25, 2020, and nursing homes had to submit staffing data for April – June 2020 through the PBJ system by August 14, 2020. Additionally, while CMS suspended updating the Staffing Star Rating due to the public health emergency; in October 2020, CMS resumed updating the PBJ staffing measures and staffing ratings.

As OIG reported, CMS has a robust process to ensure the accuracy and completeness of reported nurse staffing information, including checks for data abnormalities, monitoring of data trends across quarters, downgrading of the Staffing Domain of the Five Star Quality Ratings System for nursing homes that do not successfully submit data, and audits of individual nursing homes' staffing data. Additionally, when CMS identifies facilities with unreliable staffing data, neither staffing data nor a staffing rating are reported for these facilities on CMS's Care Compare website. These efforts have resulted in improved data reporting and accuracy rates.

CMS works in partnership with State Survey Agencies (SSAs) to oversee nursing homes, as these agencies are responsible for surveying nursing homes for compliance with federal

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requirements, such as sufficient nurse staffing. CMS shares staffing data, including a list of nursing homes that have potentially insufficient staffing on weekends and after-hours, with SSAs so they know which nursing homes may have potential staffing problems in order to target their surveys appropriately. Prior to the COVID-19 pandemic, SSAs were conducting a portion of their unannounced surveys after-hours and on weekends using lists provided by CMS to focus on possible staffing problems during those times. In addition, when conducting standard or complaint surveys, the SSAs would also investigate compliance with the nursing services staffing requirements. Appropriate enforcement actions would be taken against those facilities that failed to provide the required nurse staffing. By targeting these surveys, CMS has been able to engage in better, stronger enforcement of staffing requirements.

CMS is dedicated to empowering consumers, their families, and their caregivers by giving them the resources they need to make informed decisions, and key to this effort is the Care Compare website, which replaced Nursing Home Compare on December 1, 2020. Care Compare offers a wide variety of data related to nursing home quality, including nurse and non-nurse staffing data for individual nursing homes presented in a format that allows consumers to meaningfully compare differences between nursing homes. Care Compare was designed based on research and stakeholder feedback, and offers the features and functions that most appeal to consumers. It is also optimized for both mobile and tablet use. A facility's quality rating for staffing levels is one of three performance measures that make up a facility's overall rating under CMS' Nursing Home Five-Star Quality Rating System, which is posted on Care Compare.

The Five-Star Quality Rating System helps consumers make meaningful distinctions among high and low-performing nursing homes, compare nursing homes more easily, and identify areas that they may want to ask the nursing home about. It also helps nursing homes identify areas for improvement. CMS announced in April 2018 that it would automatically downgrade a nursing home's Staffing Star Rating to the lowest one-star if it reported no registered nurse hours for at least seven days within a quarter. In April 2019, CMS strengthened its criteria, and now downgrades the Staffing Star Rating if no registered nurse hours are reported for at least four days within a quarter, and increased the threshold a facility must exceed to obtain a five-star staffing rating.<sup>1</sup>

CMS thanks the OIG for its efforts on this issue and looks forward to working collaboratively on this and other issues in the future. OIG's recommendations and CMS' responses are below.

#### **OIG Recommendation**

Provide information to consumers on nurse staff turnover and tenure, as required by Federal law.

#### **CMS Response**

CMS concurs with the OIG's recommendation. As CMS began to collect direct care staffing data through the PBJ system, CMS was able to start analyzing the data to determine how to accurately report nurse staff turnover and tenure. CMS first focused on nurse staff turnover, which measures staff retention over a shorter amount of time than tenure, given the limited amount of initial PBJ data. Specifically, CMS updated the data reporting process in November 2017, allowing CMS to

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<sup>1</sup> CMS Center for Clinical Standards and Quality/Quality, Safety & Oversight Group, Memo to State Survey Agency Directors, Ref: QSO-19-08-NH, *April 2019 Improvements to Nursing Home Compare and the Five Star Rating System* (March 5, 2019)



track when an individual employee worked at a nursing home. The new reporting system enabled CMS to overcome prior technical challenges and begin developing both turnover and tenure measures. CMS has made significant progress in defining a measure on nurse staff turnover. Originally, CMS had taken steps to introduce a turnover measure on Care Compare in late-2020, including consulting with outside experts to define and refine a potential measure; however, due to the COVID-19 pandemic, this timeline has been delayed. CMS will continue to make progress towards reporting both nurse staff turnover and tenure publically.

**OIG Recommendation**

Ensure the accuracy of staffing data for non-nurse staff used on Care Compare.

**CMS Response**

CMS concurs with the OIG's recommendation. As OIG reported, CMS has a robust process to ensure the accuracy and completeness of nurse staffing information, including checks for data abnormalities, monitoring of data trends across quarters, downgrading of Staffing Star Ratings for nursing homes that do not successfully submit data, and audits of individual nursing homes' staffing data. CMS will explore ways to improve the accuracy of non-nurse staffing data reported by facilities by expanding our process for auditing the data submitted for these staff.

**OIG Recommendation**

Consider resident level of need when identifying nursing homes for weekend inspections.

**CMS Response**

CMS concurs with the OIG's recommendation. CMS shares staffing data, including a list of nursing homes that have potentially insufficient staffing on weekends, with SSAs so they know which nursing homes may have potential staffing problems in order to target their surveys appropriately. Prior to the COVID-19 pandemic, SSAs were conducting a portion of their unannounced surveys after-hours and on weekends using lists provided by CMS to focus on staffing problems during those times. CMS will analyze and use information about residents' level of need as the Agency continues to compile lists of nursing homes with lower reported staffing to help SSAs further target nursing homes for weekend inspections.

**OIG Recommendation**

Take additional steps to strengthen oversight of nursing home staffing.

**CMS Response**

CMS concurs with the OIG's recommendation. As stated above, CMS has long identified staffing as a vital component of a nursing home's ability to provide quality care. CMS' approach to oversight of nursing homes, including their staffing levels, is constantly evolving as reflected by our commitment to enhancing enforcement through reporting requirements. CMS is committed to increasing accountability, which the Agency demonstrated first through the weekend staffing lists for SSAs, and will work to more efficiently provide useful staffing information directly to SSAs.

# ACKNOWLEDGMENTS AND CONTACT

## Acknowledgments

Lucio Verani served as the lead analyst for this study. Others in the Office of Evaluation and Inspections who conducted the study include Victoria Coxon, Rebekah Schwartz, and Brianna Weldon. Office of Evaluation and Inspections staff who provided support include Joe Chiarenzelli, Althea Hosein, and Christine Moritz.

This report was prepared under the direction of Dwayne Grant, Regional Inspector General for Evaluation and Inspections in the Atlanta regional office; Evan Godfrey, Deputy Regional Inspector General; and Jaime Stewart, Assistant Regional Inspector General.

## Contact

To obtain additional information concerning this report, contact the Office of Public Affairs at [Public.Affairs@oig.hhs.gov](mailto:Public.Affairs@oig.hhs.gov). OIG reports and other information can be found on the OIG website at [oig.hhs.gov](http://oig.hhs.gov).

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# ABOUT THE OFFICE OF INSPECTOR GENERAL

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