

Department of Health and Human Services

**OFFICE OF  
INSPECTOR GENERAL**

**CMS'S COVID-19 DATA INCLUDED  
REQUIRED INFORMATION FROM  
THE VAST MAJORITY OF NURSING  
HOMES, BUT CMS COULD TAKE  
ACTIONS TO IMPROVE COMPLETENESS  
AND ACCURACY OF THE DATA**

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**September 2021  
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# *Office of Inspector General*

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## Report in Brief

Date: September 2021  
Report No. A-09-20-02005

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES  
**OFFICE OF INSPECTOR GENERAL**



### Why OIG Did This Audit

The United States currently faces a nationwide public health emergency because of the COVID-19 pandemic. Federal regulations, effective May 8, 2020, required nursing homes to report COVID-19 information, such as the number of confirmed COVID-19 cases among residents, at least weekly to the Centers for Disease Control and Prevention's (CDC's) National Healthcare Safety Network. Each week, CDC aggregates the reported information and sends the data to the Centers for Medicare & Medicaid Services (CMS) for posting to the CMS website. These data are used to assist with national surveillance of COVID-19 in nursing homes and to support actions to protect the health and safety of nursing home residents.

Our objective was to determine whether CMS's COVID-19 data for nursing homes were complete and accurate.

### How OIG Did This Audit

Our audit covered CMS's COVID-19 data for 15,388 nursing homes that reported data to CMS for the 4-week period from June 22 through July 19, 2020. We interviewed CMS officials to understand the reporting process for COVID-19 data, reviewed CMS's COVID-19 data and quality assurance process, selected a statistical sample of 120 nursing homes and sent questionnaires to each sampled nursing home, and sent questionnaires to State health departments in 50 States and the District of Columbia.

## CMS's COVID-19 Data Included Required Information From the Vast Majority of Nursing Homes, but CMS Could Take Actions To Improve Completeness and Accuracy of the Data

### What OIG Found

CMS's COVID-19 data for nursing homes included the required data from the vast majority of nursing homes (e.g., the number of confirmed COVID-19 cases among residents); however, the data were not complete or accurate for some nursing homes. Specifically, for 775 of the 15,388 nursing homes (about 5 percent), CMS's COVID-19 data: (1) did not include all of the COVID-19 data that nursing homes were required to report and (2) were not complete or accurate after CMS had performed its quality assurance checks (e.g., the number of confirmed COVID-19 cases among residents may have been under- or overreported). These conditions occurred because, in part, CMS's quality assurance checks were not always effective in ensuring the accuracy and completeness of the COVID-19 data for nursing homes.

In addition, we identified two areas in which CMS could take additional actions to help ensure that its COVID-19 data are complete and accurate. First, CMS could provide technical assistance to all nursing homes that fail its quality assurance checks. Second, CMS could make additional efforts to ensure that: (1) CMS's and States' COVID-19 data elements (e.g., confirmed COVID-19 cases among residents) are comparable (i.e., CMS and States could use the same data elements) and (2) the reported data are not substantially different.

When CMS's COVID-19 data are complete and accurate, Federal and State officials and other stakeholders may be able to more effectively monitor trends in infection rates and develop public health policies when making decisions about how to ensure the health and safety of nursing home residents and staff.

### What OIG Recommends and CMS Comments

We recommend that CMS assess the costs and benefits of implementing the six recommendations listed in our report (e.g., our recommendations that it revise its quality assurance checks and contact nursing homes that fail quality assurance checks to verify the accuracy of reported data or to correct inaccurate data), and if CMS determines that the benefits outweigh the costs, take action to implement the recommendations.

CMS concurred with three of our recommendations but did not concur with the other three recommendations. After reviewing CMS's comments, we maintain that our recommendations are valid.

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## INTRODUCTION

### WHY WE DID THIS AUDIT

The United States currently faces a nationwide public health emergency because of the COVID-19 pandemic. Federal regulations, effective May 8, 2020, required nursing homes to report COVID-19 information, such as the number of confirmed COVID-19 cases among residents, at least weekly to the Centers for Disease Control and Prevention's (CDC's) National Healthcare Safety Network (NHSN).<sup>1</sup> Each week, CDC aggregates the reported information and sends the data to the Centers for Medicare & Medicaid Services (CMS) for posting to the CMS website.<sup>2</sup> These publicly available data are used to assist with national surveillance of COVID-19 in nursing homes and to support actions to protect the health and safety of nursing home residents. As of February 28, 2021, CMS's COVID-19 data showed that 640,271 nursing home residents had had confirmed cases of COVID-19 and 130,174 residents had died from COVID-19.<sup>3</sup>

Because Federal and State officials use COVID-19 data to monitor trends in infection rates and develop public health policies when making decisions to ensure the health and safety of nursing home residents and staff, we assessed the risk that CMS's COVID-19 data for nursing homes could be incomplete or inaccurate. We conducted this audit to provide a snapshot of the data's completeness and accuracy for the 4-week period from June 22 through July 19, 2020 (audit period).

### OBJECTIVE

Our objective was to determine whether CMS's COVID-19 data for nursing homes were complete and accurate.

### BACKGROUND

#### COVID-19 Public Health Emergency

COVID-19 is a disease caused by a highly contagious coronavirus, called SARS-CoV-2. COVID-19's symptoms include fever, fatigue, cough, and shortness of breath. The disease is

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<sup>1</sup> In the memo "Interim Final Rule Updating Requirements for Notification of Confirmed and Suspected COVID-19 Cases Among Residents and Staff in Nursing Homes" (QSO-20-29-NH), issued May 6, 2020, CMS required nursing homes to report COVID-19 data starting May 11, 2020, but made reporting of the data before May 11, 2020, optional.

<sup>2</sup> COVID-19 Nursing Home Data, available at <https://data.cms.gov/stories/s/COVID-19-Nursing-Home-Data/bkwz-xpvg>. Accessed on Mar. 16, 2021. In this report, we refer to these data as "CMS's COVID-19 data for nursing homes."

<sup>3</sup> These data may not include the numbers of nursing home residents who had confirmed cases of COVID-19 and had died from COVID-19 before May 11, 2020.

fatal in some cases. Older adults and people who have severe underlying medical conditions, such as heart or lung disease or diabetes, are at higher risk for developing more serious complications from COVID-19.

On March 11, 2020, the World Health Organization characterized COVID-19 as a pandemic, which is an epidemic that has spread over several countries or continents, usually affecting many people.<sup>4</sup> On March 13, 2020, then President Trump declared the COVID-19 outbreak a national emergency. As of August 17, 2021, CDC had reported 37 million confirmed cases of COVID-19 and 620,493 deaths from COVID-19 in the United States.

### **CMS's Oversight of Nursing Homes**

The Medicare and Medicaid programs cover care in skilled nursing and nursing facilities (i.e., nursing homes), respectively, for eligible beneficiaries in need of nursing services, specialized rehabilitation services, medically related social services, pharmaceutical services, and dietary services. CMS is responsible for overseeing nursing homes' compliance with Medicare and Medicaid standards for ensuring the health and safety of nursing home residents by enforcing the standards required to help each resident attain or maintain the highest level of well-being.<sup>5</sup> CMS delegates many of its responsibilities to State agencies (i.e., State health departments) and issues guidance, such as State Survey Agency Directors memos, to State agencies.<sup>6</sup>

As of January 1, 2021, there were approximately 15,300 nursing homes in the United States. These nursing homes had 1.6 million licensed beds, of which 1.2 million were occupied by residents.

### **Federal Requirements for Nursing Homes To Report COVID-19 Data**

To ensure that America's health care facilities (e.g., nursing homes) are prepared to respond to the COVID-19 public health emergency, on May 6, 2020, CMS issued to State survey agency directors the memo "Interim Final Rule Updating Requirements for Notification of Confirmed and Suspected COVID-19 Cases Among Residents and Staff in Nursing Homes" (QSO-20-29-NH). The memo stated that: (1) nursing homes must submit COVID-19 data to CDC by May 17, 2020, beginning with the week of May 11 through May 17, 2020, and continue to submit the data weekly; (2) CMS would grant a 2-week grace period to submit the data, followed by a warning letter in the third week; and (3) CMS would begin imposing civil monetary penalties (CMPs) on

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<sup>4</sup> An epidemic refers to an increase, often sudden, in the number of cases of a disease above what is normally expected in a population in a specific area.

<sup>5</sup> Sections 1819 and 1919 of the Social Security Act provide that nursing homes participating in the Medicare and Medicaid programs, respectively, must meet Federal participation requirements, such as those related to quality of care, nursing services, and infection control.

<sup>6</sup> A State survey agency is the entity responsible for conducting most surveys of nursing homes to certify their compliance with CMS's Medicare and Medicaid participation requirements.



nursing homes that had not reported data by June 7, which was the end of the fourth reporting week after May 17, 2020.<sup>7</sup>

On May 8, 2020, CMS published an interim final rule that added Federal regulations requiring nursing homes to report information (i.e., data) on confirmed and suspected COVID-19 cases and other data, such as the supply of personal protective equipment (PPE), to CDC and to nursing home residents, their representatives, and their families.<sup>8,9</sup> The interim final rule stated that these data would be used to monitor trends in infection rates and develop public health policies.

On September 2, 2020, CMS's interim final rule codified the use of CMPs for each week that a nursing home failed to report COVID-19 data. In the Federal Register, CMS stated:

We believe that a completely transparent CMP structure will help deter noncompliance, encourage timely reporting, and eliminate possible gaps in reporting that could hinder the government's response to the [public health emergency] for COVID-19 in specific geographic areas. For example, depending on the circumstances, the failure of one facility to report COVID-19 cases on a timely basis could delay our ability to detect and respond to an emerging COVID-19 hot spot.<sup>10</sup>

The interim final rule stated that the amount of the CMP begins at a minimum of \$1,000 for the first occurrence of noncompliance with reporting requirements and increases by \$500 for each subsequent time that a nursing home fails to report the required COVID-19 data. (The maximum allowable CMP amount is \$6,500 per citation.) The interim final rule also stated that the reporting requirements would be assessed weekly and that the regulation would continue to be in effect for up to 1 year after the end of the public health emergency.

### **Process for Nursing Homes' Reporting of COVID-19 Data and CMS's Analysis and Posting of the Data**

Nursing homes report COVID-19 data to CDC, CDC performs quality assurance checks to reduce misrepresentation and inaccuracies in the data, and CDC sends the aggregated data to CMS. CMS performs quality assurance checks on the data and posts the data to its website. CMS

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<sup>7</sup> A CMP is a monetary penalty that CMS may impose against a nursing home for either the number of days or for each instance that the nursing home is not in substantial compliance with one or more Medicare and Medicaid participation requirements for long-term care facilities.

<sup>8</sup> PPE is used by health care personnel to protect themselves, patients, and others when providing care. PPE includes face masks, gloves, and gowns.

<sup>9</sup> 85 Fed. Reg. 27550, 27601 (May 8, 2020) and 42 CFR § 483.80(g).

<sup>10</sup> 85 Fed. Reg. 54820, 54825 (Sept. 2, 2020) and 42 CFR § 488.447.

provides technical assistance to nursing homes that failed quality assurance checks so that they can verify or correct the reported data.<sup>11</sup> The following sections describe the process in detail.

### *Nursing Homes' Reporting of COVID-19 Data to CDC*

Nursing homes are required to report COVID-19 data to CDC at least weekly through CDC's NHSN system.<sup>12, 13</sup> To support the Nation's response to COVID-19, CDC introduced a new COVID-19 module (a reporting section in the NHSN system) for long-term care facilities, including nursing homes.<sup>14</sup> This module allows nursing homes to electronically report COVID-19 data in four areas: (1) resident impact and facility capacity (e.g., the number of residents with confirmed or suspected cases of COVID-19), (2) staff and personnel impact (e.g., the number of staff with confirmed or suspected cases of COVID-19), (3) supplies and PPE (e.g., whether the nursing home has at least a 1-week supply of face masks and gloves), and (4) ventilator capacity and supplies.<sup>15</sup> To respond to a question in the COVID-19 module, a nursing home provides either a count (i.e., a specific number) or a Yes or No response. In this report, we refer to each question as a "data element."

Figure 1 on the following page shows the resident impact and facility capacity area in the COVID-19 module for our audit period and the various data elements for this area.

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<sup>11</sup> CDC also provides technical assistance to nursing homes that failed quality assurance checks. See footnote 19.

<sup>12</sup> The NHSN is a secure, internet-based system that provides health care facilities (such as nursing homes), States, and the Nation with data needed to identify problem areas, measure the progress of prevention efforts, and ultimately eliminate health-care-associated infections.

<sup>13</sup> Individual nursing homes or groups (e.g., State and local health departments) may report COVID-19 information. During our audit period, five State health departments (for California, Idaho, Maryland, Michigan, and Washington) stated that they reported COVID-19 information through the NHSN system on behalf of nursing homes.

<sup>14</sup> Long-term care facilities provide a variety of medical and personal care services to people who are unable to live independently.

<sup>15</sup> During our audit period, a resident could have been included in the number of residents with suspected cases of COVID-19 in one week and included in the number of residents with confirmed cases of COVID-19 in another week.

**Figure 1: Resident Impact and Facility Capacity Area in the COVID-19 Module and the Various Data Elements**

The screenshot shows a web-based data entry interface for nursing homes. At the top, it indicates the reporting date as 05/08/2020. There are four tabs: 'Resident Impact and Facility Capacity' (selected), 'Staff and Personnel Impact', 'Supplies & Personal Protective Equipment', and 'Ventilator Capacity & Supplies'. A note states: 'For the following questions, please collect data at the same time at least once a week (for example, 7 AM)'. The 'Resident Impact' section contains five rows of data elements, each with a text input field and a description: 'ADMISSIONS: Residents admitted or re-admitted who were previously hospitalized and treated for COVID-19' (value: 10), 'CONFIRMED: Residents with new laboratory positive COVID-19' (value: 21), 'SUSPECTED: Residents with new suspected COVID-19' (value: 33), 'TOTAL DEATHS: Residents who have died in the facility or another location' (value: 9), and 'COVID-19 DEATHS: Residents with suspected or laboratory positive COVID-19 who died in the facility or another location' (value: 7). The 'Facility Capacity and Laboratory Testing' section includes: 'ALL BEDS (FIRST SURVEY ONLY)' (value: 125), 'CURRENT CENSUS: Total number of beds that are currently occupied' (value: 125), and '\*TESTING: Does your facility have access to COVID-19 testing while the resident is in the facility?' (dropdown menu set to 'Y - Yes'). Below the testing question, it asks 'If YES, what laboratory type? Select all that apply.' with checkboxes for 'State health department lab' (checked), 'Private lab (hospital, corporation, academic institution)', and 'Other'. Annotations with arrows point to the input fields, stating: 'Nursing homes enter a count for each data element.' and 'Nursing homes select a Yes or No response for the testing data element.' Brackets on the right side group the first five rows as 'These are the data elements for resident impact.' and the last three rows as 'These are the data elements for facility capacity and laboratory testing.'

Each week, CDC extracts the reported data from the NHSN system, performs quality assurance checks to reduce misrepresentation and inaccuracies in the public reporting of these data, and compiles and sends the aggregated data to CMS.<sup>16</sup>

#### *CMS's Quality Assurance Checks Related to Nursing Homes' Reported COVID-19 Data*

After CMS receives the CDC data each week, CMS analyzes the data (e.g., by checking whether all Medicare-certified nursing homes reported the required data through the NHSN system) and performs quality assurance checks to reduce misrepresentation and inaccuracies in the public reporting of these data.

For each nursing home, CMS aggregates the data reported by the nursing home each week for each data element. CMS also adds a new data element representing the cumulative total to date for certain existing data elements, such as the number of residents with confirmed cases of COVID-19.<sup>17</sup> CMS uses these cumulative totals in performing its quality assurance checks.

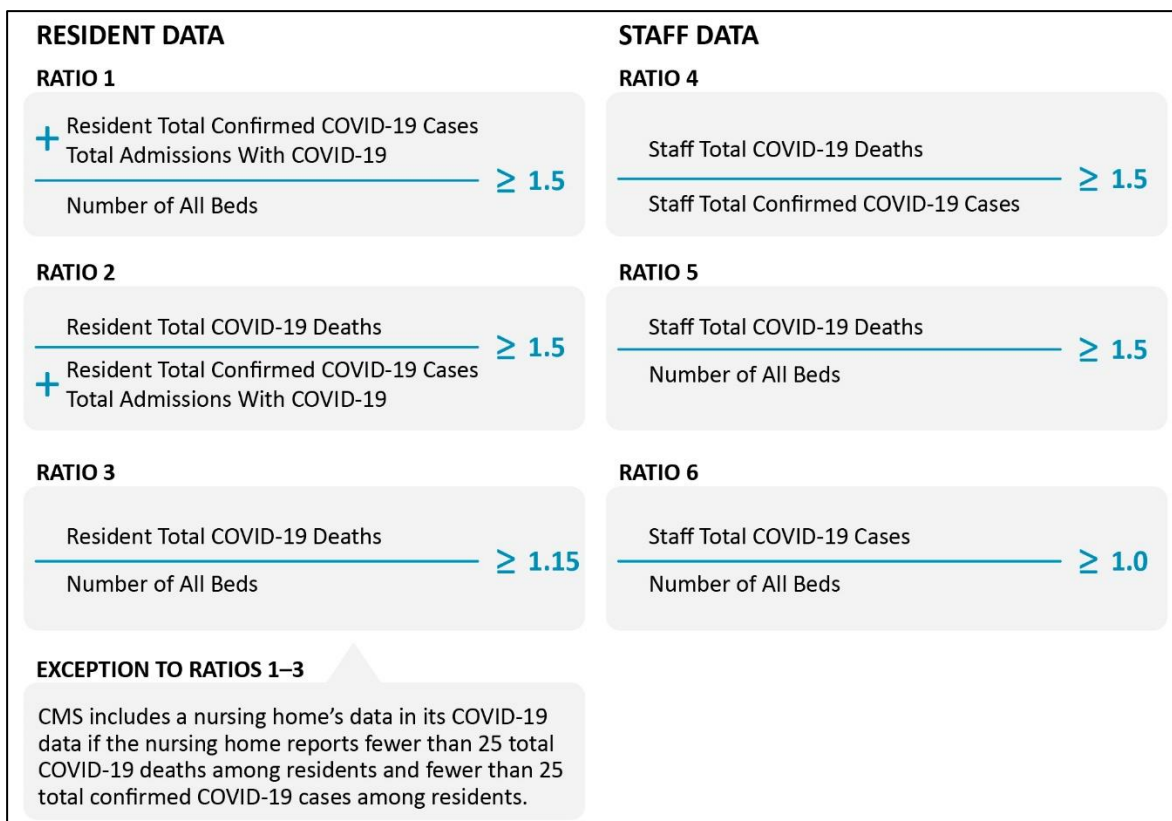
<sup>16</sup> During our audit period, CDC had three quality assurance checks. For example, if a nursing home entered the same number (greater than zero) of new weekly confirmed COVID-19 cases for 3 or more consecutive weeks, CDC considered the nursing home to have failed the quality assurance checks and excluded the data for weekly confirmed COVID-19 cases before submitting the aggregated data to CMS.

<sup>17</sup> According to CMS, it determines the cumulative total for a data element by using a nursing home's data going back to January 1, 2020, if those data are available (not May 11, 2020, the date when nursing homes were required to report the data).

These checks involve comparing certain ratios (described below) related to resident and staff COVID-19 data with specific ratio thresholds to determine whether the nursing home may have reported inaccurate data.

Figure 2 shows the six quality assurance ratios that CMS used for its quality assurance checks. For example, for ratio 1, CMS compares the number of total confirmed resident cases of COVID-19 plus the number of total admissions with COVID-19 against the number of all beds in the facility. If the ratio is greater than or equal to the ratio’s threshold (i.e., 1.5 for ratio 1), CMS updates its COVID-19 data by excluding all of the nursing home’s data for the week from the aggregated data it posts to its website. Based on CMS’s analysis of data and feedback from subject matter experts (e.g., CDC representatives), CMS determined that it was improbable for a nursing home to have 1.5 times or more the number of total confirmed resident cases of COVID-19 plus total COVID-19 admissions than the number of all beds in the facility. Except for the number of all beds in the denominators of ratios 1, 3, 5, and 6, all the totals in the numerators and denominators of the six quality assurance ratios are cumulative totals.

**Figure 2: CMS’s Six Quality Assurance Ratios<sup>18</sup>**



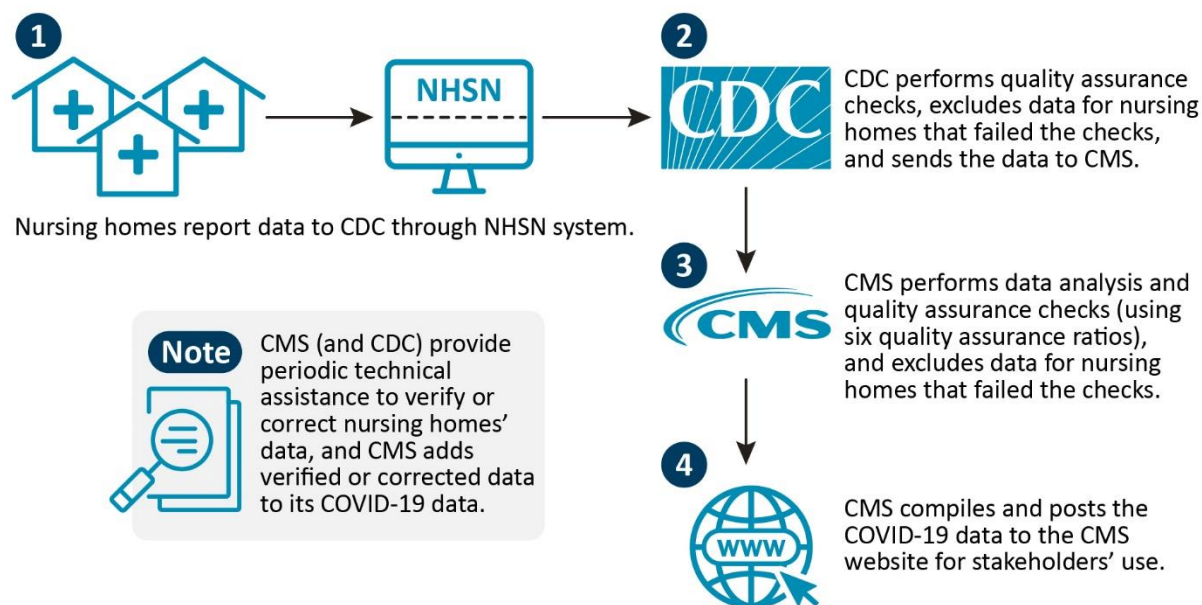
<sup>18</sup> As of January 24, 2021, CMS had revised its quality assurance checks. The threshold for ratio 1 was increased to greater than or equal to 1.75. The threshold for ratio 6 was increased to greater than 2.0 if the number of all beds was 50 or fewer or greater than 1.25 if the number of all beds was greater than 50. CMS also changed the exception to ratios 1 through 3 to by replacing the word “and” with “or” in the exception description: “or fewer than 25 total confirmed COVID-19 cases among residents.”

## CMS's Posting of COVID-19 Data to Its Website and CMS's Technical Assistance to Nursing Homes

After performing quality assurance checks, CMS compiles updated data for the nursing homes and posts these data to its website. CMS also provides technical assistance by performing periodic outreach activities by phone and email to nursing homes that failed CMS's quality assurance checks and had their data excluded from CMS's COVID-19 data.<sup>19</sup> If a nursing home verifies that its data were accurate or if it corrects its data, CMS adds the nursing home's data to the COVID-19 data for all nursing homes.

Figure 3 summarizes the reporting process for COVID-19 data for nursing homes, from when they report to CDC their COVID-19 data to when CMS posts the data to its website.

**Figure 3: Reporting Process for COVID-19 Data for Nursing Homes**



### HOW WE CONDUCTED THIS AUDIT

Our audit covered CMS's COVID-19 data for 15,388 nursing homes that reported data to CMS through CDC's NHSN system for the 4-week period from June 22 through July 19, 2020.<sup>20</sup> The

<sup>19</sup> According to CDC, it also performed periodic outreach activities to nursing homes that failed CDC's quality assurance checks. After CDC confirmed that a nursing home had corrected its data, CDC marked the corrected data for the nursing home to show that it had passed the quality assurance checks and later provided the corrected data to CMS. When CMS received the corrected data, it added the data to its COVID-19 data for all nursing homes.

<sup>20</sup> We obtained the COVID-19 data from CMS's website at <https://data.cms.gov/Special-Programs-Initiatives-COVID-19-Nursing-Home/COVID-19-Nursing-Home-Dataset/s2uc-8wxp>. Accessed on July 30, 2020.

data consisted of 61,546 records; each record represented the COVID-19 data submitted by a nursing home for 1 week of the 4-week audit period.

We interviewed CMS officials to understand the reporting process for COVID-19 data, the quality assurance process for verifying the accuracy and completeness of the data, and how the data were used. We also obtained information from CDC officials regarding nursing homes' reporting of COVID-19 data through the NHSN system and CDC's process for sending the data to CMS. To determine whether CMS's COVID-19 data for nursing homes were complete and accurate, we reviewed those data for our audit period and other data and reports, including raw (i.e., unmodified) data that nursing homes reported through CDC's NHSN system and weekly reports that contained the results of CMS's quality assurance checks.

To understand how nursing homes reported COVID-19 data through the NHSN system (e.g., whether nursing homes reported data for all data elements for each week during our audit period), we selected a statistical sample of 120 nursing homes across the Nation and sent a questionnaire to each sampled nursing home. In addition, to understand nursing homes' reporting processes at the State level, we sent questionnaires to State health departments in 50 States and the District of Columbia to identify those that collected COVID-19 data from nursing homes and posted the data publicly on their websites.

After learning that 34 of these State health departments required nursing homes to report COVID-19 data to them, we requested that these health departments provide information for the same data elements that CMS obtained through CDC's NHSN system (CMS's data elements), i.e., the numbers of COVID-19 cases and deaths among residents and staff for each week of our audit period.<sup>21</sup> We compiled the information provided by the State health departments.<sup>22</sup> We then compared the State health departments' information with CMS's COVID-19 data to determine: (1) whether the States' data elements, such as the number of confirmed COVID-19 cases among residents, were comparable to (i.e., the same as) CMS's data elements<sup>23</sup> and (2) for those data elements that were comparable, whether the data that States reported (e.g.,

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<sup>21</sup> Of the 34 State health departments, 33 responded to our request for COVID-19 information. However, not all 33 State health departments responded regarding all of the data elements, which was caused, in part, by our request that they not provide information on any data elements that reflected data collected from long-term care facilities other than nursing homes.

<sup>22</sup> We did not verify the information that State health departments provided (i.e., by reviewing supporting data or documentation).

<sup>23</sup> Because many of the data elements in CMS's COVID-19 data differed from what the States used, CMS's data and the States' data could not always be directly compared. For example, CMS's COVID-19 data included a data element for the number of resident deaths from both confirmed and suspected cases of COVID-19, but some States required nursing homes to report the number of resident deaths from only confirmed cases of COVID-19.

the specific count for the number of confirmed COVID-19 cases among residents) were substantially different from CMS's data.<sup>24</sup>

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

Appendix A contains the details of our audit scope and methodology. Appendix B contains tables showing State health departments' COVID-19 data related to cases and deaths among nursing home residents and staff.

## FINDINGS

CMS's COVID-19 data for nursing homes included the required data from the vast majority of nursing homes (e.g., the number of confirmed COVID-19 cases among residents); however, the data were not complete or accurate for some nursing homes.<sup>25</sup> Specifically, for 775 of the 15,388 nursing homes (about 5 percent), the data: (1) did not include all of the COVID-19 data that nursing homes were required to report<sup>26</sup> and (2) were not complete or accurate after CMS had performed its quality assurance checks (e.g., the number of confirmed COVID-19 cases among residents may have been under- or overreported).<sup>27</sup> These conditions occurred because: (1) CMS had limited resources to ensure that every nursing home reported all of the required COVID-19 data and (2) CMS's quality assurance checks were not always effective in ensuring the accuracy and completeness of the COVID-19 data for nursing homes.

In addition, we identified two areas in which CMS could take additional actions to help ensure that its COVID-19 data are complete and accurate. First, CMS could provide technical

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<sup>24</sup> If the difference between a State's data and CMS's data for a given data element was 20 percent or greater, we determined that the State's data were substantially different from CMS's data. For example, if the total number of confirmed COVID-19 cases among residents for our audit period was 1,000 in a State's data and 790 in CMS's data, we determined that these data were substantially different because 1,000 is 27 percent greater than 790.

<sup>25</sup> Of the 15,388 nursing homes, 13,890 nursing homes (about 90 percent) reported all of the required data (i.e., these nursing homes reported data for all of the data elements) each week during our audit period. The remaining 1,498 nursing homes (about 10 percent) did not report the required data for 1 or more of the data elements each week; however, we did not include all of these nursing homes in our findings. We did not include a nursing home's data in our findings if we determined that CMS took action to ensure that the COVID-19 data were complete and accurate, such as imposing a CMP for a nursing home that did not report resident and staff data.

<sup>26</sup> For the purpose of this report, we determined that a nursing home did not report all of the required information if it did not provide data for the data elements related to: (1) the number of COVID-19 cases and deaths among residents and staff and (2) PPE and supplies.

<sup>27</sup> The total number of nursing homes identified in our findings is greater than 775 because some nursing homes were included in more than 1 finding. These nursing homes could have corrected the data after our audit period.

assistance to all nursing homes that fail its quality assurance checks. Second, CMS could make additional efforts to ensure that: (1) CMS’s and States’ COVID-19 data elements are comparable (i.e., CMS and States could use the same data elements) and (2) the reported data are not substantially different.

When CMS’s COVID-19 data are complete and accurate, Federal and State officials and other stakeholders may be able to more effectively monitor trends in infection rates and develop public health policies when making decisions about how to ensure the health and safety of nursing home residents and staff. Incomplete or inaccurate data could delay CMS’s ability to detect and respond to an emerging COVID-19 hotspot, such as a surge or resurgence of COVID-19 cases in a community.

### **CMS’S COVID-19 DATA DID NOT INCLUDE ALL OF THE DATA THAT NURSING HOMES WERE REQUIRED TO REPORT**

Nursing homes must electronically report information about COVID-19 to CDC’s NHSN no less than weekly, including data on the number of suspected and confirmed COVID-19 infections (i.e., cases); the number of total deaths and COVID-19 deaths among residents and staff; PPE and hand-hygiene supplies on hand; and ventilator capacity and supplies on hand in the facility (42 CFR § 483.80(g)).<sup>28</sup> If a nursing home fails to comply with reporting requirements, CMS may impose a CMP for each week that the nursing home is noncompliant.<sup>29</sup> The COVID-19 module within the NHSN system instructs a nursing home to enter either a count or a “Yes” or “No” response for each data element.

For some nursing homes, CMS’s COVID-19 data did not include all of the data that they were required to report. Specifically, for the 15,388 nursing homes, we found that:

- 123 nursing homes did not report required data for at least 1 of the data elements related to COVID-19 cases and deaths among residents and staff for at least 1 week of our audit period and
- 83 nursing homes did not report required data for at least 1 of the data elements related to PPE and supplies for at least 1 week of our audit period.

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<sup>28</sup> The number of total deaths and COVID-19 deaths among residents consists of residents who died in a nursing home or another location (e.g., a hospital) as reported by the nursing home.

<sup>29</sup> CMS’s memo “Interim Final Rule Updating Requirements for Notification of Confirmed and Suspected COVID-19 Cases Among Residents and Staff in Nursing Homes” (QSO-20-29-NH), May 6, 2020. On September 2, 2020, CMPs were codified in 42 CFR § 488.447, which stated that CMS may impose a CMP for noncompliance with the requirements in sections 483.80(g)(1) and (2) and would assess compliance with those requirements weekly. Although this CMP authority was not in effect during our audit period (because it did not become effective until September 2, 2020), CMS could have instead used its CMP authority under 42 CFR § 488.408 for failure to comply with the requirements in sections 483.80(g)(1) and (2) during the audit period.



Although these nursing homes failed to report required data for some of the data elements, CMS determined that they had met reporting requirements. CMS did not have a process to: (1) identify all nursing homes that submit only partial data related to COVID-19 cases and deaths among residents and staff and related to PPE and supplies and (2) request that they submit the required data for all of the data elements.

#### Example of a Nursing Home That Submitted Partial Data

A nursing home reported data through CDC's NRSN system for only the data elements related to the number of all beds, whether it had access to laboratory testing for COVID-19 while a resident was in the facility, and whether it had staffing shortages. The nursing home did not report any data for the data elements related to the number of COVID-19 cases and deaths among residents and staff. After receiving the CDC data, CMS determined that the nursing home had met reporting requirements even though the nursing home had submitted partial data. CMS did not impose a CMP on this nursing home.

CMS stated that it did not take any actions (e.g., performing outreach) for nursing homes that submitted partial COVID-19 data because it determined whether nursing homes had met reporting requirements based on reporting in general, not on whether required data for all data elements had been reported. For example, CMS determined that a nursing home had met reporting requirements if it had reported data for any of the data elements related to resident and staff impact. CMS also stated that it would be difficult to determine which data elements would have to be reported to constitute meeting reporting requirements and that it would require significant resources to make operational changes to impose CMPs based on nursing homes not reporting required data for certain data elements.<sup>30</sup> Finally, CMS stated that it wanted to be aware of issues that nursing homes may have experienced in adjusting to the new reporting requirements and did not want to penalize nursing homes for not reporting data on PPE and ventilators.

#### **CMS'S COVID-19 DATA WERE NOT COMPLETE OR ACCURATE AFTER CMS HAD PERFORMED ITS QUALITY ASSURANCE CHECKS**

CMS's COVID-19 data were not complete or accurate after CMS had performed its quality assurance checks on nursing homes' reported data. Specifically, CMS's quality assurance checks resulted in CMS: (1) excluding some nursing homes' data from the COVID-19 data each week during our audit period when at least one of the quality assurance ratios exceeded the established threshold, (2) including data for some nursing homes that reported more total COVID-19 deaths than COVID-19 cases and admissions, and (3) including data for some nursing homes that reported more total COVID-19 deaths than total deaths from any cause. If CMS's

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<sup>30</sup> CMS stated that it could use its existing authority under 42 CFR § 488.408 to impose CMPs on nursing homes that did not meet reporting requirements.

quality assurance check process has weaknesses, there is an increased risk that nursing homes' COVID-19 data may not be complete or accurate (i.e., the data may be over- or underreported).

### **CMS Excluded Data for Some Nursing Homes From the COVID-19 Data Each Week During Our Audit Period**

Generally, if one of the six quality assurance ratios for a nursing home exceeds the threshold that CMS established for that ratio, CMS considers the nursing home to have failed the quality assurance check and excludes all of that nursing home's reported data for the week from the COVID-19 data that CMS posts on its website. Four of CMS's six quality assurance ratios (i.e., ratios 1, 3, 5, and 6) are dependent on the accuracy of the number of all beds and the total number of COVID-19 cases and admissions or deaths among residents or staff.

CMS excluded nursing homes' data from its COVID-19 data each week during our audit period when at least one of the quality assurance ratios exceeded the established threshold. Specifically, for the 15,388 nursing homes, CMS excluded 498 records for 150 nursing homes that exceeded the threshold for at least 1 of the ratios during our audit period.<sup>31</sup>

See the following page for an example of a nursing home that exceeded CMS's established threshold for one of the quality assurance ratios each week during our audit period.

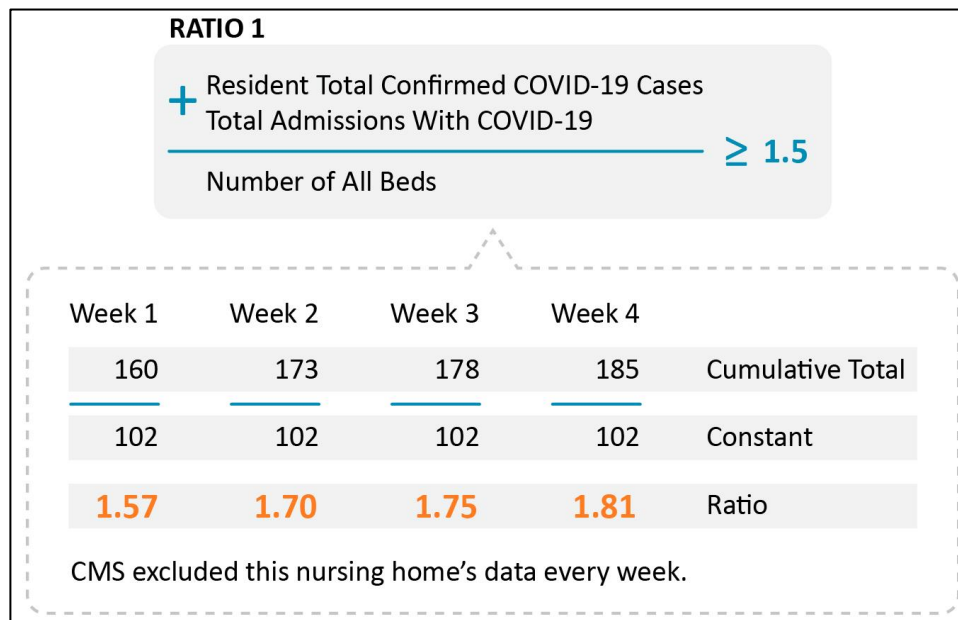
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<sup>31</sup> Each record represented the COVID-19 data submitted by a nursing home for 1 week of the 4-week audit period.

### Example of a Nursing Home That Exceeded CMS’s Established Threshold for One of the Quality Assurance Ratios Each Week During Our Audit Period

One nursing home’s ratio of the total number of residents’ confirmed COVID-19 cases and admissions to the number of all beds (i.e., ratio 1) increased each week during our audit period, from 1.57 in the first week to 1.81 in the fourth week. The cumulative total in the numerator increased each week, but the number of all beds stayed constant. All of the data for this nursing home were excluded from CMS’s COVID-19 data each week. Figure 4 shows how the nursing home failed CMS’s quality assurance check each week during our audit period for exceeding ratio 1’s threshold of 1.5. (This nursing home reported a total of 25 confirmed COVID-19 cases and admissions among residents before June 22, 2020, the start of our audit period; this total is included in the cumulative totals shown for each week.)

**Figure 4: The Nursing Home Failed CMS’s Quality Assurance Check Each Week During Our Audit Period**

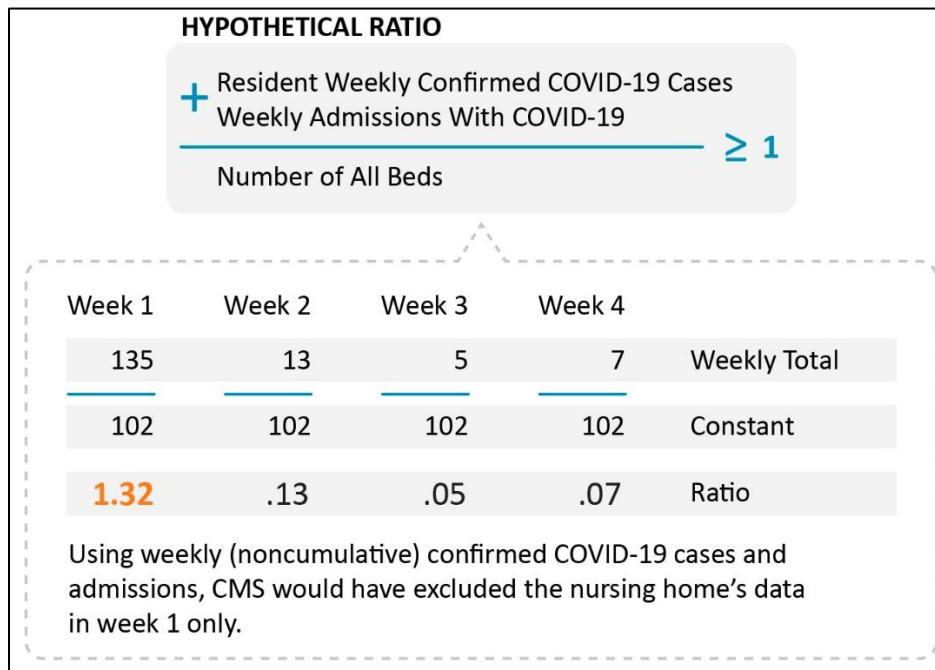


CMS’s use of ratios 1, 3, 5, and 6 resulted in certain nursing homes’ data being excluded from the COVID-19 data each week, regardless of whether the reported data were accurate. Because each of these ratios had a constant number of all beds in the denominator but a cumulative total in the numerator, this resulted in the ratio increasing every week, which meant that the established threshold for the ratio was exceeded every week.

If CMS had used noncumulative totals in the numerator of its quality assurance ratios (e.g., the weekly data reported by each nursing home) and had adjusted the threshold for each ratio to a level that may have indicated erroneous data, CMS would not have excluded some nursing

homes' data from the COVID-19 data each week. Figure 5 shows how the nursing home in Figure 4 would not have failed CMS's quality assurance check if CMS had used noncumulative totals in the numerator of ratio 1 and a hypothetical threshold of 1 (for illustrative purposes only) instead of CMS's threshold of 1.5, using the actual weekly data reported by that nursing home.

**Figure 5: The Nursing Home in Figure 4 Would Not Have Failed CMS's Quality Assurance Check Each Week if CMS Had Used Noncumulative Totals and a Different Ratio Threshold**



CMS stated that it was not aware of any ratio that would more accurately identify potentially erroneous COVID-19 data for nursing homes and that revising the existing ratios may result in excluding more data than should be excluded. CMS also stated that it did not have the resources to work individually with every nursing home whose data may be inaccurate and that nursing homes can contact CMS to verify their data for future periods so that the data would not continue to be excluded each week. Finally, CMS stated that data would continue to be excluded unless nursing homes contact CMS or CMS contacts nursing homes during its periodic outreach.

**CMS's COVID-19 Data Included Data for Nursing Homes That Reported More Total COVID-19 Deaths Than Total COVID-19 Cases and Admissions**

CMS's quality assurance ratio 2 uses the number of total COVID-19 deaths from both suspected and confirmed COVID-19 cases in the numerator and the number of total confirmed COVID-19 cases and admissions among residents in the denominator. Ratio 4 uses the number of total COVID-19 deaths from both suspected and confirmed COVID-19 cases in the numerator and the number of total confirmed COVID-19 cases among staff in the denominator. (These ratios use

cumulative, not weekly, totals.) In addition to these data, nursing homes are required to report the number of suspected COVID-19 cases among residents and staff (42 CFR § 483.80(g)). However, these data are not included in the denominator in CMS’s ratios 2 and 4.

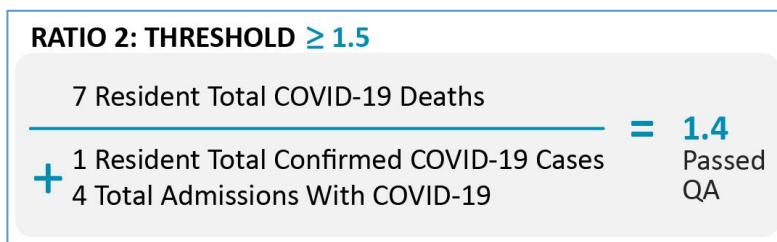
CMS’s COVID-19 data included data for nursing homes that reported: (1) more total COVID-19 deaths among residents than total confirmed COVID-19 cases and admissions among residents and (2) more total COVID-19 deaths among staff than total confirmed COVID-19 cases among staff. Specifically, for the 15,388 nursing homes, we found that:

- 279 nursing homes reported a total number of COVID-19 deaths among residents that was greater than the total number of confirmed COVID-19 cases and admissions among residents for at least 1 week during our audit period but passed the quality assurance checks<sup>32</sup> and
- 30 nursing homes reported a total number of COVID-19 deaths among staff that was greater than the total number of confirmed COVID-19 cases among staff for at least 1 week during our audit period but passed the quality assurance checks.<sup>33</sup>

**Example of a Nursing Home That Reported More Total COVID-19 Deaths Among Residents Than Total Confirmed COVID-19 Cases and Admissions Among Residents**

CMS’s COVID-19 data included data from one nursing home that had reported a total of seven COVID-19 deaths among residents as of the fourth week of our audit period but only one confirmed COVID-19 case and four COVID-19 admissions. This nursing home passed CMS’s quality assurance check because the nursing home’s ratio of 1.4 was less than the ratio threshold of 1.5. As a result, the nursing home’s data were included in the COVID-19 data. (See Figure 6.)

**Figure 6: The Nursing Home Passed CMS’s Quality Assurance Check**



<sup>32</sup> For the 279 nursing homes, 946 records showed more total COVID-19 deaths among residents than total confirmed COVID-19 cases and admissions among residents.

<sup>33</sup> For the 30 nursing homes, 85 records showed more total COVID-19 deaths among staff than total confirmed COVID-19 cases among staff.

Quality assurance ratios 2 and 4, which both used ratio thresholds of 1.5, did not identify a nursing home's data as potentially inaccurate unless the nursing home reported 1.5 times or more the number of total COVID-19 deaths among residents or staff than total confirmed COVID-19 cases and admissions among residents or total confirmed COVID-19 cases among staff.

CMS stated that a nursing home may have more total COVID-19 deaths among residents and staff than total confirmed COVID-19 cases and admissions because the nursing home may have also reported COVID-19 deaths of residents and staff who had suspected cases of COVID-19.<sup>34</sup>

### **CMS's COVID-19 Data Included Data for Nursing Homes That Reported More Total COVID-19 Deaths Than Total Deaths From Any Cause**

Nursing homes must report data that include COVID-19 deaths and total deaths among residents to CDC's NHSN (42 CFR § 483.80(g)). CDC's COVID-19 module instructs nursing homes to provide at least once a week: (1) the number of COVID-19 deaths for residents with suspected or laboratory-positive COVID-19 who died in the facility or another location and (2) the number of all deaths for residents who died in the facility or another location.

CMS's COVID-19 data included data for nursing homes that reported more total COVID-19 deaths than total deaths from any cause. Specifically, of 15,388 nursing homes, 208 reported more total COVID-19 deaths (2,879) than total deaths from any cause (1,520) for at least 1 week during our audit period. For example, 1 nursing home's data showed that it had 111 total COVID-19 deaths but only 22 total deaths from any cause.

CMS stated that it did not have a quality assurance check to identify nursing homes that reported more total COVID-19 deaths than total deaths because it focused on identifying errors that would have an impact on the accuracy of COVID-19 reporting and the COVID-19 response in nursing homes. CMS also stated that such a check would likely not have an impact on the Federal COVID-19 response. Furthermore, CMS stated that it focused on COVID-19 deaths, not the number of all deaths. (However, we believe that more COVID-19 deaths than all deaths could indicate that the reported number of COVID-19 deaths was inaccurate.) Finally, CMS stated that as of November 2020, CDC's COVID-19 module did not allow a nursing home to report more COVID-19 deaths than all deaths.<sup>35</sup>

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<sup>34</sup> As of November 23, 2020, nursing homes were no longer required to report the number of suspected COVID-19 cases among residents and staff. However, the COVID-19 data still included total suspected COVID-19 cases previously reported by nursing homes, so CMS could include suspected cases in the ratios to make the ratios more accurate.

<sup>35</sup> Although nursing homes were no longer allowed to report more COVID-19 deaths than deaths from any cause, the COVID-19 data still included data that nursing homes reported before the system change was implemented. CMS could reach out to these nursing homes and request that they verify or correct the reported data.

## **CMS COULD TAKE ADDITIONAL ACTIONS TO HELP ENSURE THAT THE COVID-19 DATA FOR NURSING HOMES ARE COMPLETE AND ACCURATE**

We identified two areas in which CMS could take additional actions to help ensure that its COVID-19 data are complete and accurate. First, CMS could provide technical assistance to all nursing homes that fail its quality assurance checks. Second, CMS could make additional efforts to ensure that: (1) CMS's and States' COVID-19 data elements are comparable (i.e., CMS and States could use the same data elements) and (2) the reported data are not substantially different.

### **Technical Assistance Is Needed for All Nursing Homes That Fail CMS's Quality Assurance Checks**

According to the CMS document *Nursing Home COVID-19 Data Quality – Frequently Asked Questions*, CMS provides technical assistance to nursing homes to help them submit COVID-19 data accurately.<sup>36</sup> CMS provides assistance through help desk support (by email and phone) and through periodic calls to assist nursing homes in complying with reporting requirements.

CMS could provide technical assistance to all nursing homes that fail its quality assurance checks to ensure that its COVID-19 data are accurate. CMS performed outreach to provide technical assistance to only 417 of 771 nursing homes (about 54 percent) that failed CMS's quality assurance checks for at least 1 week during our audit period. Further, of the 32 nursing homes that responded to our questionnaire and failed quality assurance checks for at least 1 week during our audit period, only 2 stated that they had been contacted by CMS (or CDC) to correct the data. The remaining 30 nursing homes stated that they did not know that they had failed quality assurance checks.

CMS stated that it attempted to email and call nursing homes that failed quality assurance checks. When making phone calls, CMS made three attempts and if there was no response, it did not follow up because of limited resources. CMS also stated that it would continue to monitor weekly data to verify whether nursing homes had corrected their data or had continued to fail quality assurance checks.

If CMS does not perform outreach to all nursing homes that have failed quality assurance checks, nursing homes may not be aware that they failed the checks and may need to verify and revise their reported data if the data are incorrect. Nursing homes' lack of awareness may lead to inaccuracies in CMS's COVID-19 data (i.e., nursing homes may be under- or overreporting data).

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<sup>36</sup> This document is available at <https://data.cms.gov/stories/s/COVID-19-Nursing-Home-Data/bkwz-xpvg/>. Accessed on Jan. 20, 2021.

## **Additional Efforts Are Needed To Ensure That CMS’s and States’ COVID-19 Data Elements Are Comparable and That Data Are Not Substantially Different**

To improve reliability of CMS’s COVID-19 data, CMS could make additional efforts to ensure that: (1) its COVID-19 data elements are comparable to the data elements that nursing homes report to State health departments<sup>37</sup> and (2) CMS’s and States’ data are not substantially different.

Of the 51 State health departments, 34 collected COVID-19 data from nursing homes and posted the data publicly on their websites.<sup>38</sup> However, in response to our questionnaire, not all of the State health departments provided to us information for the same data elements that CMS obtained through the NHSN system for the number of COVID-19 cases and deaths among residents and staff.<sup>39</sup>

For example, CDC’s NHSN collected data on the number of COVID-19 deaths among residents, which consisted of deaths from both confirmed and suspected cases of COVID-19. Of the 17 State health departments that provided us with the number of COVID-19 deaths among residents, 13 did not include the number of deaths from suspected cases of COVID-19. Therefore, the number of COVID-19 deaths for each State in CMS’s COVID-19 data was not comparable to the number of COVID-19 deaths reported by each of the 13 State health departments.

Table 1 on the following page shows the number of State health departments that provided information on specific data elements in response to our request and the number of State health departments with data elements that were not comparable to the data elements in CMS’s COVID-19 data.

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<sup>37</sup> There is no legal requirement that CMS and State health departments use the same data elements for the purposes of reporting COVID-19 data for nursing homes.

<sup>38</sup> We requested that the 34 State health departments provide us with information for the following data elements: the number of residents who had suspected and confirmed cases of COVID-19, the number of residents who had died from COVID-19, the number of staff who had suspected and confirmed cases of COVID-19, and the number of staff who had died from COVID-19. Of the 34 State health departments, 33 responded to our request for information. However, not all 33 State health departments responded regarding all of these data elements, which was caused, in part, by our request that they not provide information on any data elements that reflected data collected from long-term care facilities other than nursing homes.

<sup>39</sup> Table 3 in Appendix B summarizes the responses from the 51 State health departments, identifying those that collected COVID-19 data from nursing homes and posted the data publicly on their websites and whether they provided information on specific data elements (i.e., the number of COVID-19 cases and deaths among residents and staff) in response to our questionnaire.



**Table 1: Not All State Health Departments Had Data Elements That Were Comparable to CMS’s Data Elements**

<b>Data Element That Office of Inspector General (OIG) Reviewed</b>	<b>No. of State Health Departments That Provided Information on the Data Element to OIG</b>	<b>No. of State Health Departments That Did Not Have a Data Element Comparable to CMS’s</b>	<b>No. of State Health Departments That Had a Data Element Comparable to CMS’s</b>
Number of residents with suspected and confirmed cases of COVID-19	17	0	17
Number of residents who died from COVID-19	17	13	4
Number of staff with suspected and confirmed cases of COVID-19	15	0	15
Number of staff who died from COVID-19	13	12	1

Furthermore, for the data elements that were comparable, we identified substantial differences between the data provided by State health departments and CMS’s COVID-19 data. If the difference between a State’s data and CMS’s data for a given data element was 20 percent or greater, we determined that the State’s data were substantially different from CMS’s data. For example, if the total number of confirmed COVID-19 cases among residents was 1,000 in a State’s data and 790 in CMS’s data, we determined that these data were substantially different because 1,000 is 27 percent greater than 790.

Table 2 on the following page shows the number of State health departments that provided information on data elements comparable to CMS’s and the number of these State health departments with data that were substantially different from CMS’s COVID-19 data.

**Table 2: Some State Health Departments Provided Data That Were Substantially Different From CMS’s COVID-19 Data**

Data Element That OIG Reviewed	No. of State Health Departments That Had a Data Element Comparable to CMS’s	No. of State Health Departments That Had Substantially Different Data From CMS’s Data
Number of residents with suspected and confirmed cases of COVID-19	17	11
Number of residents who died from COVID-19	4	2
Number of staff with suspected and confirmed cases of COVID-19	15	6
Number of staff who died from COVID-19	1	0

Tables 4 through 7 in Appendix B show the results of our analysis for each of the four data elements shown in Tables 1 and 2.

The CMS document *Nursing Home COVID-19 Data Quality – Frequently Asked Questions*<sup>40</sup> listed several possible reasons for differences between CMS’s COVID-19 data for nursing homes and the data that nursing homes reported to State health departments:

- Nursing homes may have reported the number of COVID-19 cases or deaths to their State health departments before these data were required to be reported to CDC through the NHSN system.<sup>41</sup>
- Nursing homes may have reported different data to their States from what they reported to CDC through the NHSN system.<sup>42</sup>
- States may have reported different numbers of COVID-19 cases or deaths for a facility because their definitions and requirements for reporting may have differed from those in the NHSN system.<sup>43</sup>

<sup>40</sup> This document is available at <https://data.cms.gov/stories/s/COVID-19-Nursing-Home-Data/bkwz-xpvg/>. Accessed on Jan. 20, 2021.

<sup>41</sup> We requested that State health departments provide information for each week of our audit period.

<sup>42</sup> We requested that State health departments provide data for the same data elements for which nursing homes reported data through the NHSN system.

<sup>43</sup> We noted this issue as not all State health departments had data elements that were comparable to CMS’s data elements.

- Nursing homes' COVID-19 case or death data were identified as having not passed CMS's (or CDC's) quality assurance checks.
- Some States collected information from facilities that were not required to submit COVID-19 data through the NHSN system, such as assisted living facilities.<sup>44</sup>

CMS stated that although differences in CMS's and States' COVID-19 data may be confusing for stakeholders, CMS does not have the authority to require State health departments to collect data for the same data elements included in CMS's COVID-19 data. CMS also stated that it encourages States to "leverage the Federal reporting requirements and use the same data that [CMS] collects."

By using standardized data elements for reporting, nursing homes could ensure that they are reporting the same data elements to different entities, which may improve the ability of stakeholders to rely on the data to monitor trends in infection rates and develop public health policies to protect the health and safety of nursing home residents and staff. In addition, when CMS's COVID-19 data and States' data are substantially different, users of the data may not know which set of data they can rely on.

## CONCLUSION

CMS's COVID-19 data for nursing homes included the required data from the vast majority of nursing homes; however, the data were not complete or accurate for some nursing homes. Specifically, for about 5 percent of nursing homes, the data: (1) did not include all of the COVID-19 data that nursing homes were required to report and (2) were not complete or accurate after CMS had performed its quality assurance checks. In addition, we identified two areas in which CMS could take additional actions to help ensure that its COVID-19 data are complete and accurate. First, CMS could provide technical assistance to all nursing homes that fail its quality assurance checks. Second, CMS could make additional efforts to ensure that: (1) CMS's and States' COVID-19 data elements are comparable (i.e., CMS and States could use the same data elements) and (2) the reported data are not substantially different.

When CMS's COVID-19 data are complete and accurate, Federal and State officials and other stakeholders may be able to more effectively monitor trends in infection rates and develop public health policies when making decisions about how to ensure the health and safety of nursing home residents and staff. Incomplete or inaccurate data could delay CMS's ability to detect and respond to an emerging COVID-19 hotspot, such as a surge or resurgence of COVID-19 cases in a community. Furthermore, if CMS does not contact all nursing homes that have failed quality assurance checks, nursing homes may not be aware that they failed the checks and may need to verify and revise their reported data if the data are incorrect. Nursing homes' lack of awareness may lead to inaccuracies in CMS's COVID-19 data. In addition, by using standardized data elements for reporting, nursing homes could ensure that they are

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<sup>44</sup> We requested that State health departments provide the data only for nursing homes.

reporting the same data elements to different entities, which may improve the ability of stakeholders to rely on COVID-19 data. Finally, when CMS's COVID-19 data and States' data are substantially different, users of the data may not know which set of data they can rely on.

Therefore, although we acknowledge that CMS's COVID-19 data for nursing homes included the required data from the vast majority of nursing homes, we believe that CMS could take actions to improve the data's completeness and accuracy.

## **RECOMMENDATIONS**

We recommend that the Centers for Medicare & Medicaid Services assess the costs and benefits of implementing the following recommendations and if CMS determines that the benefits outweigh the costs, take action to:

- develop a process to identify nursing homes that do not report required data for all of the data elements related to COVID-19 cases and deaths among residents and staff and PPE and supplies and request that they submit the required data;
- revise its quality assurance checks for ratios 1, 3, 5, and 6, which use the number of all beds in the denominator, to ensure that it does not exclude from its COVID-19 data nursing homes' data that should be included;
- revise its quality assurance checks for ratios 2 and 4, which use the numbers of confirmed cases and admissions among residents and confirmed cases among staff in the denominator, by adding the number of suspected COVID-19 cases to the denominator in both ratios and adjust the ratios' thresholds to reflect the change;
- identify the nursing homes that reported more total COVID-19 deaths than total deaths from any cause and request that they verify or correct the reported data;
- contact nursing homes that failed quality assurance checks to verify the accuracy of reported data or to correct inaccurate data; and
- work with CDC and with State health departments to determine the feasibility of using comparable data elements to collect COVID-19 data and the feasibility of monitoring substantial differences in the data and, if determined feasible, take actions to provide the public with more complete and accurate COVID-19 data for nursing homes.

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

In written comments on our draft report, CMS concurred with our first, second, and fifth recommendations and provided information on actions that it had taken or planned to take to address these recommendations. However, CMS did not concur with our third, fourth, and sixth recommendations.

Regarding our first, second, and fifth recommendations, CMS stated that it will assess the costs and benefits of each recommendation. Regarding our first recommendation, CMS stated that it performs ongoing data quality checks to identify instances in which nursing homes may have entered incorrect data. CMS also stated that, as part of this process, it employs flags that alert nursing homes if their data are not correct so that they have an opportunity to correct their data and attempts to contact nursing homes that fail quality assurance checks by email and phone. Regarding our fifth recommendation, CMS stated that it provides technical assistance by performing periodic outreach activities by email and phone to nursing homes that failed CMS's quality assurance checks and had their data excluded from CMS's COVID-19 data.

CMS also provided technical comments on our draft report, which we addressed as appropriate. CMS comments, excluding the technical comments, are included as Appendix C.

After reviewing CMS's comments, we maintain that our recommendations are valid. Our responses to CMS's specific comments are described in the sections below.

### **THIRD RECOMMENDATION: REVISE QUALITY ASSURANCE CHECKS FOR RATIOS 2 AND 4**

#### **CMS Comments**

Regarding our third recommendation, CMS stated that because CDC's NHSN COVID-19 module no longer collects suspected COVID-19 cases, "it appears that this recommendation is no longer relevant." CMS suggested that we remove this recommendation.

#### **Office of Inspector General Response**

We understand that nursing homes were no longer required to report the number of suspected COVID-19 cases among residents and staff each week in the NHSN COVID-19 module as of November 23, 2020. However, CMS's COVID-19 data still included the number of suspected COVID-19 cases previously reported by nursing homes.<sup>45</sup> Ratios 2 and 4 in CMS's quality assurance checks used the number of total COVID-19 deaths from both suspected and confirmed COVID-19 cases in the numerator, but did not use suspected COVID-19 cases in the denominator. CMS could include the number of previously reported suspected COVID-19 cases

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<sup>45</sup> As of November 2020, the number of suspected COVID-19 cases for residents and staff was 388,225, which was about 31 percent of the total number of COVID-19 cases (i.e., confirmed and suspected COVID-19 cases for residents and staff and confirmed COVID-19 admissions for residents).

in the denominator to make the ratios more accurate. If inaccurate ratios are used, the COVID-19 data reported by nursing homes may be excluded from CMS's COVID-19 data when they should have been included, or vice versa. Further, CMS may not be able to provide technical assistance to nursing homes to verify the accuracy of the data reported by nursing homes.

#### **FOURTH RECOMMENDATION: IDENTIFY NURSING HOMES THAT REPORTED MORE COVID-19 DEATHS THAN DEATHS FROM ANY CAUSE**

##### **CMS Comments**

Regarding our fourth recommendation, CMS stated that because CDC has confirmed that updates to the NHSN interface no longer allow nursing homes to enter a number of COVID-19 deaths that is greater than total deaths from any cause, "it appears that this recommendation is no longer relevant."<sup>46</sup> CMS suggested that we remove this recommendation.

##### **Office of Inspector General Response**

We understand that the NHSN no longer allows nursing homes to report more COVID-19 deaths than deaths from any cause. However, we identified nursing homes that had previously reported more COVID-19 deaths than deaths from any cause before the NHSN interface was updated. If CMS does not request that those nursing homes verify or correct their previously reported data, CMS cannot ensure that the total number of COVID-19 deaths is accurate.

#### **SIXTH RECOMMENDATION: DETERMINE THE FEASIBILITY OF USING COMPARABLE DATA ELEMENTS TO COLLECT COVID-19 DATA**

##### **CMS Comments**

Regarding our sixth recommendation, CMS agreed that, to the extent possible, data reporting elements should be aligned among States and the Federal Government. However, CMS stated that it does not have oversight of or authority over States' reporting efforts for COVID-19 data.

##### **Office of Inspector General Response**

We understand that CMS does not have the authority to mandate that States align COVID-19 data elements in their own reporting systems with Federal reporting requirements. However, CMS, CDC, and State health departments may be able to work together, to the extent possible, to use comparable data elements and monitor substantial differences in CMS's COVID-19 data and States' data. These actions would improve the ability of stakeholders to rely on the data and to protect the health and safety of nursing home residents and staff.

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<sup>46</sup> Nursing homes report to CDC through the NHSN system the weekly totals of COVID-19 deaths and deaths from any cause.

## APPENDIX A: AUDIT SCOPE AND METHODOLOGY

### SCOPE

Our audit covered CMS's COVID-19 data for 15,388 nursing homes that reported data to CMS through CDC's NHSN system for the 4-week period from June 22 through July 19, 2020.<sup>47</sup> The data consisted of 61,546 records; each record represented the COVID-19 data submitted by a nursing home for 1 week of the 4-week audit period.

We did not perform an overall assessment of the internal control structure of CMS. Rather, we limited our review to those internal controls related to CMS's COVID-19 data for nursing homes. We reviewed all five components of internal controls: control environment, risk assessment, control activities, information and communication, and monitoring.<sup>48</sup> Because our audit was designed to provide only reasonable assurance that the internal controls we reviewed were effective, it would not necessarily have detected all internal control deficiencies.

We conducted our audit from June 2020 to May 2021.

### METHODOLOGY

To accomplish our objective, we:

- reviewed applicable Federal laws, regulations, and guidance;
- interviewed officials from CMS to obtain an understanding of the reporting process for COVID-19 data, the quality assurance process for verifying the accuracy and completeness of the data, and how the data were used;
- obtained information from CDC officials regarding nursing homes' reporting of data through the NHSN system, CDC's quality assurance process, and CDC's process for sending the data to CMS;
- obtained COVID-19 nursing home data from CMS's website on July 30, 2020;

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<sup>47</sup> We obtained the COVID-19 data from CMS's website at <https://data.cms.gov/Special-Programs-Initiatives-COVID-19-Nursing-Home/COVID-19-Nursing-Home-Dataset/s2uc-8wxp>. Accessed on July 30, 2020.

<sup>48</sup> The Government Accountability Office's (GAO's) *Standards for Internal Control in the Federal Government: September 2014* (GAO-14-704G), known as the Green Book, sets the internal control standards for Federal entities. The Green Book defines internal control as the plans, methods, policies, and procedures used by management to fulfill the mission, strategic plan, goals, and objectives of the entity. The Green Book approaches internal control through a hierarchical structure made up of five components: (1) control environment, (2) risk assessment, (3) control activities, (4) information and communication, and (5) monitoring.

- obtained other data and reports from CMS and CDC, including raw (i.e., unmodified) data that nursing homes reported through CDC’s NHSN system and weekly reports that contained the results of CMS’s quality assurance checks;
- analyzed CMS’s COVID-19 data and the other data and reports obtained from CMS and CDC to determine whether CMS’s data were complete and accurate (e.g., whether nursing homes reported more COVID-19 deaths than COVID-19 cases);
- selected a statistical sample of 120 nursing homes across the Nation and sent a questionnaire to each sampled nursing home to obtain an understanding of how nursing homes reported COVID-19 data through the NHSN system (e.g., whether nursing homes reported data for all data elements for each week during our audit period);<sup>49</sup>
- sent questionnaires to State health departments in 50 States and the District of Columbia to identify those that collected COVID-19 data from nursing homes and posted the data publicly on their websites and to obtain an understanding of nursing homes’ reporting processes at the State level;
- requested that State health departments that required nursing homes to report COVID-19 data provide us with information for the same data elements that CMS obtained through the NHSN system for our audit period: the number of residents with suspected and confirmed cases of COVID-19, the number of residents who had died from COVID-19, the number of staff who had suspected and confirmed cases of COVID-19, and the number of staff who had died from COVID-19;
- compiled information provided by State health departments and compared it with CMS’s COVID-19 data to determine: (1) whether the States’ data elements were comparable to CMS’s data elements and (2) for those data elements that were comparable, whether the data that States reported were substantially different from CMS’s data;<sup>50</sup> and

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<sup>49</sup> We selected a stratified random sample of nursing homes based on whether, for our audit period, they had: (1) reported data for all 4 weeks, (2) reported data for all 4 weeks but failed quality assurance checks for 1 to 3 weeks, (3) reported data for all 4 weeks but failed quality assurance checks for all 4 weeks, and (4) not submitted data for 1 or more weeks. Of the 120 nursing homes, 103 responded to our questionnaire.

<sup>50</sup> We did not verify the information that State health departments provided (i.e., by reviewing supporting data or documentation). Because the COVID-19 data elements for nursing homes used by CMS and States differed, CMS’s data and the States’ data could not be directly compared. For example, CMS required nursing homes to report the number of resident deaths from both confirmed and suspected cases of COVID-19, but some States required nursing homes to report the number of resident deaths from only confirmed cases of COVID-19. If the difference between a State’s data and CMS’s data for a given data element was 20 percent or greater, we determined that the State’s data were substantially different from CMS’s data. For example, if the total number of confirmed COVID-19 cases among residents for our audit period was 1,000 in a State’s data and 790 in CMS’s data, we determined that these data were substantially different because 1,000 is 27 percent greater than 790.



- discussed the results of our audit with CMS officials.

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

**APPENDIX B: STATE HEALTH DEPARTMENTS’ COVID-19 DATA RELATED TO CASES AND DEATHS  
AMONG NURSING HOME RESIDENTS AND STAFF**

Table 3 summarizes the 51 State health departments’ responses to our questionnaire, identifying those States that collected COVID-19 data from nursing homes and posted the data publicly on their websites. The table also identifies whether the States provided information on specific data elements (i.e., the numbers of COVID-19 cases and deaths among residents and staff).

**Table 3: State Health Departments That Collected and Posted COVID-19 Data and Provided Requested Information (i.e., Count) for Cases and Deaths Among Residents and Staff**

State	Did State Health Department Collect and Post COVID-19 Data Publicly?	Did State Health Department Provide Information for the Following Data Elements to OIG?			
		Resident COVID-19 Cases	Resident COVID-19 Deaths	Staff COVID-19 Cases	Staff COVID-19 Deaths
Alabama	Yes	No	No	No	No
Alaska	No	-	-	-	-
Arizona	No	-	-	-	-
Arkansas	No	-	-	-	-
California	Yes	Yes	Yes	Yes	Yes
Colorado	Yes	No	No	No	No
Connecticut	Yes	Yes	Yes	Yes	Yes
Delaware	Yes	No	No	No	No
District of Columbia <sup>51</sup>	-	-	-	-	-
Florida	Yes	No	No	No	No
Georgia	Yes	Yes	Yes	Yes	No
Hawaii	No	-	-	-	-
Idaho	No	-	-	-	-
Illinois <sup>52</sup>	Yes	No	No	No	No
Indiana	Yes	No	No	No	No
Iowa	Yes	Yes	Yes	No	No
Kansas	Yes	No	No	No	No
Kentucky	Yes	Yes	Yes	Yes	Yes
Louisiana	Yes	Yes	Yes	Yes	No
Maine	No	-	-	-	-

<sup>51</sup> The District of Columbia’s health department did not respond to our questionnaire.

<sup>52</sup> In the information that Illinois’ State health department provided to us, the numbers of COVID-19 cases and deaths among residents and staff were combined into one total. Because we could not separate the data elements, we excluded Illinois from our analysis.

State	Did State Health Department Collect and Post COVID-19 Data Publicly?	Did State Health Department Provide Information for the Following Data Elements to OIG?			
		Resident COVID-19 Cases	Resident COVID-19 Deaths	Staff COVID-19 Cases	Staff COVID-19 Deaths
Maryland	Yes	No	No	No	No
Massachusetts	Yes	Yes	Yes	Yes	Yes
Michigan	Yes	Yes	Yes	Yes	Yes
Minnesota	No	-	-	-	-
Mississippi	Yes	Yes	Yes	Yes	Yes
Missouri	No	-	-	-	-
Montana	No	-	-	-	-
Nebraska	No	-	-	-	-
Nevada	Yes	No	No	No	No
New Hampshire	Yes	Yes	Yes	Yes	Yes
New Jersey	No	-	-	-	-
New Mexico	No	-	-	-	-
New York	Yes	No	Yes	No	No
North Carolina	Yes	No	No	No	No
North Dakota	Yes	No	No	No	No
Ohio	Yes	Yes	No	No	No
Oklahoma	No	-	-	-	-
Oregon	Yes	No	No	No	No
Pennsylvania	Yes	No	No	No	No
Rhode Island	Yes	Yes	Yes	Yes	Yes
South Carolina	Yes	Yes	Yes	Yes	Yes
South Dakota	No	-	-	-	-
Tennessee	Yes	Yes	Yes	Yes	Yes
Texas	Yes	Yes	Yes	Yes	Yes
Utah	Yes	Yes	Yes	Yes	Yes
Vermont	No	-	-	-	-
Virginia	Yes	No	No	No	No
Washington	Yes	No	No	No	No
West Virginia	Yes	Yes	Yes	Yes	Yes
Wisconsin	Yes	No	No	No	No
Wyoming	No	-	-	-	-

Tables 4 through 7 on the following pages summarize the information that State health departments provided us for each of the four data elements, whether each data element was comparable to CMS’s data element, and the results of our analysis to determine whether there were substantial differences between the States’ and CMS’s COVID-19 data. For each State shown in these tables, we calculated the difference in percentage between the State’s data and

CMS's COVID-19 data by: (1) subtracting CMS's count for the data element from the State health department's count for the data element and (2) dividing the result by CMS's count. If the difference in percentage was 20 percent or greater, we determined that the State's data were substantially different from CMS's data.

**Table 4: Comparability of Data Element and Difference of State Health Departments' Data and CMS's COVID-19 Data (i.e., Count) for Resident COVID-19 Cases**

State Health Department That Provided Data To OIG	Data Element: Resident COVID-19 Cases	Comparable to Data Element From CMS's COVID-19 Data?	Count From State Health Department	Count From CMS	Difference in Percentage (%)	Substantially Different From CMS's COVID-19 Data?
California	Confirmed	Yes	4,495	3,943	14%	No
Connecticut	Confirmed	Yes	127	180	-29%	Yes
Georgia	Confirmed	Yes	1,688	1,529	10%	No
Iowa	Confirmed	Yes	401	295	36%	Yes
Kentucky	Confirmed	Yes	547	590	-7%	No
Louisiana	Confirmed	Yes	1,425	1,354	5%	No
Massachusetts	Confirmed	Yes	365	228	60%	Yes
Michigan	Confirmed	Yes	429	298	44%	Yes
Mississippi	Confirmed	Yes	1,382	968	43%	Yes
New Hampshire	Confirmed	Yes	61	91	-33%	Yes
Ohio	Confirmed and Suspected	Yes	1,290	1,894	-32%	Yes
Rhode Island	Confirmed	Yes	55	42	31%	Yes
South Carolina	Confirmed	Yes	781	1,059	-26%	Yes
Tennessee	Confirmed	Yes	1,193	357	234%	Yes
Texas	Confirmed	Yes	5,835	5,476	7%	No
Utah	Confirmed	Yes	301	352	-14%	No
West Virginia	Confirmed	Yes	85	14	507%	Yes

**Table 5: Comparability of Data Element and Difference of State Health Departments' Data and CMS's COVID-19 Data (i.e., Count) for Resident COVID-19 Deaths<sup>53</sup>**

State Health Department That Provided Data To OIG	Data Element: Resident COVID-19 Deaths	Comparable to Data Element From CMS's COVID-19 Data?	Count From State Health Department	Count From CMS	Difference in Percentage (%)	Substantially Different From CMS's COVID-19 Data?
California	Confirmed and Suspected	Yes	661	537	23%	Yes
Connecticut	Confirmed and Suspected	Yes	60	44	36%	Yes
Georgia	Confirmed and Suspected	Yes	221	243	-9%	No
Iowa	Confirmed	No	52	-	-	-
Kentucky	Confirmed	No	99	-	-	-
Louisiana	Confirmed	No	158	-	-	-
Massachusetts	Confirmed	No	95	-	-	-
Michigan	Confirmed	No	64	-	-	-
Mississippi	Confirmed	No	259	-	-	-
New Hampshire	Confirmed	No	10	-	-	-
New York	Confirmed and Suspected	Yes	141	131	8%	No
Rhode Island	Confirmed	No	39	-	-	-
South Carolina	Confirmed	No	223	-	-	-
Tennessee	Confirmed	No	162	-	-	-
Texas	Confirmed	No	556	-	-	-
Utah	Confirmed	No	43	-	-	-
West Virginia	Confirmed	No	26	-	-	-

<sup>53</sup> CMS's COVID-19 data for resident COVID-19 deaths consisted of the number of deaths from confirmed and suspected cases. If a State health department provided the number of deaths for only confirmed cases, the data were not comparable, and we did not include the count from CMS.

**Table 6: Comparability of Data Element and Difference of State Health Departments' Data and CMS's COVID-19 Data (i.e., Count) for Staff COVID-19 Cases**

State Health Department That Provided Data To OIG	Data Element: Staff COVID-19 Cases	Comparable to Data Element From CMS's COVID-19 Data?	Count From State Health Department	Count From CMS	Difference in Percentage (%)	Substantially Different From CMS's COVID-19 Data?
California	Confirmed	Yes	4,226	3,718	14%	No
Connecticut	Confirmed	Yes	204	172	19%	No
Georgia	Confirmed	Yes	973	1,199	-19%	No
Kentucky	Confirmed	Yes	376	441	-15%	No
Louisiana	Confirmed	Yes	1,195	1,340	-11%	No
Massachusetts	Confirmed	Yes	320	200	60%	Yes
Michigan	Confirmed	Yes	613	637	-4%	No
Mississippi	Confirmed	Yes	633	720	-12%	No
New Hampshire	Confirmed	Yes	62	63	-2%	No
Rhode Island	Confirmed	Yes	63	97	-35%	Yes
South Carolina	Confirmed	Yes	335	811	-59%	Yes
Tennessee	Confirmed	Yes	1,365	795	72%	Yes
Texas	Confirmed	Yes	3,825	4,838	-21%	Yes
Utah	Confirmed	Yes	182	202	-10%	No
West Virginia	Confirmed	Yes	92	27	241%	Yes

**Table 7: Comparability of Data Element and Difference of State Health Departments' Data and CMS's COVID-19 Data (i.e., Count) for Staff COVID-19 Deaths<sup>54</sup>**

State Health Department That Provided Data To OIG	Data Element: Staff COVID-19 Deaths	Comparable to Data Element From CMS's COVID-19 Data?	Count From State Health Department	Count from CMS	Difference in Percentage (%)	Substantially Different From CMS's COVID-19 Data?
California	Confirmed and Suspected	Yes	14	15	-7%	No
Connecticut	Confirmed	No	3	-	-	-
Kentucky	Confirmed	No	0	-	-	-
Massachusetts	Confirmed	No	0	-	-	-
Michigan	Confirmed	No	2	-	-	-
Mississippi	Confirmed	No	4	-	-	-
New Hampshire	Confirmed	No	0	-	-	-
Rhode Island	Confirmed	No	1	-	-	-
South Carolina	Confirmed	No	5	-	-	-
Tennessee	Confirmed	No	0	-	-	-
Texas	Confirmed	No	16	-	-	-
Utah	Confirmed	No	0	-	-	-
West Virginia	Confirmed	No	0	-	-	-

<sup>54</sup> CMS's COVID-19 data for staff COVID-19 deaths consisted of the number of deaths from confirmed and suspected cases. If a State health department provided the number of COVID-19 deaths for only confirmed cases, the data were not comparable, and we did not include the count from CMS.

## APPENDIX C: CMS COMMENTS



DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

*Administrator*  
Washington, DC 20201

**DATE:** June 21, 2021

**TO:** Christi A. Grimm  
Principal Deputy Inspector General

**FROM:** Chiquita Brooks-LaSure *Chiq B LaS*  
Administrator

**SUBJECT:** Office of Inspector General (OIG) Draft Report: CMS's COVID-19 Data Included Required Information From Most Nursing Homes, but CMS Could Take Actions To Improve Completeness and Accuracy of the Data A-09-20-02005

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.

As part of our response to the pandemic, on May 8, 2020, CMS published an interim final rule with comment period (85 FR 27550) requiring nursing homes to report data on a weekly basis to the Centers for Disease Control and Prevention (CDC) about COVID-19 cases, deaths, and supply levels, among other metrics (42 C.F.R. 483.80(g), 85 FR 27550, 27627, May 8, 2020). Consistent with CMS' commitment to transparency, CMS began posting the reported COVID-19 data for viewing by nursing home residents and families, facilities, stakeholders, and the general public beginning in early June 2020. The data posted by CMS on the COVID-19 Nursing Home Data Website is reported by nursing homes and collected at the federal level by the CDC through the National Healthcare Safety Network (NHSN) Long-Term Care Facility COVID-19 Module.

The CDC NHSN system is used to ensure a nationwide, standardized process of collecting COVID-19 data from nursing homes in each state. While the CDC is the owner and is responsible for the NHSN system, CMS and CDC use this data as part of a coordinated effort to provide detailed information to state and local health departments, as well as nursing homes, and to inform national infection prevention and control policies and strategies to further support nursing home residents. It is important to note, however, that this system and requirement is separate from state-level COVID-19 data collection efforts, and CMS does not have the authority to mandate that state agencies (other than the state Medicaid and CHIP agencies) comply with federal reporting requirements. Although some states may have adopted the NHSN system after utilizing a state-based system, CMS expects that federally-reported data and state-reported may differ for individual facilities.



The OIG's findings show that the vast majority of nursing homes have entered data correctly, with less than five percent of nursing homes not reporting all required data. As such, the data posted provides an informative and actionable representation of how COVID-19 has impacted nursing homes across the U.S. Nursing homes that are not in compliance with reporting requirements will receive a deficiency citation, and CMS will impose a civil money penalty (CMP). As such, CMS has established an automated process to track facilities that are not in compliance with the requirement to report data to CDC, and to impose CMPs on these facilities. CMPs become due and payable after the facility has been afforded an opportunity to dispute the findings through Independent Informal Dispute Resolution, or an administrative hearing is final, if requested. For example, if facilities provided evidence of a good faith effort to report, but were unable to report due to technical issues, CMS may rescind the CMPs.

As with any new reporting program, CMS provides technical assistance to facilities to help them submit data accurately. This is accomplished through help desk support and periodic stakeholder calls, with the goal of assisting nursing homes in how they can best comply with the reporting requirements. CMS's outreach focuses on the data variables that have the greatest impact on nursing home quality and safety, such as the number of resident and staff COVID-19 hospital admissions, cases, and deaths. In addition, the CDC offers training and technical support on reporting through the NHSN Module, including web-based trainings and live office hours with CDC subject matter experts.

CMS and the CDC are performing ongoing data quality checks to identify instances where facilities may have entered incorrect data, such as entering cumulative counts over time instead of new cases, and other data entry errors. As part of its quality assurance process, CMS has flags that alert facilities if their data are not correct so that the facilities have the opportunity to make corrections. Additionally, CMS attempts to contact nursing homes that fail quality assurance checks by email and phone calls. CMS encourages state and local health departments that have access to these data to reach out to their facilities to work with them on amending their data. A common reason for not reporting in the beginning has been difficulty using NHSN, and both CMS and CDC have reached out to these facilities to assist them. CMS will also, on occasion, directly contact facilities reporting inaccurate data, such as when there is a spike in the number of facilities that have triggered quality assurance flags, in order to help resolve any reporting issues.

In addition to the data collected through the CDC's NHSN, CMS uses every tool at its disposal to effectively monitor trends in infection rates, and develop public health policies when making decisions about how to ensure the health and safety of nursing home residents and staff. CMS has remained focused on holding Medicare and Medicaid certified nursing homes accountable for safety and quality of care. For example, state survey agencies (SSAs) prioritized their work to focus on facilities whose conditions pose immediate jeopardy to facility residents. CMS shares data with the SSAs each week to help inform which nursing homes may have potential problems preventing or controlling the spread of COVID-19, and therefore can target swift onsite facility surveys. To further assist nursing homes in responding to the ongoing pandemic, the Department of Health and Human Services deployed federal Task Force Strike Teams to coordinate with states and provide onsite technical assistance and education to nursing homes experiencing outbreaks. Additionally, CMS strategically refocused the approach of Quality Innovation

Network – Quality Improvement Organizations (QIN – QIOs) to work with providers, community partners, beneficiaries and caregivers on data-driven quality improvement initiatives designed to improve the quality of care for beneficiaries across the United States. QIN – QIOs also reach out to nursing homes across the country to provide infection control training and virtual technical assistance.

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

**OIG Recommendation**

CMS should assess the cost and benefits of implementing the following recommendations and if CMS determines that the benefits outweigh the costs, take action to:

- Develop a process to identify nursing homes that do not report required data for all of the data elements related to COVID-19 cases and deaths among residents and staff and PPE and supplies and request that they submit the required data.

**CMS Response**

CMS concurs to assess the costs and benefits of the OIG’s suggested recommendation. CMS performs ongoing data quality checks to identify instances where facilities may have entered incorrect data. As part of this process, CMS employs flags that alert facilities if their data is not correct so facilities have the opportunity to correct their data. CMS also attempts to contact nursing homes that fail quality assurance checks by email and phones calls.

**OIG Recommendation**

CMS should assess the cost and benefits of implementing the following recommendations and if CMS determines that the benefits outweigh the costs, take action to:

- Revise its quality assurance checks for ratios 1, 3, 5, and 6, which use the number of all beds in the denominator, to ensure that it does not exclude from its COVID-19 data nursing home’s data that should be included;

**CMS Response**

CMS concurs to assess the costs and benefits of the OIG’s suggested recommendation.

**OIG Recommendation**

CMS should assess the cost and benefits of implementing the following recommendations and if CMS determines that the benefits outweigh the costs, take action to:

- Revise its quality assurance checks for ratios 2 and 4, which use the numbers of confirmed cases and admissions among residents and confirmed cases among staff in the denominator, by adding the number of suspected COVID-19 cases to the denominator in both ratios and adjust the ratios’ thresholds to reflect the change;

**CMS Response**

Because the CDC's NHSN Long Term Care Facility COVID-19 Module no longer collects suspected cases, it appears that this recommendation is no longer relevant, therefore CMS non-concurs and suggests the OIG remove this recommendation.

**OIG Recommendation**

CMS should assess the cost and benefits of implementing the following recommendations and if CMS determines that the benefits outweigh the costs, take action to:

- Identify the nursing homes that reported more COVID-19 deaths than total deaths from any cause and request that they verify or correct the reported data;

**CMS Response**

The CDC has confirmed that updates to the NHSN interface no longer allow facilities to enter a number of COVID-19 deaths that is greater than total deaths from any cause. It appears that this recommendation is no longer relevant, and therefore, CMS non-concurs and suggests the OIG remove this recommendation.

**OIG Recommendation**

CMS should assess the cost and benefits of implementing the following recommendations and if CMS determines that the benefits outweigh the costs, take action to:

- Contact nursing homes that failed quality assurance checks to verify the accuracy of reported data or to correct inaccurate data.

**CMS Response**

CMS concurs to assess the costs and benefits of the OIG's suggested recommendation. CMS provides technical assistance by performing periodic outreach activities by phone and email to nursing homes that failed CMS's quality assurance checks and had their data excluded from CMS's COVID-19 data.

**OIG Recommendation**

CMS should assess the cost and benefits of implementing the following recommendations and if CMS determines that the benefits outweigh the costs, take action to:

- Work with CDC and with State health departments to determine the feasibility of using comparable data elements to collect COVID-19 data and the feasibility of monitoring substantial differences in the data and, if determined feasible, take actions to provide the public with more complete and accurate COVID-19 data for nursing homes.

**CMS Response**

CMS agrees that – to the extent possible – data reporting elements should be aligned among States and the Federal Government. As stated above, CMS does not have oversight of or authority over States' reporting efforts. Because of this lack of authority, CMS non-concurs with this recommendation.