



# CHANGES IN OWNERSHIP AMONG SKILLED NURSING FACILITIES FROM 2016 TO 2021: VARIATIONS BY SIZE, OCCUPANCY RATE, PENALTY AMOUNT, AND TYPE OF OWNERSHIP

## KEY POINTS

This brief analyzes released data from the Centers for Medicare & Medicaid Services (CMS) on changes of ownership of skilled nursing facilities (SNFs), based on information reported to CMS through the Provider Enrollment, Chain, and Ownership System on or after January 1, 2016.

- Medium-sized facilities (51-100 beds, and 101-200 beds), were more likely to experience a change of ownership (around 4%) compared to smaller size and larger size facilities (2.1% and 2.5%, respectively).
- Facilities with lower occupancy rates were more likely to experience a change of ownership. Facilities with occupancy rates below 65% were twice as likely to experience a change of ownership compared to facilities with occupancy rates above 85%.
- Facilities that had incurred higher fines were more likely to experience change of ownership. Facilities with fines larger than \$20,000 were more likely to experience a change of ownership (almost 5%) compared to facilities with lower fines (averaging about 4%) and those with no fines (3.1%).
- For-profit SNFs were more likely to experience a change of ownership per year during our study period (4.3%) compared to non-profits (1.6%) and government (1.1%).

## BACKGROUND

There are approximately 15,000 nursing homes (both nursing facilities and skilled nursing facilities [SNFs]) nationwide, serving more than 1.3 million residents.<sup>1</sup> Over 90% of nursing homes are dually certified in the Medicare and Medicaid programs, serving both residents who need short post-acute rehabilitative and palliative services after a stay in an acute care hospital, and those who need longer-term custodial-type care with support services. The Medicare benefit pays for certain short-term post-acute care in SNFs (up to 100 days in a benefit period).

In April 2022, the Centers for Medicare & Medicaid Services (CMS) publicly released datasets on hospital and SNF mergers and acquisitions, consolidation, and other changes of ownership transactions dating back to 2016.<sup>2</sup> Publication of these data supports the Biden-Harris Administration's goal of improving transparency and accessibility of information that can be readily used for research to help address questions about how ownership structures in these markets are changing, the extent of market consolidation, and whether those changes affect access to care, quality, and prices.

Recent analyses by ASPE using these data found frequent changes of ownership among hospitals and SNFs between 2016 and 2021, with wide variation across states, and that ownership changes among hospitals were

more common in medium and larger hospitals, and hospitals with low profit margins.<sup>3</sup> In a subsequent analysis focused on SNF change of ownership transactions, ASPE found that a total of 3,254 facilities had a change of ownership from January 2016 to December 2021, and the number of transactions changing ownership had generally increased since 2016. During the study period, the highest proportion of SNFs change of ownership occurred in 2019 (5%, or 779 out of 15,535 SNFs). Change of ownership transactions have decreased since 2019, but have remained slightly higher than in prior years, averaging about 3.9% of SNFs in 2020 and 3.6% in 2021. The ASPE analyses also found that SNFs with overall lower star quality ratings experience a change of ownership more often than SNFs with higher quality ratings.<sup>4</sup>

This analysis expands ASPE's previous work to examine what other types of facility-level characteristics may be associated with a change of ownership transactions among SNFs. Researchers, stakeholder groups, and policy makers have raised concerns about potential financial incentives associated with ownership changes that may prioritize profits at the expense of resident care, particularly as it relates to private equity firms buying struggling nursing homes.<sup>5,6,7,8</sup> Other studies have also provided additional insight into the various aspects of nursing home ownership and ownership changes on quality, staffing stability, and patient outcome.<sup>9,10,11</sup> As a result, on February 28, 2022, the Biden-Harris Administration released a fact sheet, *"Protecting Seniors by Improving Safety and Quality of Care in the Nation's Nursing Homes"*, announcing several reforms to improve quality in nursing homes, including a commitment to make nursing home ownership more transparent in order to better understand how care is affected by different owner types and ownership transactions.<sup>12</sup> In this fact sheet, the Biden-Harris Administration also expressed their intent to expand financial penalties as enforcement sanctions to encourage high quality compliance in all nursing homes, regardless of ownership status, and potentially protecting against ownership transactions mainly incentivized by profits.

This analysis explores how nursing home change of ownership transactions from 2016 to 2021 vary by facility size, occupancy rate, penalty amounts,<sup>a</sup> and ownership type. We selected these factors since they may contribute to management practices or financial vulnerability of a nursing home, in turn affecting their likelihood of experiencing a change of ownership. For example, low occupancy and high penalty amounts could result in reduced operating margins and therefore less financial security for nursing homes, potentially compelling existing owners to sell the nursing home in whole or in part. A nursing home's status as a for-profit or non-profit facility might also influence its attractiveness to potential buyers and investors, and facility size and location in a rural setting could contribute to operational challenges, potentially influencing existing owners' decision to sell. To better understand the extent to which such factors may be associated with changes of ownership, this analysis will explore whether the size of facilities, level of occupancy rates, amount of penalties, and differences in profit status are associated with the likelihood of experiencing a change of ownership.

Although this analysis provides an overview of how these factors are associated with changes in ownership, it does not establish a causal relationship between each factor and changes of ownership, an explanation or justification for the transactions, or explain how quality of care changed after the transactions.

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<sup>a</sup> CMS may impose penalties on a nursing home when there's a serious health or fire safety citation or if the nursing home fails to correct a citation for a long period of time. These penalties include "fines" that may be imposed once per citation or each day until the nursing home corrects the citation, and "payment denials", when the government stops Medicare or Medicaid payments to the nursing home for new residents until the nursing home corrects the citation. Fines vary depending on the seriousness of the deficiency and harm to the patient(s). Data on the fines and payment denials received by nursing homes was retrieved from CMS: <https://data.cms.gov/provider-data/archived-data/nursing-homes>.

## DATA AND METHODS

To examine how change of ownership transactions vary by facility size, occupancy rate, penalty size, and ownership type, we used the SNF Change of Ownership (CHOW) data files, which is a subset of data derived from the Provider Enrollment, Chain, and Ownership System (PECOS).<sup>13</sup> The CHOW files contain buyer and seller information, enrollment records, ownership and managerial control information, and dates of when changes of ownership occurred. A change of ownership or CHOW typically occurs when a Medicare-enrolled provider has been purchased by another organization.

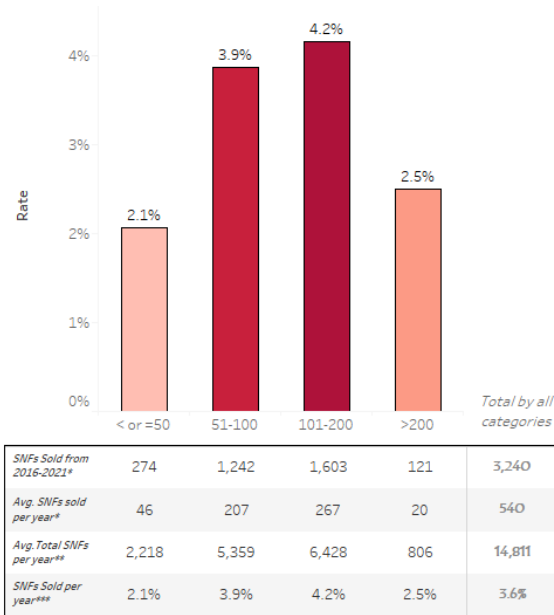
To understand nursing home change of ownership trends by facility characteristics, we linked the CHOW data file with Nursing Home Annual Files publicly available in CMS's Care Compare website from 2016 to 2021.<sup>14</sup> The Nursing Home Annual files provide information on the total number of nursing homes, facility size, occupancy rate (facility size and occupancy rates were derived from number of beds and resident census), total penalty amounts, and ownership type (for-profit, nonprofit or government). Monthly files from January 2016 to December 2021 were appended to create a single data frame of the Nursing Home Annual Files (n=1.07 million). Information from the CHOW data file about facilities experiencing a change of ownership -- specifically, their CMS certification number (CCN) and the month and year of the transaction date -- were linked with the nursing home annual files CCN and reporting date (month and year). For example, if a facility had a change of ownership in January 2019, we used data on the facility's characteristics as of January 2019 as reported in Care Compare. This data linkage allowed us to explore facility characteristics such as the number of beds and occupancy rate of each facility at the time when the change of ownership occurred. In addition, the number of total nursing homes for each figure varies due to reporting differences and missing data for each month and year of the various factors we explored.

## RESULTS

### ***Skilled Nursing Facilities That Experienced a Change of Ownership During 2016-2021, by Facility Size***

Roughly 80% of all facilities (11,787 out of 14,811) had 51-200 beds in any one year during our study period. About 43% of all facilities had 101-200 beds, 36% had between 51 and 100 beds, 15% had 50 or fewer beds, and only about 5% were very large facilities with more than 200 beds. **Figure 1** shows that facilities with 101-200 beds had the highest likelihood of experiencing a change of ownership: 4.2% of facilities of that size experienced a change of ownership between 2016 and 2021. Among facilities with 51-100 beds, 3.9% experienced a change of ownership during the same period, compared to 2.1 % of the smallest facilities and 2.5% of the largest facilities 2.5%.

**Figure 1. Percent of Facilities Experiencing a Change of Ownership during 2016-2021, by Facility Size**



Source: Data.CMS.gov, Skilled Nursing Facility Change of Ownership (CHOW) was linked with the NH\_ProviderInfo file from the archived Nursing Home Annual Database in the Care Compare website. Accessed April 2, 2022.

\* CMS CHOW files.

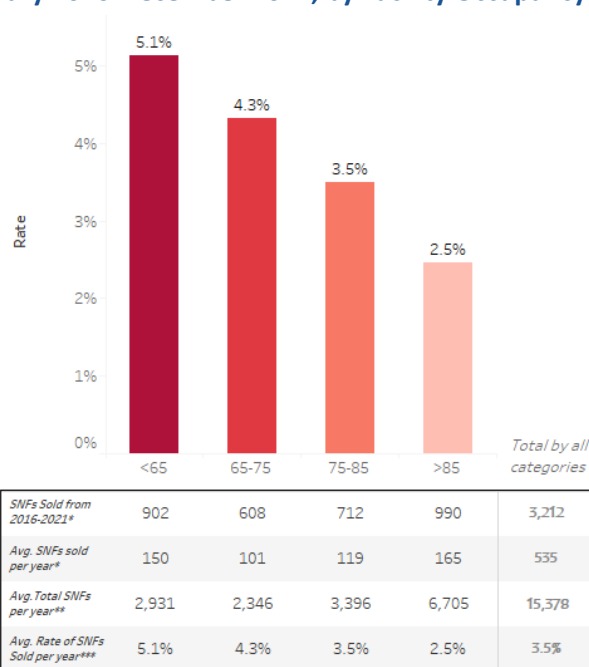
\*\* Average Total NHs per year is calculated by taking the average total NHs for each month using NH\_ProviderInfo monthly files from Care Compare Data of each year (2016-2021).

\*\*\* Percent Calculation = (Average SNFs CHOW per year/Average Total SNFs per year) \* 100.

### ***Skilled Nursing Facilities That Experienced a Change of Ownership During 2016-2021, by Facility Occupancy Rates***

Roughly 44% of all facilities (6,705 out of the total 15,378) had an average annual occupancy rate of higher than 85% during the study period. **Figure 2** shows that the share of facilities experiencing a change of ownership decreased monotonically as occupancy rates increased. Of the facilities that experienced a change of ownership during our study period, facilities with lower occupancy rates were more likely to experience a change of ownership compared to facilities with occupancy rates above 85%. About 5% of the facilities with occupancy rates below 65% had a change of ownership during the study period, while only 2.5% of facilities with occupancy rates higher than 85% had a change of ownership during that same period. On average, 4% of facilities with occupancy rates between the lowest and highest range experienced a change of ownership during this time period.

**Figure 2. Percent of Facilities Experiencing a Change of Ownership during January 2016-December 2021, by Facility Occupancy Rate**



Source: Data.CMS.gov, Skilled Nursing Facility Change of Ownership (CHOW) was linked with the NH\_ProviderInfo file from the archived Nursing Home Annual Database in the Care Compare website. Accessed April 2, 2022.

\* CMS CHOW files.

\*\* Average Total NHs per year is calculated by taking the average total NHs for each month using NH\_ProviderInfo monthly files from Care Compare Data of each year (2016-2021).

\*\*\* Percent Calculation = (Average SNFs CHOW per year/Average Total SNFs per year) \* 100.

### ***Skilled Nursing Facilities That Experienced a Change of Ownership During 2016-2021, by Facility Penalty Amount***

Penalty fees can be imposed on facilities by CMS to address deficiencies in quality of care or safety standards in nursing homes. The penalty fees may be assessed per day of non-compliance or per instance of non-compliance and have dollar ranges that correspond to the seriousness of harm to the patient(s). **Figure 3** shows that the share of facilities experiencing a change of ownership increased monotonically as facilities incurred higher penalties. About 4,200 (or 28%) of all facilities incurred penalties at some point during 2016-2021, and almost half of those facilities (2,028, or 48%) incurred accumulated penalties higher than \$20,000. During the study period, facilities incurring penalties were more likely to experience a change of ownership than facilities incurring no penalties.

**Figure 3. Percent of Facilities Experiencing a Change of Ownership during January 2016-December 2021, by Total Penalty Amount**



Source: Data.CMS.gov, Skilled Nursing Facility Change of Ownership (CHOW) was linked with the NH\_ProviderInfo file from the archived Nursing Home Annual Database in the Care Compare website. Accessed April 2, 2022.

\* CMS CHOW files.

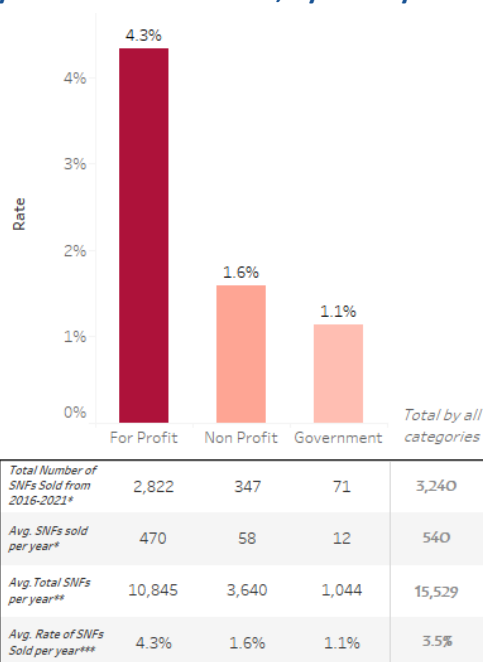
\*\* Average Total NHs per year is calculated by taking the average total NHs for each month using NH\_ProviderInfo monthly files from Care Compare Data of each year (2016-2021).

\*\*\* Percent Calculation = (Average SNFs CHOW per year/Average Total SNFs per year) \* 100.

### ***Skilled Nursing Facilities That Experienced a Change of Ownership During 2016-2021, by Profit Status***

About 70% of all nursing homes are for-profit providers, 23% are non-profit, and 7% are government-owned. **Figure 4** shows that for-profit facilities had the highest likelihood of experiencing a change of ownership per year (4.3%), compared to non-profits (1.6%) and government-owned facilities (1.1%). Further research is needed to address how meaningful the magnitude of this difference is across the three types of ownership.

**Figure 4. Percent of Facilities Experiencing a Change of Ownership during January 2016-December 2021, by Facility Profit Status**



Source: Data.CMS.gov, Skilled Nursing Facility Change of Ownership (CHOW) was linked with the NH\_ProviderInfo file from the archived Nursing Home Annual Database in the Care Compare website. Accessed April 2, 2022.

\* CMS CHOW files.

\*\* Average Total NHs per year is calculated by taking the average total NHs for each month using NH\_ProviderInfo monthly files from Care Compare Data of each year (2016-2021).

\*\*\* Percent Calculation = (Average SNFs CHOW per year/Average Total SNFs per year) \* 100.

## DISCUSSION

There is increasing scrutiny around how the nursing home market is changing as a result of larger organizations and different types of investors (e.g., private equity, real estate investment trust firms) acquiring smaller or struggling facilities, and how those changes of ownership and resulting shifts in the overall market for nursing home care may affect the quality of the care. In previous analyses of these data, ASPE found that changes of ownership have occurred more frequently in nursing homes than in hospitals between 2016 and 2021 -- over 20% of nursing homes experienced a change of ownership during this time period, compared to fewer than 6% of hospitals. ASPE found that a total of 3,254 nursing home facilities had a change of ownership from January 2016 to December 2021, with the number of transactions increasing since 2016.

The findings from this brief provide new evidence of what facility characteristics are associated with a higher likelihood of change of ownership transactions during 2016-2021. Specifically, facility size, occupancy rate, penalty size, and ownership type were chosen for this analysis as factors that may influence a facility's risk for experiencing a change of ownership. We found that medium-sized facilities (51-200 beds), facilities with lower occupancy rates (<85%), facilities with the highest penalty fees (above \$20,000), and for-profit facilities were more likely to experience a change of ownership during our study period than facilities in other size categories, facilities with higher occupancy rates, facilities with lower penalty fees, and non-profit and government facilities, respectively. Further research is needed to identify the reasons for these associations. Below we present some potential considerations:

### ***Facility Size***

We found that medium-sized facilities (51-200 beds) had a higher likelihood of experiencing a change of ownership compared to both smaller (fewer than 50 beds) and larger (more than 200 beds) facilities. The reason for this pattern is uncertain; however, there may be operational factors influencing this trend. For example, very large facilities may be less vulnerable to having to sell due to their larger market share and financial leverage. Conversely, smaller facilities with fewer than 50 beds may have some operational advantages that may allow for better control and management of their operational costs, which larger facilities may have less control over.

### ***Occupancy Rates***

We found that the share of facilities experiencing a change of ownership decreased monotonically with higher occupancy rates. Of the facilities that had a change of ownership during our study period, facilities with the lowest occupancy rates (<65%) experienced a change of ownership twice as frequently as facilities with the highest occupancy rates (>85%). One potential explanation for this finding is that facilities with low occupancy rates (even high performing ones) may experience greater difficulties in covering their fixed operational costs, and thus, be more vulnerable to experiencing a change of ownership in which they are acquired by organizations with better financial standing.

### ***Penalty Size***

We found that the share of facilities that experience a change of ownership increased monotonically with higher penalties. One possible explanation for this finding is that quality deficiencies that result in penalties may be the product of underlying operational challenges and other financial difficulties that force a facility's owners to sell. These financial difficulties may be compounded by increased costs associated with paying the penalties. This hypothesis is further supported by ASPE's prior analyses that found that facilities with overall lower star quality ratings are more likely to experience a change of ownership compared to facilities with higher star quality ratings.

### ***Ownership Type***

Our analysis shows that for-profit facilities were more than twice as likely to experience a change of ownership (4.3%) compared to non-profits (1.6%), and four times as likely as government facilities (1.1%). This could be indicative of buyers' perception of for-profit facilities as a better value in terms of their potential for higher profit margins resulting in higher returns.

## **CONCLUSION**

Although analysis provides insight on the extent to which size, occupancy rate, penalty size, and profit status are associated with changes in ownership in the nursing home market. Our findings do not establish a causal relationship between specific facility characteristics and their likelihood of experiencing a change of ownership, nor can they identify the reasons motivating these transactions. Further research is needed to assess what types of organizations are buying these facilities (e.g., small vs. large, chain vs. non-chain, facilities owning stocks in the market, private equity firms, real estate investment trusts, etc.) and why; causal effects of change of ownership transactions on the facility's quality of care; and implications for market concentration and competition. Additional research could also explore resident characteristics associated with changes in ownership, including demographic characteristics of a facility's residents (e.g., race, dual eligibility status) and average resident acuity levels.



## ENDNOTES

1. Centers for Disease Control and Prevention. (2022). *FASTSTATS--Nursing Home Care*. <https://www.cdc.gov/nchs/fastats/nursing-home-care.htm>. Retrieved May 11, 2022.
2. Centers for Medicare & Medicaid Services (CMS) (n.d.). *Medicaid Services Data*. <https://data.cms.gov/provider-characteristics/hospitals-and-other-facilities/skilled-nursing-facility-change-of-ownership>. Retrieved May 6, 2022. Change of ownership data is provided from PECOS, where CMS's Center for Program Integrity maintains records of mergers, acquisitions, consolidations and other changes of ownership for the hospitals and nursing homes the agency regulates. CMS requires changes of ownership to be reported by the entity within 30 days of the change and through self-reporting by each entity.
3. Welch, P., Ruhter, J., Bosworth, A., De Lew, N., Sommers, B.D. (2022). *Changes in Ownership of Hospital and Skilled Nursing Facilities: An Analysis of Newly Released CMS Data* (Issue Brief). <https://aspe.hhs.gov/reports/changes-ownership-hospital-skilled-nursing-facilities>.
4. Oliveira, I., Blanco, M. (2022). *Changes in Ownership of Skilled Nursing Facilities from 2016-2021: Variations by Geographic Location and Quality* (Issue Brief). <https://aspe.hhs.gov/reports/changes-ownership-snfs-2016-2021-analysis-using-newly-released-cms-data>.
5. Braun, R.T., Jung, H., Casalino, L.P., Myslinski, Z., Unruh, M.A. (2021). Association of Private Equity Investment in US Nursing Homes With the Quality and Cost of Care for Long-Stay Residents. *JAMA Health Forum*, 2(11): e213817. doi:10.1001/jamahealthforum.2021.3817.
6. Gupta, A., Howell, S.T., Yannelis, C., Gupta, A. (2020). *Does Private Equity Investment in Healthcare Benefit Patients? Evidence from Nursing Homes*. New York, NY: NYU Stern School of Business. <https://ssrn.com/abstract=3537612>.
7. Stevenson, D.G., Grabowski, D.C. (2008). Private Equity Investment and Nursing Home Care: Is it a Big Deal? *Health Affairs* (Millwood), 27(5): 1399-408.
8. U.S. Government Accountability Office. (2011). *Nursing Homes: Complexity of Private Investment Purchases Demonstrates need for CMS to improve the Usability and Completeness of Ownership Data*. Washington, DC: U.S. Government Accountability Office. <https://www.gao.gov/products/gao-10-710>.
9. Hillmer, M.P., Wodchis, W.P., Gill, S.S., Anderson, G.M., Rochon, P.A. (2005). Nursing Home Profit Status and Quality of Care: Is There Any Evidence of An Association? *Med Care Res Rev.*, 62(2): 139-66. doi:10.1177/1077558704273769. PMID: 15750174.
10. Harrington, C., Olney, B., Carrillo, H., Kang, T. (2012). Nurse Staffing and Deficiencies in the Largest For-Profit Nursing Home Chains and Chains Owned by Private Equity Companies. *Health Serv Res.*, 47(1 Pt 1): 106-28. doi:10.1111/j.1475-6773.2011.01311.x.
11. Grabowski, D.C., Stevenson, D.G. (2008). Ownership Conversions and Nursing Home Performance. *Health Serv Res.*, 43(4): 1184-203. doi:10.1111/j.1475-6773.2008.00841.x.
12. White House. (2022). *Fact Sheet: Protecting Seniors by Improving Safety and Quality of Care in the Nation's Nursing Homes*. <https://www.whitehouse.gov/briefing-room/statements-releases/2022/02/28/fact-sheet-protecting-seniors-and-people-with-disabilities-by-improving-safety-and-quality-of-care-in-the-nations-nursing-homes/>. Retrieved October 13, 2022.

13. MedPAC. (2022). *March 2022 Report to the Congress: Medicare Payment Policy*.  
<https://www.medpac.gov/document/march-2022-report-to-the-congress-medicare-payment-policy/>.
14. CMS Nursing Homes Archived Annual files. <https://data.cms.gov/provider-data/archived-data/nursing-homes>. Accessed May 2022.

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### Office of the Assistant Secretary for Planning and Evaluation

200 Independence Avenue SW, Mailstop 447D  
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### ABOUT THE AUTHORS

Iara Oliveira, M.S., and Martin Blanco, M.A., M.P.H., work in the Office of Behavioral Health, Disability, and Aging Policy in the Office of the Assistant Secretary for Planning and Evaluation.

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