Ownership of Skilled Nursing Facilities: An Analysis of Newly-Released Federal Data

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KEY POINTS

• In September 2022, the Centers for Medicare & Medicaid Services (CMS) released publicly for the first-time comprehensive data on the ownership of all U.S. skilled nursing facilities (SNFs) that are enrolled in Medicare. This report analyzes this new dataset.

• Most SNFs are for-profit (71.7%), 22.5% are non-profit, and 5.7% are government-owned. Across all ownership types, 63.5% are structured as corporations and 16.2% as limited liability companies.

• The largest ten chains (representing less than 2% of all chains) own over 10% of all SNFs, while the remaining 597 chains own 55.6% of SNFs, and a third of SNFs (33.8%) are independent. Each of the top ten chains operates in at least half a dozen states.

• Individuals directly or indirectly own half of the ownership shares of SNFs, and organizations own the other half.

• Market concentration was typically low based on traditional measures (mean Herfindahl-Hirschman Index [HHI] index of about 1000) at the level of the hospital referral region. However, HHI does not account for cross-market ownership.

BACKGROUND

As of September 2022, there are 15,151 nursing homes (both nursing facilities and skilled nursing facilities [SNFs]) nationwide, serving more than 1.3 million residents. About 2% (289) of nursing homes are Medicaid-only certified, 4% (608) are Medicare-only certified, and 94% (14,253) of are dually certified in Medicare and Medicaid. They serve residents who need short post-acute rehabilitative or palliative services after a stay in an acute care hospital (under the Medicare benefit) and residents who need longer-term custodial-type care with support services (under the Medicaid benefit). About 51% of SNF revenue comes from Medicaid, compared to 21% from Medicare and 28% from private pay (either private insurance or out-of-pocket).

As part of the Administration’s plan to improve transparency, safety, and quality of care in the nation’s nursing homes and the Administration’s Executive Order on promoting competition, in April 2022 the Centers for Medicare & Medicaid Services (CMS) publicly released datasets on Medicare-enrolled hospital and SNFs Change of Ownership, including on mergers and acquisitions, since 2016. The release makes these data more assessable to the public, researchers, press, monitoring agencies, and other interested stakeholders. These data can identify what types of ownership structures are shaping these markets and how those structures are affecting consolidation and competition. When linked to other data sources such as CMS’s Public Use Files
(PUFs), the dataset yields information on nursing homes with new owners, including information about a facility’s star-rating, size, chain affiliation, and profit status, which in turn can facilitate investigations of the impact on quality of care of ownership transactions.

To further improve transparency, in September 2022, CMS released data on all Medicare-certified SNFs, complementing the prior data release which only included the SNFs that had experienced a change of ownership. This release enables users to answer basic questions about the nursing home industry, including size of chains, frequency of individual vs. multiple owners, and local market concentration for SNFs. As with the previous release, these files can be merged with other CMS PUFs. Given that virtually all nursing homes are certified under both Medicare and Medicaid, the ownership patterns in this dataset likely also yield insights into the ownership of Medicaid facilities. The dataset will be updated monthly and will also be accessible through the Care Compare website, making this information more accessible to analysts and the general public.

This report provides an overview of the available data, a brief description of the ownership variables, a methodology for calculating the ownership shares by individuals vs. organizations, and several preliminary analyses to showcase the data.

**Data and Methods**

**Data**

On September 26, 2022, CMS released three files with information on all SNF owners currently enrolled in Medicare.* The three files represent ownership at one point of time (September 2022), without any historical data. Their source is the Provider Enrollment, Chain, and Ownership System (PECOS). Before being paid by Medicare, providers must enroll in Medicare through PECOS.† This “enrollment” is only for Medicare providers and is separate from the enrollment of Medicare beneficiaries.

The SNF-level file has enrollment data, including SNF name, physical address, and (for merging) CMS Certification Number (CCN). The owner file distinguishes between individuals and organizations and between direct and indirect owners. Unlike a direct owner, there is at least one subsidiary between the provider and an indirect owner. Owners whose ownership shares are less than 5% are not reported.

Based in part on common ownership, CMS has assigned about two-thirds of SNFs to groups called “affiliated entities,” which this report calls “chains.”

In this report, to enhance our analyses of the SNF enrollment file, we merged it to two public use files (PUFs): Care Compare, which provides information on the number of beds; and SNF cost report, which provides information on urban-rural location. The 855A enrollment form (p. 11) asks about organizational structure but currently does not offer “government” as one of the options. This information is available in Care Compare as part of the state-agency submitted data and was used for categorization of government entities in this report.

* The three files are as follows: A SNF-level file (“SNF_Enrollments”), a SNF-owner-level file (“SNF_All_Owners”), and a (very small) file of SNFs with multiple NPIs (“SNF_Additional_NPIs”). https://data.cms.gov/provider-characteristics/hospitals-and-other-facilities/skilled-nursing-facility-enrollments, accessed on 9-28-22. Scroll down to find related data files and data guidance.

† SNFs and other institutional providers enroll using form 855A, which can be found on-line by googling just “855A” and “Medicare.”
Methodology

We present descriptive statistics on ownership, organizational structure, and size. We also compare these patterns for organizational vs. individual-owned SNFs. Although PECOS does not identify ultimate owners, all individual owners are ultimate owners, because individuals cannot be owned by other individuals or by organizations. We leverage this fact to calculate the percentage of SNFs owned by individuals.

Finally, we calculate the Herfindahl-Hirschman Index (HHI) to measure the extent to which owners of SNFs are concentrated. When multiple SNFs in a market are in the same chain, those SNFs are treated as a unit in the calculation of the HHI. We use hospital referral regions (HRR) as our geographical unit, in part, because rural areas are assigned to nearby urban areas. There are 306 HRRs.

Limitations

The primary limitation of the PECOS data is that it is self-reported and there are limited opportunities to validate the data via other sources. PECOS is considered to be a System of Record (SOR) for Medicare provider enrollment data. That is, if there is a conflict between PECOS and another dataset in CMS, PECOS is considered to be authoritative for Medicare provider enrollment data.

Additional limitations include that owners with less than 5% share of a provider need not be reported; the dataset does not identify ultimate owners, that is, owners who are not subsidiaries of other owners; and the ownership share (i.e., an owner’s share of a provider) is often missing. Of the SNFs with direct owners, 14.0% either have missing values for ownership shares or those shares sum to more than 100%.

RESULTS

Overview of U.S. SNFs

Table 1 describes the ownership categories for the SNFs in the CMS dataset and other basic information, including governance, size, certification, and location.

More than two-thirds of SNFs are for-profit, less than one quarter are non-profit, and about 6% are government. Weighting by the number of beds increases the for-profit share slightly relative to the nonprofit share.

Corporation is the dominant form of organizational structure, representing 63.5% of all SNFs. One sixth of SNFs (16.2%) are organized as limited liability companies (LLCs). About 6% of SNFs are government owned, and about 4.5% are organized as partnerships. The 10.1% in the “other” category is broken down into 2.5% “church related,” 5.1% “individual,” and “other.” The “individual” category is not defined; a majority of these facilities are owned by a single individual, but not all of them.

Two-thirds (66.2%) of SNFs are part of a chain. Entities with 2-10 SNFs had 14.5% of SNFs, those with 11-25 SNFs had 16.6%, those with 26-50 SNFs also had 16.6%, those with 51-100 SNFs had 7.9%, and those with more than 100 SNFs had 10.5%. This distribution shifts only slightly when weighted by number of beds. The remaining 34% of SNFs can be considered “independent SNFs.”

The vast majority (95.9%) of Medicare-certified nursing homes are also certified for Medicaid. About 4% of SNFs are certified only for Medicare, and Medicaid-only facilities are not included here. These SNFs tend to have fewer beds per facility.

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Metropolitan Statistical Areas (MSAs), in contrast, treat rural areas of a state as a residual market. The MSAs are geographically compact, but the rural area is anything but.
More than a quarter of SNFs (26.5%) are located in rural areas, but only 21.4% of the beds are located there, indicating that these SNFs are smaller on average than urban SNFs.

Table 1. Ownership, Size, and Other Features of U.S. SNFs, 2022

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>SNFs</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For-profit</td>
<td>10,625</td>
<td>71.7%</td>
</tr>
<tr>
<td>Nonprofit</td>
<td>3,334</td>
<td>22.5%</td>
</tr>
<tr>
<td>Government</td>
<td>851</td>
<td>5.7%</td>
</tr>
<tr>
<td>Total</td>
<td>14,810</td>
<td>100.0%</td>
</tr>
<tr>
<td>Organizational Structure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporation</td>
<td>9,406</td>
<td>63.5%</td>
</tr>
<tr>
<td>Limited liability company</td>
<td>2,406</td>
<td>16.2%</td>
</tr>
<tr>
<td>Government</td>
<td>851</td>
<td>5.7%</td>
</tr>
<tr>
<td>Partnership</td>
<td>650</td>
<td>4.4%</td>
</tr>
<tr>
<td>Other</td>
<td>1,497</td>
<td>10.1%</td>
</tr>
<tr>
<td>Total</td>
<td>14,810</td>
<td>100.0%</td>
</tr>
<tr>
<td>Affiliated Entity (by its size)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-10 SNFs</td>
<td>2,153</td>
<td>14.5%</td>
</tr>
<tr>
<td>11-25 SNFs</td>
<td>2,456</td>
<td>16.6%</td>
</tr>
<tr>
<td>26-50 SNFs</td>
<td>2,460</td>
<td>16.6%</td>
</tr>
<tr>
<td>51-100 SNFs</td>
<td>1,171</td>
<td>7.9%</td>
</tr>
<tr>
<td>&gt;100 SNFs</td>
<td>1557</td>
<td>10.5%</td>
</tr>
<tr>
<td>not assigned</td>
<td>5,013</td>
<td>33.8%</td>
</tr>
<tr>
<td>Total</td>
<td>14,810</td>
<td>100.0%</td>
</tr>
<tr>
<td>Certification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare and Medicaid</td>
<td>14,203</td>
<td>95.9%</td>
</tr>
<tr>
<td>Medicare only</td>
<td>607</td>
<td>4.1%</td>
</tr>
<tr>
<td>Total</td>
<td>14,810</td>
<td>100.0%</td>
</tr>
<tr>
<td>Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>9,608</td>
<td>73.5%</td>
</tr>
<tr>
<td>Rural</td>
<td>3,460</td>
<td>26.5%</td>
</tr>
<tr>
<td>Total</td>
<td>13,068</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Note: Only the location variable is derived from SNF cost reports. The organizational structure variable is derived from Care Compare. Medicaid-only SNFs are in Care Compare but not in PECOS.

Chains

Table 2 presents the ten largest chains, as measured in terms of number of SNFs. They range in size from 101 to 237 SNFs. Collectively, the ten chains (which represent less than 2% of the 607 chains in the dataset) own a tenth (10.7%) of the beds in the country. Smaller chains own a majority of the beds (56.7%), and independent SNFs own a third (32.6%).
Table 2. Chains with the Most SNFs, 2022
(In Descending Order by Number of SNFs)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Name</th>
<th>SNFs</th>
<th>Number</th>
<th>%</th>
<th>Number in thousands</th>
<th>%</th>
<th>States</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GENESIS HEALTHCARE</td>
<td>237</td>
<td>1.6%</td>
<td></td>
<td>27.0</td>
<td>1.7%</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>THE ENSIGN GROUP</td>
<td>234</td>
<td>1.6%</td>
<td></td>
<td>25.5</td>
<td>1.6%</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>LIFE CARE CENTERS OF AMERICA</td>
<td>210</td>
<td>1.4%</td>
<td></td>
<td>27.1</td>
<td>1.7%</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>HCR MANORCARE</td>
<td>155</td>
<td>1.0%</td>
<td></td>
<td>21.5</td>
<td>1.4%</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>PROVIDENCE GROUP</td>
<td>130</td>
<td>0.9%</td>
<td></td>
<td>14.3</td>
<td>0.9%</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>CONSULATE HEALTH CARE/INDEPENDENCE LIVING CENTERS/NSPIRE HEALTHCARE/RAYDIANT HEALTH CARE</td>
<td>128</td>
<td>0.9%</td>
<td></td>
<td>14.5</td>
<td>0.9%</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>EVANGELICAL LUTHERAN GOOD SAMARITAN SOCIETY</td>
<td>126</td>
<td>0.9%</td>
<td></td>
<td>8.5</td>
<td>0.5%</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>TRILOGY HEALTH SERVICES</td>
<td>124</td>
<td>0.8%</td>
<td></td>
<td>8.2</td>
<td>0.5%</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>SABER HEALTHCARE GROUP</td>
<td>112</td>
<td>0.8%</td>
<td></td>
<td>11.5</td>
<td>0.7%</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>SIGNATURE HEALTHCARE</td>
<td>101</td>
<td>0.7%</td>
<td></td>
<td>11.7</td>
<td>0.7%</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total in this table</td>
<td>1,557</td>
<td>10.5%</td>
<td></td>
<td>169.9</td>
<td>10.7%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All other chains</td>
<td>8,240</td>
<td>55.6%</td>
<td></td>
<td>899.8</td>
<td>56.7%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independent</td>
<td>5,013</td>
<td>33.8%</td>
<td></td>
<td>518.3</td>
<td>32.6%</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grand total</td>
<td>14,810</td>
<td>100.0%</td>
<td></td>
<td>1,588.0</td>
<td>100.0%</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

Genesis HealthCare and The Ensign Group have about the same number of SNFs, but Genesis operates in 22 states and Ensign in 13. As displayed in Figure 1, Genesis SNFs are mostly in the Northeast and Mid-Atlantic, (though with some presence in Albuquerque and Los Angeles). Ensign is geographically more concentrated in the Southwest, with most of its beds in Texas, Arizona, Colorado, Utah, and Southern California.

Figure 1. Distribution of SNFs Owned by the Two Largest SNF Chains, 2022

Note: The size of each circle is proportionate to the number of beds owned by the chain in the HRR.
Individual Owners

As presented in Table 3, of the 14,810 SNFs in the dataset, 12,097 (or 81.7%) report having owners. Of the 2,713 SNFs (18.3%) without owners, half (50.1%) report having a governing board.

For SNFs with owners, the sum of ownership shares among direct owners should exceed 0% but not 100%. However, in 14.0% of SNFs with owners, the sum of shares was outside this range. There are 10,395 SNFs with ownership shares within this range. Roughly half (49.5%) of the ownership shares of the 10,395 SNFs are owned by individuals, another half (48.1%) are owned by organizations, and the remaining few (2.4%) are unreported because of having shares less than 5%. Individuals who own SNFs directly own a quarter (25.2%) of all shares.

Breaking these down by organizational control yields two patterns. Almost all nonprofit SNFs (98.8%) and government SNFs (96.6%) are owned by organizations. In general, nonprofit and government providers cannot be owned by individuals. One-third (33.6%) of for-profit SNFs are owned by organizations and 63.5% are owned by individuals.

Table 3. Percentage of Ownership Shares by Individual vs. Organizational Owners, by SNF Control

<table>
<thead>
<tr>
<th>Control</th>
<th>Total</th>
<th>Has owners</th>
<th>Sum of shares</th>
<th>% with owners</th>
<th>% outside range</th>
<th>Individual</th>
<th>Not reported</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>All categories</td>
<td>14,810</td>
<td>12,097</td>
<td>10,407</td>
<td>81.7%</td>
<td>14.0%</td>
<td>49.5%</td>
<td>2.4%</td>
<td>48.2%</td>
</tr>
<tr>
<td>For-profit</td>
<td>9,869</td>
<td>9,476</td>
<td>8,061</td>
<td>96.0%</td>
<td>14.9%</td>
<td>63.5%</td>
<td>3.0%</td>
<td>33.6%</td>
</tr>
<tr>
<td>Nonprofit</td>
<td>4,090</td>
<td>2,109</td>
<td>1,903</td>
<td>51.6%</td>
<td>9.8%</td>
<td>0.9%</td>
<td>0.3%</td>
<td>98.8%</td>
</tr>
<tr>
<td>Government</td>
<td>851</td>
<td>512</td>
<td>443</td>
<td>60.2%</td>
<td>13.5%</td>
<td>3.4%</td>
<td>0.1%</td>
<td>96.6%</td>
</tr>
</tbody>
</table>

Note: When the sum of ownership shares of direct owners is either missing or exceeds 100%, it is considered here as outside the defined range.

Table 4 lists the twelve largest individual owners (as measured in terms of the number of SNFs owned or partially owned). Besides the number of SNFs, Table 4 also reports the sum of ownership shares and the mean ownership share across all SNFs owned by an individual. For instance, the largest owner owns part or all of 212 SNFs (209 SNFs with data on ownership shares). Their ownership shares sum to the equivalent of almost 23 SNFs, such that their ownership share averages 11.0% across all of their SNFs.
Table 4. Twelve Largest Individual Owners (In Descending Order by Number of SNFs)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Number of SNFs owned</th>
<th>Ownership shares</th>
<th>Chain with plurality of SNFs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>With ownership share data, X</td>
<td>Sum, Y</td>
</tr>
<tr>
<td>1</td>
<td>212</td>
<td>209</td>
<td>22.9</td>
</tr>
<tr>
<td>2</td>
<td>211</td>
<td>204</td>
<td>36.3</td>
</tr>
<tr>
<td>3</td>
<td>194</td>
<td>193</td>
<td>183.0</td>
</tr>
<tr>
<td>4</td>
<td>130</td>
<td>130</td>
<td>64.6</td>
</tr>
<tr>
<td>5</td>
<td>130</td>
<td>130</td>
<td>64.8</td>
</tr>
<tr>
<td>6</td>
<td>122</td>
<td>120</td>
<td>19.1</td>
</tr>
<tr>
<td>7</td>
<td>115</td>
<td>110</td>
<td>36.7</td>
</tr>
<tr>
<td>8</td>
<td>101</td>
<td>100</td>
<td>28.9</td>
</tr>
<tr>
<td>9</td>
<td>98</td>
<td>98</td>
<td>16.8</td>
</tr>
<tr>
<td>10</td>
<td>83</td>
<td>80</td>
<td>40.0</td>
</tr>
<tr>
<td>11</td>
<td>81</td>
<td>78</td>
<td>39.0</td>
</tr>
<tr>
<td>12</td>
<td>79</td>
<td>72</td>
<td>72.0</td>
</tr>
</tbody>
</table>

The mean ownership share varies substantially across individual owners. Two owners (ranked 3 and 12) have mean shares of 100% or close to it. Six owners have mean shares of one-third of less. Four (ranked 4, 5, 10, and 11) have mean shares of about half. Owners ranked 4 and 5 are in 50-50 joint ventures with each other; owners ranked 10 and 11, who have the same surname, also have 50-50 joint ventures with each other.

When one or several owners own the same set of SNFs, that set is considered a chain. For instance, owner 3 owns Life Care Centers of America, the third largest chain, and owners 4 and 5 own Providence Group, the fifth largest chain (see Table 2). However, 87.7% of the SNFs of owners 4 and 5 are assigned to Providence Group, and the remaining 12.3% (not shown) are not assigned to any chain, suggesting opportunities for updating the assignment of SNFs to chains.

Market Concentration

Across all hospital referral regions (N=306), the mean HHI is 930 and the median is 670. (All figures are weighted by the number of beds.) The 90th percentile is 1410 and the 95th percentile is 1750. Most markets for SNF services have low concentration, based on traditional HHI classifications, which designate less than 1500 as low concentration, 1500-2500 as moderate concentration, and above 2500 as high concentration. HHI does not, however, account for chains across multiple geographic markets, and, as noted, large chains are disproportionately represented in SNF ownership across multiple states. These chains may have advantages over independent facilities in their ability to more successfully brand and acquire market share and keep costs down via economies of scale in terms of back-office functions (e.g., regulatory compliance).
As shown in Figure 2, high concentration is limited to four markets (in declining order of HHI): San Luis Obispo, California; Bend, Oregon; Odessa, Texas, and Sun City, Arizona. Another twenty markets are moderately concentrated.

DISCUSSION

This report describes several useful patterns that can be gleaned from CMS’s new data released on SNF ownership. The report is intended to familiarize potential users with some of the types of analyses—such as those involving chains, individual owners, and geography—that can be performed with these data in combination with public-use files, as well as identify some of the limitations and challenges of using these data.

Our analysis focused on horizontal integration and found that most geographic markets have low levels of concentration according to traditional measures such as the HHI. We also, however, identify large chains that are disproportionately represented in SNF ownership and operate across multiple states and markets. We note that such analyses are only as good as the assignment of SNFs to affiliated entities, which we call “chains.” The data collection instrument (855A) could include a question identifying organizational owners that are ultimate owners, that is, not having any owners itself. Questions identifying other types of ownership structures, including private equity and real estate investment trusts (REITs), would also be useful in further unpacking the potential patterns of consolidation and competition among SNFs.

Future data releases could facilitate analyses related to vertical integration between SNFs and other provider types, for instance, if similar ownership data were released on all Medicare-enrolled hospitals. SNFs were designed to care for patients who no longer need inpatient hospital services but still need rehabilitation

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5 Although in principle an area of one color could represent two or more contiguous HRRs, this has not occurred except between the HRR in Utah and the HRR in neighboring Idaho and Nevada (and for the unconcentrated HRRs).
services and full-time skilled nursing care. The relationships between SNFs and hospitals is therefore an important policy area for future exploration.
APPENDIX: DATA AND METHODS

Data

Overview of the Dataset and Definitions: On September 26, 2022, CMS released three files with information on all SNF owners currently enrolled in Medicare, as noted.

The SNF-level file has enrollment data, including SNF name, physical address, NPI, and (for merging) CMS Certification Number (CCN). In the SNF-owner-level file, each of SNF’s “owners” is defined by a “role” variable. For the purposes of this report, the more prominent roles are direct owner, indirect owner, operational/managerial control, officer, and director. Consistent with the standard usage, this report uses “owner” to mean only the first two roles. Unlike a direct owner, there is at least one subsidiary between the provider and an indirect owner. Owners whose ownership shares are less than 5% are not reported.

An owner-type variable distinguishes between individuals and organizations. The first three roles (direct owner, indirect owner, operational/managerial control) can be either type; the other two roles (officer and director) pertain to individuals only.

For each direct and indirect owner, the file reports the share of the provider owned by that owner. Ownership shares of direct owners should not sum to more than 100%. For instance, if an organization owns 50% of a provider and an individual owns 46%, this indicates that there is another owner (or set of owners) that own the remaining 4% but do not appear in the dataset, due to the 5% threshold on ownership share for reporting.

Ownership shares of indirect owners, however, can sum to more than 100%. For example, suppose a provider is 100% owned by organization A, which is 100% owned by organization B, which is 100% owned by organization C. Organization A would be a direct owner and the organizations B and C would be indirect owners. The shares of indirect owners would sum to 200%. Note that the ultimate owner—the owner that is not a subsidiary of another owner—is not identified in PECOS. (As used here, an “ultimate owner” can have a small share of total ownership.) On an organizational chart, the ultimate owner is typically displayed at the top. Individual owners are necessarily ultimate owners, but ultimate owners that are organizations cannot be identified as such.

As noted in the Data Guidance, CMS uses “provider” in two senses. For the purpose of ownership, a provider represents a tax identification number; for the purpose of certification, a provider represents a CMS certification number (CCN). We use “facility” in the latter sense.

The all-SNF file has 14,864 observations, each representing a facility. Each CCN uniquely identifies an observation. Providers report their TIN when submitting forms to PECOS. Rather than make public these TINs, CMS has uniquely assigned to each TIN an associate ID, which is in this file. Note that there may be multiple CCNs (i.e., facilities) with the same associate ID; however, the vast majority of SNFs (82.4%) have single-SNF associate IDs. About 8.3% have associate IDs with 2 – 10 SNFs, and the remaining 9.3% have IDs with more than ten SNFs.

Chains: Knowing how providers are organized into chains can be helpful for both program integrity issues and assessments of market power. CMS defines these concepts as follows:

- **Chain provider** – A group of two or more providers under common ownership or control.
- **Common control** – Exists when an individual, a group of individuals, or an organization has the power, directly or indirectly, to significantly influence or direct the actions or policies of the group of suppliers or eligible providers.
• **Common ownership** – Exists when an individual, a group of individuals, or an organization possesses significant equity in the group of suppliers or eligible providers.

To construct chains, an analyst would ideally have data on the ultimate owners of each provider as well as the owner of the real estate (that is, the landlord of the facility). The available data would also include who manages the facility. The 855A form has data on management but not on ultimate owner or the landlord.

The all-SNF file, however, has the variable “affiliated entity,” which is constructed by CMS using network analysis. About two-thirds of SNFs are assigned to groups of SNFs called “affiliated entities.” This assignment process involves a hierarchy. First, SNFs reporting at least one owner are assigned to an affiliated entity based on their direct and indirect owners. Next, SNFs reporting a governing board (but no owner) are assigned to an affiliated entity based on individuals in the roles of “officer” or “director.” Some of the remaining SNFs, which report another entity exercising managerial control, are assigned to affiliated entities based on that.”** For simplicity of discussion, we consider all affiliated entities (including those owned only by individuals) to be “chains,” although invariably there are gray areas.

**Other Data:** For this report, the all-SNF file was merged with two other Public Use Files (PUFs) CMS files: the Care Compare files and Medicare Cost Reports.†† Care Compare provides information on number of beds, Medicaid- and Medicare-certification, and profit status (i.e., for-profit, non-profit, government).‡‡ SNF cost reports report urban or rural location.

**Limitations:** In addition to the limitations mentioned above, there is an issue of consistency across variables, which takes at least two forms: First, the ownership shares of a SNF’s direct owners sometimes sum to more than 100%.

Second, roughly speaking, each provider should have at least one owner or have a governing board. More precisely, when we exclude SNFs that are for-profit, are government owned, or a partnership and also exclude those that report a governing board, 9.3% remain (1,375/14,810). One possible explanation is that each of the owners has a share less than 5%, which would imply more than 20 owners. However, almost no SNFs (0.5%) report owners whose shares sum to less than 25%. Arguably, about 9% of SNFs are nonprofits but are not reporting either owners or a governing board.

**Methodology**

**Individuals who own SNFs and their ownership shares:** Although PECOS does not identify ultimate owners, all individual owners are ultimate owners, because individuals cannot be owned by other individuals or by organizations. We leverage this fact to calculate the percentage of SNFs owned by individuals.

Consider hypothetical provider X reporting three direct owners: one individual with 25% ownership share and two organizations with 35% and 40% shares. Each of the two organizational owners are owned by another entity. The 35% organization is owned by an individual (35%), and the 40% organization is owned by an organization (40%). Therefore, individuals own 60% of provider X (25%+35%). There is no double counting as all individual owners are ultimate owners.

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** (See the SNF Data Guidance (pp. 6-7) for more detail.)
†† Prior to merging, the CCN in the all-SNF file required modification, the most important modification is inserting a leading 0 and a minor one is dropping suffixes. The vast majority of observations in the all-SNF file merged.
‡‡ The percentage of SNFs that merge depends, in part, on the currency of the cost report. Our data included only reports for fiscal years ending in 2019.
An additional complexity is that owners with shares below 5% need not be reported. In such cases, we do not know whether owners are individuals or organizations. However, their share can be calculated as 100% minus the sum of the shares of direct owners. The share of organizational owners is, therefore, 100% minus the sum of individual shares (direct + indirect) and minus the sum of unreported shares (direct only).[^1] If 3% of ownership shares were unreported, 37% of provider X would be owned by organizations (that is, 100% - 60% - 3%).

[^1]: Even this may be an overestimate because some unreported direct owners may be owned by a reported indirect owner.
REFERENCES


7 Centers for Medicare & Medicaid Services Data; Skilled Nursing Facility All Owners, https://data.cms.gov/provider-characteristics/hospitals-and-other-facilities/skilled-nursing-facility-all-owners. The Skilled Nursing Facility (SNF) All Owners dataset provides information on all owners of SNFs currently enrolled in Medicare. This data includes ownership information such as ownership name, ownership type, ownership address and ownership effective date.

8 https://data.dartmouthatlas.org/supplemental/#crosswalks, downloaded on 8-30-22. HRRs are defined in terms of zip codes, which are reported in the SNF file.

9 https://www.justice.gov/atr/herfindahl-hirschman-index

