Comparative Health System Performance Initiative

Agency for Healthcare Research and Quality

Nursing Homes Affiliated with U.S. Health Systems, 2018

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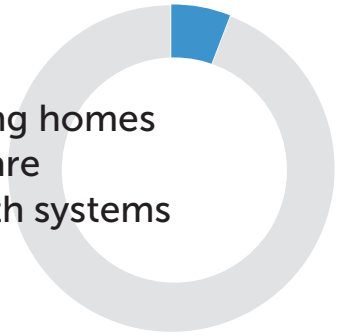
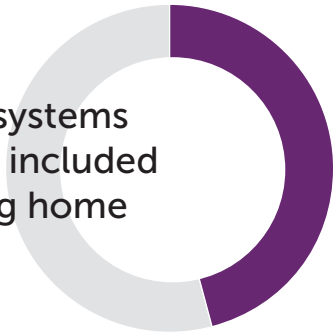
Nursing home and system affiliations



6% of nursing homes (N=15,518) are affiliated with systems



46% of systems (N=633) included a nursing home

Among systems with nursing homes, 71% included

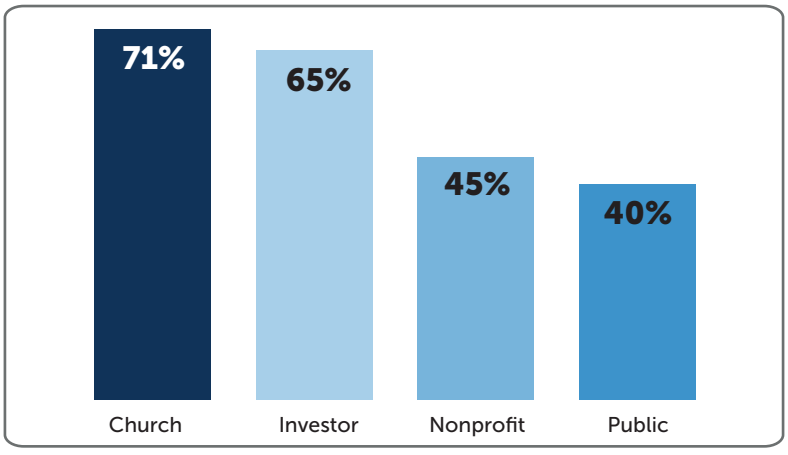
1 or 2

nursing homes.

The largest 5% of systems included on average

9 nursing homes.

Church operated systems are more likely to include nursing homes.



This analysis is based on AHRQ's Compendium of U.S. Health Systems, 2018. Developed as part of the Comparative Health System Performance (CHSP) Initiative, the Compendium is a resource for data and research on health systems. For the purposes of the Compendium, **health systems include at least one hospital and at least one group of physicians that provide comprehensive care (including primary and specialty care) and are connected with each other through common ownership or joint management.** The largest systems in the infographic are those with the largest total number of beds across the system. The CHSP Initiative includes a robust set of research activities that draw on several other definitions of health systems. For more information about these definitions, visit: https://www.ahrq.gov/chsp/chsp-reports/resources-for-understanding-health-systems/defining-health-systems.html.

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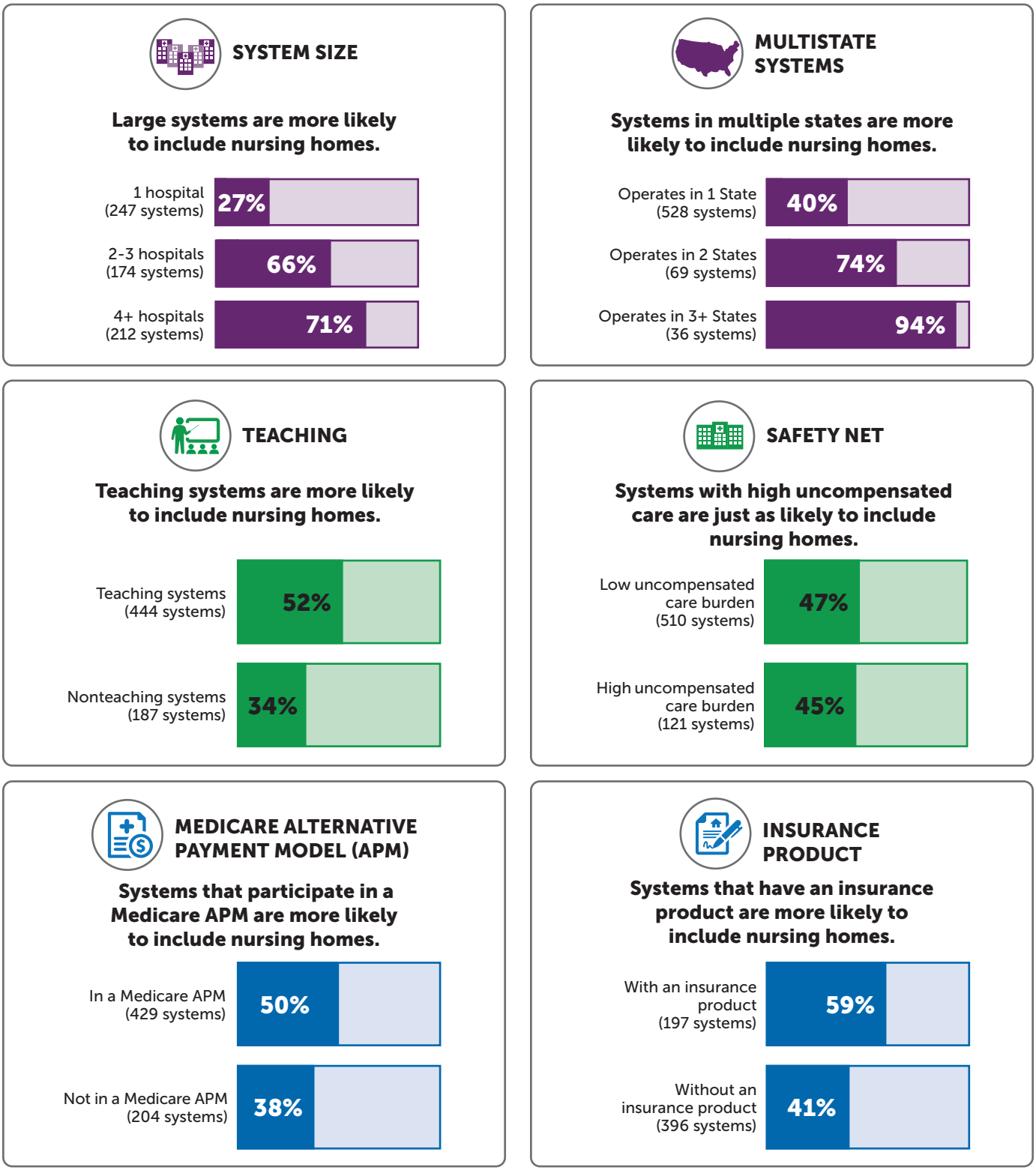
Percentage of systems with system-affiliated nursing homes, by system type



The shaded portions are systems that include a nursing home. There are 637 systems in the Compendium of U.S. Health Systems, 2018. Four systems are missing results for the nursing homes variable. Two additional systems are missing results for the safety net and teaching system variables; a total of 40 systems are missing information for the insurance product variable. These systems are excluded from relevant calculations. The relationships between system type and including a nursing home do not adjust for system size or any other system characteristics. For example, large systems and multistate systems might be more likely to include a nursing home because they operate in more markets where they could have a system-affiliated nursing home.

Percentage of systems with system-affiliated nursing homes

System type	Number of systems with a nursing home	Total number of systems	Percentage of systems
Ownership			
Public ownership	50	126	40%
Religious ownership	37	52	71%
Nonprofit ownership	196	438	45%
Investor ownership	11	17	65%
System size			
1 hospital	66	247	27%
2-3 hospitals	114	174	66%
4+ hospitals	150	212	71%
Multistate systems			
Operates in 1 State	209	528	40%
Operates in 2 States	51	69	74%
Operates in 3+ States	34	36	94%
Teaching			
Teaching	230	444	52%
Nonteaching	64	187	34%
Safety net			
Low uncompensated care burden	239	510	47%
High uncompensated care burden	55	121	45%
Without a high DSH patient percentage hospital	177	425	42%
With a high DSH patient percentage hospital	117	206	57%
Medicare Alternative Payment Model			
Participates in a Medicare APM	216	429	50%
Does not participate in a Medicare APM	78	204	38%
Insurance product			
Offers insurance product	116	197	59%
Does not offer insurance product	162	396	41%

METHODS

This analysis is based on the Compendium of U.S. Health Systems, 2018, which presents a list of U.S. health systems. To operationalize the definition of health systems described above, we identified systems using the following data sources:

- American Hospital Association (AHA) annual survey of hospitals data, 2017
- IQVIA OneKey, 2018

In addition to being identified in one of the data sources, systems had to meet these three criteria to be included in the final list: have at least one non-Federal general acute care hospital, have 50 or more total physicians, and have 10 or more primary care physicians.

We used the 2018 IQVIA OneKey database to construct the measure of whether a system included any nursing homes. According to the IQVIA OneKey data, a nursing home (cot_id = 94) is defined as "an extended-care facility that provides medical, nursing, or custodial care to people who cannot care for themselves but who do not require hospitalization." We did not find 4 of the 637 systems in the OneKey data, and we are therefore missing data on whether those systems include a nursing home. We used systems with nonmissing nursing home data to report the percentage of systems that offer an insurance product.

Most health system types were calculated using data from the Centers for Medicare & Medicaid Services' (CMS) Healthcare Cost Report Information System (HCRIS) and reflect all U.S. non-Federal general acute care hospitals. Other system types are based on data from the Alternative Payment Model Management System from CMS or based on AHA data. Health system types are defined as follows:

- Ownership: Systems are categorized as primarily public, nonprofit, church operated, or investor owned based on the majority of non-Federal general acute care hospital beds in the system. We compared HCRIS data on investor-owned status with AHA data on investor-owned status. For cases in which the two data sources disagreed, we considered the system to be not investor owned. For systems with missing HCRIS ownership data, we filled in information from the AHA annual survey.
- Teaching: Systems are categorized as nonteaching or teaching based on their resident-to-bed ratio across systems' non-Federal general acute care hospitals. Systems with no residents are considered nonteaching systems, and systems with a resident-to-bed ratio greater than zero were considered teaching systems.
- Safety net systems: Systems are categorized as serving the safety net using two measures: (1) systems with a high systemwide uncompensated care burden calculated as the ratio of total uncompensated care to total operating expense across systems' non-Federal general acute care hospitals and (2) systems with at least one hospital with a high DSH patient percentage. In both cases, "high" is defined as the top quintile among U.S. health systems.
- Medicare Alternative Payment Models (APMs): Systems are categorized as participating in a Medicare APM if one or more system-affiliated physicians are involved in a Medicare APM. We used data from CMS's APM Management System from 2018 to identify health systems and physicians participating in Medicare APMs.
- Insurance product: Systems are categorized as offering an insurance plan if any of a system's non-Federal general acute care hospitals reported in the AHA data that the hospital or its system owns or jointly owns a health plan, or if the hospital or its system has a joint venture or significant partnership with an insurer.

CAVEATS AND LIMITATIONS

Because the list largely relies on the definitions of systems in the two data sources and systems' members specified in the data, systems may be included in this analysis that may not precisely align with the CHSP definition of a system. Similarly, we approximate delivery of comprehensive care using the hospital and physician type and count information, which may lead to inclusion of systems that do not provide comprehensive care in the manner intended by the definition. Further, we rely on hospital reporting in the HCRIS data for the system types and attributes, for which information about some hospitals is missing.

For more information about the methodology used to construct and analyze the national list of health systems and a more detailed summary of caveats and limitations, visit: https://www.ahrq.gov/chsp/data-resources/compendium/technical-documentation.html.

About the Comparative Health System Performance Initiative

The Agency for Healthcare Research and Quality (AHRQ) created the Comparative Health System Performance (CHSP) Initiative to study the characteristics of high-performing health systems and to understand how health systems use evidence-based practices, including patient-centered outcomes research (PCOR). The effective adoption and use of PCOR evidence holds promise as a way to improve clinical outcomes and reduce costs. However, little is known about the characteristics of high-performing health systems and the role of PCOR evidence in health system performance.

The CHSP Initiative aims to address these knowledge gaps and accelerate the diffusion of PCOR evidence among health systems. Specifically, the objectives of the CHSP Initiative are to:

- Classify and characterize types of health systems and compare their performance on clinical and cost outcomes.
- Identify characteristics of high-performing health systems.
- Evaluate the role of PCOR in health system performance.
- Promote the diffusion of PCOR evidence across health systems nationally.

The Compendium of U.S. Health Systems, which presents a list of health systems in the United States, is a step toward classifying and characterizing health systems and is a data resource to help advance research on health systems. The Compendium is intended to be a resource for researchers, policymakers, health system leaders, and others who seek to study health systems and will be updated over the course of the 5-year initiative to reflect the evolving health care delivery environment.

For more information about the CHSP initiative, visit https://www.ahrq.gov/chsp/index.html.

Suggested Citation

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