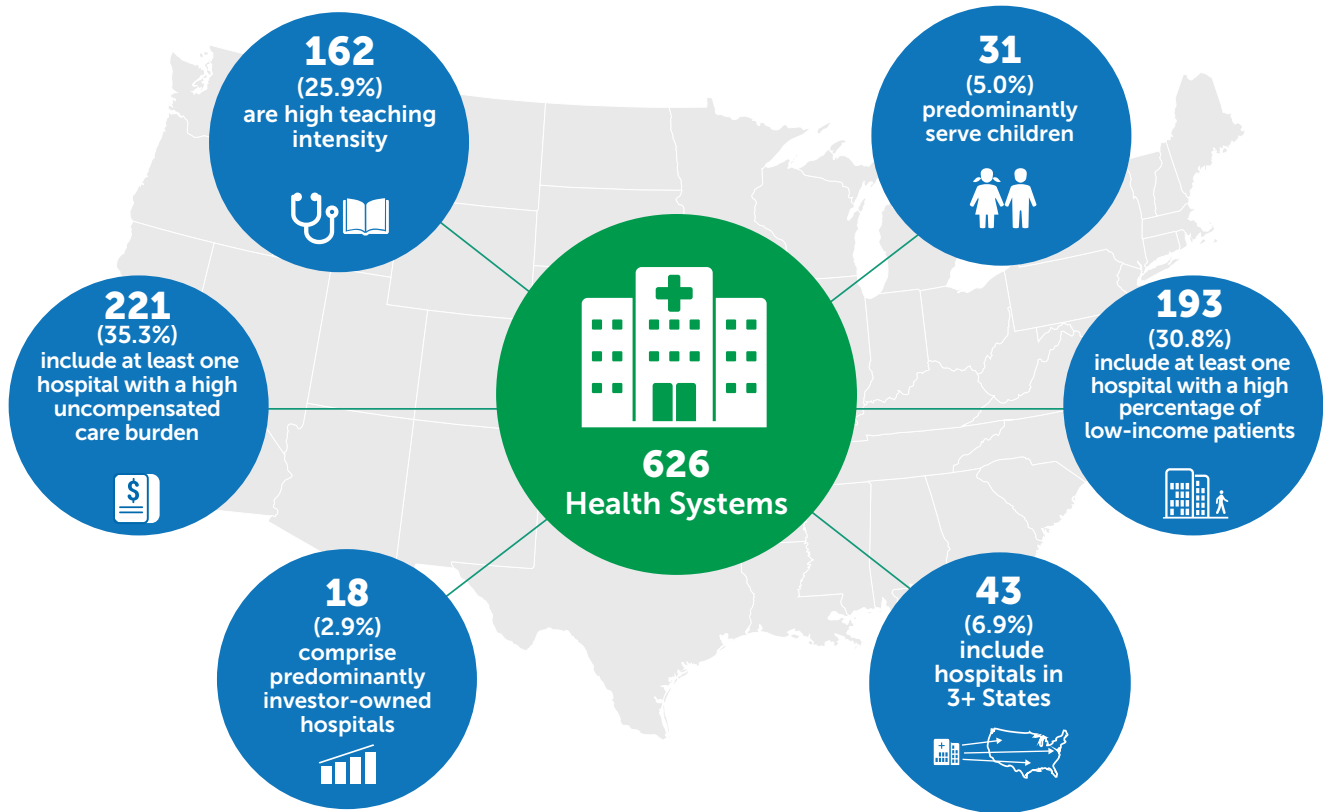


# U.S. Health System Characteristics, 2016

**By the end of 2016, there were 626 health systems\* in the United States.**



## Health systems in the U.S. health care safety net

Systems account for **88.4%** of total discharges from all U.S. hospitals with high uncompensated care burdens and **88.3%** from hospitals with high percentages of low-income patients.

Systems include **63.4%** of all U.S. hospitals with high uncompensated care burdens



Systems include **74.8%** of all U.S. hospitals with high percentages of low-income patient populations



Hospitals with high percentages of low-income patient populations represent those with a high disproportionate share hospital patient percentage.

\*This analysis is based on AHRQ's Compendium of U.S. Health Systems, 2016. 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 who provide comprehensive care (including primary and specialty care) and are connected with each other through common ownership or joint management.** 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, see: <https://www.ahrq.gov/chsp/chsp-reports/resources-for-understanding-health-systems/defining-health-systems.html>.

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## METHODS

This analysis is based on the Compendium of U.S. Health Systems, 2016, which presents a list of U.S. health systems that meet the Compendium's definition described above. 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, 2015
- SK&A integrated health system database, 2016
- QuintilesIMS™ Healthcare Organization Services (OneKey Organizations [HCOS]), 2016

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.

Total physician and primary care physician counts come from HCOS. Systems' hospital counts and hospital locations come from combining the AHA, HCOS, and SK&A data. Health system attributes, such as number of beds and discharges, were calculated from Centers for Medicare & Medicaid Services' Healthcare Cost Report Information System (HCRIS) and reflect all U.S. non-Federal general acute care hospitals.

Health system types were calculated using data from HCRIS and reflect all U.S. non-Federal general acute care hospitals. Health system types are defined as follows:

- High teaching intensity: Systemwide teaching intensity is defined as a resident-to-bed ratio greater than or equal to 0.25 across non-Federal general acute care system hospitals.
- Predominantly serving children: Systems are categorized as predominantly delivering care at children's hospitals if a majority of non-Federal general acute care hospital beds in the system are in children's hospitals.
- Predominantly investor owned: Systems are categorized as predominantly investor owned if a majority of non-Federal general acute care hospital beds in the system are in hospitals.
- System includes at least one hospital with a high uncompensated care burden: Systems are categorized as having at least one hospital with a high uncompensated care burden if they have a non-Federal

general acute care hospital in the top quintile of uncompensated care burden (the ratio of total uncompensated care to total operating expenses).

- System includes at least one hospital with a high disproportionate share (DSH) patient percentage: System includes at least one hospital with a high DSH patient percentage if they have a non-Federal general acute care system hospital in the top quintile of DSH patient percentage among hospitals paid under the Inpatient Prospective Payment System (IPPS). DSH patient percentage is calculated as (Medicare Social Security Insurance days/total Medicare days) plus (Medicaid, non-Medicare days/total days).

## CAVEATS AND LIMITATIONS

Because the list largely relies on the definitions of systems in the three data sources and systems' members specified in the data, systems may be included in this analysis that may not precisely align with the working definition. 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 that is 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.

In addition, we identified discrepancies in systems' attributes reported in the three data sources, including fairly substantial discrepancies in counts of physicians for some systems appearing in HCOS, SK&A, and AHA. To help address this issue, we present counts of physicians from HCOS, which includes hospital staff physicians and most often had the highest count of physicians. These counts of physicians should be interpreted with the understanding that estimates vary across data sources depending on the data collection methods and types of physicians included. Finally, the list reflects health systems in the United States at the end of 2016; however, there is a lag in the data at times, as a result of updating changes to systems, such as mergers, acquisitions, and name changes. These cases were updated as they were identified throughout the analysis.

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

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## 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, see <https://www.ahrq.gov/chsp/>.