Comparative Health System Performance Initiative

Agency for Healthcare Research and Quality

Snapshot of U.S. Health Systems, 2016

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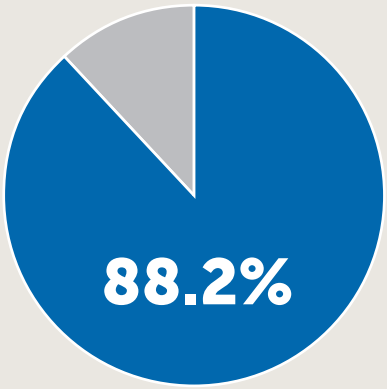
CHSP Data Brief, No. 1 September 2017

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

U.S. hospitals and physicians in health systems

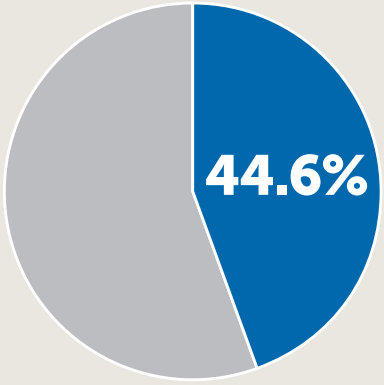
Percentage of U.S. hospital beds in systems



69.7% of U.S. hospitals are in health systems

91.6% of U.S. hospital discharges are from system hospitals

Percentage of U.S. physicians in health systems



42.7% of U.S. primary care physicians are in health systems

Note: The hospital figures represent all non-Federal general acute care hospitals in the United States.

*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 that 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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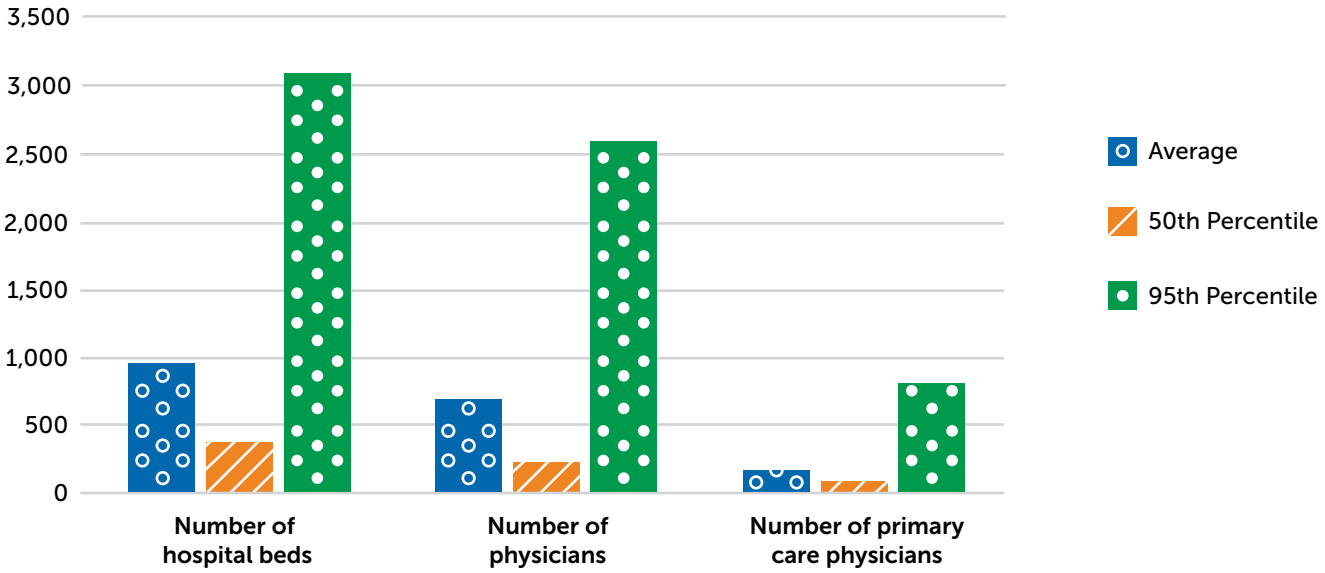
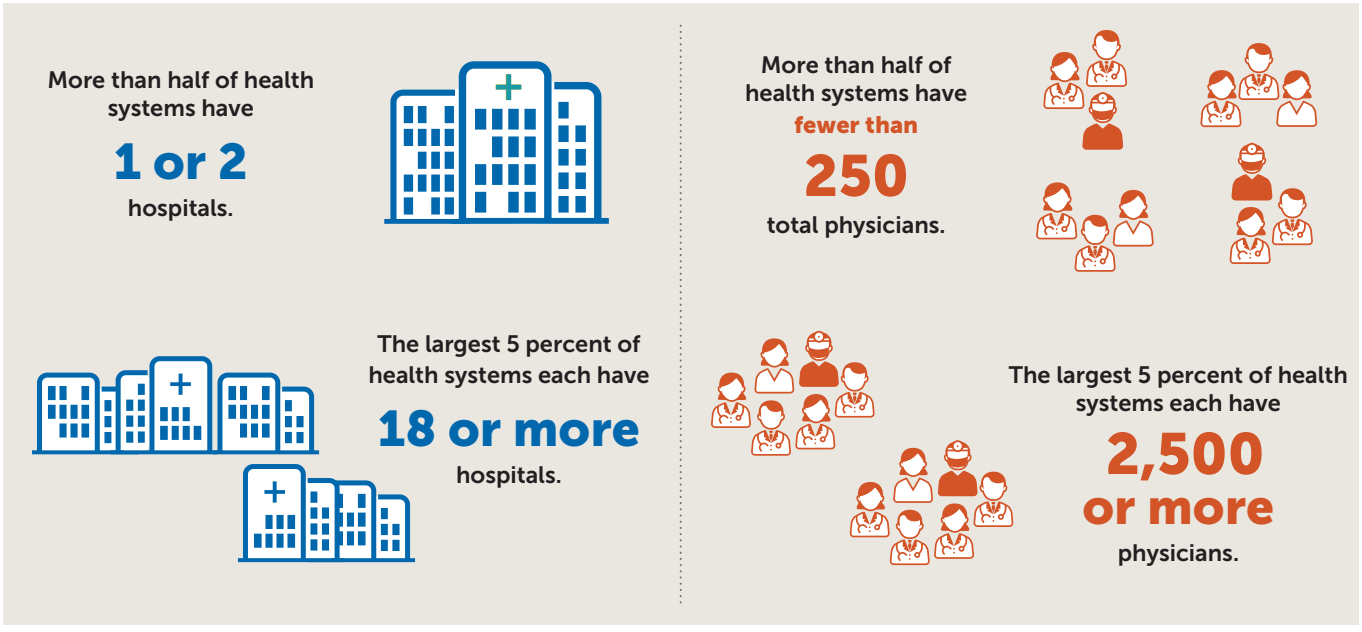
Variation in number of hospital beds and physicians among health systems



Health systems in the United States vary notably in size. Overall, there are a large number of small health systems. However, a very small number of systems include many more hospitals and physicians than other systems.

- The number of hospital beds in systems is 965 on average, ranging from 24 to 34,532 across systems. The 10 largest U.S. health systems (based on the number of hospital beds) account for 24.5 percent of beds in systems.
- The number of physicians in systems is 691 on average, ranging from 50 to 20,300 across systems. The 10 largest U.S. health systems (based on the number of physicians) account for 21.0 percent of the physicians in systems.
- The largest 5 percent of U.S. health systems, based on the number of hospitals, account for 42.8 percent of the hospitals in systems.



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.

The number of U.S. physicians is the total count of unique medical doctors (MDs) and doctors of osteopathy (DOs) in the HCOS data. The number of U.S. primary care physicians is the count of unique MDs and DOs in the HCOS data in the following specialties: adolescent medicine, family medicine, geriatrics, general practice, internal medicine, or pediatrics. The total numbers of U.S. physicians in systems (for all specialties combined and primary care) are the counts of unique MDs and DOs that HCOS identified as having a close affiliation with the 626 U.S. health systems. The specific system-level counts of physicians are the numbers of MDs and DOs with a close affiliation with the system but may include some duplicate physicians closely affiliated with more than one system. 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.

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/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, see https://www.ahrq.gov/chsp/index.html.

Suggested Citation

Heeringa J, Jones DJ, Machta RM, Furukawa MF, Miller D, Rich EC. Snapshot of U.S. Health Systems, 2016. CHSP Data Brief #1. September 2017. Agency for Healthcare Research and Quality, Rockville, MD. https://www.ahrq.gov/sites/default/files/wysiwyg/snapshot-of-us-health-systems-2016.pdf

Acknowledgments

The authors would like to acknowledge the contributions of Linda Bergofsky (AHRQ), Jing Guo (AHRQ), Jan DeLaMare (AHRQ), Zeynal Karaca (AHRQ), Herb Wong (AHRQ), Laura Sarnoski (Mathematica), Linda Molinari (Mathematica), Ken Peckham (Mathematica), and Charles Bush (Mathematica).