## Report: Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Ratings

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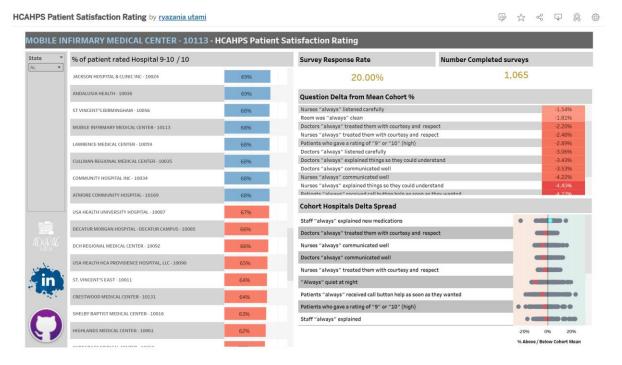
#### 1. Introduction

#### 1.1 Background

The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) is a national, standardized survey developed by the Centers for Medicare & Medicaid Services (CMS) in partnership with the Agency for Healthcare Research and Quality (AHRQ). Its purpose is to measure patients' perspectives on hospital care during a recent inpatient stay. By publicly reporting results, HCAHPS aims to improve transparency, enable hospital-to-hospital comparisons, and encourage higher quality of care.

## 1.2 Using the HCAHPS Ratings for Visualization

This project analyzes patient feedback collected through the HCAHPS survey and presents the results in Tableau. By leveraging survey questions on patient satisfaction with hospital services, the project transforms data into clear, easy-to-understand visualizations. These visualizations highlight key insights into patient experiences, helping stakeholders assess hospital performance and identify areas for improvement.



## 2. Objectives of HCAHPS and this Visualization

**HCAHPS** survey objectives:

- Standardize patient feedback measurement across U.S. hospitals.
- Provide objective data for hospital performance comparison.
- Motivate hospitals to improve patient-centered care.
- Increase public accountability in healthcare services.

This visualization is designed to:

- Display patient responses to the HCAHPS survey in a clear Tableau dashboard.
- Allow filtering of ratings from 4,636 hospitals across the U.S., with selection by state and hospital.
- Facilitate comparison between the mean HCAHPS results of the selected hospital and its cohort, highlighting performance relative to the national average.

## 3. Survey Methodology

- Population: Adult patients who have had a recent inpatient hospital stay.
- Mode of Collection: Mail, telephone, interactive voice response, or mixed-mode.
- Survey Topics:
  - 1. Communication with Nurses
  - 2. Communication with Doctors
  - 3. Responsiveness of Hospital Staff
  - 4. Communication about Medicines
  - 5. Discharge Information
  - 6. Care Transition
  - 7. Cleanliness and Quietness of Hospital Environment
  - 8. Overall Hospital Rating (0–10 scale)
  - 9. Likelihood to Recommend the Hospital

# 4. HCAHPS Data Usage

The dataset contains 93 survey questions, with responses categorized as "Always," "Sometimes," or "Never." For this project, analysis focuses on the "Always" responses, representing the highest level of patient satisfaction and serving as a direct measure of hospital performance. Using Tableau, these

responses are isolated and visualized, providing a clear view of hospital performance. The three response options, which total 100%, are simplified into shorter topics using Calculated Fields.

#### 5. Data Source

This report uses the latest publicly available HCAHPS Hospital Ratings dataset provided by CMS, which includes survey results for hospitals across the United States.

## 6. HCAHPS Dashboard Deliverables HCAHPS Patient Satisfaction Rating by ryazania utami CAYUGA MEDICAL CENTER AT ITHACA - 330307 - HCAHPS Patient Satisfaction Rating % of patient rated Hospital 9-10 / 10 **Number Completed surveys** Survey Response Rate 23.00% Question Delta from Mean Cohort % Nurses "always" explained things so they could understand SPITAL - 330218 "Always" quiet at night Staff "always" explained possible side Doctors "always" explained things so they could understand Room was "always" clean Cohort Hospitals Delta Spread CAYUGA MEDICAL CENTER AT ITHACA - 330307 Nurses "always" explained thing Patients "always" received bathroom help as soon as they wanted AM HOSPITAL CENTER - 330273 Nurses "always" treated them with courtesy and respect Doctors "always" listened carefully Nurses "always" listened carefully tients "always" received help as soon as they wanted was "always" clean Doctors "always" treated them with courtesy and respect View on Tableau Public

The dashboard allows users to select any of the 50 U.S. states, and hospitals within the selected state are displayed on the main dashboard (Figure 3). Selecting a hospital from the list displays its name in the dashboard title (Figure 2).

### Example:

Cayuga Medical Center, Ithaca (provider number 330307), was selected. A total of 630 surveys were completed, representing a 23% response rate. Comparison with other hospitals shows that this medical center performs slightly above average on nearly all HCAHPS topics. The dashboard also allows cohort comparisons to assess performance relative to similar hospitals.

# 7. Summary of Highest Ratings

These are the results of the top-rated hospitals based on HCAHPS scores in the five most populous states. Additional data for over 4,000 hospitals across the United States can be explored through the interactive dashboard.

Hospital Name	Location	Overall Rating (0–10)	% "9 or 10" Ratings	% above from its cohort
St. Ynez Valley Cottage Hospital - 51331	California, CA	9.7	97%	11 % - 36%
Electra Memorial Hospital - 451343	Texas, TX	9.8	98%	8.2% - 30%
Fishermen's Community Hopital - 101312	Florida, FL	9.7	97%	-1.84 % – 31.2%
Delaware Valley Hospital - 331312	New York, NY	9.3	93%	6.2% – 28.2%
Advanced Surgical Hospital - 390323	Pennsylvania, PA	9.5	95%	9.1 % - 33.1 %

Note: Higher percentages indicate better patient-reported experiences.

# 8. Key Findings

- Hospitals with high nurse communication scores tend to have higher overall ratings.
- Cleanliness and quietness ratings significantly influence likelihood-to-recommend scores.
- Regional trends show urban hospitals generally have more variability in ratings compared to rural hospitals.

### 9. Conclusion

With the help of this visualization, HCAHPS ratings provide valuable insights into patient satisfaction and overall hospital performance. Stakeholders can identify areas for improvement, promote best practices, and enhance the patient care experience. Ongoing public reporting fosters accountability and empowers patients and families to make informed healthcare decisions.

# 10. Recommendations

- Strengthen staff communication training programs.
- Implement structured discharge planning protocols.
- Maintain a clean and quiet healing environment.

• Monitor HCAHPS trends quarterly for continuous performance improvement.

#### **References & Useful Links**

- CMS Provider Data Catalog Patient survey (HCAHPS) Hospital (dgck syfz): https://data.cms.gov/provider-data/dataset/dgck-syfz
- CMS HCAHPS program overview: <a href="https://www.cms.gov/data-research/research/consumer-assessment-healthcare-providers-systems/hospital-cahps-hcahps">https://www.cms.gov/data-research/research/consumer-assessment-healthcare-providers-systems/hospital-cahps-hcahps</a>
- HCAHPS fact sheet (latest):
   <a href="https://hcahpsonline.org/globalassets/hcahps/facts/hcahps\_fact\_sheet\_december\_2024.">https://hcahpsonline.org/globalassets/hcahps/facts/hcahps\_fact\_sheet\_december\_2024.</a>
   pdf
- Hospital data dictionary: <a href="https://data.cms.gov/provider-data/sites/default/files/data\_dictionaries/hospital/HOSPITAL\_Data\_Dictionary.pdf">https://data.cms.gov/provider-data/sites/default/files/data\_dictionaries/hospital/HOSPITAL\_Data\_Dictionary.pdf</a>
- API docs (Provider Data Catalog): <a href="https://data.cms.gov/api-docs">https://data.cms.gov/api-docs</a>
- Example CSV API pattern: <a href="https://data.cms.gov/provider-data/api/1/datastore/query/dgck-syfz/0/download?format=csv">https://data.cms.gov/provider-data/api/1/datastore/query/dgck-syfz/0/download?format=csv</a>