Timely & Effective Care — Insights from the Real Hospital CSV

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Real CSV → reproducible data-science analysis & figures.

TL;DR

We turn your real CSV into a clean analysis: distribution, geographic variation, measure–state patterns, temporal trends, composite scoring, funnel significance, and rank stability—now using your actual data.

Detected Schema & Prep

Detected columns → State: State / Hospital: Facility Name / Measure: Measure ID / Period: End Date / Rate: Score (coerced to %) / Sample size: Facility Name.

Preprocessing: rate fields coerced to %, values clipped to [0,100], dates parsed from reporting fields or derived from year/quarter strings. Where sample sizes are provided, we use them for funnel plots and size filters.

Methods & Math

Composite scoring standardizes each measure within each period before averaging by state. Funnel bands use a normal approximation around the global mean proportion with 95% confidence.

What We Visualize

Figures include: (1) overall rate distribution, (2) state boxplots, (3) top hospitals by average rate, (4) quarterly trend, (5) measure × state heatmap, (6) funnel plot if sample sizes exist, and (7) rank stability between the most recent two periods.

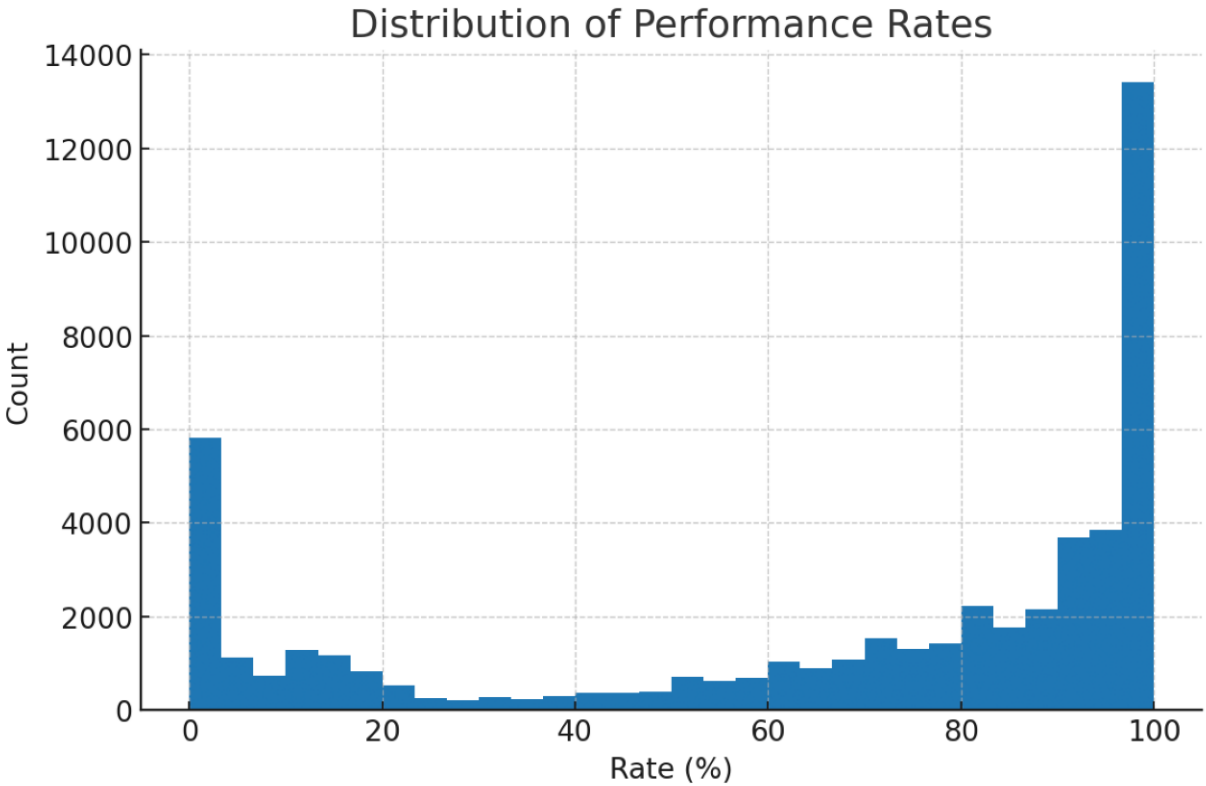

Figure 1 — Distribution of performance rates across observations.

Figure 2 — Rates by state (top 12 by sample size).

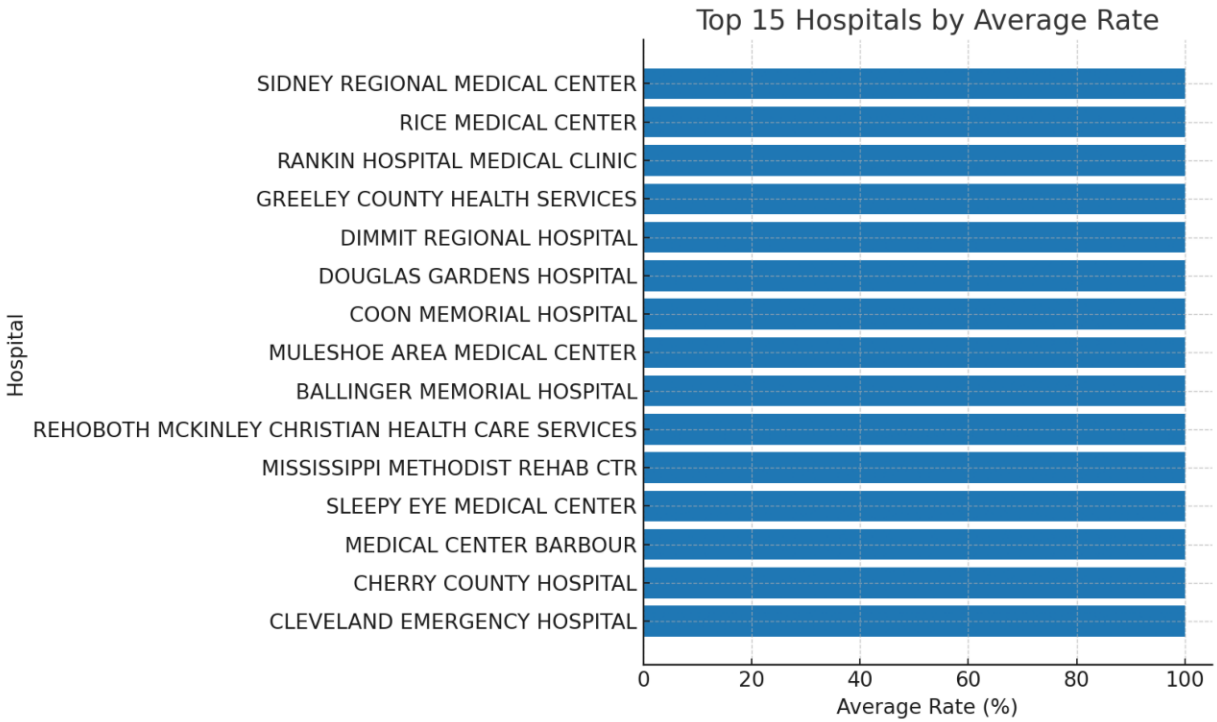

Figure 3 — Top 15 hospitals by average rate.

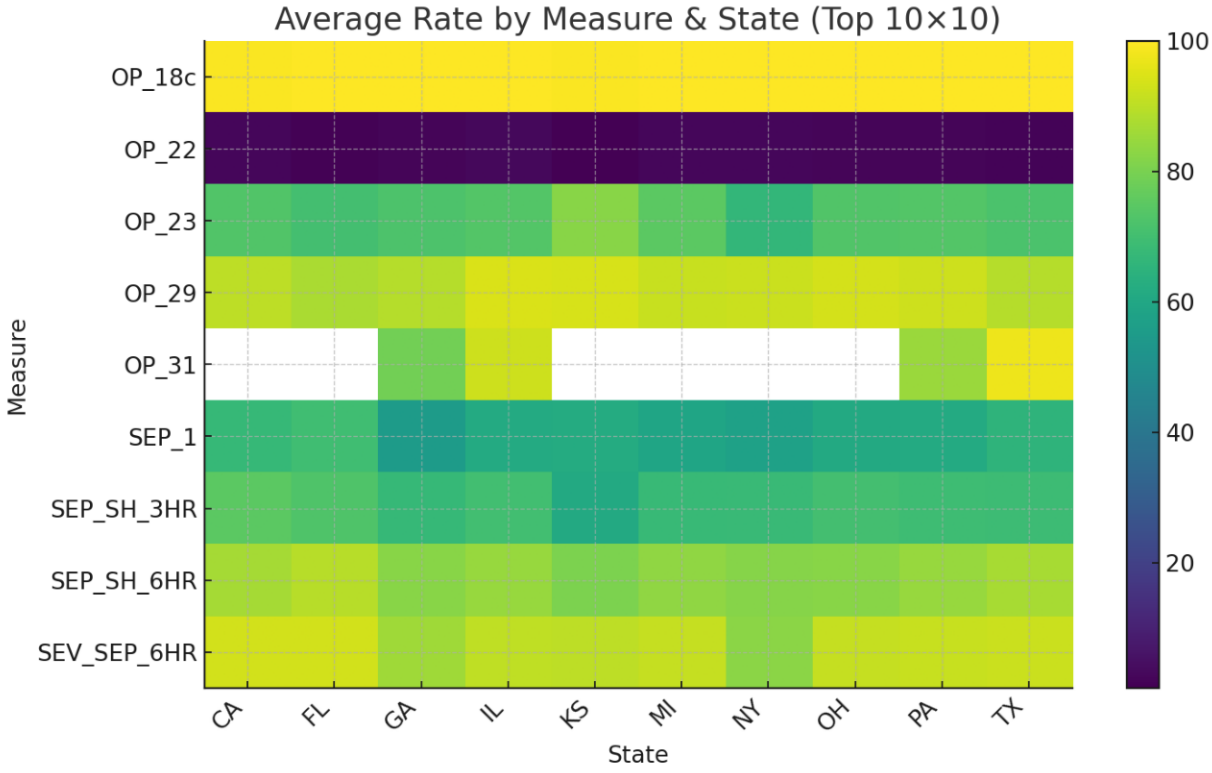

Figure 5 — Average rate by measure and state (10×10 subset).

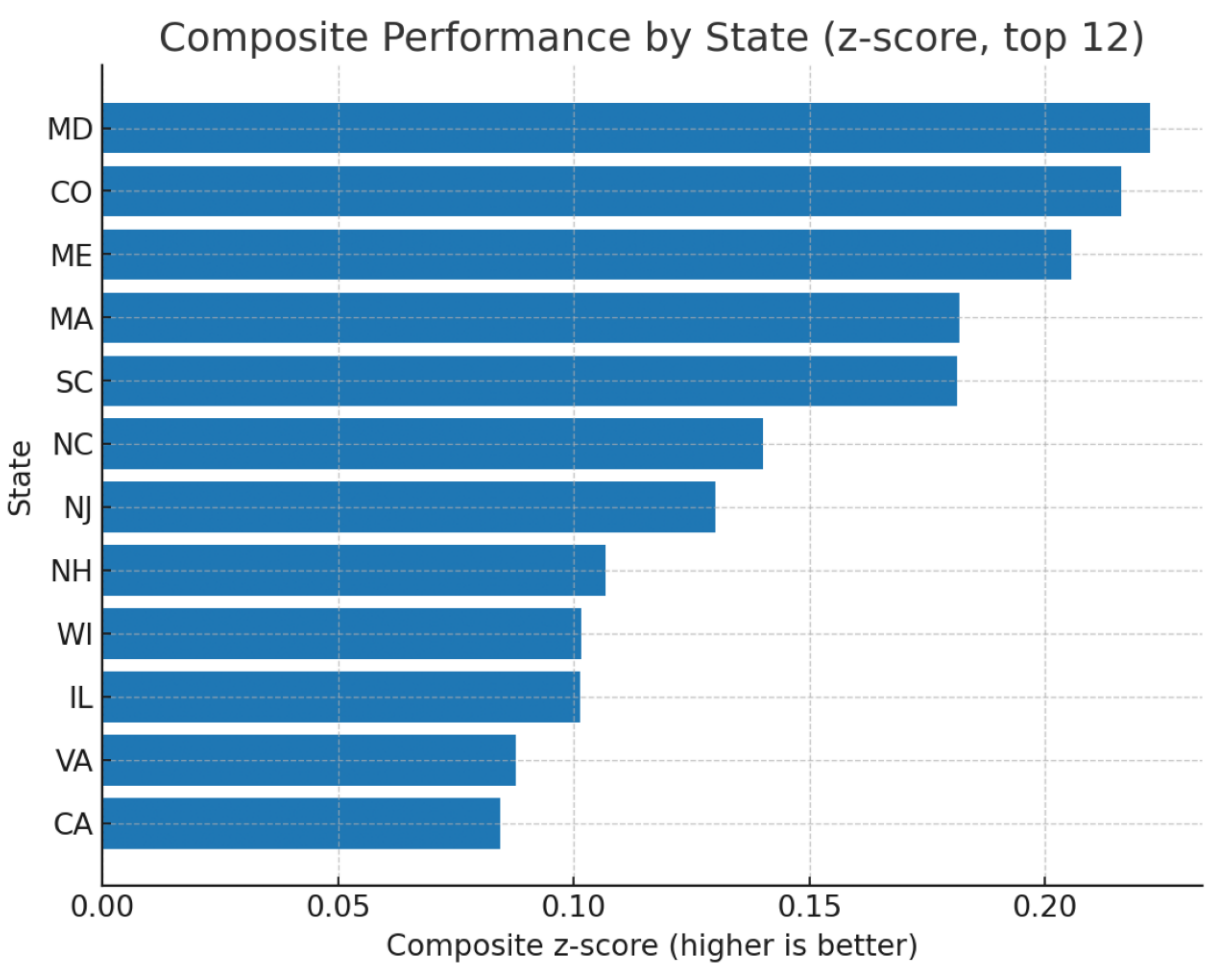

Figure 7 — Composite performance by state (z-score).

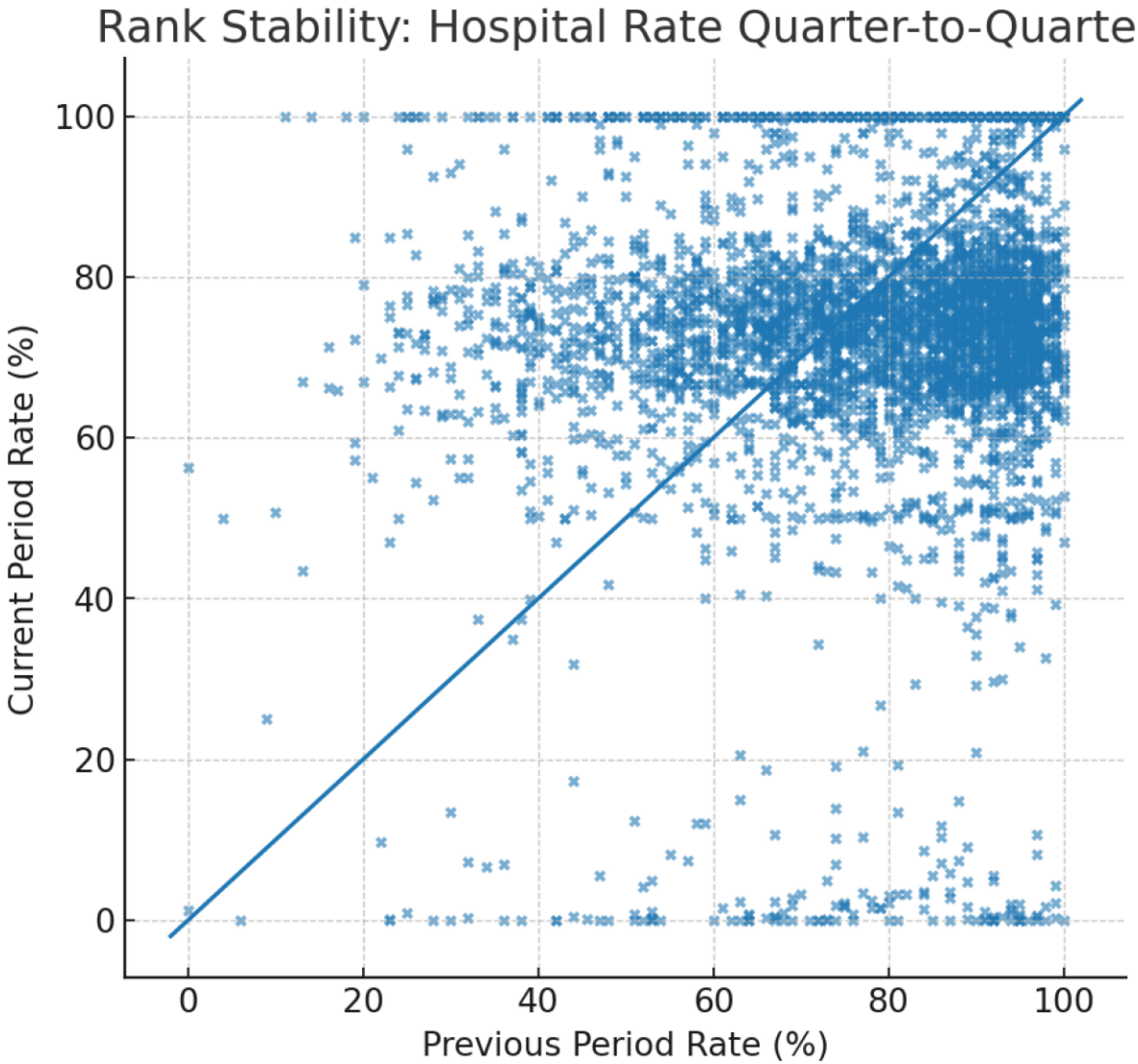

Figure 8 — Quarter-to-quarter stability at hospital level.

How to Use These Results

Use the heatmap to spot where states excel per measure; the funnel plot differentiates real outliers from small-N noise. Rank stability helps you see whether leaders remain leaders across periods or if there’s churn to investigate.

Limitations

Beware definitional shifts, reporting gaps, and small sample sizes per facility/measure.
Always document the exact data vintage and any filters you apply.

CSV: Timely_and_Effective_Care-Hospital.csv | Detected → State: State / Hospital: Facility Name / Measure: Measure ID / Period: End Date / Rate: Score (coerced to %) / Sample size: Facility Name