

# Overcoming Hurdles in Threes: Clear Data, Smarter Decisions, Better Care

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## Learning Objectives

- Explain how a data mining approach contributed to the creation of timely and accurate dashboards that accelerated clinical care transformation.
- Discuss the utilization of strategic resources and tools to help improve performance on quality metrics and patient care.

## Overview

Transforming complex data into simple, actionable metrics—and presenting them through timely, accurate dashboards—has significantly improved our quality outcomes. Explore how we regularly review dashboards and reports with key stakeholders to drive engagement and accountability for identifying opportunities and implementing improvement initiatives. These dashboards have helped create awareness among providers at all levels regarding key quality outcome metrics and providers' potential roles in quality improvement.

## Methods

### Criteria Analysis, Data Consolidation, & Data Validation

- Transitioned from manual extraction process by leveraging existing Vizient report templates to identify population and streamline initial data analysis.<sup>1</sup>
- Enhanced data accuracy and reduced load time by integrating CDB application programming interface tool for automated data extraction and processing.<sup>1</sup>
- Implemented a data validation process to ensure data was accurate and consistent.

### Dashboard Creation

- Developed dynamic dashboards that reveal key areas for improvement.

### Monitoring & Sharing

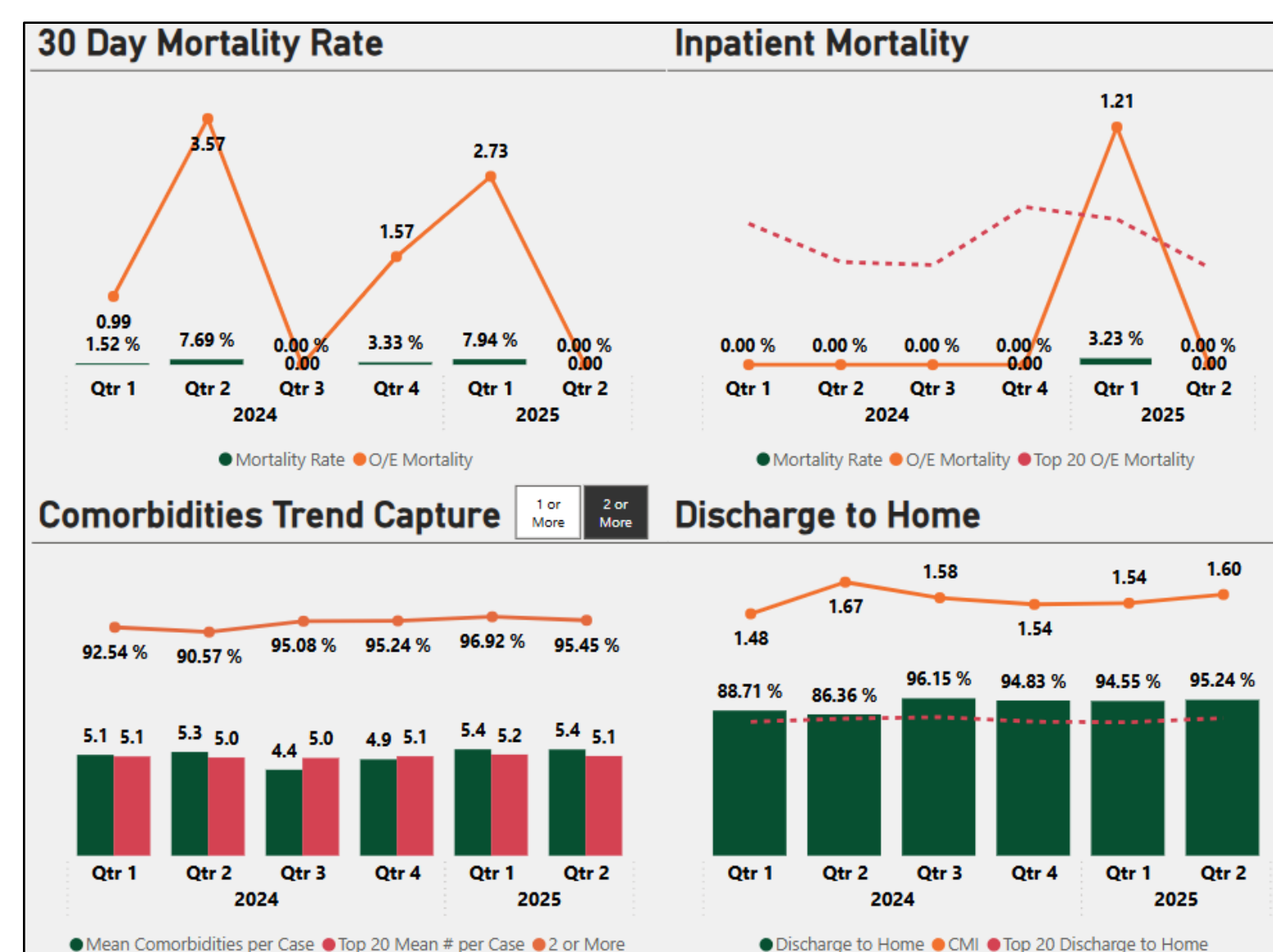
- Dashboards track metric trends and highlight areas for improvement, with insights regularly shared with Clinical Chairs, Division Chiefs, Senior Administrative Officers, Nursing Leaders, and Senior Leadership.

### Accountability & Implementation

- Service line specific committees and taskforces were established to ensure accountability for targeted improvements, supported by accessible dashboards that enable Senior Leadership to track department and provider specific metrics.

## Results

- Mortality index rate has decreased from 1.06 in 2021 to 0.57 in 2024<sup>1</sup>
- Vizient Quality & Accountability Ranking has gone from 16<sup>th</sup> 2020 to 70<sup>th</sup> percentile in 2024<sup>2</sup>
- US News and World Report average specialty rank has improved from 66<sup>th</sup> in 2020 to 87<sup>th</sup> percentile in 2025<sup>3</sup>
- Our approach has had a positive impact on the organization, enhancing operational efficiency and productivity
- Stakeholders expressed satisfaction with project's results, highlighting long term benefits and potential for future growth



Source: Internal dashboard created by Fernando Pavon using Microsoft Power BI. Data from University of Miami Health System.

## Lessons Learned

- Leveraging API developer tool resulted in 94% reduction in data load time – from 3 hours to 15 minutes.
- Timely and accurate access to data and dashboards is essential for driving stakeholder engagement and ensuring accountability, as providing actionable insights that guide next steps significantly enhances their involvement.
- While API offers significant benefits, hospitals should anticipate a learning curve and allocate sufficient time for team capacity-building, as initial setup can delay adoption and require adjustment to new workflows.
- Comprehensive dashboard documentation – including change logs, metric definitions, and development rationale – is essential for maintaining dashboards, ensuring consistency, and enabling teams to understand, update, and scale solutions effectively over time.

## Key Takeaways

- Delivering clear, timely, and accurate data is critical for fostering stakeholder engagement and driving informed decision-making.
- Starting with Vizient's templates and tools provides a strong foundation – leveraging these resources, including API and methodologies, can significantly improve dashboard accuracy, reduce data load times and accelerate turnaround.
- Driving quality improvement requires strong leadership commitment and a top-down approach—when senior executives set priorities and model accountability, it creates alignment and momentum across the organization. Early and active engagement from executive leadership is essential to establish the tone and ensure sustained focus on improvement efforts.

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<sup>1</sup> Vizient Clinical Data Base. Irving, TX: Vizient, Inc; 2025. <https://www.vizientinc.com> Accessed January 2025.

<sup>2</sup> Vizient Quality & Accountability Study. Irving, TX: Vizient, Inc; 2025. <https://www.vizientinc.com> Accessed July 2025.

<sup>3</sup> U.S. News & World Report. (2025, July 29). University of Miami Hospital and Clinics-UHealth Tower. <https://health.usnews.com/best-hospitals/area/fl/university-of-miami-hospital-and-clinics-6390610>