Epic Inpatient Clinical Workflow Analyst Project

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Mock Data Simulation – July 2024

Power BI | DAX | Python | GitHub Portfolio Project

Project Overview

This project simulates how an Epic Inpatient Clinical System Analyst identifies operational inefficiencies in provider workflows, documentation practices, and discharge delays. The goal is to demonstrate how mock Epic data can be used to surface workflow challenges and drive system-level improvements that support clinicians, improve throughput, and reduce unnecessary lag in patient care.

Key Insights from the Dashboard

- The average time from admission to first provider order was 4.6 hours. The Telemetry and Stepdown units showed the longest delays.
- The average time from **discharge order to actual discharge** was 5.7 hours. **Ortho** had the highest delay at 6.8 hours.
- MD and RN documentation lags after discharge averaged 3.6 and 3.3 hours, with the Neuro and Telemetry units taking the longest to complete notes.
- The average transfer delay between units was 88.7 minutes.
- **65% of patients had order sets used**, leaving a 35% gap that could reflect training gaps, workflow friction, or preference variability.

Analyst Recommendations

• Improve response time to initial provider orders by adding real-time alerts for delays beyond four hours in high-risk units.

- Streamline the discharge process by coordinating multidisciplinary workflows once a discharge order is placed, especially in Ortho and Telemetry.
- Reduce documentation lags by optimizing note templates and embedding post-discharge task alerts within Epic.
- Reinforce use of order sets to standardize care and reduce provider variability. Provide targeted training and Epic usage audits in units with lower adoption rates.

Alignment with Epic Analyst Responsibilities

This project demonstrates how I would support inpatient teams as a system analyst by reviewing clinical workflows, surfacing actionable insights from data, and translating operational problems into Epic-based solutions. The dashboard reflects the kind of ongoing support, cross-team coordination, and systems thinking that are core to this role.