

Summary of the Dashboard Development Process

The Emergency Room Visits Dashboard was built following a structured approach:

1. Data Import & Cleaning:

- The dataset was imported from Kaggle (CSV format) into Power BI.
- Columns were renamed, missing values handled, and date-time columns were formatted.
- An age categorization feature was created, grouping patients into Children, Adults, and Seniors.

2. Data Transformation & Enrichment:

- A calendar table was created to support year and month slicers.
- A custom measure was developed to calculate busiest hospital days and hours.
- Satisfaction scores were analyzed by race, gender, and age range.

3. Dashboard Design & Visualization:

- Key visuals included: line charts, bar charts, heatmaps, and KPIs showing trends in patient visits, wait times, and satisfaction scores.
- Conditional formatting was applied to highlight high/low satisfaction scores and wait times.
- Custom navigation buttons and filters were integrated for seamless interaction.

4. Deployment & Testing:

- The dashboard was published in Power BI Service, ensuring it updates dynamically.
- The GitHub repository was created to share project files and resources.

Conclusion

This project provides valuable insights into emergency room operations, helping hospitals optimize resource allocation, patient experience, and wait time management. The dashboard can be extended with predictive modeling and machine learning to forecast hospital demand trends.