



# HOSPITAL EMERGENCY ROOM DASHBOARD

## STEPS IN PROJECT

Menu

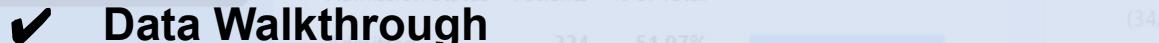
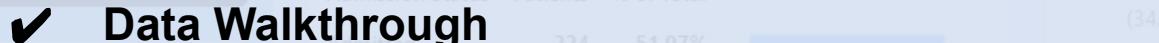
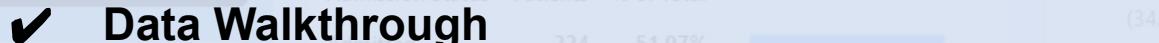
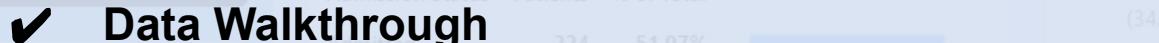
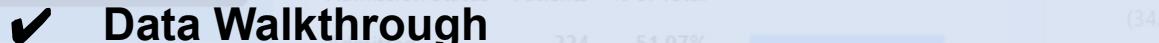
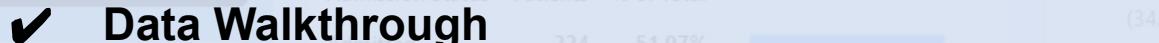
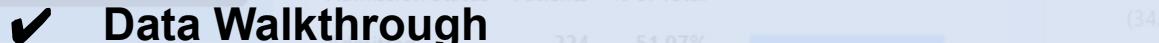
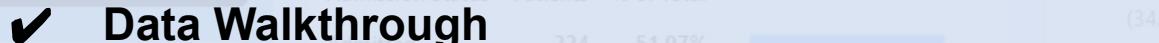
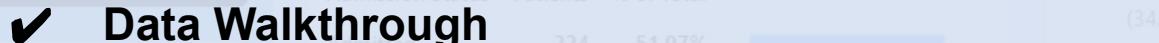
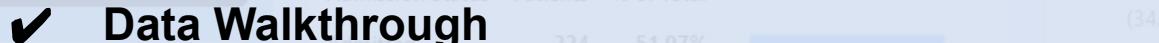
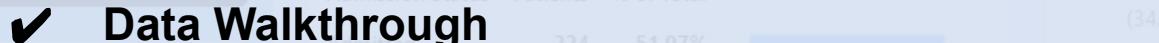
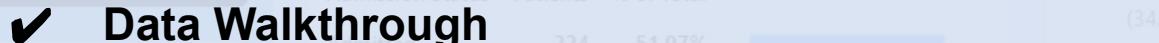
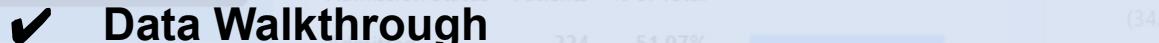
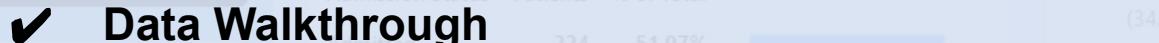
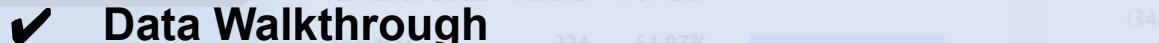
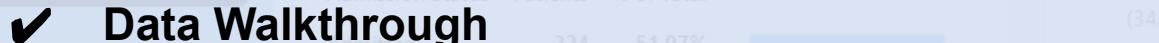
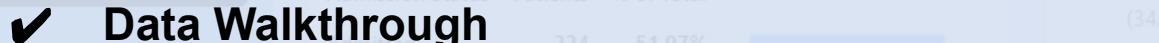
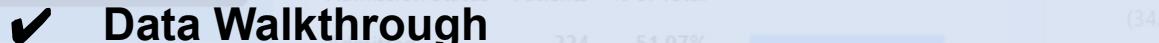
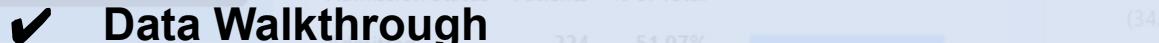
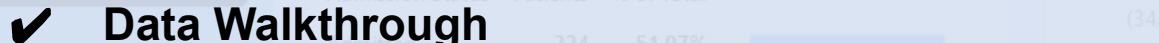
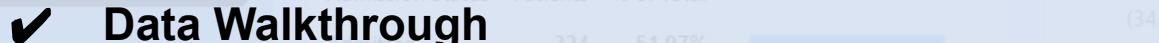
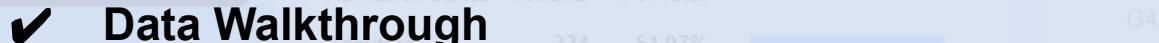
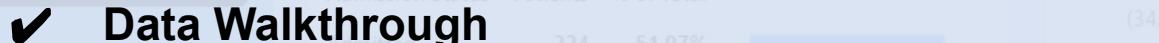
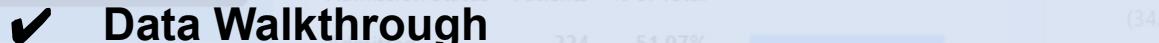
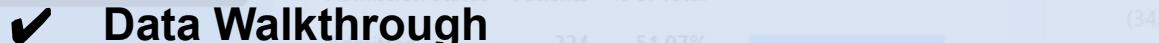
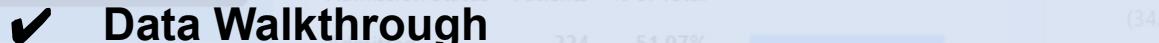
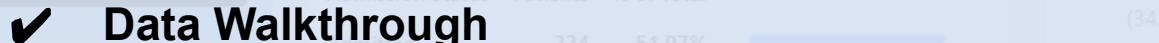
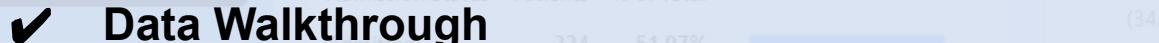
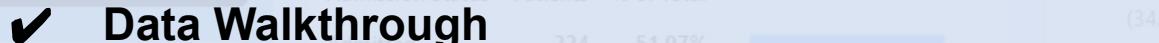
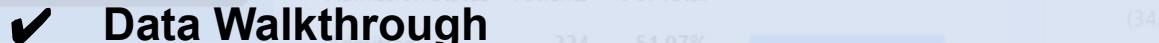
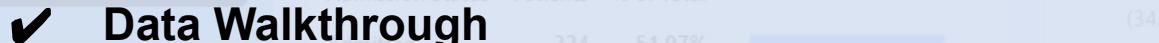
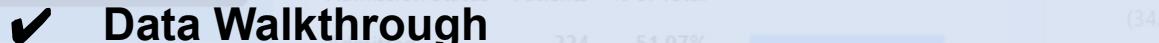
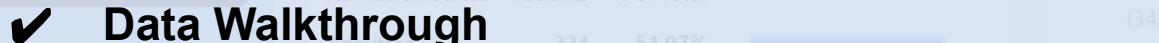
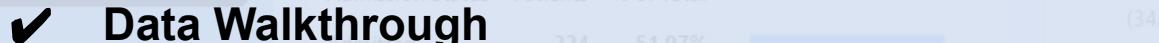
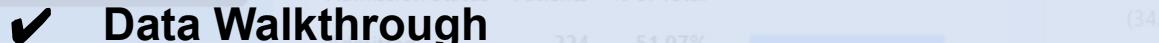
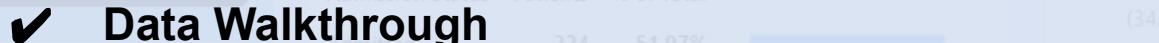
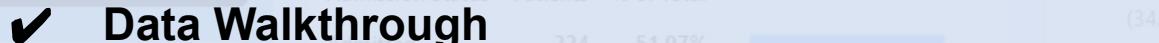
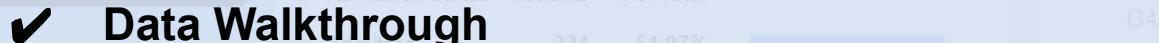
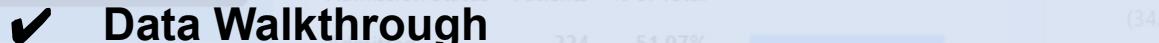
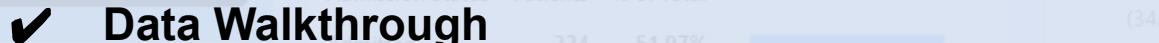
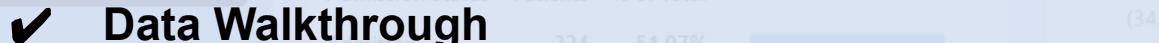
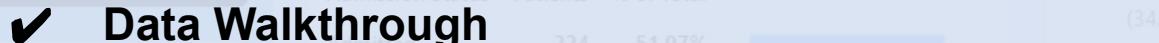
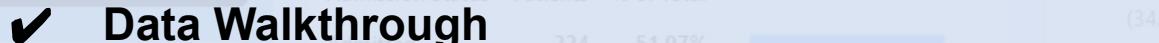
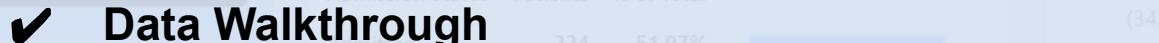
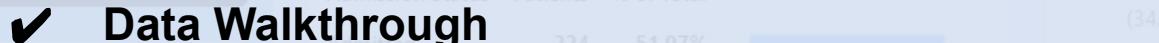
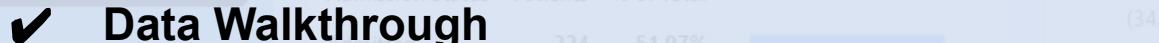
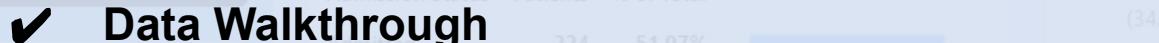
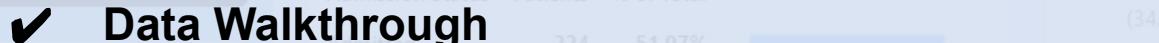
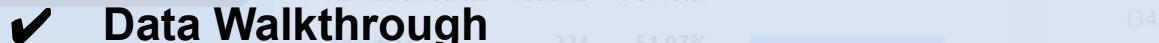
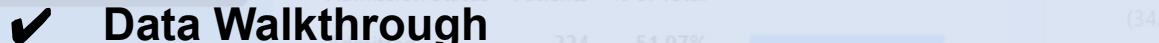
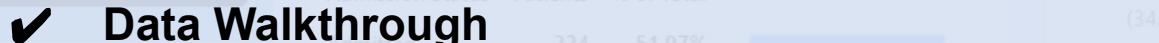
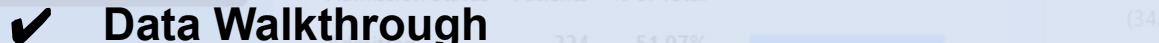
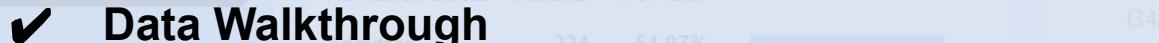
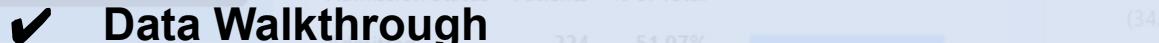
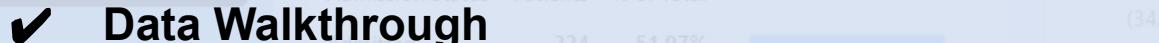
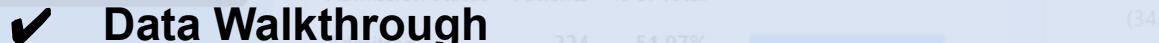
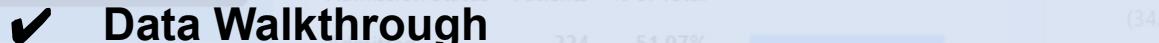
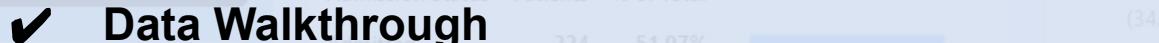
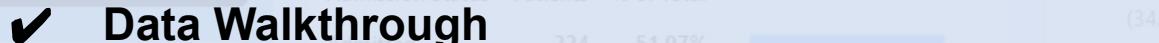
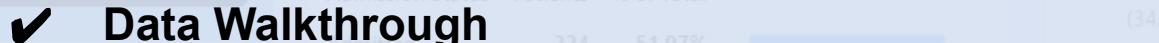
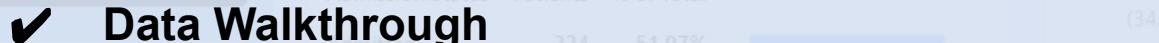
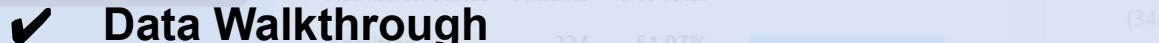
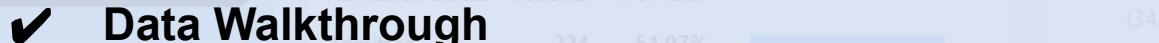
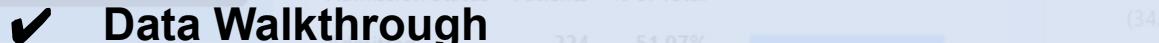
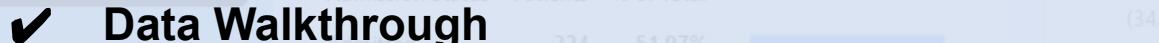
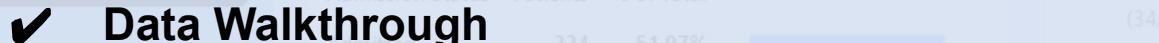
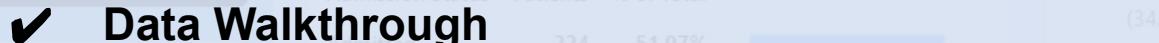
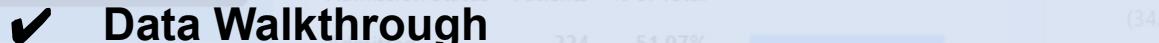
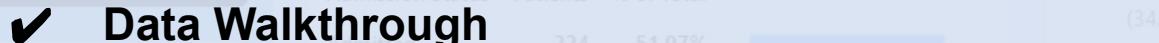
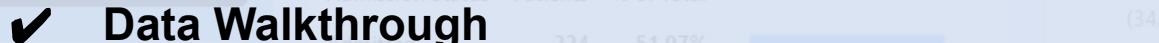
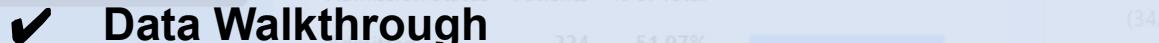
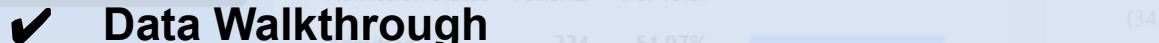
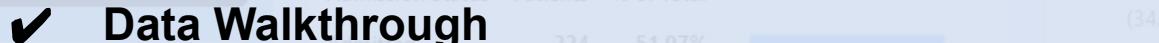
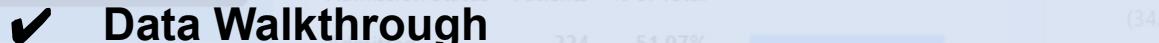
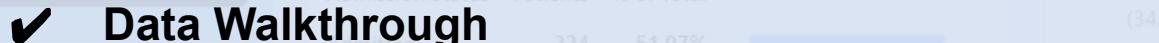
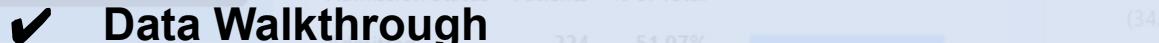
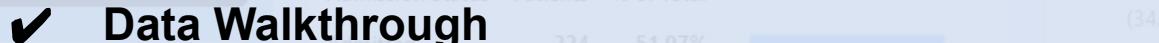
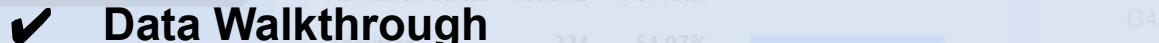
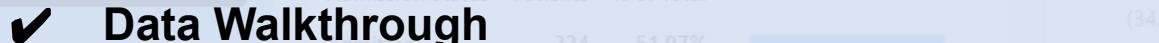
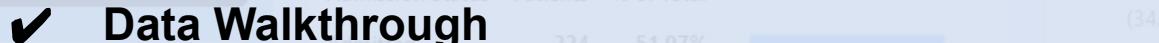
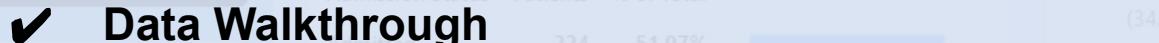
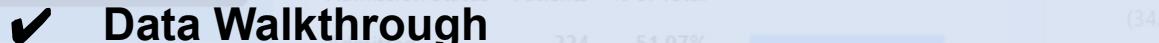
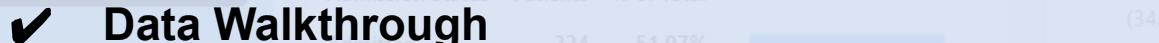
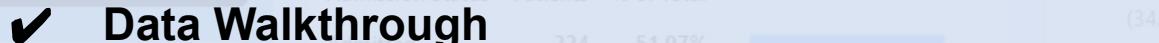
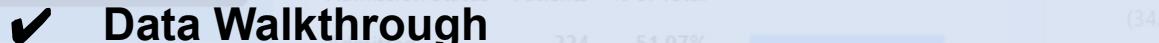
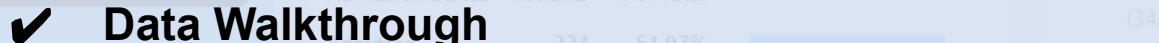
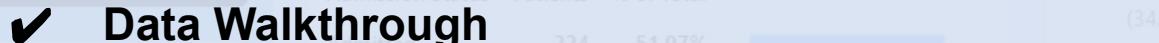
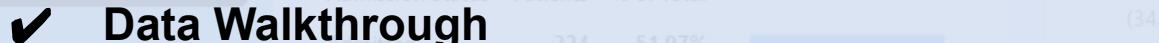
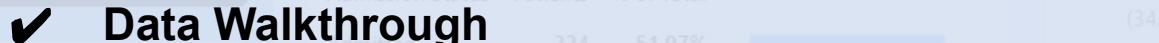
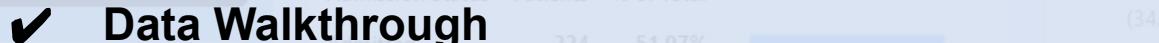
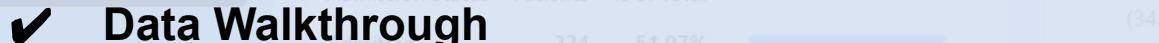
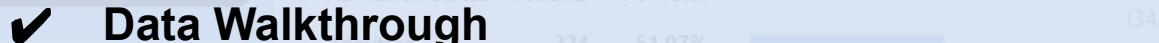
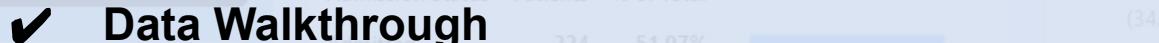
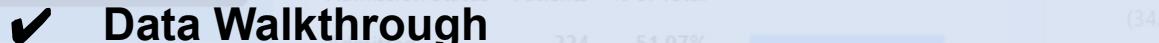
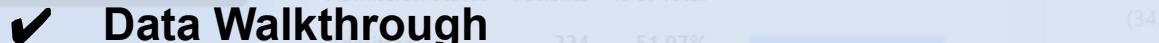
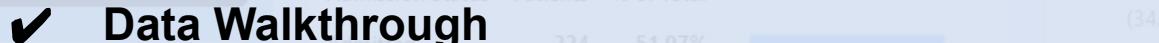
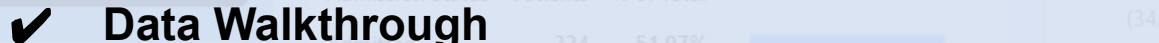
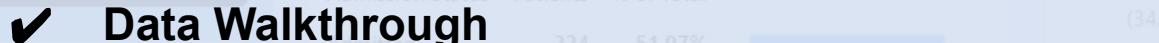
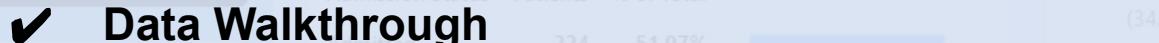
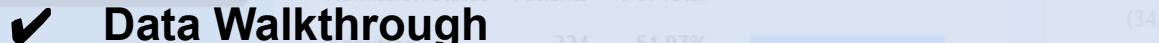
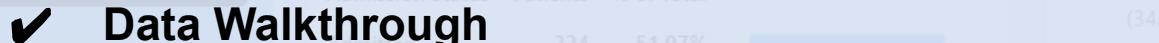
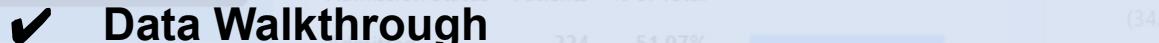
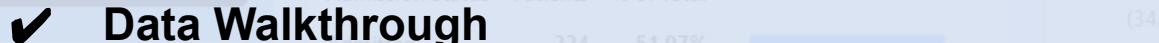
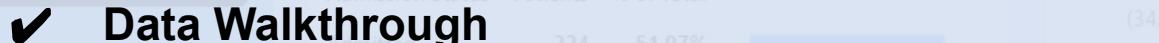
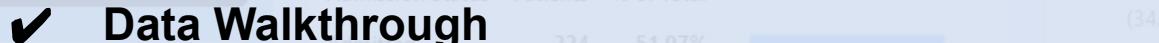
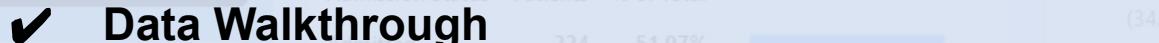
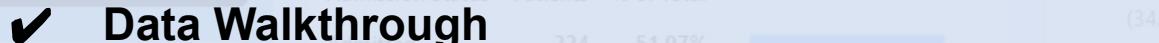
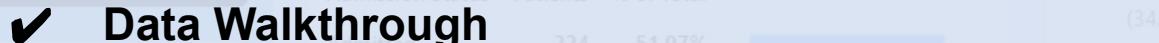
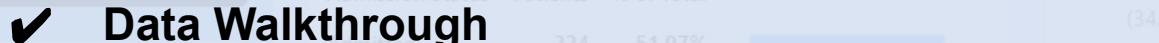
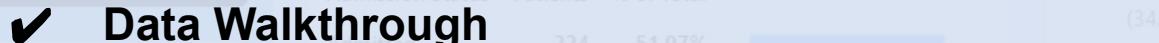
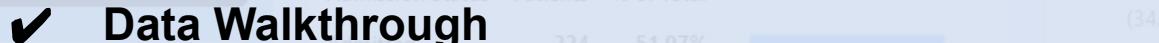
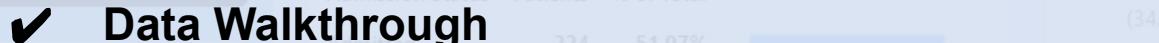
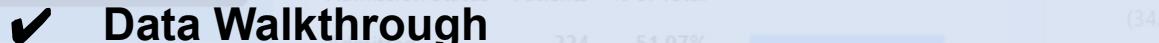
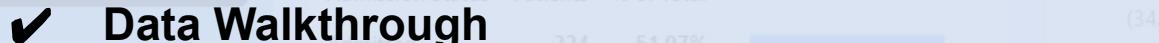
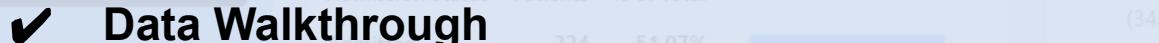
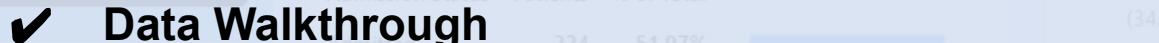
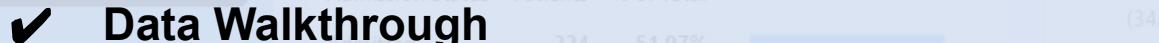
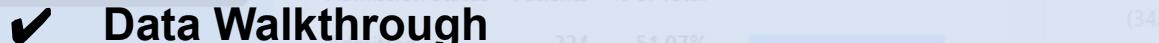
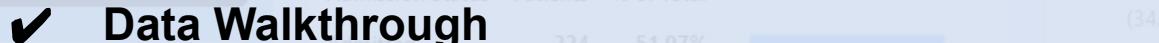
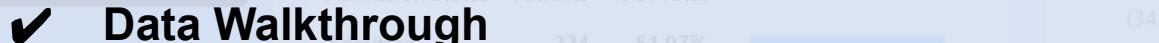
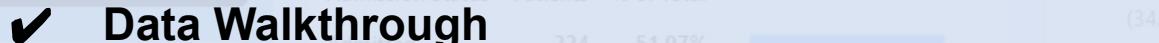
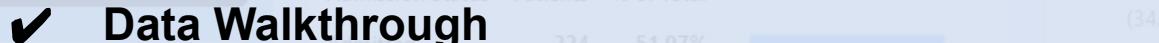
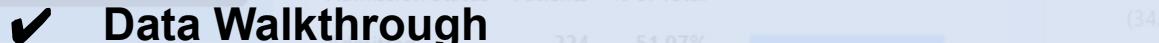
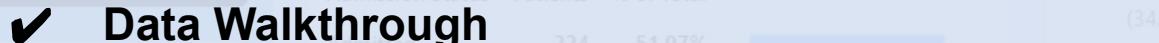
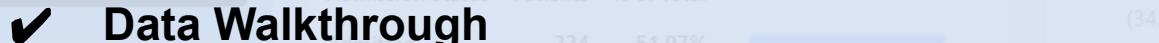
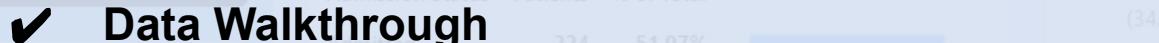
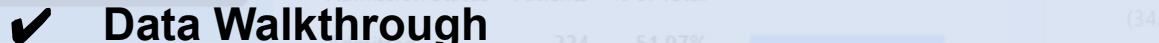
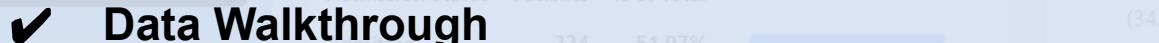
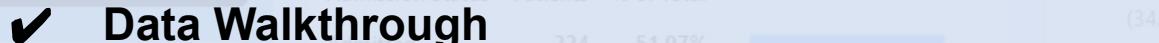
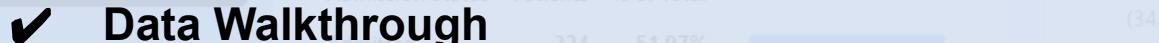
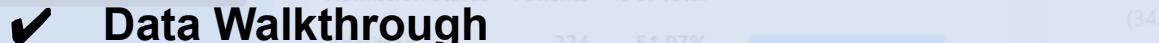
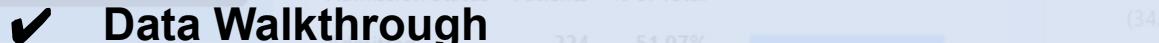
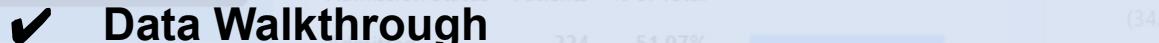
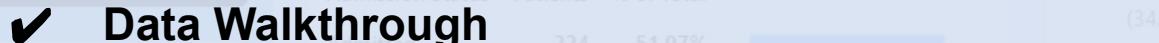
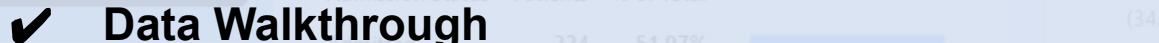
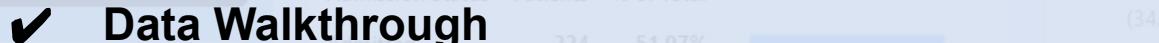
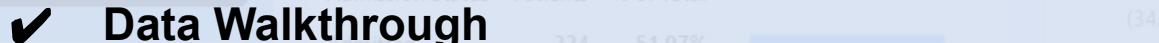
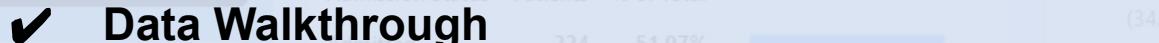
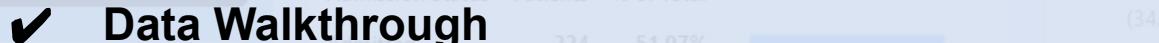
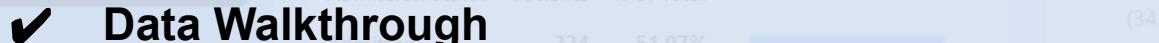
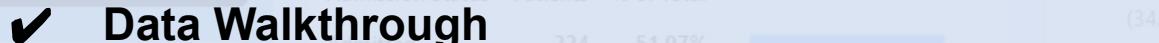
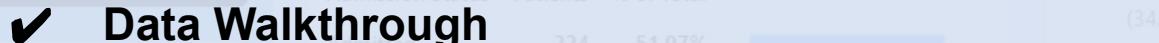
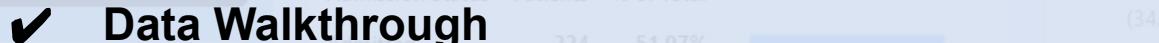
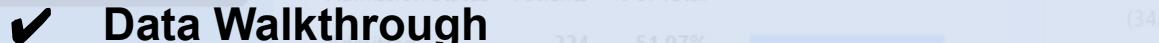
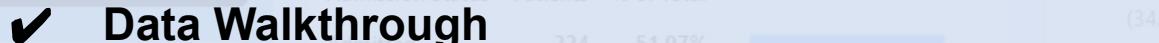
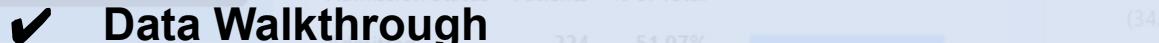
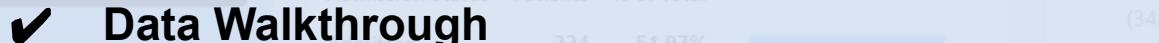
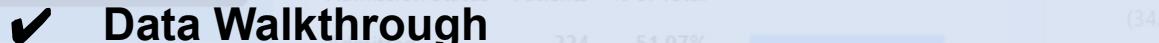
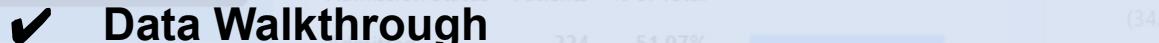
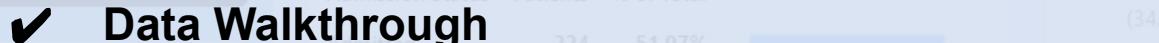
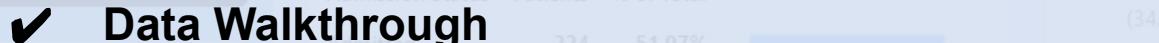
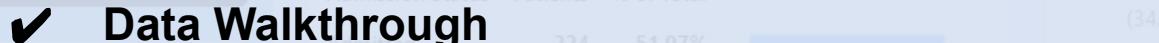
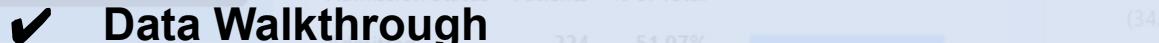
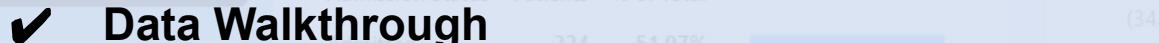
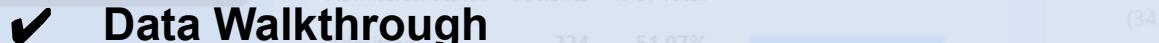
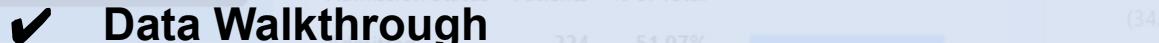
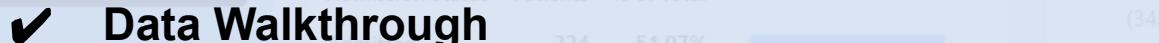
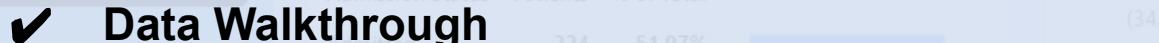
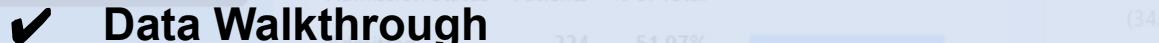
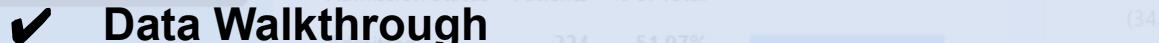
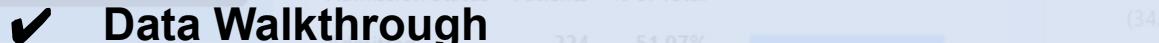
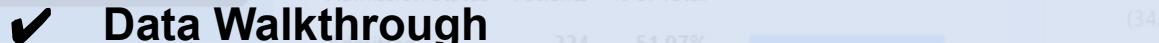
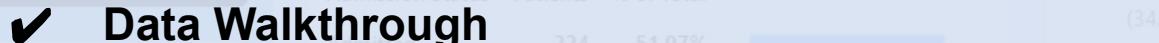
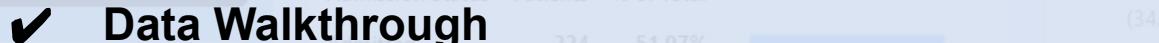
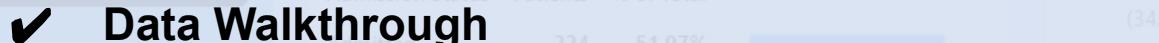
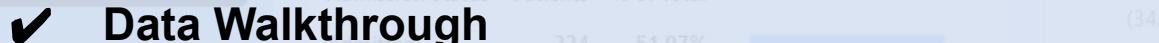
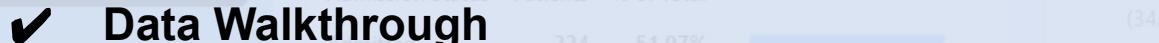
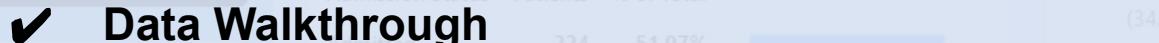
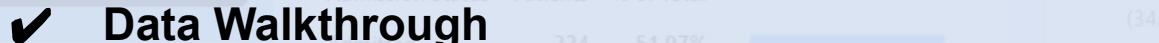
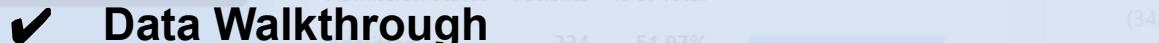
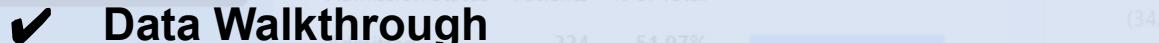
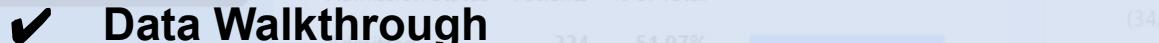
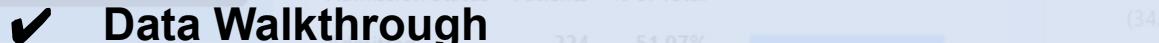
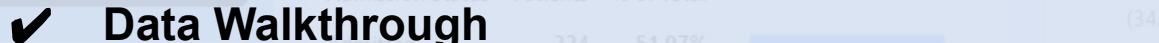
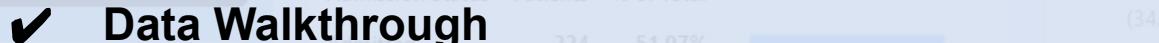
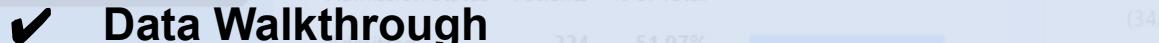
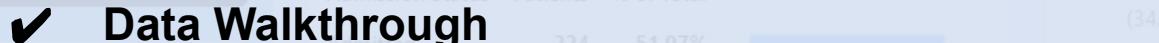
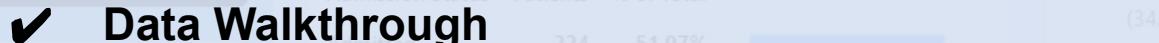
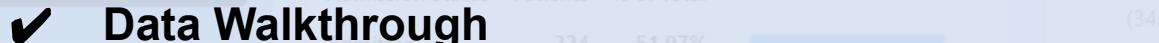
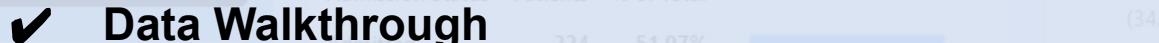
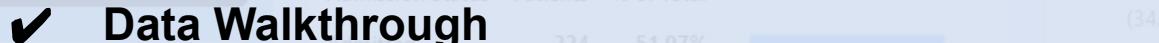
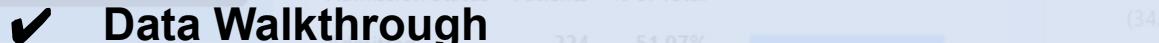
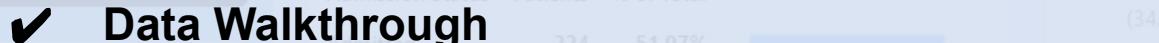
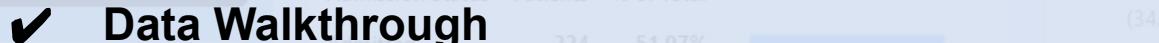
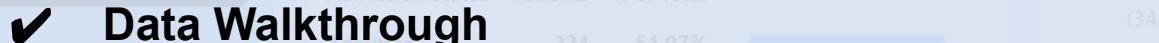
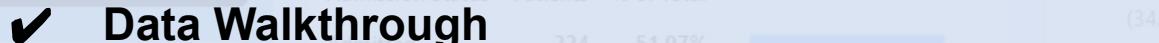
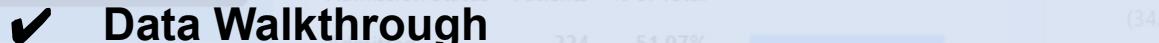
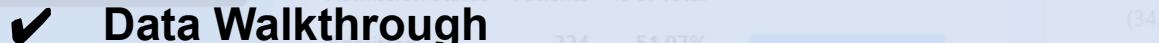
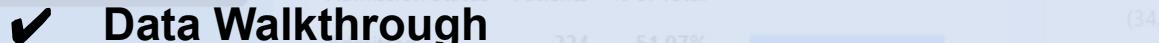
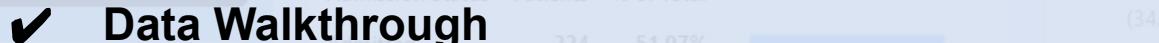
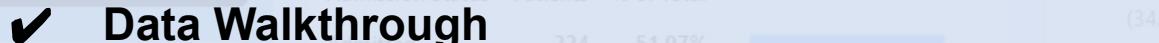
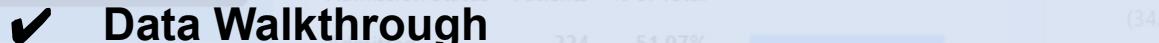
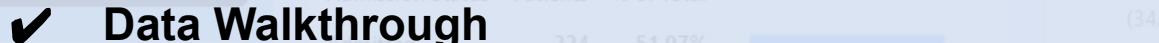
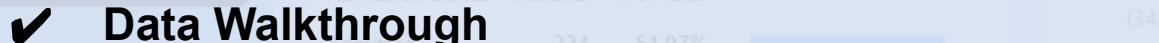
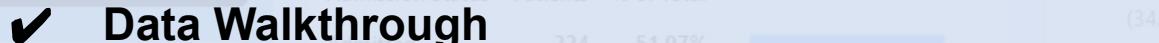
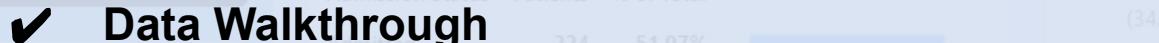
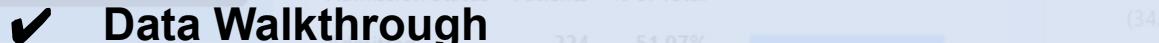
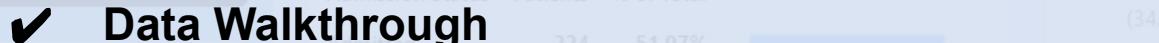
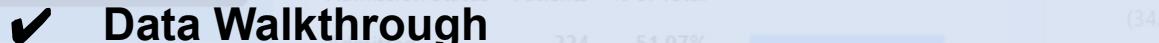
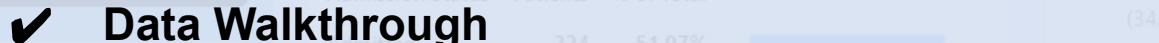
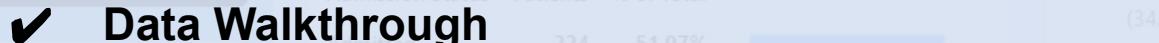
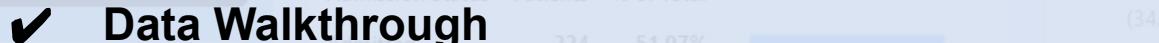
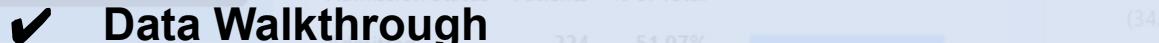
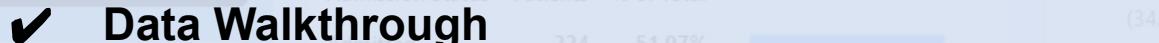
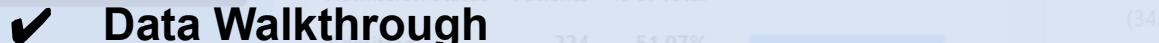
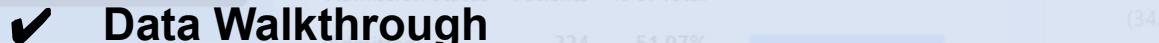
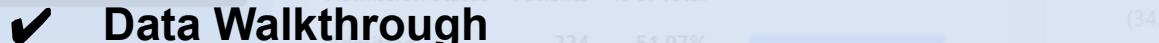
### ✓ Requirement Gathering/ Business Requirements

Monthly View

Admission Status Patients % of Total

Admitted 224 51.97%

Not Admitted 207 48.03%





# HOSPITAL EMERGENCY ROOM DASHBOARD



## DASHBOARDS - 4

Menu

### 1. Monthly View

### 2. Consolidated View

### 3. Patient Details

### 4. Key Takeaways



No of Patients  
431

Avg Wait Time  
36.7 Min

Patient Satisfaction Score  
4.72

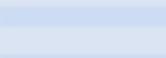
No of Patients Referred  
179

04 Feb 11 Feb 18 Feb 25 Feb

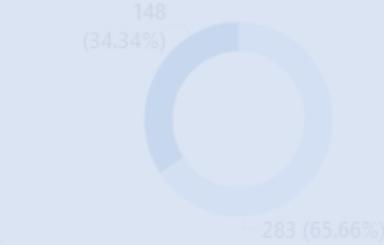
Patient Admission Status

Admitted 224 51.97%

Patients 48.03%

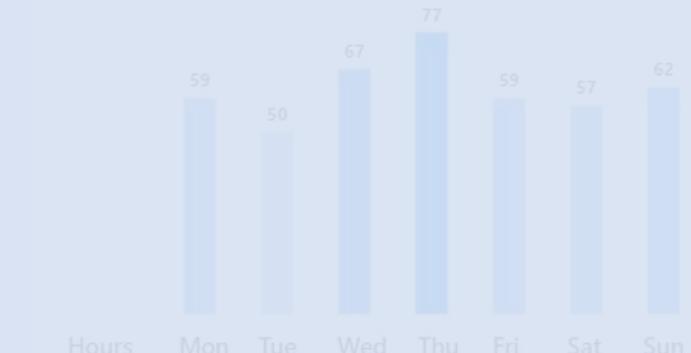


% of Patients Seen Within 30 Mins



- Target Missed
- Within Target

No of Patients by Day & Hour



No of Patients by Gender



- Male
- Female
- Non-Conforming

No of Patients by Department Referral

None	252
General Practice	89
Orthopedics	46
Physiotherapy	14
Cardiology	12
Gastroenterology	6
Neurology	6
Renal	6

No of Patients by Patient Race

White	124
African American	89
Two or More Ra...	89
Asian	43
Declined to Ide...	35
Native America...	26
Pacific Islander	25





# HOSPITAL EMERGENCY ROOM DASHBOARD

## BUSINESS REQUIREMENTS

### KPI's Requirements

To enhance operational efficiency and provide actionable insights into emergency room performance, we need to create a Hospital Emergency Room Analysis Dashboard in Power BI. This solution will enable stakeholders to track, analyze, and make data-driven decisions regarding patient management and service optimization.

#### Number of Patients:

Measure the total number of patients visiting the ER daily.

Display a daily trend using an area sparkline to understand patterns over time, such as peak days or seasonal trends.

#### Average Wait Time:

Calculate the average time patients wait before being attended to by a medical professional.

Use an area sparkline to show daily fluctuations and identify days with higher wait times that may require operational adjustments.

#### Patient Satisfaction Score:

Analyze the average satisfaction score of patients on a daily basis to evaluate the quality of service provided.

Present a daily trend using an area sparkline to identify dips in satisfaction and correlate them with operational challenges or peak times.

#### Number of Patients Referred:

Count the number of patients referred to specific departments from the ER each day.

Use an area sparkline to track daily trends and identify departments with high referral rates, which may require additional resources.





# HOSPITAL EMERGENCY ROOM DASHBOARD



## BUSINESS REQUIREMENTS

### Dashboard 1: Monthly View

Monthly View

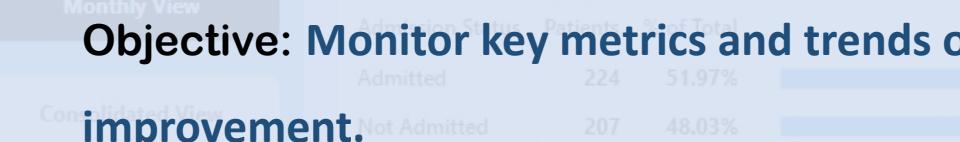
**Objective:** Monitor key metrics and trends on a month-by-month basis to identify patterns and areas for improvement.

#### Charts to Develop:

- Patient Admission Status: Track admitted vs. non-admitted patients.
- Patient Age Distribution: Group patients by 10-year age intervals.
- Department Referrals: Analyze referral trends across different departments.
- Timeliness: Measure the percentage of patients seen within 30 minutes.
- Gender Analysis: Visualize patient distribution by gender.
- Racial Demographics: Analyze patient data by race.
- Time Analysis: Assess patient volume by day and hour.

Menu

Patient Admission Status



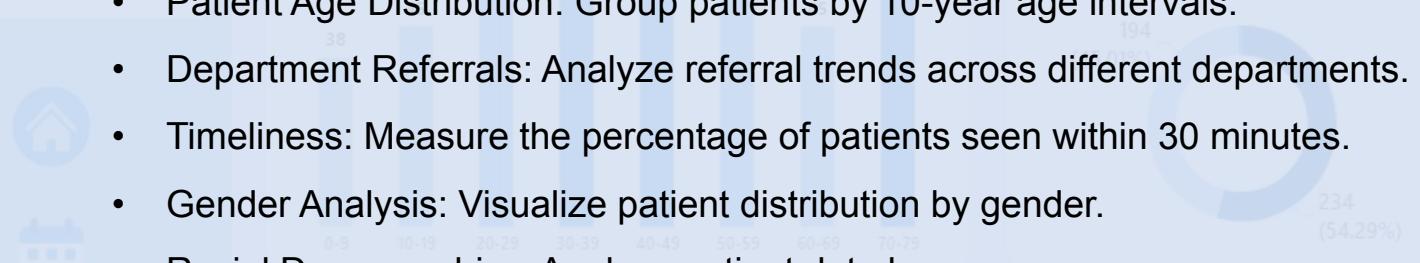
% of Patients Seen Within 30 Mins



No of Patients by Day & Hour



Key Takeaways



Hours	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00-02	7	3	6	4	2	5	5
03-04	6	4	5	6	5	3	3
05-06	3	7	5	4	7	5	6
07-08	6	5	2	7	2	6	2
09-10	5	3	6	9	2	10	3
11-12	8	5	5	3	7	9	8
13-14	6	5	8	6	4	1	6
15-16	3	1	5	5	3	4	10
17-18	2	5	7	10	6	4	3
19-20	8	2	4	6	5	2	4
21-22	3	6	8	5	8	5	8
23-24	2	8	10	10	8	8	8





# HOSPITAL EMERGENCY ROOM DASHBOARD



## BUSINESS REQUIREMENTS

Menu

Monthly View

Patient Admission Status

% of Patients Seen Within 30 Mins

No of Patients by Day & Hour

### Dashboard 2: Consolidated View

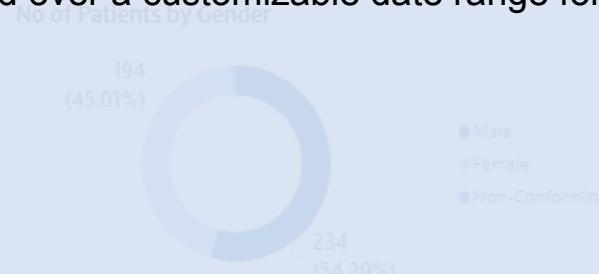
Consolidated View

Objective: Provide a holistic summary of hospital performance for a selected date range.

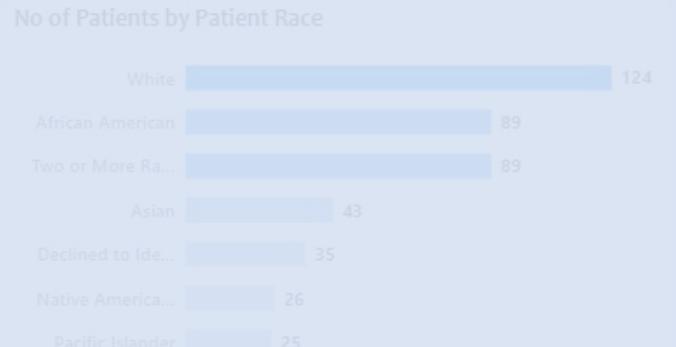
Charts to Develop:

- Similar metrics as the Monthly View, but aggregated over a customizable date range for broader insights and trend analysis

Key Takeaways



Hours	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00-02	7	3	6	6	4	2	5
03-04	6	4	5	6	5	3	
05-06	3	7	5	4	7	5	6
07-08	6	5	2	7	2	6	2
09-10	5	3	6	9	2	10	3
11-12	8	5	5	3	7	9	8
13-14	6	5	8	6	4	1	6
15-16	3	1	5	5	3	4	10
17-18	2	5	7	10	6	4	3
19-20	8	2	4	6	5	2	4
21-22	3	5	6	5	8	5	7
23-24	2	8	8	10	10	8	8





# HOSPITAL EMERGENCY ROOM DASHBOARD



## BUSINESS REQUIREMENTS

Menu

### Dashboard 3: Patient Details

**Objective:** Offer granular insights into patient-level data to enable detailed analysis and troubleshooting.

**Charts to Develop:** A grid displaying essential fields:

- Patient ID
- Patient Full Name
- Gender
- Age
- Admission Date
- Patient Race
- Wait Time
- Department Referral
- Admission Status

No of Patients by Age Group



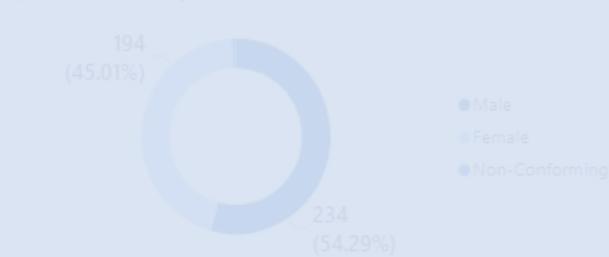
No of Patients by Department Referral



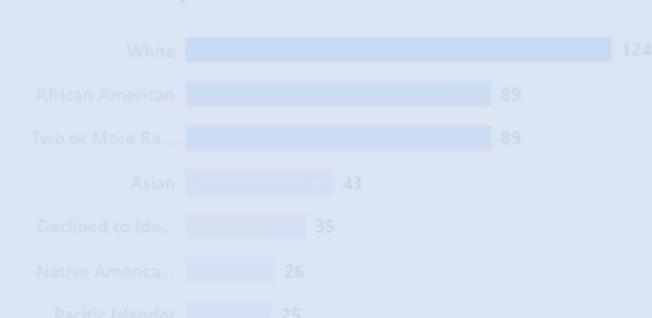
% of Patients Seen Within 30 Mins



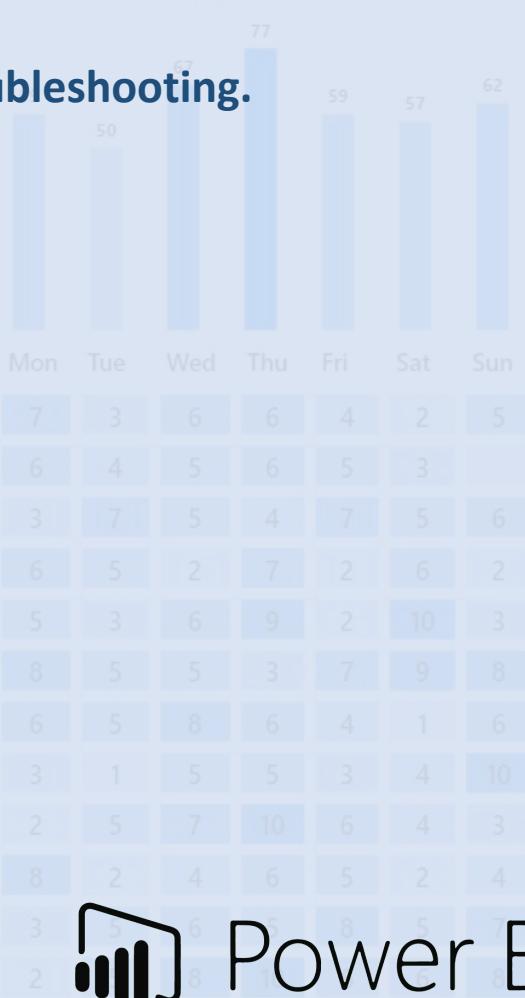
No of Patients by Gender



No of Patients by Patient Race



No of Patients by Day & Hour





# HOSPITAL EMERGENCY ROOM DASHBOARD



## BUSINESS REQUIREMENTS

Menu

### Dashboard 4: Consolidated View

Objective: Summarize the findings from all dashboards to provide clear and actionable insights for stakeholders.

#### Charts to Develop:

Details

- Descriptive analysis of each metric and visualization, including patterns, anomalies, and actionable recommendations to optimize emergency room operations and patient care.



% of Patients Seen Within 30 Mins

148  
(34.34%)

Within Target

No of Patients by Day & Hour



No of Patients by Age Group

Key Takeaways

Details

Key Takeaways



No. of Patients

431



Avg. Wait Time

36.7 Min



Patient Satisfaction Score

4.72



No of Patients Referred

179



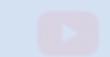
Menu

Monthly

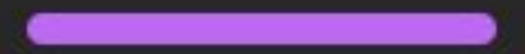
Consolidated

Detailed

Key Takeaways



Not subscribed

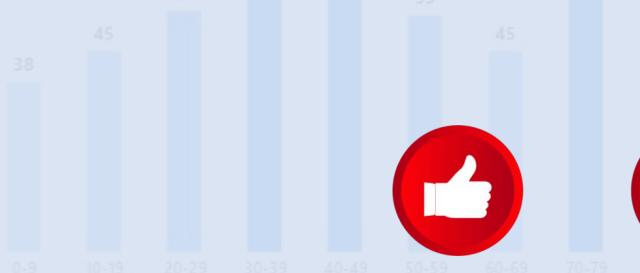


84.0%

Subscribed



16.0%



NO OF PATIENTS BY GENDER



No of Patients by Department Referrals

None	124
General Practice	89
Orthopedics	46
Physiotherapy	14
Cardiology	12
Gastroenterology	6
Neurology	6
Renal	6

# SUBSCRIBE

Hours	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00-02	7	3	6	6	4	2	5
03-04	6	4	5	6	5	3	
05-06	3	7	5	4	7	5	6
07-08	6	5	2	7	2	6	2
09-10	5	3	6	9	2	10	3
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23-24	2	8	10	10	8	8	8



Power BI



# HOSPITAL EMERGENCY ROOM DASHBOARD



Menu

Monthly View

Consolidated View

Details

Key Takeaways



## Patient Admission Status

Admission Status	Patients	% of Total
Admitted	224	51.97%
Not Admitted	207	48.03%

## No of Patients by Age Group

