

## **Title: Power BI Healthcare Project for Patient Admission Data Dashboard**

### **Description:**

This project showcases a Power BI dashboard designed for managing patient admission data within a healthcare environment.

The dashboard provides real-time insights into various aspects of patient admissions, including admission dates, discharge dates, emergency admissions, duration of stay, gender distribution, and doctor's notes.

### **Key Features:**

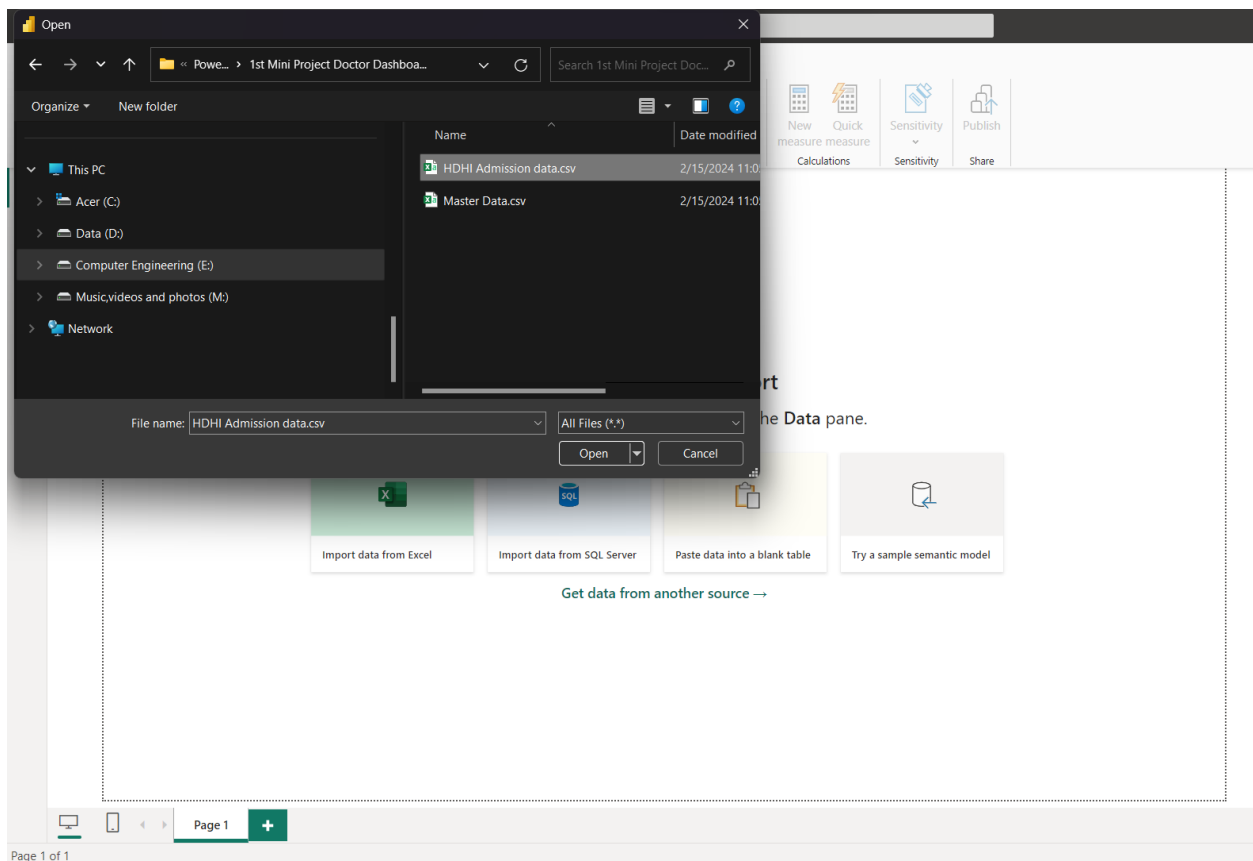
- Integration of multiple data sources, including electronic health records and admission databases.
- Data preparation and modeling within Power BI, enabling efficient querying and visualization.
- Customized dashboard design with interactive visualizations such as tables, charts, and graphs.
- Real-time updates to reflect changes in patient admission data as they occur.
- Incorporation of additional details such as patient names and doctor's notes for comprehensive analysis.
- Testing, validation, and deployment to ensure accuracy, functionality, and user-friendliness within the healthcare environment.

This project demonstrates proficiency in data analytics, visualization, and dashboard development using Power BI, along with an understanding of healthcare data management principles.

## Start with Project

I will walk you through the project

## Selecting the dataset



Viewing the data

	Admission No	D.O.A	D.O.D	AGE	GENDER	RURAL	TYPE OF ADMISSION-EMERGENCY/OPD	month year	duration of intensive unit stay	OUTCOME	SMOKIN
Table view	293721		27-06-2017	57	M	U	E	Monday, June 17, 2024	3	DISCHARGE	
4002	379558		08-11-2017	67	F	U	E	Thursday, October 17, 2024	8	DISCHARGE	
5493	412444		03-01-2018	70	M	U	E	Tuesday, December 17, 2024	0	DISCHARGE	
5544	413730		02-01-2018	29	M	U	O	Tuesday, December 17, 2024	2	DISCHARGE	
6029	420718		15-01-2018	55	F	R	O	Thursday, January 18, 2024	0	DISCHARGE	
6112	185018		17-01-2018	58	F	U	O	Thursday, January 18, 2024	0	DISCHARGE	
6113	185018		17-01-2018	58	F	U	O	Thursday, January 18, 2024	0	DISCHARGE	
6179	414945		21-01-2018	29	M	U	E	Thursday, January 18, 2024	1	DISCHARGE	
6205	424447		22-01-2018	74	F	U	O	Thursday, January 18, 2024	0	DISCHARGE	
6206	424447		22-01-2018	74	F	U	O	Thursday, January 18, 2024	0	DISCHARGE	
6207	425076		01-02-2018	36	F	U	O	Thursday, January 18, 2024	1	DISCHARGE	
6223	713940		24-01-2018	72	F	U	E	Thursday, January 18, 2024	1	DISCHARGE	
6241	484508		26-01-2018	23	M	U	E	Thursday, January 18, 2024	2	DISCHARGE	
6256	483791		25-01-2018	39	M	U	O	Thursday, January 18, 2024	0	DISCHARGE	
6292	428529		29-01-2018	53	F	U	E	Thursday, January 18, 2024	2	DISCHARGE	
6341	367411		06-02-2018	61	M	U	E	Thursday, January 18, 2024	0	DISCHARGE	
6600	424888		26-02-2018	31	F	R	O	Sunday, February 18, 2024	0	DISCHARGE	
6601	424888		26-02-2018	31	F	R	O	Sunday, February 18, 2024	0	DISCHARGE	
6682	479429		18-02-2018	62	F	U	O	Sunday, February 18, 2024	0	DISCHARGE	
6683	479429		18-02-2018	62	F	U	O	Sunday, February 18, 2024	0	DISCHARGE	
6690	458916		20-02-2018	51	M	U	O	Sunday, February 18, 2024	0	DISCHARGE	
6702	436246		06-03-2018	52	F	U	O	Sunday, February 18, 2024	5	DISCHARGE	
6703	436246		06-03-2018	52	F	U	O	Sunday, February 18, 2024	5	DISCHARGE	
6751	442077		20-02-2018	57	F	R	O	Sunday, February 18, 2024	0	DISCHARGE	
6764	441317		20-02-2018	56	M	U	O	Sunday, February 18, 2024	0	DISCHARGE	
6791	443618		24-02-2018	50	M	R	O	Sunday, February 18, 2024	0	DISCHARGE	
6925	447609		01-03-2018	69	F	U	O	Sunday, February 18, 2024	0	DISCHARGE	
6942	440506		28-02-2018	57	M	R	O	Sunday, February 18, 2024	1	DISCHARGE	
6955	439931		28-02-2018	60	M	U	O	Sunday, February 18, 2024	0	DISCHARGE	

Table: HDHI Admission data (15,757 rows)

Creating relationship between 2 data set

Here we create relationship via admission number in admission dataset & MRD number in master dataset



## Create relationship

Select tables and columns that are related.

HDHI Admission data

SNO	Admission No	D.O.A	D.O.D	AGE	GENDER	RURAL	TYPE OF ADMISSION-EMERGENCY/OPD
1594	293721	null	27-06-2017	57	M	U	E
4002	379558	null	08-11-2017	67	F	U	E
5493	412444	null	03-01-2018	70	M	U	E

Master Data

Admission Num	Name
234735	Mary
234696	Anna
234882	Emma

Cardinality

Many to many (\*:\*)


Cross filter direction

Single (Master Data filters HDHI Admission data)

☒ Make this relationship active

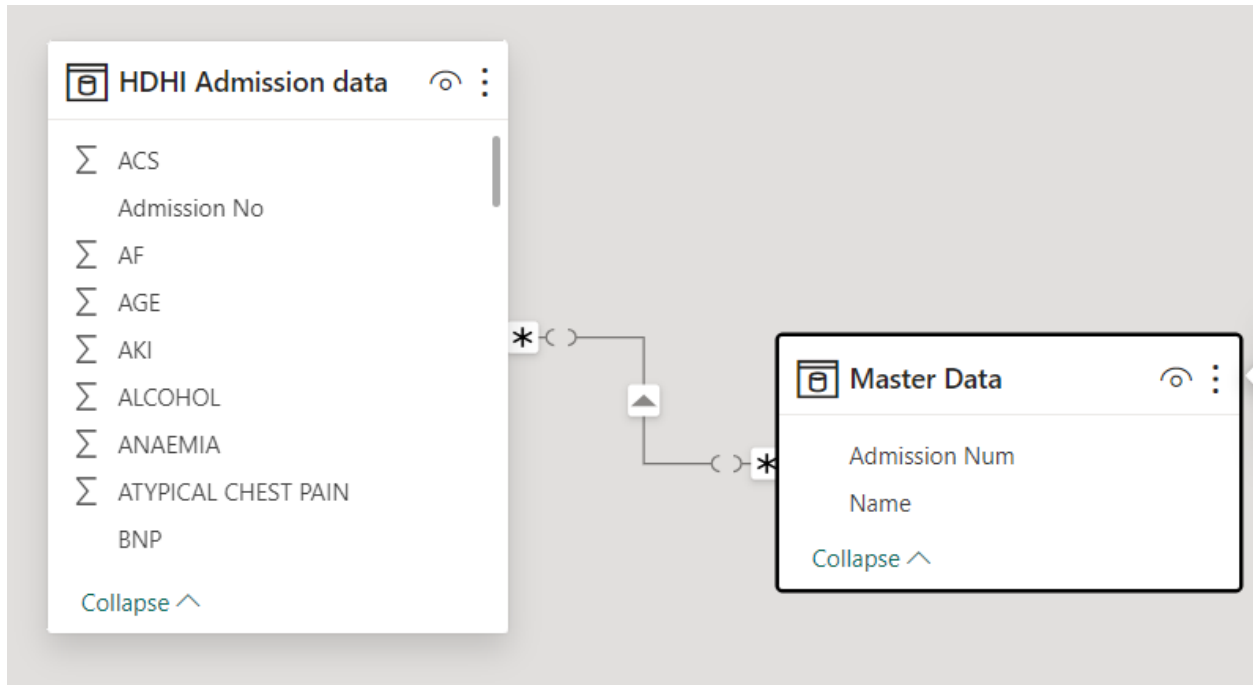
☐ Apply security filter in both directions

☐ Assume referential integrity

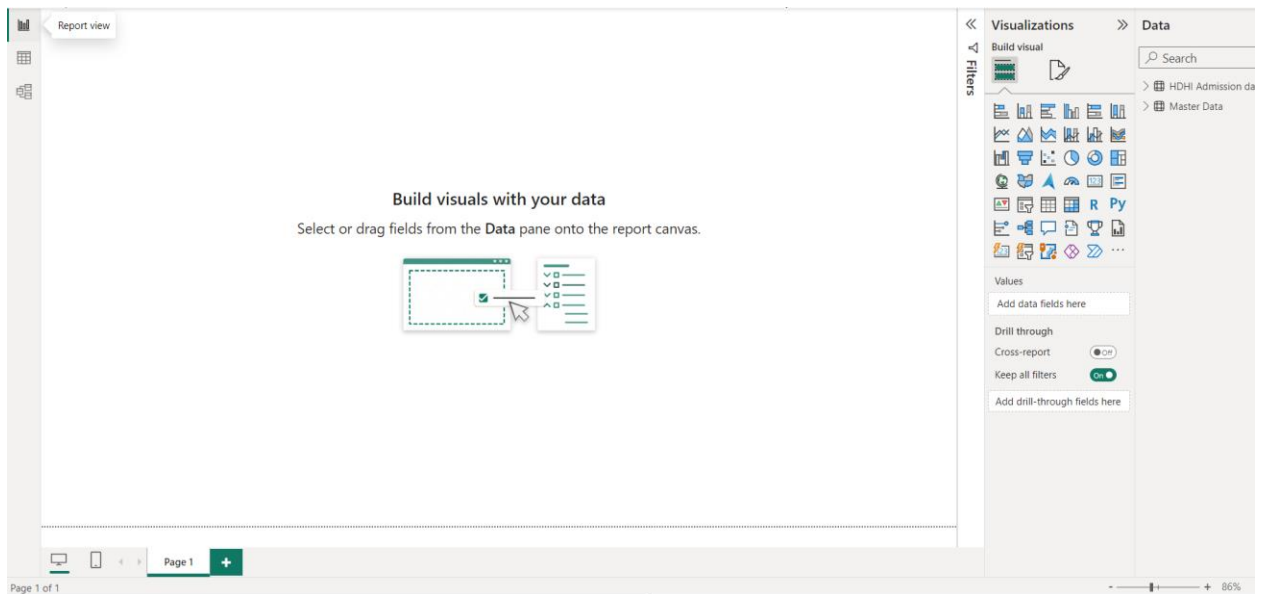
 This relationship has cardinality Many-Many. This should only be used if it is expected that neither column (Admission No and Admission Num) contains unique values, and that the significantly different behavior of Many-many relationships is understood. [Learn more](#)

OK

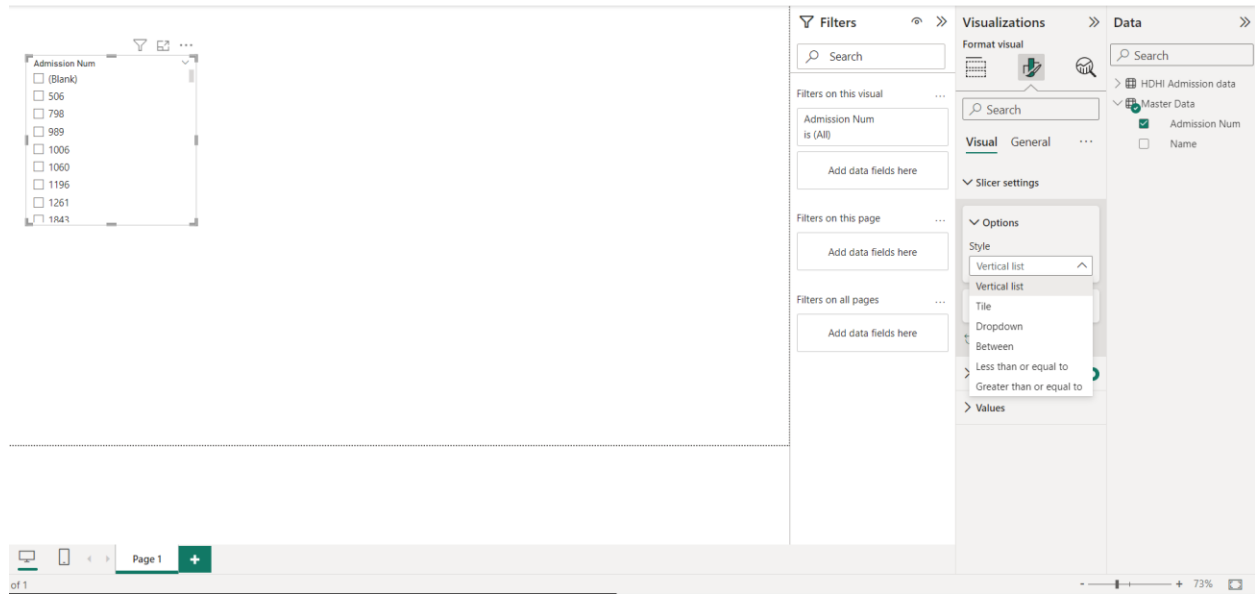
Cancel



### Creating Report View for doctor's Dashboard:



### Adding Slicer for vertical listing of MRD Number(Admission Number)



**Creating new column to smoking**

Adding various columns , table, I created simple useful summary dashboard from large data, which can be useful to doctors'

Admission Num

- ☒ 506  
☐ 798  
☐ 989  
☐ 1006  
☐ 1060  
☐ 1196  
☐ 1261  
☐ 1843  
☐ 3180

General Details						
<b>Delbert</b>	<b>50</b>	<b>M</b>	<b>10-03-2019</b>	<b>506</b>		
Patient Name	AGE	GENDER	D.O.D	Admission No		
<b>0</b>		<b>N</b>	<b>N</b>			
duration of intensive unit stay		ALCHOLIC	SMOKER			
Report						
<b>0</b>	<b>0</b>	<b>13.10</b>	<b>1</b>	<b>0</b>	<b>288</b>	<b>DISCHARGE</b>
Sum of CVA B...	Sum of HFNEF	Sum of HB	Sum of HTN	Sum of INFE...	PLATELETS	OUTCOME
Doctors Note						
Patient's condition is stable. Follow up as Advised.						