

Sunrise Hospital Analysis



AGENDA

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Introduction

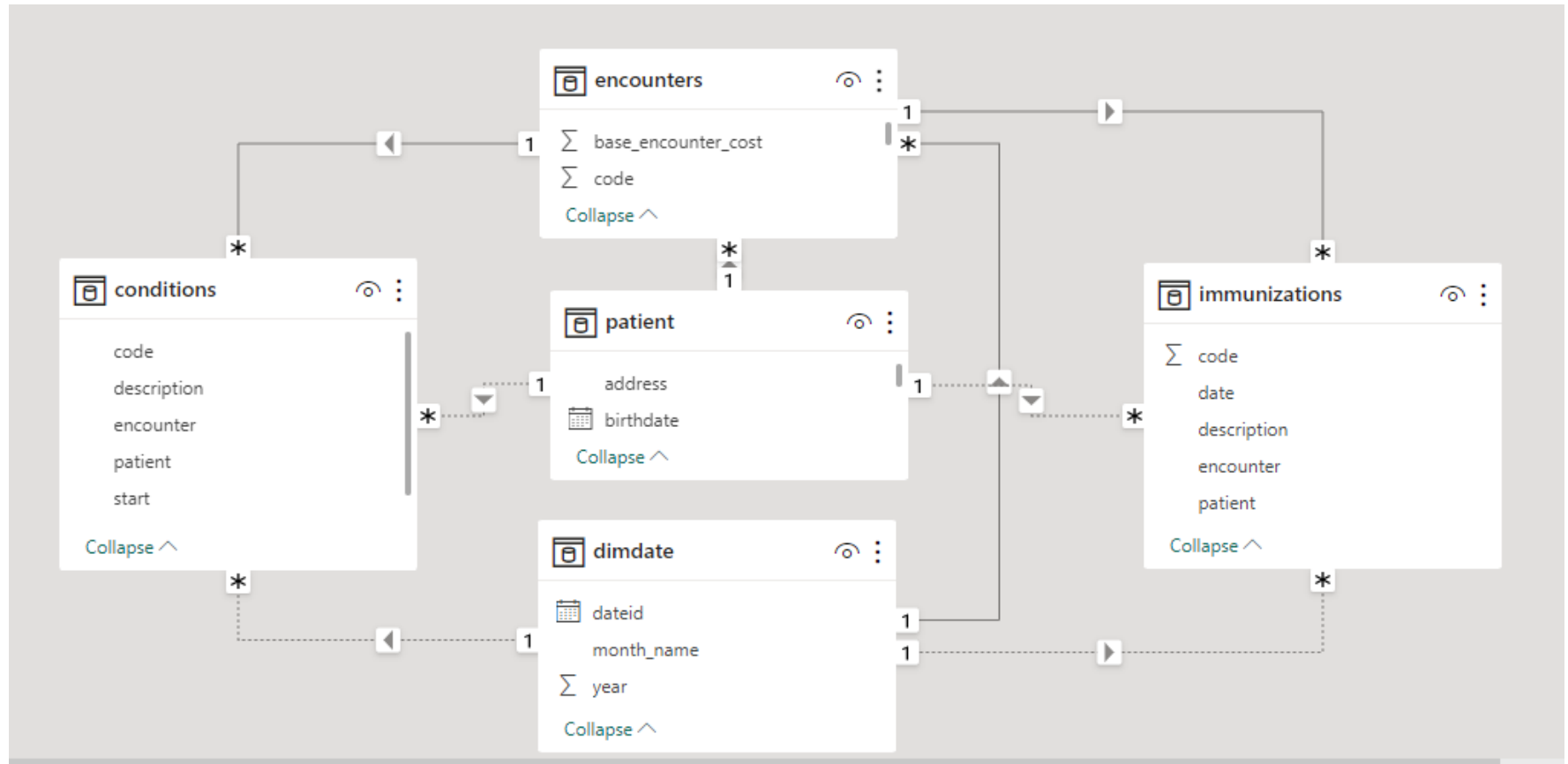
Sunrise Hospital is the leading healthcare Hospital in India with mission is to enhance the health and well-being through **personalized** and **comprehensive** medical services.



Objective

Doctors in Sunrise Hospital requests insights from data collected between year **2015** and **2023**. The objective is to optimize **improve patient outcomes** and support **informed decision-making** within the healthcare institution.

Dataset and modelling



Tools used



Request 1

Calculate total patient count from year 2015-2023

```
select count(distinct patient) as total_patient_count  
from encounters
```

SQL

Power BI

	total_patient_count bigint
1	10458

Total Patient Count


10,458

Request 2

Calculate total immunization for year 2022

```
select count(code) as immunization_count  
from immunizations  
where date between '2022-01-01' and '2022-12-31'
```

SQL

	immunization_count 
1	14074

Power BI

Immunization count

14,074

Request 3

Calculate distinct condition for year 2019

```
select count(distinct code) as distinct_condition  
from conditions  
where start between '2019-01-01' and '2019-12-31'
```

SQL

	distinct_condition 
1	120

Power BI

Distinct Condition

120

Request 4

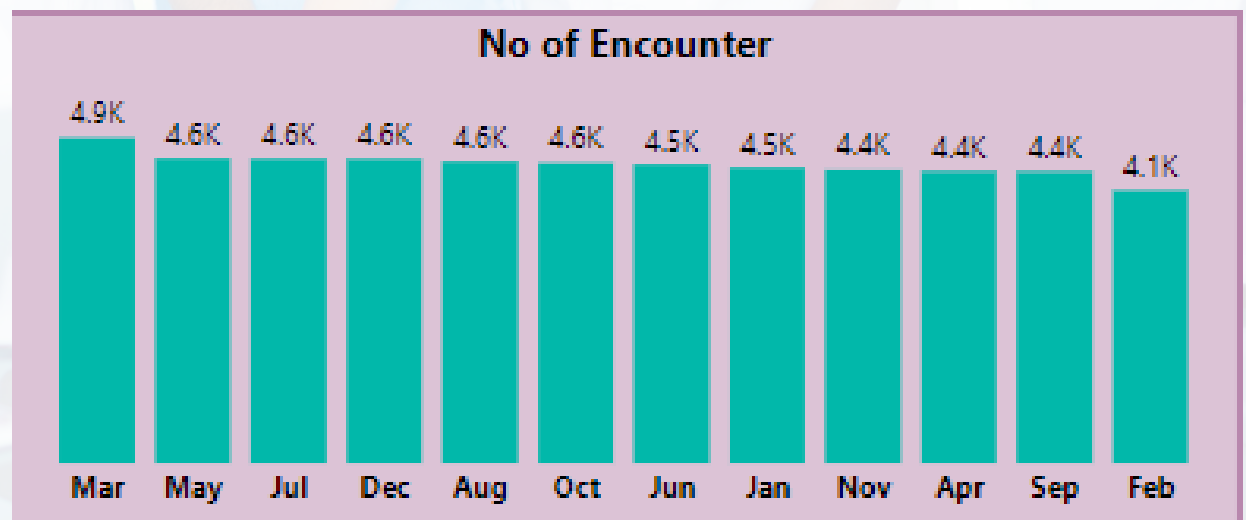
Calculate no of encounters of each month for year 2020

```
select month_name,  
count(id)  
from encounters as e  
inner join dimdate as d  
on e.start=d.dateid  
where e.start between '2020-01-01' and '2020-12-31'  
group by month_name  
order by 2 desc
```

SQL

	month_name character varying (100) 🔒	count bigint 🔒
1	Mar	4936
2	May	4623
3	Jul	4617
4	Dec	4615
5	Aug	4574
6	Oct	4552
7	Jun	4529
8	Jan	4478
9	Nov	4445
10	Apr	4426
11	Sep	4422
12	Feb	4131

Power BI



Request 5

Mention patient full name with no immunization

```
select concat(first || ' ' || last) as full_name
from immunizations as i
right join patients as p
on i.patient=p.id
where i.patient is null
order by 1 asc
```

SQL

	full_name text
1	Bernita Turner
2	Blake Anderson
3	Cleopatra Abshire
4	Isidra Mosciski
5	Janina Medhurst
6	Jolie Volkman
7	Lottie Heller
8	Shawn Mueller

Power BI

Patient with no immunization
Full name
Bernita Turner
Blake Anderson
Cleopatra Abshire
Isidra Mosciski
Janina Medhurst
Jolie Volkman
Lottie Heller
Shawn Mueller

Request 6

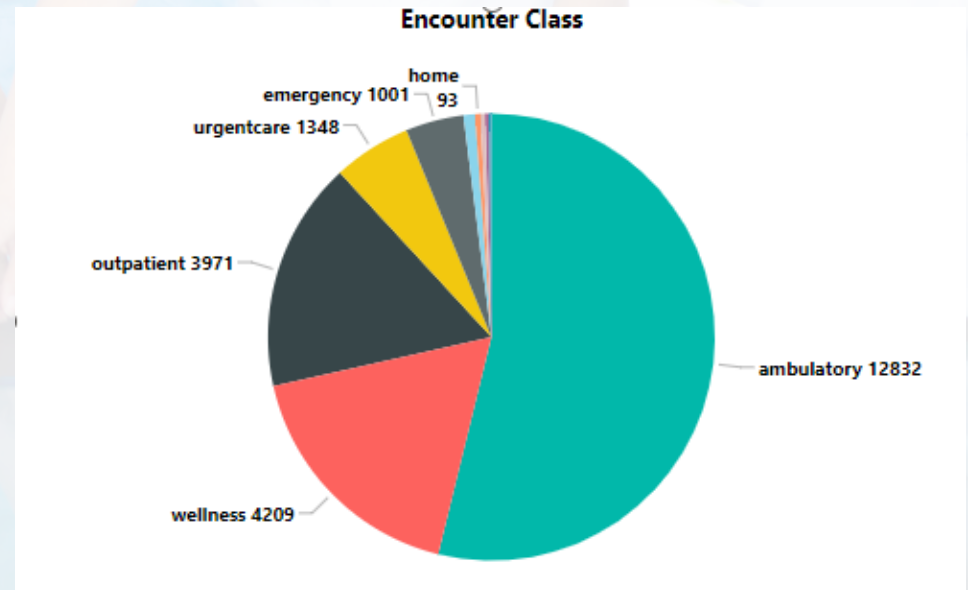
Calculate encounterclass for year 2023

```
select encounterclass,  
count(*)  
from encounters  
where start between '2023-01-01' and '2023-12-31'  
group by encounterclass  
order by 2 desc
```

SQL

	encounterclass character varying (100)	count bigint
1	ambulatory	12832
2	wellness	4209
3	outpatient	3971
4	urgentcare	1348
5	emergency	1001
6	inpatient	199
7	home	93
8	virtual	80
9	snf	68
10	hospice	39

Power BI



Request 7

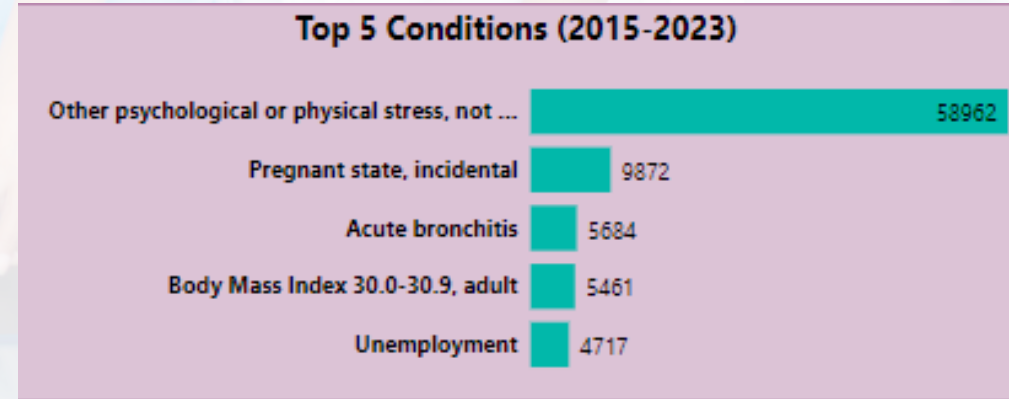
Mention top 5 conditions from 2015-2023

```
select description,  
count(*)  
from conditions  
group by description  
order by 2 desc  
limit 5
```

SQL

	description character varying (200)	count bigint
1	Other psychological or physical stress, not elsewhere classifi...	58962
2	Pregnant state, incidental	9872
3	Acute bronchitis	5684
4	Body Mass Index 30.0-30.9, adult	5461
5	Unemployment	4717

Power BI



Insights

- From total registered patients in Sunrise Hospital 8 patients has not taken any immunization
- Most highest encounter class for year 2023 was Ambulatory
- Pre-COVID year (2019) their were around 120 distinct conditions reported in Sunrise hospital
- Other psychological and physical stress is top health condition between 2015-2023
- Hospital provided total immunization of 14,074 in year 2022



thank you!