TeleCure Clinic

AGENDA

1. Introduction
2. Objective
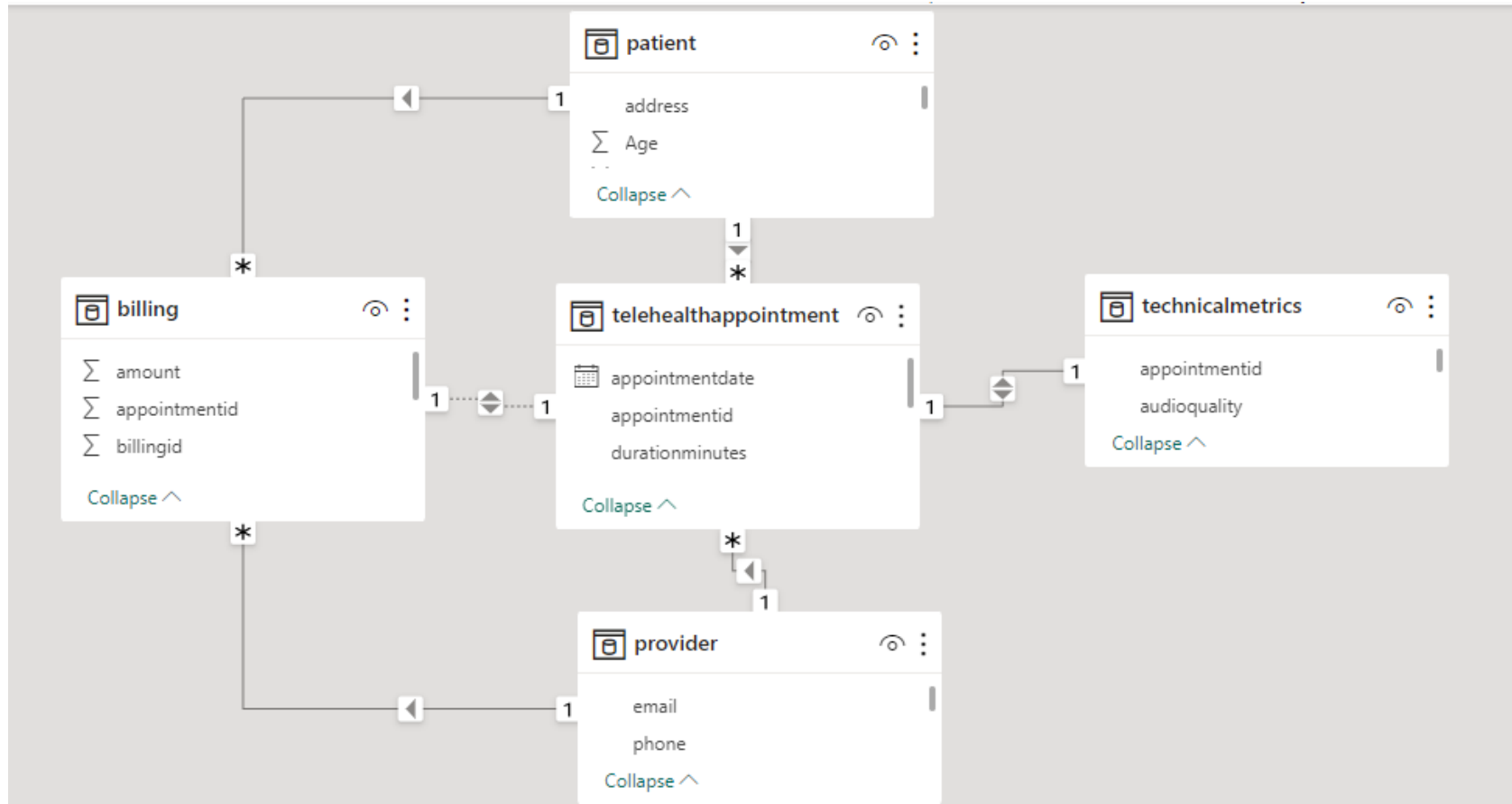3. Dataset
4. Requests
5. Insights

Introduction

TeleCure Clinic started telehealth service from January 2024, dedicated to bringing swift, convenient, and personalized medical care from the comfort of your home

Objective

Extract insights from the data collected in January 2024 to enhance and optimize TeleCure Clinic's services, ensuring a continuous commitment to delivering high-quality, patient-centered telehealthcare experiences

Dataset and modelling

Tools used

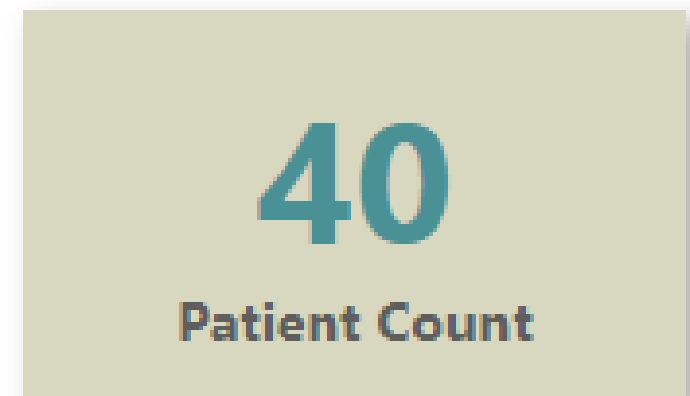 SQL

 Power BI

Question 1

Calculate total no of patient in telehealth

```
select count(distinct patientid) as patient_count
from patient
```

SQL

	patient_count 🔒 bigint
1	40

Power BI

40

Patient Count

Question 2

Calculate average appointment duration

```sql
select round(avg(durationminutes),2) as avg_duration
from telehealthappointment
```

SQL

avg_duration 🔒 numeric
1	43.89

Power BI

43.89

Average duration (in Min)

Question 3

Calculate % of appointment with connection issue

```sql
SELECT
    COUNT(t.AppointmentID) AS TotalAppointments,
    SUM(CASE WHEN tm.ConnectionQuality = 'Poor' THEN 1 ELSE 0 END) AS AppointmentsWithConnectionIssues,
    (SUM(CASE WHEN tm.ConnectionQuality = 'Poor'THEN 1 ELSE 0 END) * 100.0) / COUNT(t.AppointmentID) AS PercentageWithConnectio
FROM TelehealthAppointment t
LEFT JOIN TechnicalMetrics tm ON t.AppointmentID = tm.AppointmentID;
```

SQL

Power BI

percentagewithconnectionissues
numeric

5.7894736842105263

5.79

Percent of Connection Issue

Question 4

Calculate provider name and amount of pending revenue

```sql
select concat(firstname||' '||lastname) as providername,
sum(amount) as amount_pending
from billing
inner join provider
on billing.providerid=provider.providerid
where paymentstatus='Pending'
group by firstname, lastname
order by 2 desc
```

SQL

	providername text	amount_pending numeric
1	Dr. James Jones	210.00
2	Dr. Olivia Owens	210.00
3	Dr. Daniel Davis	210.00
4	Dr. Emily Miller	210.00
5	Dr. Logan Lambert	150.00
6	Dr. Sarah Johnson	150.00
7	Dr. William Wilson	150.00
8	Dr. Benjamin Baker	150.00
9	Dr. Liam Larson	150.00
10	Dr. Ava Adams	140.00

Power BI

Provider name	Amount Pending
Dr. Daniel Davis	₹210
Dr. Emily Miller	₹210
Dr. James Jones	₹210
Dr. Olivia Owens	₹210
Dr. Benjamin Baker	₹150
Dr. Liam Larson	₹150
Dr. Logan Lambert	₹150
Dr. Sarah Johnson	₹150
Dr. William Wilson	₹150

Question 5

Calculate average patient age in telehealth

```
select avg(date_part('Year', age(dateofbirth))) as avg_age
from patient
```

SQL

avg_age double precision 🔒
1	35

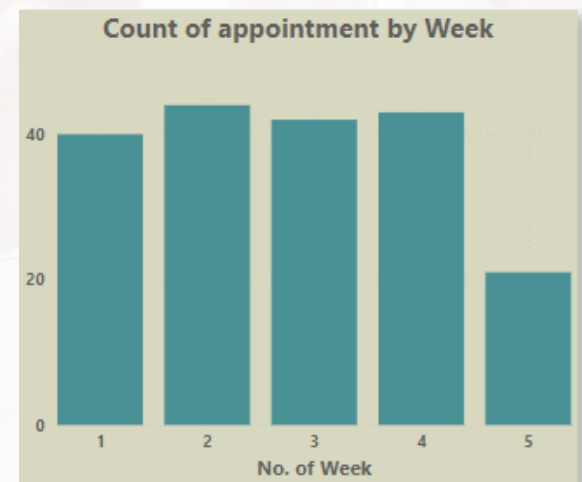## Power BI

36

Average Patient Age

Question 6

Calculate no of appointment per week in January 2024

```sql
with cte as(
select count(*) as no_of_appointment,'1st week' as week
from telehealthappointment
where appointmentdate between '2024-01-01 00:00:00' and '2024-01-07 23:59:59'
union
select count(*) as no_of_appointment,'2nd week' as week
from telehealthappointment
where appointmentdate between '2024-01-08 00:00:00' and '2024-01-14 23:59:59'
union
select count(*) as no_of_appointment,'3rd week' as week
from telehealthappointment
where appointmentdate between '2024-01-15 00:00:00' and '2024-01-21 23:59:59'
union
select count(*) as no_of_appointment,'4th week' as week
from telehealthappointment
where appointmentdate between '2024-01-22 00:00:00' and '2024-01-28 23:59:59'
union
select count(*) as no_of_appointment,'5th week' as week
from telehealthappointment
where appointmentdate between '2024-01-29 00:00:00' and '2024-01-31 23:59:59'
)
select no_of_appointment, week
from cte
order by 2 asc
```

SQL

	no_of_appointment bigint	week text
1	40	1st week
2	44	2nd week
3	42	3rd week
4	43	4th week
5	21	5th week

Power BI

Count of appointment by Week
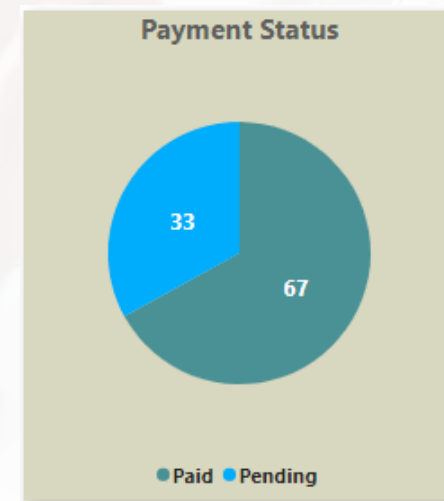
Question 7

Calculate count of paid and pending payment status

```sql
select sum(case when paymentstatus='Paid' then 1 else 0 end) as paid_count,
       sum(case when paymentstatus='Pending' then 1 else 0 end) as pending_count
from billing
```

SQL

	paid_count 🔒 bigint	pending_count 🔒 bigint
1	67	33

Power BI

Payment Status

33
67

● Paid ● Pending

Insights

- **Second week** of Jan had highest no of appointment for telehealth service
- Average appointment duration is **43 minutes**
- There was **5.79%** of connection issue during telehealth service
- Average patient age in telehealth was **36** years
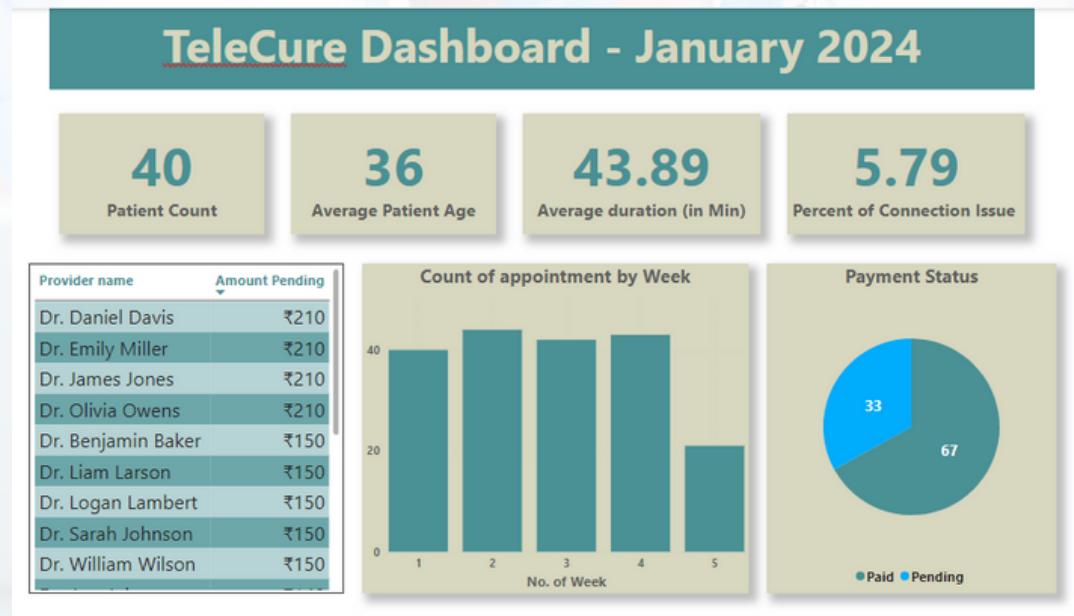- Out of all appointments for Jan 2024 , **67** were paid and **33** were pending

Link

SQL link-
https://github.com/nikitavutekar/TeleCure-Clinic.gitTeleCure-
Clinic.git

Dashboard link-
https://www.novypro.com/project/telecure-dashboard

thank you!