# Power BI Healthcare Analytics Dashboard – Report

## 1. Model Design

The data model was structured in a Star Schema for optimal reporting:  
- Fact Tables:  
 • Appointments (Appointment Type, Fee, Follow-up flag, Appointment Date)  
 • Treatments (Treatment Type, Treatment Cost, Outcome, Treatment Date)  
- Dimension Tables:  
 • Patients (Patient ID, Age, Gender, Insurance Type)  
 • Doctors (Doctor ID, Specialty, Experience)  
- Date Table: Added to enable trend analysis over time.  
  
Relationships:  
- Appointments linked with Patients and Doctors.  
- Treatments linked with Patients and Doctors.  
- Both fact tables linked to the Date dimension.

## 2. Key DAX Measures

Some of the key DAX measures used:  
  
• Total Patients:  
 DISTINCTCOUNT(Patients[PatientID])  
  
• Total Appointments:  
 COUNTROWS(Appointments)  
  
• Average Fee per Appointment:  
 AVERAGE(Appointments[Fee])  
  
• Total Treatment Cost:  
 SUM(Treatments[Cost])  
  
• Successful Treatment Rate %:  
 DIVIDE(COUNTROWS(FILTER(Treatments, Treatments[Outcome] = "Successful")), COUNTROWS(Treatments), 0)  
  
• Follow-up Rate %:  
 DIVIDE(COUNTROWS(FILTER(Appointments, Appointments[Follow-up Appointments] = TRUE())), COUNTROWS(Appointments), 0)

## 3. Analysis Results

- Overall Trends:  
 • Active Patients: ~60+  
 • Total Appointments: ~600  
 • Average Fee per Appointment: ~$110  
  
- Treatment Insights:  
 • Medication and Surgery dominate treatment types.  
 • Success rate around 30%, indicating room for improvement.  
  
- Patient Insights:  
 • Senior patients (60+) account for the highest appointments.  
 • Insurance type impacts retention – private insurance patients show better follow-up rates.  
  
- Doctor Insights:  
 • Certain specialties perform significantly better in outcomes relative to costs.