**Patient Data Generation Plan and Analysis Insights and Dashboard Structure**

Generate 20 000 data points. The data should have:

* **Patient ID** – 4300 unique patients. Some patients are allowed to have multiple revisits. The multiple patient visits can even be up to 10 or more. The visits can also be across different hospitals.
* **Patient Age** – ranging between 1-100
* **Patient Gender** – Male or female
* **Admission date** – The admission dates should range from 2022-01-01 to 2024-07-12
* **Discharge date**
* **Admission time** – In SAST
* **Treatment cost** – In South African Rands
* **Length of stay** – Discharge date – admission date
* **Hospital** – Name of the hospital the patient got treated. Create 3 fake hospital names. Some hospitals are allowed to have way more visitations than others. Hospital names:
  + **Eltech Medical Center** - this is a combination of Eli and tech
  + **Bayestry Hospital** - this is a combination of Bayesian and try
  + **Anival** **Health Clinic** - this is a combination of Anime and val.
* **Diagnosis** – Create 20 unique diagnosis – covid-19 should be part of it. Include diagnosis that is common in South Africa. Research common diagnosis to include.

**Same insights to generate with the patient data**

* Total treatment cost
* Total Number of visits
* Average patients stay length
* Number of unique patients treated
* Weekday with the most visits
* Most common diagnosis
* Patient visits trend over time
* Top 5 diagnosis by visitation
* Treatment costs per hospital

**Dashboard structure**

Row 1 column 1 – Total number of visits, unique patients treated, average stay length

Row 1 column 2 – Total treatment cost, most common visitation hour

Row 1 column 3 – Top 5 patient diagnosis

Row 2 – Patient visits overtime

Row 3 column 1 – Heatmap of weekday and number of visitations by hour of the day

Row 3 column 2– Top 5 Diagnosis visits by gender and age-group