**NHS Step Up Challenge (using Excel)**

**Challenge Overview**

An interactive Excel dashboard created for the NHS Step Up Challenge. This project showcases data aggregation and visualization techniques using real-world prescribing data to highlight insights into antidepressant prescriptions across regions in England.

**Dashboard Overview**

The dashboard provides clear, interactive visualisations that allow users to:

* View the top prescribed antidepressants nationally
* Compare costs across drug types and regions
* Filter and explore prescribing trends through slicers and pivot charts
* Gain insights into regional prescribing behaviour

**Tool Used**

Built in **Microsoft Excel** using pivot tables, charts, slicers, and custom formatting to create an accessible yet powerful interface.

**Dataset**: NHS prescribing data (source provided separately)

**Challenge Summary**

This project was completed as part of a data challenge and consists of two main exercises:

1. Data Transformation
2. Data Visualization

Below are the key exercises and questions that guided the analysis and visualization process.

**Exercise 1: Transforming and Aggregating Data**

* **Q1:** Identify the nationally top 10 prescribed anti-depressants, sorted by volume.
* **Q2:** Calculate the total national cost of *Mirtazapine* prescribing.
* **Q3:** Determine the spend on *Sertraline hydrochloride* prescribing in the Midlands region.
* **Q4:** Calculate the total number of anti-depressant items prescribed nationally

**Exercise 2: Visualising Data**

* **Q1:** Horizontal bar chart of the top 5 most prescribed drugs in December 2024.
* **Q2:** Vertical bar chart showing total cost of *Sertraline hydrochloride* in the Northeast region.
* **Q3:** Two vertical bar charts comparing:
  + Total anti-depressant prescribing (by items) nationally
  + Total anti-depressant prescribing cost (by type)
* **Q4:** Two pivot tables showing:
  + Prescribing volume per region
  + Prescribing cost per region
* **Q5:** Two horizontal bar charts comparing:
  + Top 10 most prescribed anti-depressants (by items)
  + Anti-depressants with the highest total prescribing cost

The dashboard includes all required visualizations, with interactive elements and labelled filters to explore each question dynamically.

**Features**

* Dynamic slicers for regional filtering
* Top-drug rankings by items and cost
* Clean visual layout with hover labels
* Raw data sheet included for transparency

**How to Use**

1. Download the file: StepUp\_Dashboard.xlsx

2. Open in Microsoft Excel

3. Use the slicers to filter by region, drug, or month

4. Explore the dashboard and insights interactively

**N.B:** This project was completed as part of an NHS virtual experience initiative to explore real-world data skills using Excel. All calculations and visualizations are contained within the Excel file.

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