Hospital Patient Waitlist Dashboard Analysis

This project focuses on designing an interactive Power BI dashboard to analyze hospital patient waitlist data spanning from January 2018 to March 2021. The primary objective of the dashboard is to facilitate data-driven decision-making by offering comprehensive insights into patient waitlists across different case types, specialties, and age profiles.

**Key Features:**

1. **Summary View**:
   * **Waitlist Statistics**:
     + Latest Month Waitlist: **709K** patients.
     + Previous Year (PY) Waitlist: **640K** patients.
   * **Case Type Split**:
     + **Outpatient**: 72.49% of total cases.
     + **Day Case**: 16.89%.
     + **Inpatient**: 10.62%.
   * **Key Indicators**:
     + Patient waitlist trends analyzed by **time bands (e.g., 0–3 months, 3–6 months, etc.)** and **age profiles (0–15, 16–64, 65+ years)**.
     + Highlighted specialties with the highest waitlist averages (e.g., Ophthalmology, Pediatric Orthopedics).
2. **Trend Analysis**:
   * Monthly waitlist trends for **Day Case**, **Inpatient**, and **Outpatient** show significant fluctuations, with a notable upward trend in outpatient cases from 2019 to 2021.
3. **Detailed View**:
   * Drill-down capability by **Archive Date**, **Case Type**, **Specialty Name**, **Age Profile**, and **Time Band**.
   * Tabular representation of data providing detailed counts for Day Case, Inpatient, and Outpatient waitlists across various demographic and time band filters.

**Insights Derived:**

1. **Specialty Insights**:
   * **Ophthalmology** and **Paediatric Respiratory Medicine** specialties exhibit high average patient waitlists.
2. **Age Profile Analysis**:
   * Patients aged **16–64** consistently form the majority across most waitlist categories and time bands.
3. **Trends Over Time**:
   * The outpatient category shows the steepest growth over the observed period, emphasizing the need for capacity enhancement in outpatient services.
4. **Time Band Impact**:
   * A significant proportion of cases fall under shorter wait times (0–6 months), suggesting operational efficiency in addressing immediate care needs.

**Recommendations:**

1. **Resource Allocation**:
   * Prioritize resources for high-demand specialties like Ophthalmology and Pediatric Orthopaedics to reduce waitlists effectively.
2. **Operational Enhancements**:
   * Implement strategies to manage the growing outpatient demand, such as optimizing scheduling or increasing facility capacity.
3. **Continuous Monitoring**:
   * Maintain regular analysis using the dashboard to track trends and adjust strategies dynamically.
4. **Focus on Age-Specific Needs**:
   * Address the unique requirements of the 16–64 age group, which forms the largest portion of the waitlist.