**Final Patient Emergency Room Visit Report – Comprehensive Analysis and Recommendations**

**Introduction**

This report provides a detailed analysis of patient visits to the emergency room based on key data from patient demographics, wait times, satisfaction levels, and department referrals. The goal is to highlight the insights drawn from this data and offer recommendations to improve overall service quality and patient experience.

**Key Insights**

**1. Patient Volume and Trends**

* **Total Patients Visits**: 9,216
  + Administrative appointments make up **50.04%** of the visits, while **49.96%** are non-administrative visits.
  + A growing trend in patient visits from **2019** to **2020**, with an increase from **4,338** to **4,878** patients.
* **Patients by Week Type**:
  + A significant number of patients visit on weekdays (**6,574**), while weekends see fewer visitors (**2,642**).
* **Patient Demographics**:
  + **Adults** dominate the patient base, with **7,106** visits.
  + The remaining age groups, including **children** and **teenagers**, show fewer visits, with **infants** accounting for the smallest proportion (**226 visits**).
  + Gender distribution is nearly even, with **51.1% male** and **48.69% female** patients.

**2. Satisfaction and Wait Times**

* **Average Satisfaction**: **5.47**, indicating moderate patient satisfaction.
* **Service Not Rated**: **75.10%** of patients did not provide service feedback, highlighting an opportunity to increase engagement.
* **Average Wait Time**: **35.26 minutes**, with some variation across age and racial groups. The data suggests that wait times might be a contributing factor to lower satisfaction in certain demographics.

**3. Referrals and Department Distribution**

* **Referred Patients**: **41.41%** of patients had department referrals, with **General Practice** (1,840 referrals) and **Oncology** (995 referrals) being the most common.
* **Walk-in Patients**: **58.59%** were walk-ins, with no specific referral or prior appointment, indicating that a majority of patients seek immediate care.

**4. Demographic and Satisfaction Trends**

* **Satisfaction by Age and Race**:
  + **African American** and **Asian** patients tend to report higher satisfaction, particularly in middle-age groups (31-40 and 41-50).
  + **Younger age groups** (0-10) show some dissatisfaction, possibly linked to longer wait times or care quality.
  + Patients aged **51+** experience varying levels of satisfaction, with **White** and **Two or More Races** patients showing higher satisfaction at ages 51-60.

**Recommendations**

**1. Optimize Patient Experience and Satisfaction**

* **Increase Feedback Collection**:
  + **75.10%** of patients did not rate the service, indicating a missed opportunity to gather valuable insights. Streamline the feedback process through digital surveys or in-person kiosks to improve service ratings.
  + Offering incentives for providing feedback or simplifying the process could boost response rates and provide clearer insights for service improvements.
* **Targeted Satisfaction Initiatives**:
  + Younger patients (0-10) and older age groups (61+) show lower satisfaction levels. Consider tailoring care and reducing wait times for these age groups by introducing family-friendly or senior-specific programs to improve their experience.
  + Focus on enhancing services for racial groups or age brackets that experience longer wait times or lower satisfaction, such as Native American/Alaska Native and Pacific Islander patients.

**2. Improve Wait Time and Resource Allocation**

* **Reduce Average Wait Time**:
  + With a **35.26-minute average wait**, efforts should be made to lower this. Optimize staff scheduling, especially during peak hours (weekdays) when patient volumes are high.
  + Utilize patient flow software to predict and manage wait times more efficiently.
* **Weekend Services**:
  + Since weekends see a lower patient volume, enhancing weekend services could improve satisfaction for the **2,642 patients** who visit during this time. Ensure adequate staffing and resources are available, or consider offering faster triage services to minimize wait times and boost weekend satisfaction.

**3. Enhance Department-Specific Services**

* **General Practice and Oncology** departments have the highest referral rates. Focusing on optimizing patient flow and reducing wait times in these departments can have a significant positive impact on overall satisfaction.
* **Walk-in patients** account for **58.59%** of visits, suggesting a need for efficient emergency or triage services. By improving intake processes for these patients, the hospital can reduce wait times and provide faster care to critical cases.

**4. Resource Planning for Growing Demand**

* The year-over-year increase in patient visits (**4,338 in 2019** to **4,878 in 2020**) suggests a need for scaling resources—more staff, space, or equipment may be required to handle growing demand.
* Analyzing peak months (e.g., July and August) where patient visits increase can inform better resource allocation and planning during high-demand periods.

**Conclusion**

The data reveals a clear need for improvements in patient satisfaction, particularly related to wait times and service quality. By increasing patient feedback, optimizing wait times, improving weekend service quality, and focusing on high-traffic departments like General Practice and Oncology, the hospital can significantly enhance the patient experience. Furthermore, as patient volumes continue to grow, scaling resources and improving service efficiency will be essential for maintaining high-quality emergency care.