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Enhancing Admission Efficiency and Optimizing Nursing Workload Through a Centralized Admission Model

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Background and objective

Facing severe nursing shortages and high nurse-to-patient ratios, workflow optimization is an urgent priority. The conventional direct-to-ward admission clashes with peak nursing activities, hindering timely assessments and causing prolonged patient waits, which heightens anxiety and delays medical interventions. This study used process re-engineering to establish an Admission Center in a regional hospital to alleviate ward bottlenecks. To evaluate the impact of the Admission Center on workflow efficiency and preventive care delivery. Specific objectives: assess waiting time reduction, evaluate workload offloading, and examine the effect of integrating cancer screening on public health outcomes.

Method

The study utilized workflow re-engineering for non-infectious same-day/pre-scheduled admissions. The Center launched July 1st, 2024. Five core workflow components were implemented: One-Stop Service, Front-Loaded Assessments, Integrated Pre-Ordered Exams (blood, ECG, X-ray), and Incorporation of Cancer Screening.

Relevance to HPH

Process optimization successfully shortened patient wait times and movement while enhancing admission efficiency and patient experience.

Results

Data showed service growth and improved exam rates. Pilot (Jul–Dec 2024, N=806): Monthly average 131. Top 3: Orthopedics (31.7%), Urology (15.7%), Cardiology (15.5%). Pre-written Medical Order Rate: 85.6%. Expanded (Jan–Aug 2025, N=1155): Monthly average 140. Top 3: Orthopedics (27.8%), Cardiology(20.07%), Urology(14.8%). Pre-written Medical Order Rate rose significantly to 95.6%. Emergency admissions (3%) were low due to direct ED-to-ward handover post-diagnosis.

Conclusion

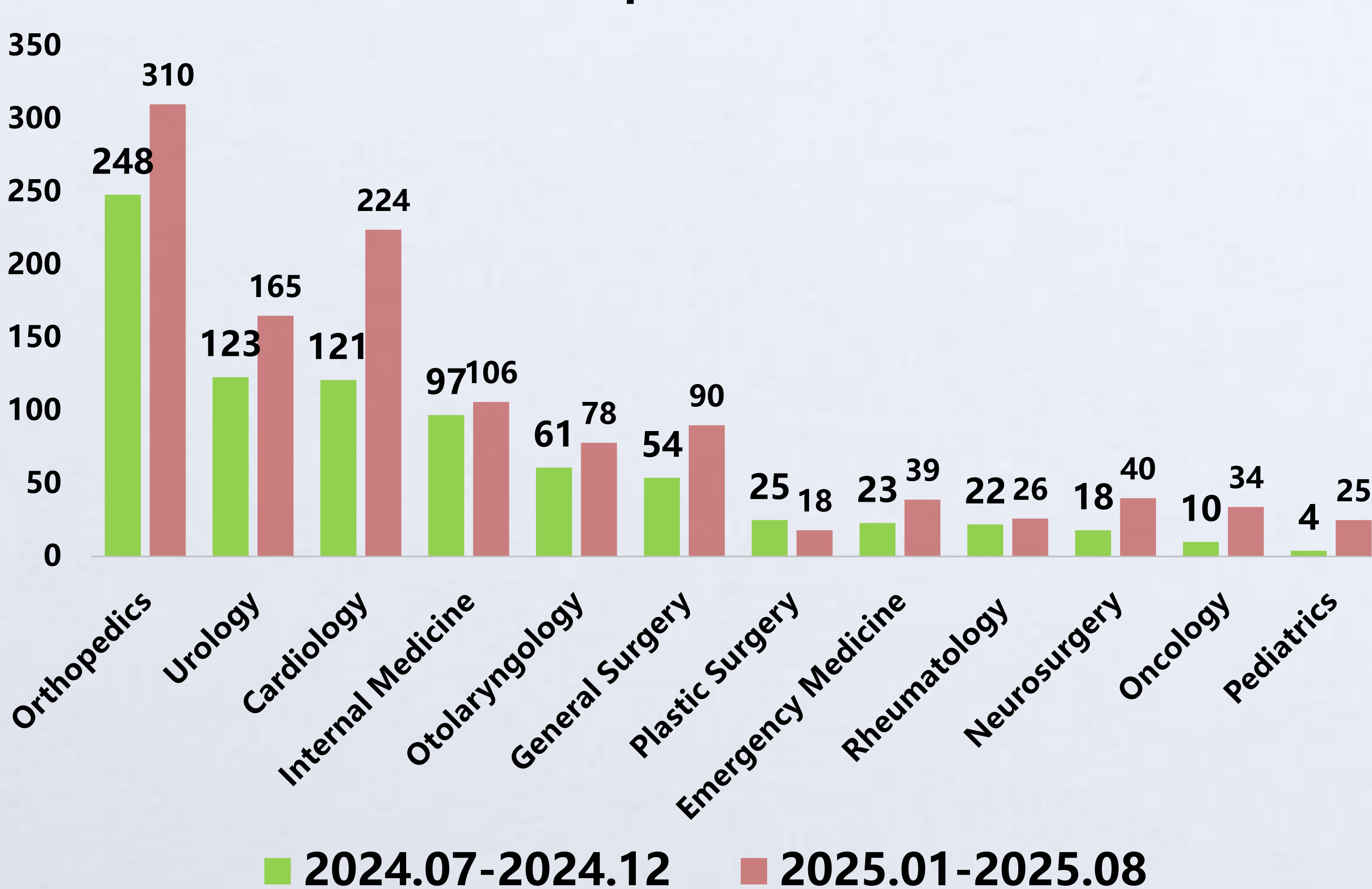
● Key Benefits:

1. Workload Reduction: Offloading assessments saved an estimated **35 hours of nursing time monthly**, allowing focus on clinical care.
2. Enhanced Efficiency: Pre-written Medical Order completion improved from **85.6% to 95.6%**, minimizing patient movement.
3. Service Integration: Successful integration of cancer screening suggests enhanced public participation in preventive health.

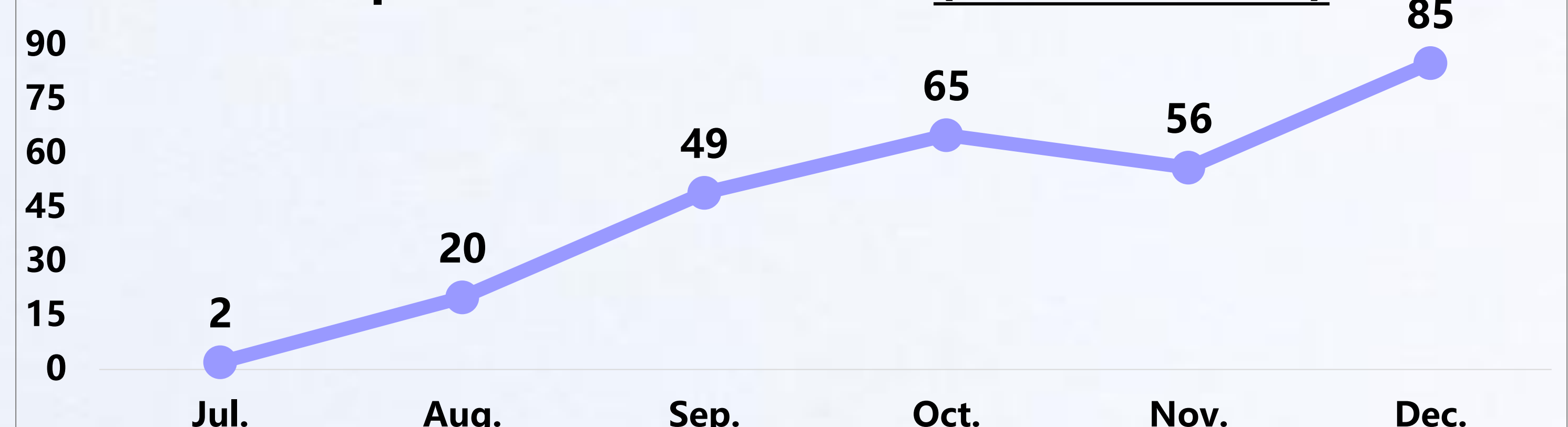
● Future Work:

1. Spatial Planning: Integrate the Center concept into future expansion/renovation using external digital displays.
2. Intelligent Platform: Implement an Intelligent Bed Management System to integrate real-time data and reduce manual bed assignment reliance.

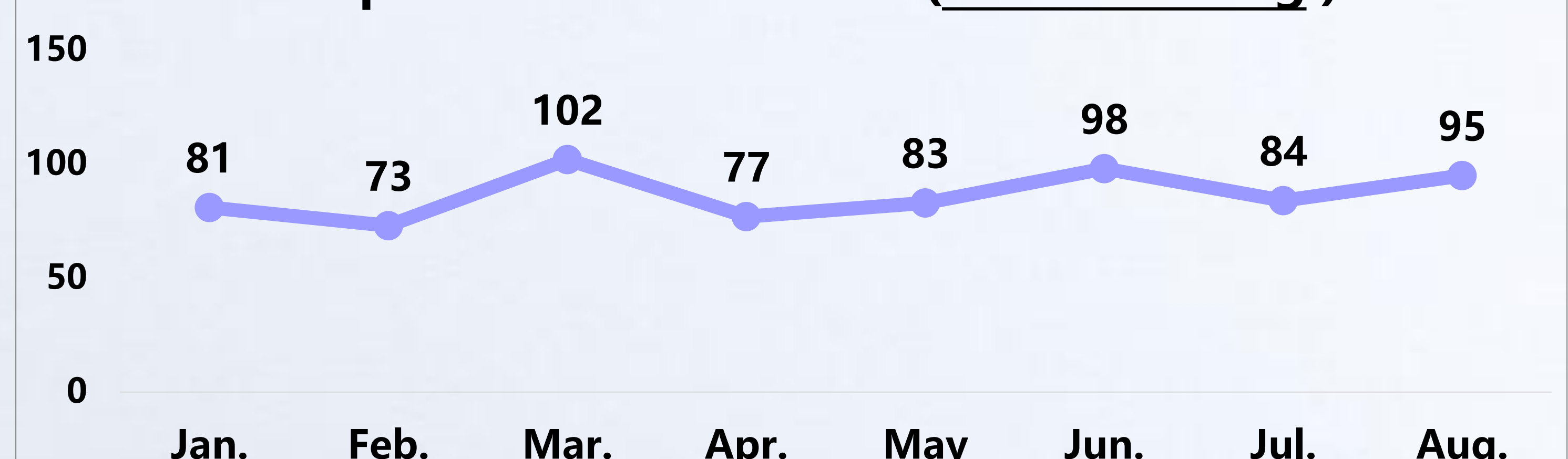
Analysis of Inpatient Center Service by Department



Admission Center: Number of Patients with Completed Medical Orders(2024.Jul.-Dec.)



Admission Center: Number of Patients with Completed Medical Orders(2025.Jan.-Aug.)



※Medical orders include blood tests, EKG, X-rays, and other urinalysis