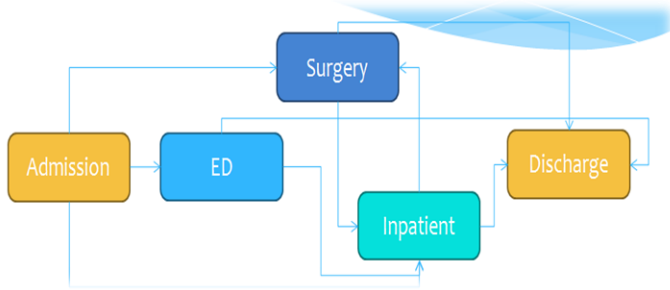


Validating a new Hospital Building Master Plan



Client's Challenge

- The new facility should accommodate the projected number of patients
- Bed / resource requirements
- Identification and quantification of bottleneck areas
- It can help in adding more space / counters in these areas
- Visualizing the entire hospital if integrated

PMI's Approach

- Analysis of Data, building the model and verification
- Separate models made for each department
- Analysis of baseline model results
- Bottleneck identification
- Individual models' integration
- Layout distance sensitivity analysis

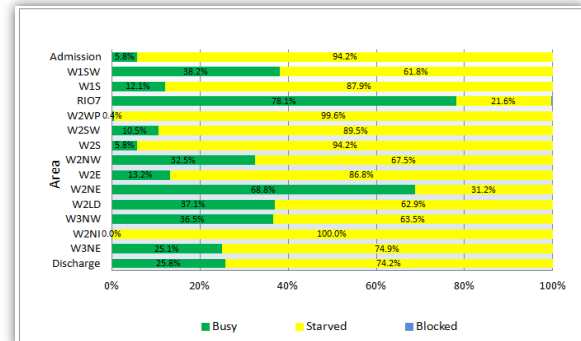
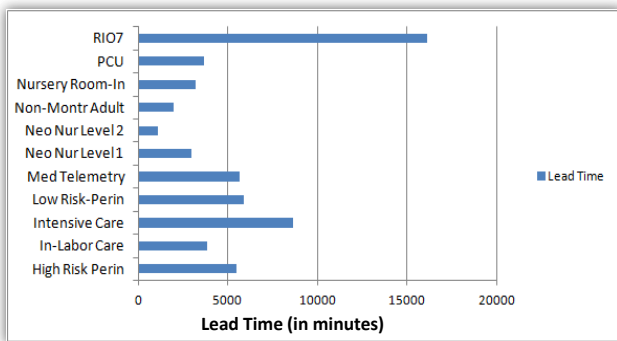
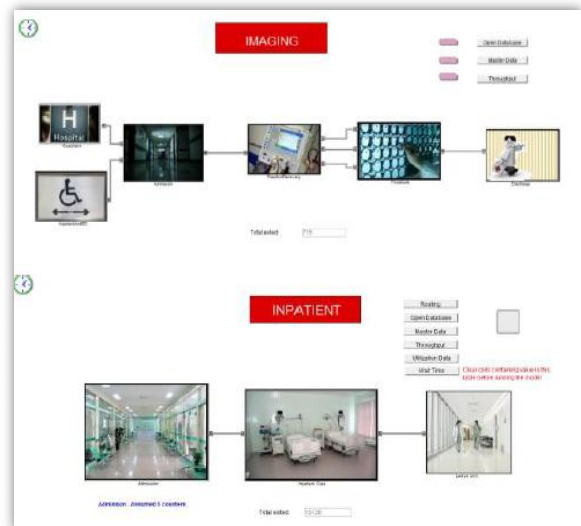
Findings & Recommendations

- Hospital capacity (to serve 61000 patients/year) validated
- Integrated model found to have concerns in Common rooms (named RIO)
- RIO found to be the bottleneck due to its capacity, and Patient In-System Stay time (lead Time)
- Existing RIO capacity increased by 5 beds

Key Points

- Future state plan validation
- VA NVA identification to shorten lead time
- Impact of change in distance between departments

Patient Route	Average Throughput per day (No. of Patients)
ED	78
Surgery	6
Inpatient	6
ED to Inpatient	26
Surgery to Inpatient	4
Inpatient to Surgery	2
Overall Throughput	122



*Data shown here has been modified to protect client confidentiality