

A GAP ANALYSIS OF OPERATION THEATRE PATIENT FLOW PROCESS

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❖ Research Objectives -

- To study the patient flow process in the operation theatre complex.
- To find out gaps in the patient process flow in the operation theatre complex.

❖ Research Methodology

- Study Design** – Descriptive, prospective study
- Sample size** – Census
- Inclusion Criteria** – All elective cases in the OT complex
- Exclusion Criteria** – All emergency cases.

❖ Tools and Techniques -

The Primary data was collected on routine basis from OT and recovery area of Columbia Asia Hospital Pune. Process mapping for the surgeries being performed was developed and track of activities taking place were monitored.

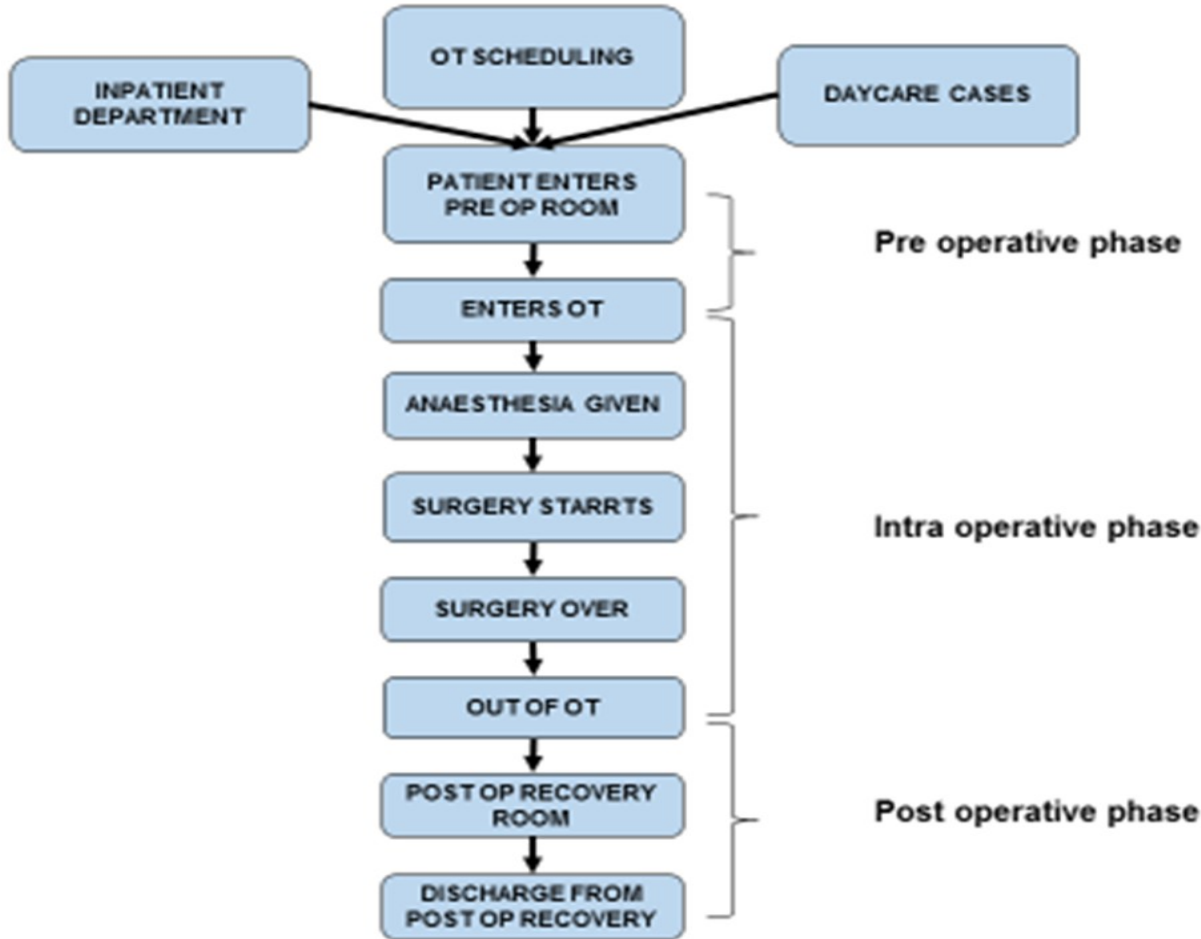


Chart 1.0 – Patient flowchart in the Operation Theatre Complex

❖ Data analysis –

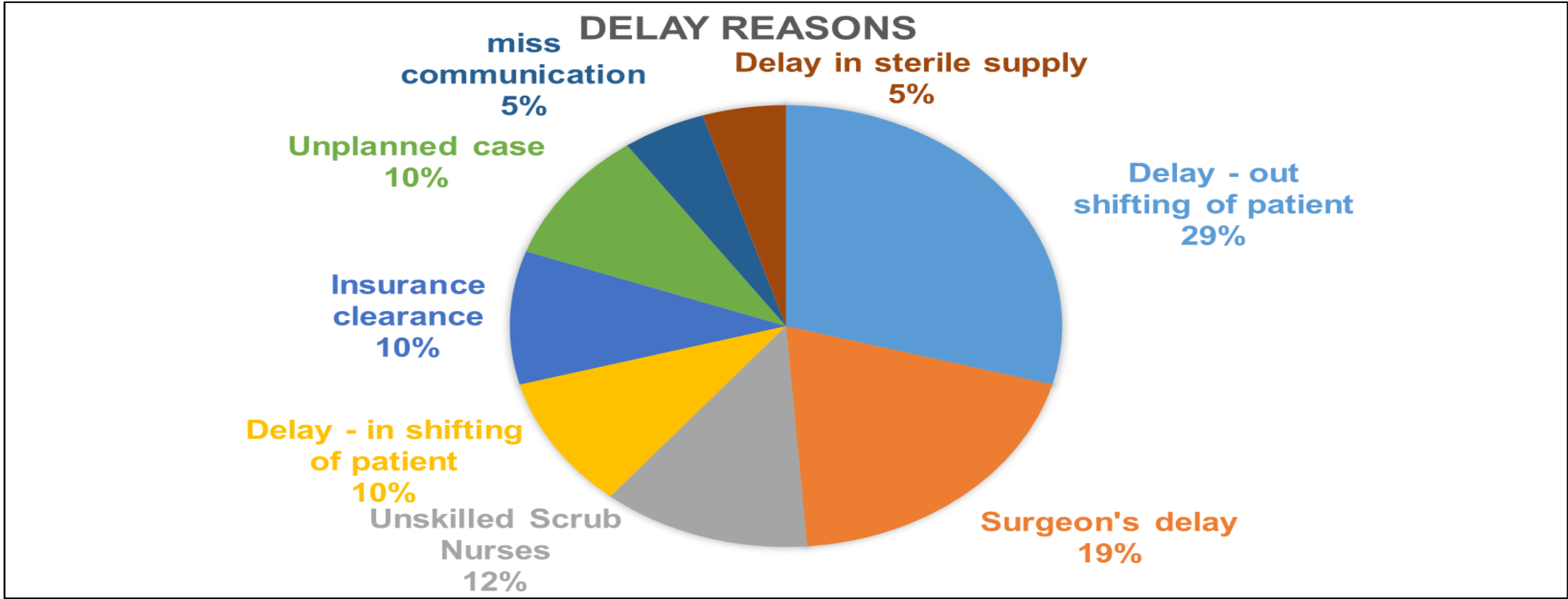


Chart 2.0 – Reasons for delay

(1) Pre-operative phase -

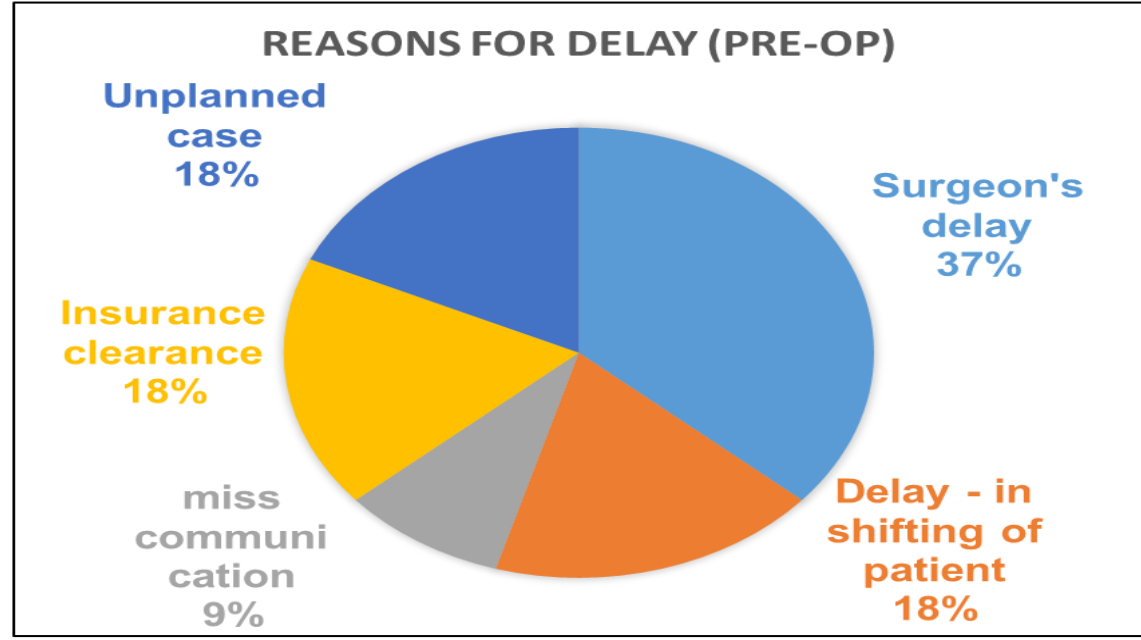


Chart 3.0 – Reasons of pre-op delay

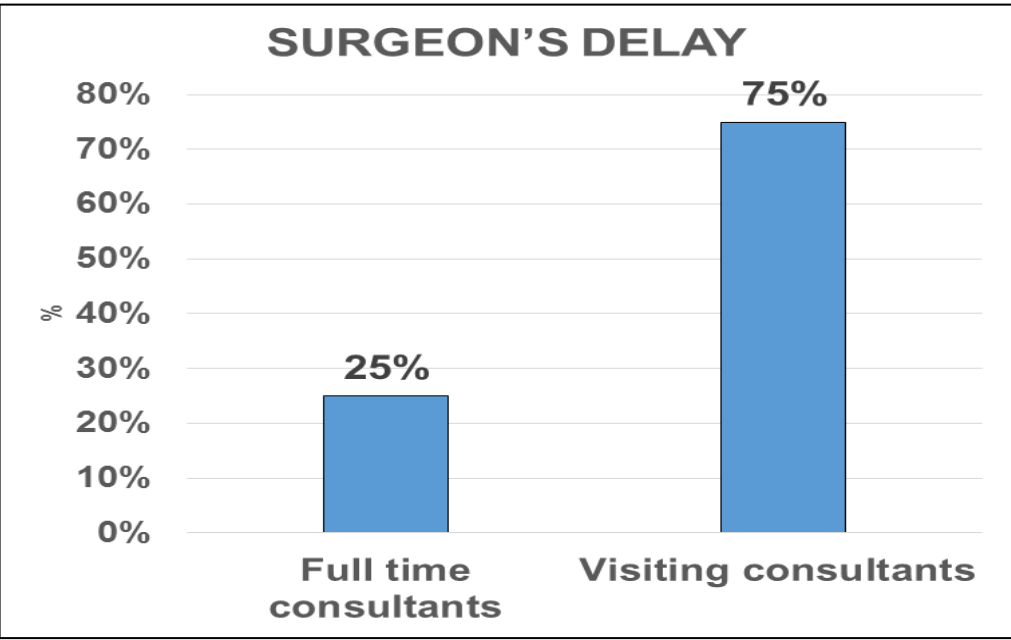


Chart 4.0 – Full time vs visiting consultants

(2) Intra-operative phase -

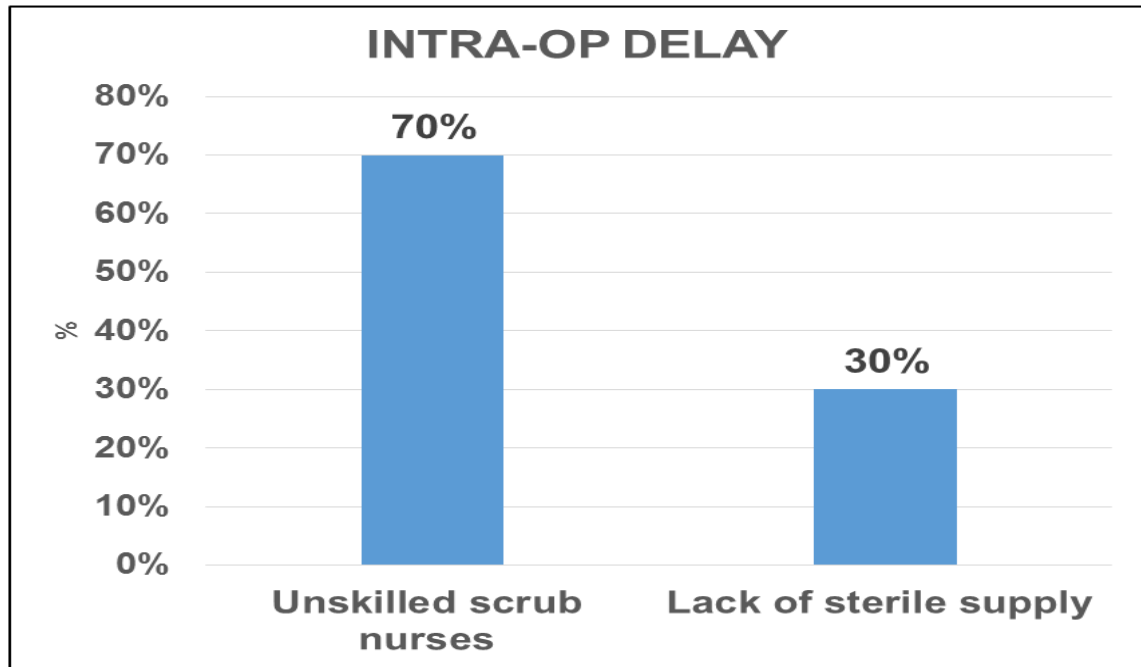


Chart 5.0 – Reasons for intra-op delay

(3) post-operative phase –

Post-operative delay was observed in 24% cases.

Post-operative delay was due to delay in out shifting of patients to ICU and wards

❖ Suggestions –

- First case should reach O.T. in time from the wards, allowing OT to start on time.
- The first case should be an in-house case.
- Allocate morning slots to full-time consultants.
- Adopt full time consultant model.
- Constant communication with doctors responsible for delay.
- Insured patients to be admitted post clearance.
- Hire trained scrub nurses.
- Online scheduling service.
- text message system for OT scheduling.
- Improve coordination between ward nurses and nurse aids.
- Special transport teams.
- Initiate a incentive program for scrub nurses.
- Preformed surgical kits for better efficiency

A UTILISATION STUDY OF MODALITIES IN RADIOLOGY DEPARTMENT

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❖ Research Objectives –

- To find out the utilisation coefficient of MRI ,CT, USG and X RAY
- To compare the flow of cases from IPD,OPD and OTC

❖ Research Methodology –

- Study Design** – Retrospective , Cross-sectional study.
- Sample size** – Census.
- Inclusion criteria** – All routine cases.
- Exclusion criteria** – All emergency cases.

❖ Tools and Techniques –

- The workload of each modality was calculated.
- Average time per scan was calculated.
- The total number of visits were analysed to find out IPD to OPD ratio
- Total scans done per day, total operational time was calculated
- The utilisation index for each modality was calculated.

- Utilisation Index** - $\frac{N}{M} \times 100$

N – Average number of hours the equipment is used per day
M – Maximum number o hours the equipment can be used per day

❖ Data analysis –

- Utilisation Index -

Modalit y	Total scans	Avg time per scan	Avg scans per day	Avg hours per day	Max hours available per day	Utilisati on Index
CT	206	0.42	2	0.84	10	8.4%
MRI	203	0.75	2	1.50	10	12.79%
USG	1163	0.45	10	4.5	8	54.97%
X-RAY	1738	0.33	15	4.95	8	60.85%

Table 1.0 – utilisation Index

- Patient Flow

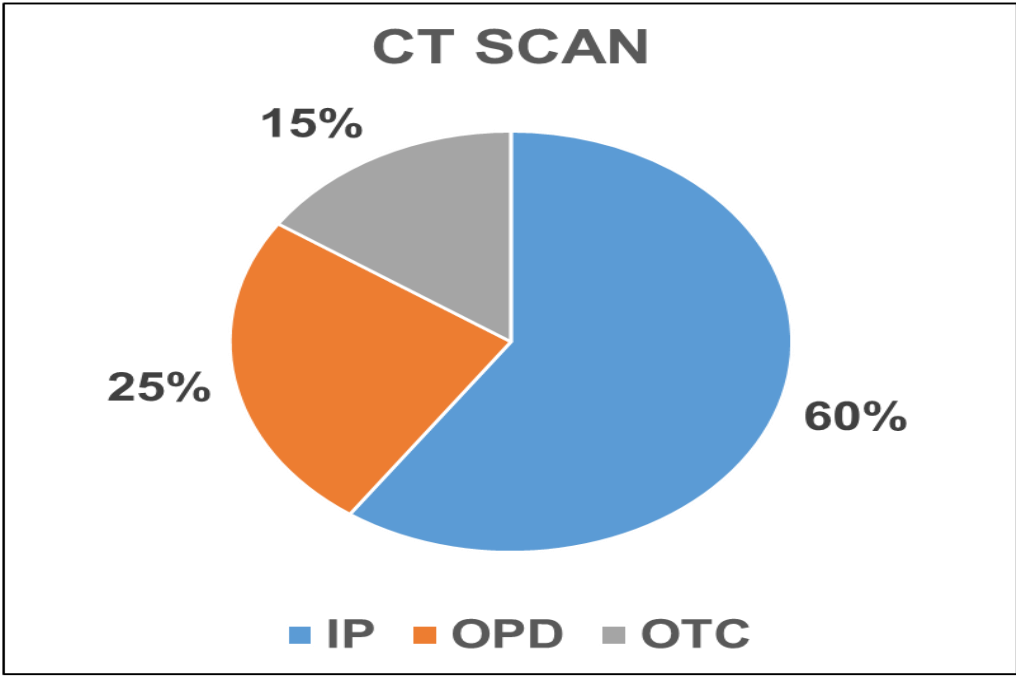


Chart 1.0 total patients availing CT scan

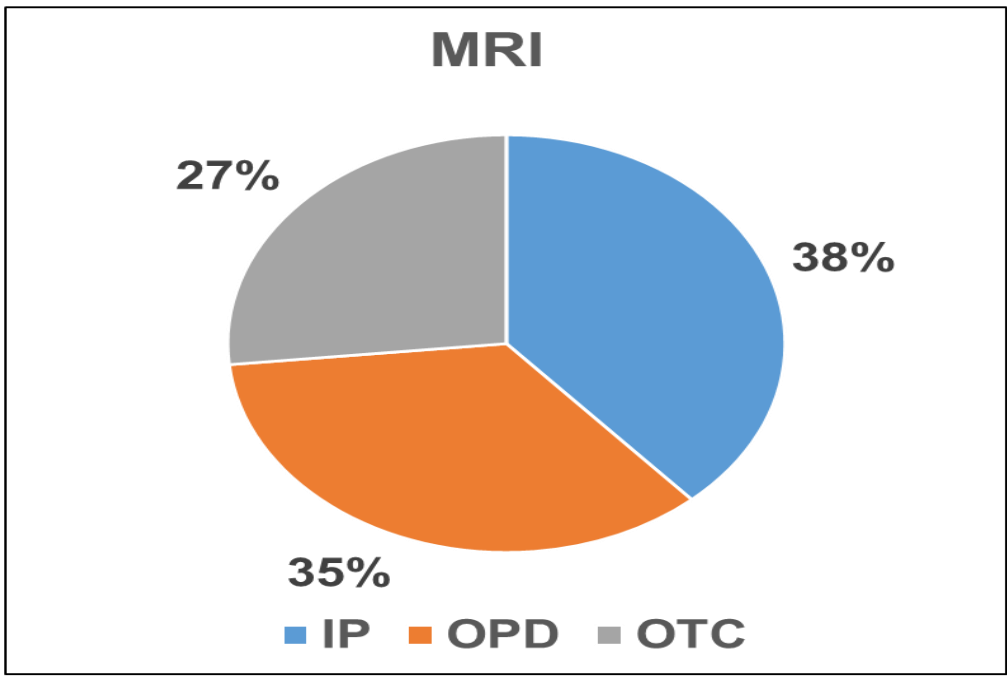


Chart 2.0 total patients availing MRI

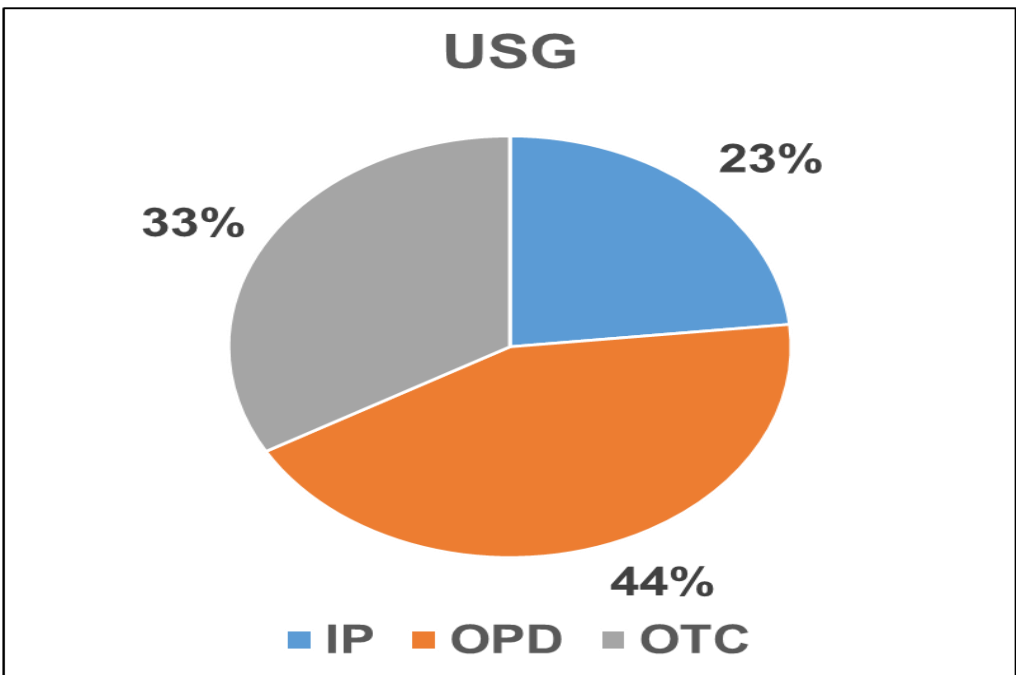


Chart 3.0 total patients availing USG

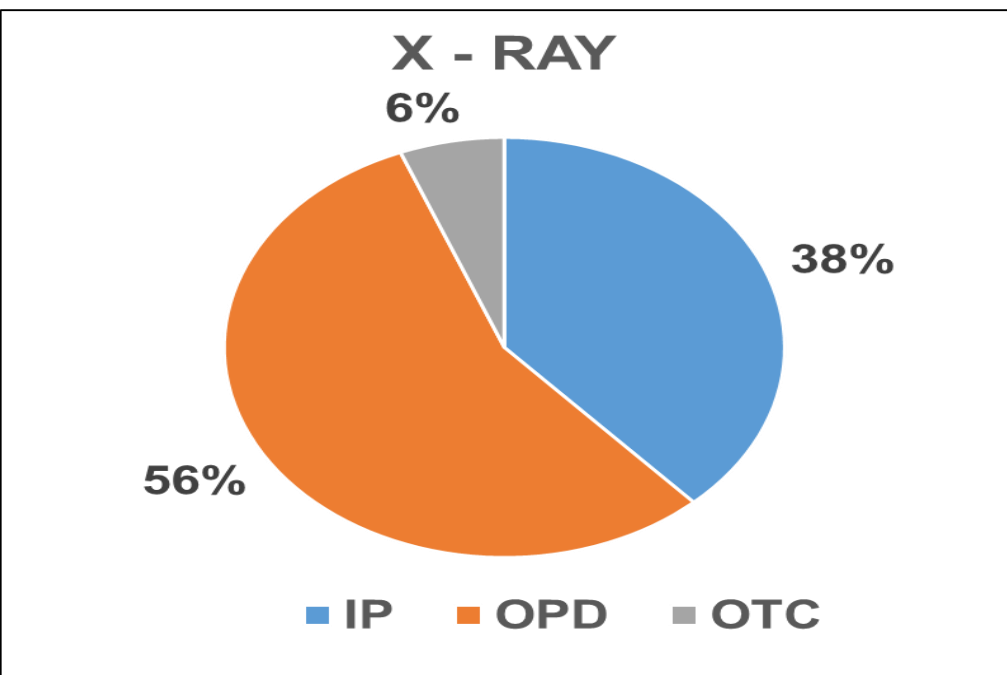


Chart 4.0 total patients availing X RAY

Referred and walk-in Cases -

CT scan – 15.53%
MRI scan – 26.6%
USG – 33.28%
X- RAY – 6.04%

IPD to OPD ratio

CT – 2 : 1
MRI – 1 : 1
X RAY – 1 :2
USG – 1 : 1

❖ Suggestions –

- Strengthening neurosciences, general surgery, critical care, orthopaedic departments by introducing popular consultants.
- Tie up with nursing homes and hospitals.
- Aggressive direct to customer marketing and promotion of heath check packages.
- Special discount packages.
- Change in policy regarding referral charges to outside consultants.
- Increase tie up with corporates.