SURGICAL MANAGEMENT COST VARIANCE: ANALYZING ESTIMATE VS ACTUAL BILLING IN A TERTIARY CARE HOSPITAL

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HISTORY

Fortis Healthcare expanded in Manesar, Gurugram, by acquiring Medeor Hospital from VPS Group. This move is part of Fortis's strategy to grow in the Delhi NCR region. The hospital, now part of Fortis, will have 350 beds and offer many medical services. This acquisition strengthens Fortis's presence in Gurugram, alongside its main facility, Fortis Memorial Research Institute (FMRI).

ABOUT

Fortis Hospital, Manesar, Gurugram, is Fortis Healthcare's second multispecialty hospital in the city. It has 350 beds, including 100 ICU beds, 15 emergency beds, 2 Cath Labs, and 9 operating theatres (OTs). The hospital features the latest technology and a team of skilled professionals focused on excellent patient care.

VISION

To create a world-class integrated healthcare delivery system in India, entailing the finest medical skills combined with compassionate patient care.

MISSION

To be a globally respected healthcare organisation known for Clinical Excellence and Distinctive Patient Care.

ORGANISATION STRUCTURE

OBJECTIVE

- To evaluate the variance between estimated and actual surgical billing amounts for different types of surgeries.
- To identify the key factors contributing to deviations such as ICU requirements, post-operative complications, unplanned consumables, and extended stays.
- To analyze departmental trends in estimate accuracy across surgical specialties (e.g., Gastro, Oncology, Gynae, Ortho).

METHODOLOGY

This observational study uses a retrospective cross-sectional design to analyze estimate vs actual billing for surgical patients at Fortis Hospital Manesar.

Fig 1: Surgical Bill Deviation(%)

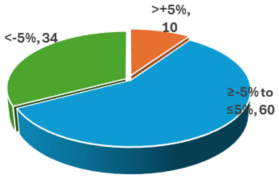


Fig 2: Overestimated Deviation by Speciality

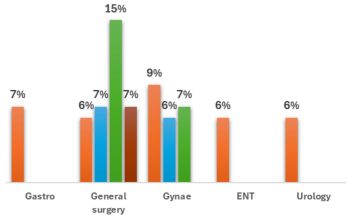


Fig 3: Factor Affecting Costs

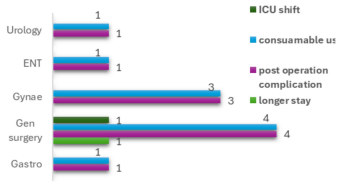
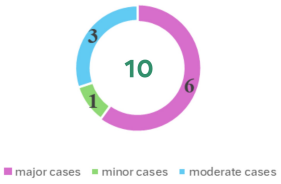


Fig 4: Case Type Split



INTRPRETATION

- 10 surgical cases showed billing deviation over 5%, mostly in major surgeries.
- Major deviations were highest in General Surgery and Gynaecology.
- ICU stay, complications, and longer hospital stay affected billing.
- Accurate estimation needed for high-cost surgeries.
- Overestimation trend suggests need for better pre-surgical billing tools

SUGGESTIONS

- Optimizing consultants schedules to minimize delays.
- Streamlining discharge procedures, particularly with expedited Third-Party Administrator (TPA) approval.
- Organize Monthly Training for PCS Teams on common deviation causes, insurance clauses, and communication skills.
- Utilizing AI-driven systems for scheduling.

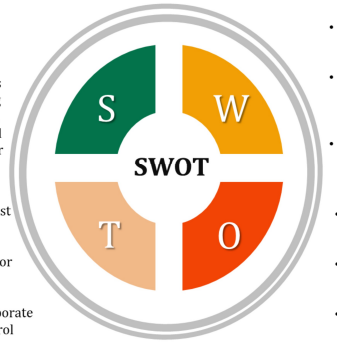
SWOT ANALYSIS

STRENGTH

- Structured pre-surgical estimation process for most surgical procedures.
- Skilled PCS and billing teams familiar with multiple billing types (cash, TPA, corporate).
- Use of an integrated Hospital Information System (HIS) for streamlined data access.

THREAT

- Risk of declining patient trust due to unexpected billing deviations.
- Potential financial disputes or negative reviews affecting hospital's reputation.
- Pressure from TPA and corporate clients for stricter cost control and more accurate estimates.



WEAKNESS

- Inconsistencies in billing estimates due to lack of clinical input during estimation.
- Poor interdepartmental coordination leading to gaps between estimation and final billing.
- Absence of post-procedure estimation update during patient stay.

OPPORTUNITY

- Adoption of dynamic billing dashboards for real-time deviation tracking.
- Developing predictive models using historical data to improve estimation accuracy.
- Enhancing patient education around possible cost variations and billing transparency.

TOWS ANALYSIS

	Strengths (S)	Weakness (w)
Opportunities (O)	**S-O strategies** • Integrate HIS with dynamic dashboards to track estimate vs actual billing in real-time. • Use skilled staff to educate patients on possible billing variations.	**W-O strategies** • Implement auto-alerts in dashboards for post-procedure estimate updates. • Use analytics to adjust estimates mid-treatment when complications arise.
Threats (T)	**S-T strategies** • Use structured estimation process to reduce surprises and build patient trust. • Use HIS data access to provide transparent breakdowns to TPA/corporate clients.	**W-T strategies** • Involve clinicians directly during estimation to improve accuracy. • Improve interdepartmental communication through scheduled billing review meetings.

PRACTICAL EXPOSURE VS THEORETICAL LEARNING

Observed real-time coordination between PCS, billing, TPA desk, financial counselling, OT, and wards for surgical admissions.	Gained insight into hospital workflow models, especially admission-to-discharge clinical pathways.
Learned how pre-surgical estimates are prepared, approved, and communicated for cash, insurance, and corporate	Applied concepts of healthcare financial management, variance analysis.

CHALLENGES FACED DURING INTERNSHIP

- Applying theoretical knowledge to real-world tasks and challenges.
- facing difficulties with coordination with the people.
- Adjusting to and integrating within the specific culture of a workplace.

MAJOR LEARNING DURING INTERNSHIP

- Strengthened conflict resolution and interdepartmental communication.
- Understood patient-centric service delivery and process optimization
- Learned patient handling, billing, and coordination tasks.