

The background of the slide is a soft-focus image of pink flowers with yellow stamens. The text is overlaid on this background.

DESIGNING A TOTAL KNEE REPLACEMENT PRICE PACKAGE FOR EHCC HOSPITAL- A COST BREAKUP & PRICING OF THE SERVICE

**By
Dr.Snehashree Chavan(PT)
Batch 17**

**Post Graduate Diploma in Hospital Management
2012-14
Institute of Health Management Research, Jaipur**

ETERNAL HEART CARE CENTRE (EHCC) , Jaipur

- **225 bedded Multispecialty hospital**
- **Commissioned in September 2013**
- **Flagship social initiative of Dr.Samin k Sharma & his wife Mrs.Manju Sharma**
- **Affiliate of Mount Sinai Hospital, New York, USA**
- **Vision: A centre of excellence in area of medicine with highest international standards at affordable cost for the community around the globe.**
- **Mission: To redefine healthcare by improving outcomes and experience of patients through cutting edge research and personalized clinical care including innovative, preventive, diagnostic, therapeutic and rehabilitation services**
- **Present specialties offered: Cardiology & Orthopedics**

SUMMARY OF THE JOB

- Visit to all the clinical and non clinical departments during orientation
- Major time invested in working in the quality department
- Facilitation of NABH accreditation procedure for the hospital.
- Gap analysis using the self assessment tool kit
- Formulation of SOPs of various departments of the hospital
- Designing of the Total knee replacement packages for unilateral as well as bilateral procedures

NEED OF THE STUDY

- A comprehensive surgery package , is beneficial to both the customers as well as the organization
- A basic requirement of aligning the offering of a newly functional service under a single component, for better cost estimation and better structuring of price
- Profit calculation
- It may also have an impact upon the marketing strategies

OBJECTIVES



To design a comprehensive TKR package for U/L as well as B/L procedures

To design packages according to the categories of room

To perform cost breakup analysis & calculating the unit cost

To do appropriate pricing

METHODOLOGY

- **Study Setting:** Eternal Heart Care Centre, Jaipur.
- **Study Period:** Feb to April 2014 (3 Months)
- **Study Design:** This study is an exploratory study as it has been done to test concepts before they are put in marketplace.
- **Type of Analysis:** Quantitative Analysis

TOOLS OF DATA COLLECTION

➤ **Primary Data Collection:**

- Discussion with experts of the hospital
- Review of financial records
- Review of records of central stores, pharmacy & laboratory
- Package data from competitive hospitals

➤ **Secondary data collection:**

From various articles of journals, from books & websites of hospitals & other published sources related to designing of packages, cost breakup analysis & cost optimization in hospitals

DESIGNING OF PACKAGES

- Bundling of medical facilities (like diagnostics & investigations, surgical procedure, IPD charges) in one package
- Makes the service more attractive to consumers & more manageable to the hospital

ADVANTAGES OF PACKAGE SYSTEM:

➤ Patient point of view:

- More choice in choosing different packages according to the class
- After depositing money becomes free from worries and tension for the treatment
- Reduces the expenses incurred by the patients on the medicine and consumables, as supply would be procured in the bulk by the hospital from the supplier through rate contract.
- Bundled payment discourages unnecessary care, encourages coordination across providers, and potentially improves quality.

➤ Hospital point of view:

- For a hospital, it is a source of income as now more number of patients can be treated in the same set up
- This would also mean optimum utilization of resources in terms of man, material and infrastructure.
- This would speed up billing process and increase accountability on their behalf.
- It makes product more attractive to corporate, state agencies, TPA's and insurance providers

CONCEPT OF DESIGNING OF PACKAGES

- Prices will be decided on the basis of activity based costing i.e. using Cost plus pricing
- Comparative study of EHCC hospital with other competitors for designing packages i.e. Competitive pricing

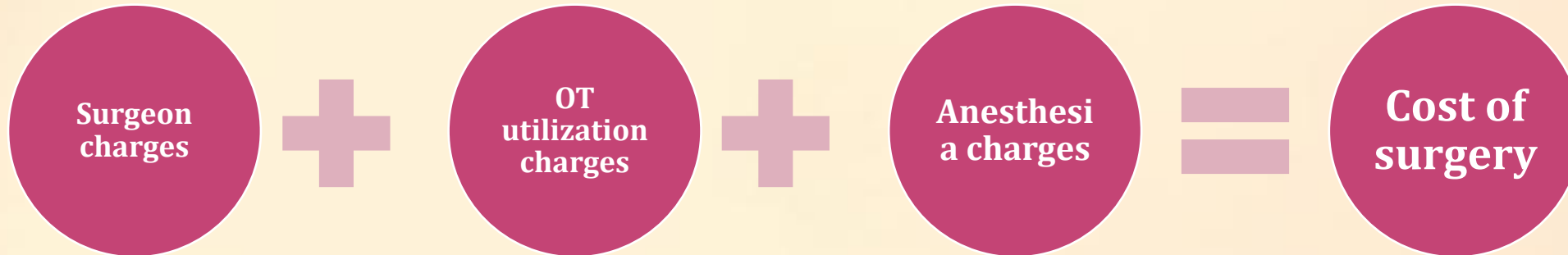
Package Calculations

- [TKR package calculation.xlsx](#)

COST OF SURGERY

Surgery cost calculation according to the hospital policy is done in the following method:

Keeping the surgeon charges as the base



Where, OT utilization charges = 65 % of surgeon charges

& Anesthesia charges = 35% of surgeon charges

At present hospital is offering Rs 15000 as the surgeon charges for performing each TKR procedure.

Therefore,

$$\begin{aligned}\text{Cost of per TKR surgery} &= 15000 + 65\% \text{ of } 15000 + 35\% \text{ of } 15000 \\ &= 15000 + 9750 + 5250 \\ &= \textbf{Rs 30,000}\end{aligned}$$

OTHERS...

- Consultation charges are Rs300 for the General ward,
- Rs400 for Twin sharing room
- Rs500 for Semi-Deluxe & Deluxe room
- Physiotherapy charges are Rs 150 per day for all categories of rooms which includes 2 visits. .
- Dietician charges are Rs150 per visit per day for all categories of rooms & would be for 7days for U/L TKR & 10days for B/L TKR.
- The implant cost depends upon the type of the implant used & its choicedepends solely upon the orthopedic surgeon in consultation with the patient as per his affordability. This may vary from case to case; hence it would not be included in the package cost.
- Additional costs differing from case to case owing to blood transfusions, other investigations like CT, MRI, etc or costs occurring due to usage of high end medicines & consumables are exclusions in the basic package & would be charged over & above

Package Calculations

- [TKR package calculation.xlsx](#)

CONCLUSION

- Cost analysis in a hospital is an extensive area of study.
- There are numerous factors involved in building up of the basic cost of a product or service & their identification is a crucial phenomenon.
- Certain factors are such that they cannot be controlled
- Some are such that focusing on them can curb unnecessary expenditures.
- Distinguishing such factors and focusing on factors which will help in reducing wastage and optimize utilization of resources with an added return in the profits. Enhance the quality of service delivered and thereby affect the patient satisfaction.

RECOMMENDATIONS

Interventional strategies for enhancing cost optimization:

- Expenditure on drugs and consumables needs to be checked by looking for some alternate vendors so that the overall cost of the surgery can be reduced.
- **Reduction in stay** in wards by continuous Quality Improvement (both Pre and Post procedure) and effective Team Management.
- **Benchmarking costs and operations:** Benchmarking with peers is also an important tool for tracking progress of initiatives. Benchmarking not only provides performance context, but also can aid discovery of improvement opportunity and help in identifying the right performance targets
- **Managing Accountability:** Driving—and maintaining—successes requires strong systems of accountability. To this end, organizations need the right organizational culture, incentives, role definitions, and performance metrics in place
- **Material standardization** helps in reduction of costs to a great extent. Not only standardization of medicines and consumables be done but standardization of each and every item involved in patient care should be achieved

LIMITATIONS OF THE STUDY

- Utility costs such as electricity consumption, etc could not be analyzed due to unavailability of this data.
- Operation theatre utilization could not be calculated using direct cost & indirect cost method, as there was lack of permission for the same from the organization's management.
- The study was conducted for a short duration restricted to a specific time period and may vary according to the situational changes.
- Since the study was undertaken before the initiation of the specialty, the costs beard by respective heads could not be verified practically with the patient bills as there was no precedence

REFERENCES

- Analysis of hospital costs: A manual for managers By Donald s. Shepard, ph.d. Dominic hodgkin, ph.d. Yvonne anthony, ph.d. September 29, 1998 Institute for health policy Heller school Brandeis university Waltham, ma 02254-9110 usa Prepared for the Health systems development program World health organization Geneva, switzerland
- Emerging practices in cost management- by Barry J. Brinker
- Hospital Management Accounting- by G.R.Kulkarni
- From Volume To Value: Better Ways To Pay For Health Care Providers would be better able to reduce costs and improve quality under episode-of-care and comprehensive care payment systems by Harold D. Miller
- Hospital Strategies for Process-Based Cost Reduction Educational report SPONSORED BY Ernst & Young
- Can bundled' payments help slash health costs?- USA Today. Retrieved 2010-03-11.
- Package pricing- Miller J (1 June 2008)

A white rectangular card is placed diagonally on a dense layer of pink rose petals. The petals are vibrant pink with some yellowish centers, creating a soft, textured background. The card is clean and minimalist, with the words 'Thank you' written in a black, elegant cursive script.

Thank you