

**IMPROVING THE REVENUE
MANAGEMENT MATRIX
and RE-ENGINEERING THE INSURANCE
DEPARTMENT PROCESS**

for A Hospital in Sharjah, U.A.E administered by Innovamed Practice
Management

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INTRODUCTION

The study was conducted in INNOVAMED PRACTICE MANAGEMENT LLC which is a Business Management Consultancy in Sharjah Free zone.

As a Management Trainee in the Insurance sector of the organization, I was involved in activities of Innovamed aimed at targeting the existing clientage which included Healthcare Organizations like

- Specialized Dental and Orthodontic Centre
- Lilac Medical Centre
- W. Wilson Specialized Hospital
- Ishtar Medical Centre

Basic role and responsibility spanned from analysis of existing management and business strategies, supporting and enhancing the providers in development and management of process flow and management policies.

We had to oversee the complex insurance and patient billing processes , reduce TAT (Turnaround time) and resources which can reduce hospital burden of Revenue cycle Management by focussing more on administrative components than clinical.

AIM

The study aims at improving the Revenue Management Matrix and Re-engineering the Insurance Department process for a Multispecialty Hospital in Sharjah, U.A.E.

OBJECTIVES

- To review the insurance processes related guidelines and standards of a Multispecialty Hospital in Sharjah, UAE and hospital settings in general.
- To assess the processes of health insurance in a hospital against standards.
- To identify the gaps against the health insurance processes of the hospital.



STUDY METHODOLOGY

STUDY DESIGN:

A Quantitative and Qualitative Observational Study was carried out retrospectively over a period of 3 months in the client insurance department on the outpatient and inpatient claims.

The same study was done on operational years financial records for the client hospital with reference to other market players.

METHODS OF DATA COLLECTION

Review of Health Insurance process related guidelines, and standards in General, and the guidelines of the Hospital.

Review and analysis of financial & hospital records from finance department, Insurance Department and Quality department.

STUDY RESPONDENTS

All the records of patient coming with insurance coverage, services rendered and claims processed over a period of three(3) months were reviewed with financial books for operational 2years (From Jan 2017 to Dec 2018).

Data was also collected for other market competitors to benchmark and analyze. No direct interaction with patient or relative was made during the study. The study has used secondary data only.

DURATION

Period: February-April'2019

SAMPLE SIZE

A total of 2100 were claims processed during October to December 2018 (3months) and Financial book records for operational years were observed and mapped

SOURCE OF DATA COLLECTION

Review of Manual Interpretations of Hospital records, Financial Books, Balance Sheets, HMIS and DHPO claim records was done.

DATA ANALYSIS APPROACH

The collected data was analyzed by using six sigma and root cause analysis.

The proper assessment of factors related to the denial of claims and the subsequent issues faced by the hospital as loss of revenue were being shortlisted and analyzed.

The data was processed through 5 phases of Six sigma :

- ❖ Define
- ❖ Measure
- ❖ Analyze
- ❖ Improve
- ❖ Control

ETHICAL CONSIDERATIONS

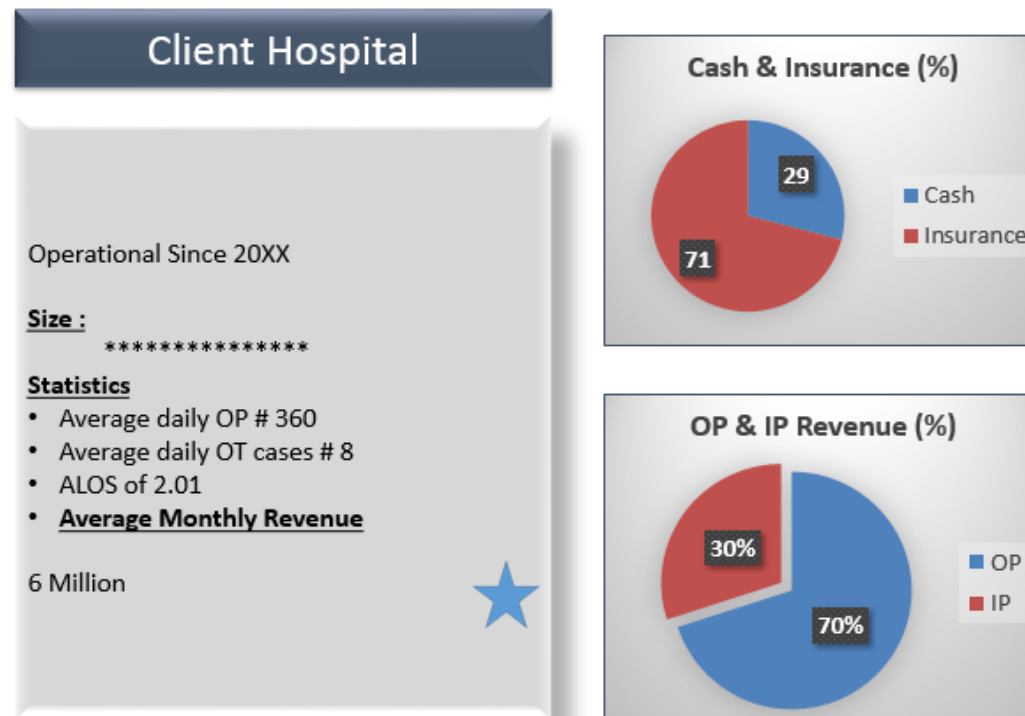
The confidentiality of the patients and client hospital was maintained and no disclosure of their records was done. Even in this document, the processed data and analysis done on behalf of Innovamed was shared only.



DEFINE PHASE

The current financial status of the hospital was defined and compared with 4 hospitals in the market. After the review of the data the values to define client hospital and competitors are as following:

For the client hospital the operational facts were recorded. The size of hospital is hidden as per company non-disclosure agreement with client.



HOSPITAL A

Operational Since 1st Quarter 2015
Operational Break-even by 9th month of Operations

Size :

- 90 Beds (69 Functional)
- 23 Out patient Clinics
- 5 Operating Rooms
- 2 LDRPs

Statistics

- Average daily OP # 500
- Average daily OT cases #30 (800/mth)
- ALOS of 1.8
- Monthly Avg Births # 140

Average Monthly Revenue

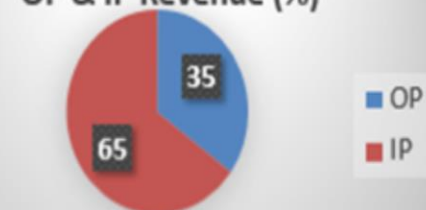
15 Million



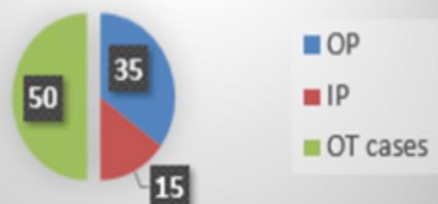
Cash & Insurance (%)



OP & IP Revenue (%)



Revenue Contribution in %



HOSPITAL B

Operational Since 2014
Obtained Break-even by 18months of Operations

Size :

- 92 beds
- 22 Out Patient Clinics
- 2 Operating Rooms+ Cath Lab
- 2 LDRPs +1 CS OR

Statistics

- Average daily OP # 500
- Average daily OT cases # 14
- ALOS of 2.1
- Monthly Avg Births #80

Average Monthly Revenue

20 Million



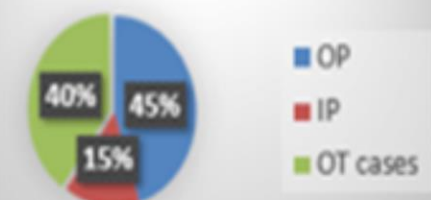
Cash & Insurance (%)



OP & IP Revenue (%)



Revenue Contribution in %



HOSPITAL C

Operational Since 2006

Size :

- 76 Beds
- 20 Out patient Clinics
- 5 Operating Rooms
- 2 LDRPs

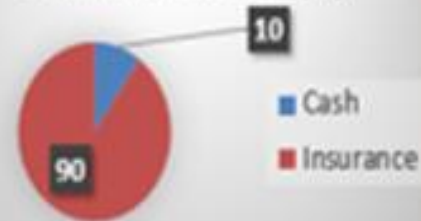
Statistics

- Average daily OP# 300
- Average daily OT cases # 10
- ALOS of 1.8
- Monthly Avg Births # 75

Average Monthly Revenue

16 Million

Cash and Insurance (%)



OP & IP Revenue (%)



Revenue contribution in %



HOSPITAL D

Operational Since 2004
Break-even in 6 months

Size :

- 75 Beds
- 45 Out patient Clinics
- 4 Operating Rooms (1cath Lab)
- 3 LDRPs

Statistics

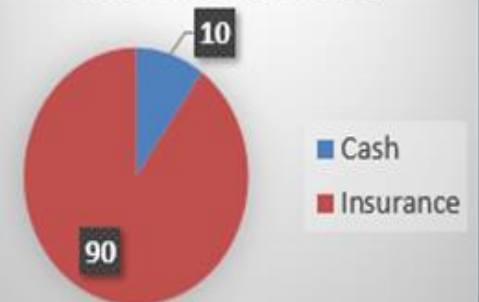
- Average daily OP # 900
- Average daily OT cases #10
- ALOS of 2
- Avg Births 150

Average Monthly Revenue

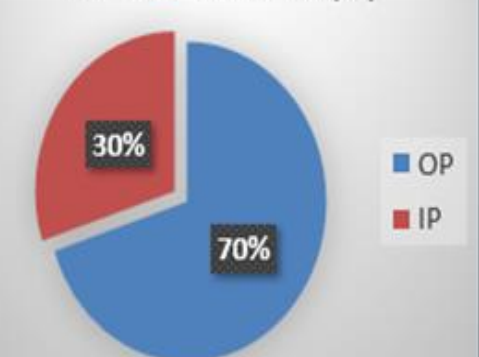
30 Million



Cash & Insurance (%)



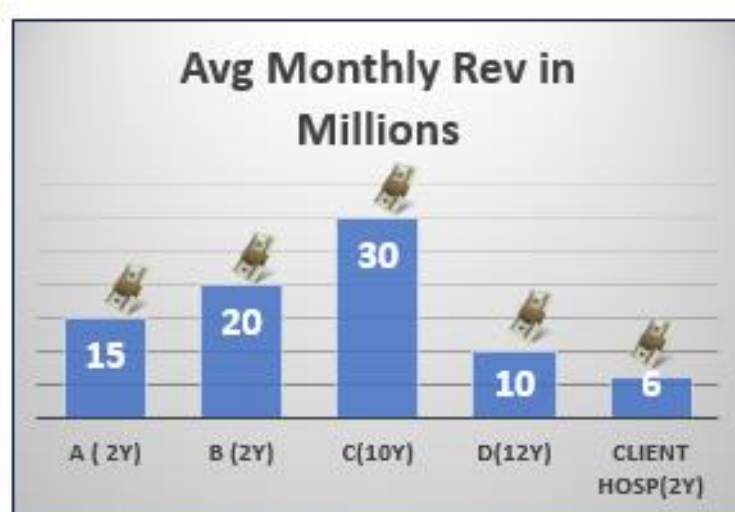
OP & IP Revenue (%)



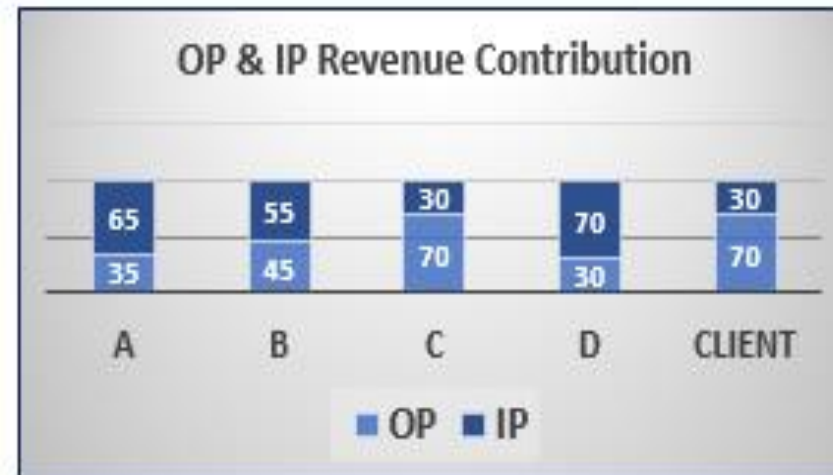
MEASURE PHASE

The financial and operational capacity of each of hospital was measured and compared with client hospital on parameters like Average monthly revenue, Yearly revenue per bed, OP & IP Revenue Contribution, Cash & Insurance patient ratio, etc

Average Monthly Revenue



OP And IP Revenue Contribution



Yearly Revenue /Bed



Comparison study of Client Hospital Self Pay Price List against Price List of Hospital A

Discrepancies & variation found in price list for Client Hospital Vs Hospital A

No.	Description	Units
1	Services with higher pricing compared to Hospital A	1321
2	Services with lower price compared to Hospital A	1070
3	Services not included in Hospital A tariff (Ex: Consumables)	2516
	Other Observations	
1	Duplicate CPT noted in the tariff list	
2	Almost 1/3 rd of the price list contains consumables codes	

Variation found in prices for Delivery packages of client hospital Vs Hospital A

Delivery Package (AED)	Hospital A (Sharing Room)	Client Hospital
NVD	8200	6999
LSCS	14500	10999

Variation found in prices for Consultations of client hospital Vs Hospital A

Consultation Fee (AED)	Hospital A	Client Hospital
ER GP	150	175
Specialist	200	280
Consultant	350	315

ANALYZE PHASE

The various pricing mechanisms were analyzed and compared with market standards to find the difference in billing collection and revenue generation.

PRICE LIST FOR SELF PAY /CASH PATIENTS

In the Current Market Scenario, the gross price list at Client Hospital is quite ambiguous. While some of the prices are higher than benchmark hospitals, a significant number of services are priced less (relative to the effort required to perform such services) which needs a relook and price revision.

SELF PAY GUIDELINES(Client Hospital)

5% of Procedure Charges to be considered as Anesthesia charge.

Further it also states that Package charges include OT & Anesthesia and to be considered as a Package with a disclaimer -Some Packages anesthesia charges 5% included some packages anesthesia charges excluded.

SELF PAY GUIDELINES(Hospital A)

Follows the International Standard Guidelines states 20% of the Procedure can be charged as Anesthesia Charges.

Thus if Procedures (IP surgeries) are inclusive of all charges then the prices for Self-Pay may need to be revised.

PRICE LIST FOR INSURANCE CLIENTS

- The Discounts offered for various networks across Health Insurance Companies are on the higher side relative to benchmark hospitals
- Higher discounts can be provided for Diagnostic Services; however, it is generally infeasible to maintain high discount rates for resource-intensive services such as Room Charges since this will affect the direct revenues of the organization.
- In a Matured market like UAE, a Hospital cannot charge separately for Nursing Services since it is perceived as a part of Room Charges. Hence if the Insurance team can take an effort to reduce the discounts on Room Charges it would be ideal.
- Anesthesia Charges needs to be streamlined or there is no clarity in how the charges are arrived.
- OT & Anesthesia needs to be charged always additional from the Service price.
- With DRG being implemented in Dubai & Northern Emirates, it will be a tough challenge for a private hospital to cope with the above billing practices. Revision of Price list is required with a proper study on their utilization and resources

Review of Initial Client Billing Methodology

Observations and interactions were made on floors of client hospital to understand the process flow and how the invoices are generated for Insurance and Cash Patients.

Based on our interaction with the Staff related to process (OP & IP Billing and Approvals) the observations are:

1. There is a lack of coordination between Departments.

OP Billing staff focus purely on Billing without rejection considerations, and rely solely on system efficiency for the same

Similarly, IP has reservations on what they bill.

2. Billing team do not have a common reporting heads.

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3. Different OP and IP Staff have different understanding and interpretation of the Billing Methodology.
4. While the IT System is robust and well equipped from a Billing Perspective, feedback from Staff indicates that the Tariff Master doesn't always pick up the right prices against the Insurance companies and many times they had to correct it manually.
5. There is a major communication gap between Approval Team and Invoicing Team of client hospital

OUT PATIENT BILLING

Currently OP Bills auditing are being done on a daily basis by the Night Supervisor.

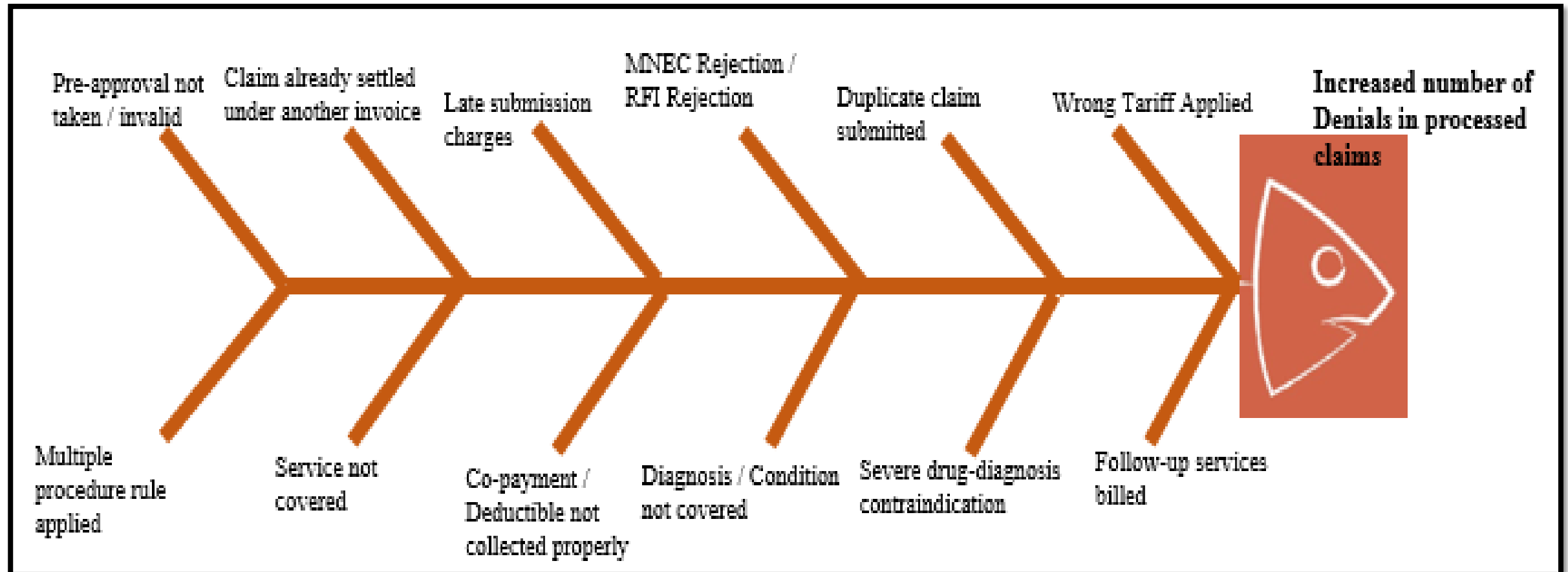
As per our review of 1100 claims (For O.P)

The process is to check and validate the Card Numbers and Insurance entitlements.

INPATIENT BILLING

As per our review of 1000 claims (For I.P)

1. It was observed that IP Bills are not checked against services rendered, which is attributed to the shortage of staff & lack of training.
2. Internal Billing Audit not done on daily basis by experienced or senior team members.
3. There is no process where Medical coders code on the procedure performed before the closure of Invoice and patient discharge.

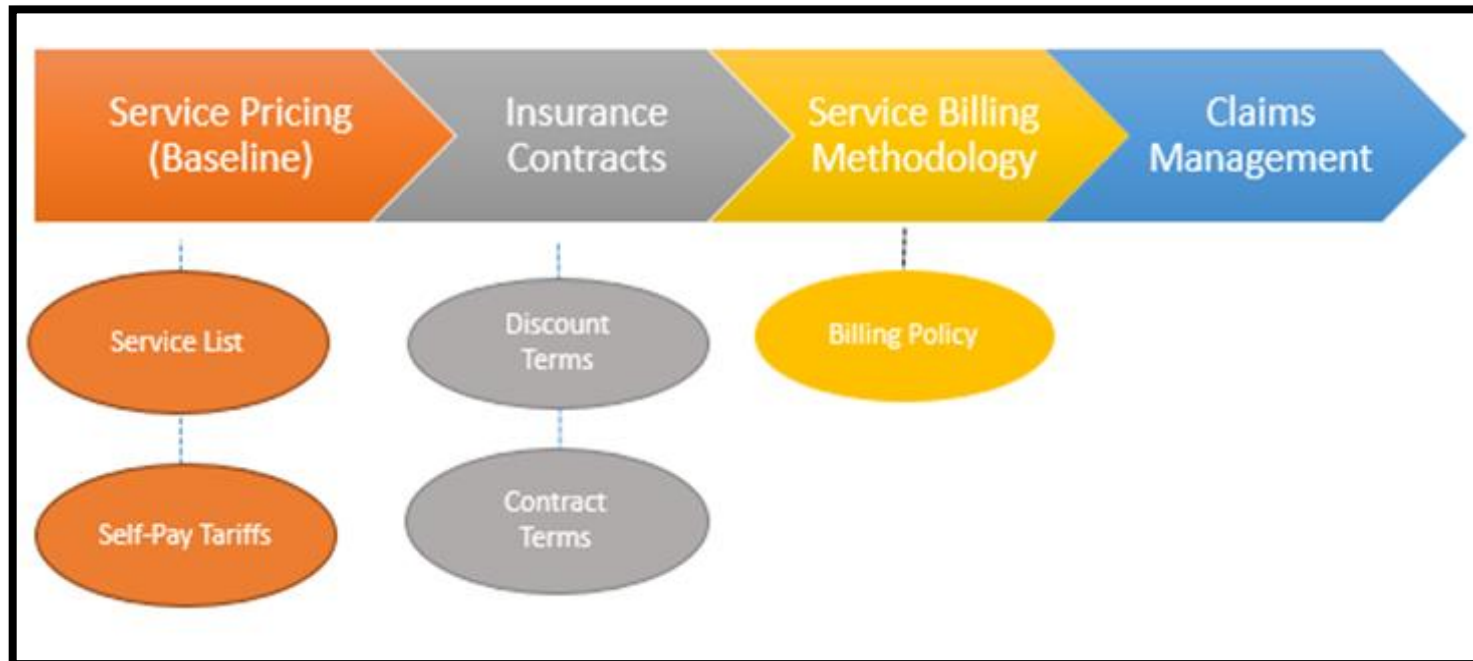


Fish – Bone Analysis for reasons of denied claims

IMPROVE PHASE

To improve the current revenue cycle the correct approach should be followed in matrix for development.

The focus should start from improving service pricing, re-negotiating insurance contracts, re-define service billing methodology and then correcting the claims management as per analysis of denials and drawn fish-bone diagram.



CONTROL PHASE

- If the Rejections are controlled and reduced to the standard of 3 to 5% that itself gives an automatic revenue to the bottom lines by 15-17%. This must have hurt the EBITDA of Hospital in spite of efforts made to control rejections.
- The following methods checks the complete control on RCM and streamlines to keep a check on the rejections. Also, it will assist in generating the additional revenue and boost the financial standing in healthcare industry.

CONCLUSION

The initial audit for claim generation should validate :

- | | |
|------------------------------------|------------------------------------|
| 1. Covered or Non-Covered services | 2. Approval Validity |
| 3. Coverage of Diagnosis | 4. Standard Exclusions |
| 5. Maternity Approvals | 6. Verbal Approval Codes are taken |

The claim re-submission/ reconciliation gaps identified by audit:

1. The Resubmissions not successful due to not addressal of denial codes and not attaching supporting documents.
2. The Reconciliation team submits all the invoices which are being rejected without trend analysis.

As the highest rejection was due to absence of preapproval (80% of the denied claims), we have prepared a **pre-approval manual** for the training of the client. (Attached in Appendix)

RECOMMENDATIONS

The study recommends

Training for front desk staff / approval staff :

- ❖ Insurance related updates
- ❖ Reasons for Denials
- ❖ Understanding on the common diagnosis
- ❖ Recurrent reasons of denials for Standard exclusions.
- ❖ The team should be trained for correct invoicing with regards to collection of correct co-pay and deductibles.
- ❖ The team should be trained to avoid free follow up visits billing

Training for insurance team :

- ❖ The pre-approval should be taken as per terms and conditions of contract with the approval company and validity should be checked properly before rendering the service.
- ❖ The claims should be submitted within 30 days of the claim generated month to avoid late submission penalties.
- ❖ The claim batches should be thoroughly checked to avoid duplications.
- ❖ The team should be trained for correct invoicing with regards to covered services & diagnosis.

REFERENCES

- www.uae-embassy.org/news-media/uae-government-expands-relationships-leading-us-hospitals
- <http://gulfnews.com/gn-focus/special-reports/health/the-state-of-the-uae-s-health-2016-1.1658937>
- <https://www.export.gov/article?id=United-Arab-Emirates-Healthcare-Services>
- <http://www.thenational.ae/uae/billions-lost-in-health-care-fraud-and-waste-in-the-uae>
- <https://www.thenational.ae/uae/new-cost-controls-to-clean-up-wild-west-uae-healthcare-market>
- <https://www.khaleejtimes.com/business/vat-in-uae/vat-will-spare-healthcare-hit-premiums;>
[http://gulfnews.com/business/economy/vat/food-to-be-taxed-while-health-care-and-education-avoid-vat-hike-1.2121343;](http://gulfnews.com/business/economy/vat/food-to-be-taxed-while-health-care-and-education-avoid-vat-hike-1.2121343)
- <https://www.khaleejtimes.com/business/vat-in-uae/federal-tax-authority-announces-supplies-subject-to-vat>
- <https://www.vision2021.ae/en/national-priority-areas/world-class-healthcare>
- <http://www.thenational.ae/uae/health/sheikh-mohammed-approves-strategy-to-improve-health-care>
- <https://government.ae/en/about-the-uae/strategies-initiatives-and-awards/local-governments-strategies-and-plans/dubai-health-strategy-2021>
- <http://www.thenational.ae/uae/health/man-in-charge-of-dha-wants-speed-of-progress-accelerated>
- <https://www.thenational.ae/business/travel-and-tourism/dubai-reveals-master-plan-for-500-000-medical-tourists-a-year-1.470337>
- <http://www.uaeinteract.com/society/health.asp>
- <https://www.lw.com/thoughtleadership/healthcare-regulation-in-uae>
- [http://www.haad.ae/haad/Portals/0/Health%20Regulation%20Laws/Book9_En/index.](http://www.haad.ae/haad/Portals/0/Health%20Regulation%20Laws/Book9_En/index)
- <http://www.dhcc.ae/portal/en/regulatory.aspx>

APPENDIX OF THE STUDY



Pre-Approval Manual for Clients

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PRACTICE MANAGEMENT LLC



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