ANALYSIS OF HOSPITAL PERFORMANCE BASED ON QUALITY INDICATORS

At CK Birla Hospital, Jaipur

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INTRODUCTION

- With the increasing demands on hospitals for improved quality and lower costs, hospitals have been forced to re evaluate their manner of operation and quality assurance (QA) programs. Hospitals have been faced with customer dissatisfaction with services, escalating costs, intense competition, and reduced reimbursement for services. As a result, many hospitals have incorporated total quality management (TQM), also known as continuous quality improvement (CQI) and quality improvement (QI), to improve quality care and decrease costs.
- Accreditation to a health care organisation stimulates continuous improvement. It enables the organisation in demonstrating commitment to quality care. It raises community confidence in the services provided by the health care organisation. It also provides opportunity to healthcare unit to benchmark with the best.
- Organisations like the Quality Council of India (QCI) and its National Accreditation Board for Hospitals & Healthcare Providers have designed an exhaustive healthcare standard for hospitals and healthcare providers. This standard consists of stringent 600 plus objective elements for the hospital to achieve in order to get the NABH accreditation. These standards are divided between patient centered standards and organization centred standards

- **The Cycle of continuous quality improvement (CQI) goes like this**

  - The sample size and frequency of data collection is defined
  - The data has to be collected for various indicators across all departments or functions on a monthly basis. Target is set for each department
  - Non performances/Under performances across departments who fall below set target is identified
  - Root cause analysis done
  - Suitable corrective action taken
  - Effectiveness of corrective action taken is evaluated
  - Corrective action will be modified if required
  - Preventive action taken
  - Effectiveness of the preventive action taken is evaluated
  - If Consistency is maintained with respect to achieving defined target in a particular department or process, then new target is set after getting the consensus from all stake holders
  - The target is increased by few notches to achieve it

- This cycle goes on and on improving the performances and quality of each and every department/process
  - Various indicators are adapted and data captured on monthly basis for comparisons and analysis

RESEARCH METHODOLOGY

Research question

- What is the compliance of various quality indicators being measured for the continuous quality improvement in Rukmani Birla Hospital , Jaipur as directed by the NABH and the main reasons for outliers.

Objectives

- To Collect and compile the data for various Key Performance Indicators.
- To do Trend analysis of indicators over a period of past 9 months in order to see the variations
- To evaluate the outliers and the main reasons for the deviations and discrepancies.
- To recommend methods to eliminate prospective errors and increase the compliance.

Materials and Methods

- **Study design-** Descriptive and observational
- **Data type**- Secondary Data
- **Research Approach**- Quantitative
- **Period of study**- February 4th to May 3rd, 2019
- **Duration of data to be analysed–** June 2018 to February 2019
- **Inclusion Criteria**- Emergency
  Radiology
  Nursing
  Infection Control
  IPD & IPE
  ICU
  Human Resource
  Security

Mode of Data collection

- **Secondary sources –** Hospital Records
  NABH Guidelines
  Capture sheets
  Hospital Policies and Manuals
  HMIS of the hospital

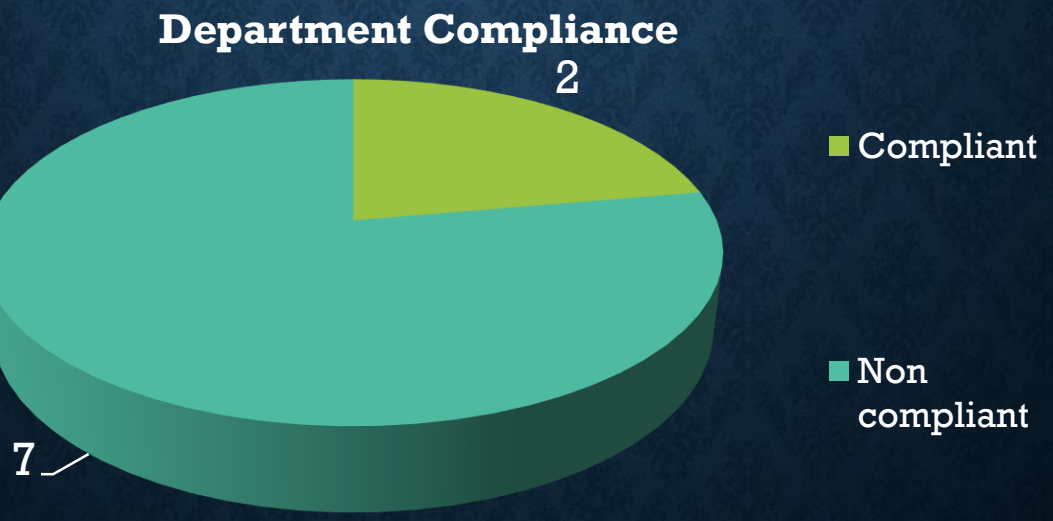
DATA ANALYSIS

LIST OF INDICATORS

Within Target	Deviation - ONCE	MULTIPLE Deviations
Adherence to safety Precautions	Time for initial assessment- ER	CAUTI
Reporting Error	Return to ICU	CLABSI
Re- dos	Variations in Mock Drill	Incidence of falls
VAP	BOR	Waiting Time(MRI)
SSI	Discharge time (Cash)	LOS
Return to ER	Patient Identification Error	Nurse Patient Ratio
IP Satisfaction rate		Discharge Time (TPA)
Near misses		Employee Satisfaction
Sentinel Events		Employee R & R
Blood Body fluid Exposure		
Needle stick Injury		
Handover compliance		
Hand hygiene compliance		
Waiting Time (exc. MRI)		

OBSERVATION

- This deals with the department wise observations which were considered for immediate corrections.
- The hospital authority accepted and implemented the same for improving quality of care in the hospital.
- The initial observation that was made related to the compliance of departmental indicators to NABH standards were as follows:



Department	Status
OPE	100% Compliance
Infection Control	100% Compliance

Department	Status
Security	80% Compliance
Nursing	20% Compliance
Emergency	70% Compliance
IPD	30% Compliance
Radiology	30% Compliance
ICU	20% Compliance
Human Resource	40% Compliance

Observations (SECURITY)	Correction done
• Reasons for outliers, if present, was not given	• Asked to either attach the RCA or mention it in the Quality sheet
• Final values not mentioned properly	• Appropriate format was told and corrections were made
• Not mentioned anything in the numerator/denominator if nothing is significant	• Values to be taken as zero if no incidence is there - corrected

Observations (IPD)	Corrections done
• Unstructured data was there without any format	Processing of the data with complete format
• Numerator and denominator was not mentioned	Numerator and denominator were provided with proper format
• Outliers not mentioned	Intimated to concerned person

Observations (EMERGENCY)	Corrections done
• Unstructured data was there without any format	Processing of the data with complete format
• Numerator and denominator was not mentioned	Numerator and denominator were provided with proper format
• Target not mentioned	Intimated to concerned person corrected
• RCA was not mentioned	Requested for the same and given thereby

Observations (NURSING)	Corrections done
• **Nurse-patient ratio** was not mentioned and no interpretation done	Formula verified with NS and clarification regarding the same done and corrected
• **Sentinel events** were calculated wrong	Validation was done correcting it to original values
• **Handover** data was not given	Data rechecked and interpretation done
• **Near miss** incidents were not correlated with total no. of incidents	Detailed explanation of the formula given and near misses calculated
• **Patient identification** was miscalculated	Re calculation done and corrected
• Discrepancy in target value for ratios	Intimated and asked for correction

Observation (ICU)	Correction
• Indicators indirectly maintained	Proper format and correct way of recording was formulated
• 50% of the indicators not captured	List of indicators to be maintained compulsory was given. Monitoring was done to make sure required data is being captured
• Staff was unaware about the indicators	Training session on NABH awareness was Organised with the help of quality manager.

Observation (HUMAN RESOURCE)	Correction
• Indicators not maintained in the required format	Proper format and correct way of recording was formulated
• Data being worked upon in back log	Pending data was asked for completion to match with the timeline
• Targets and sample size not being followed	NABH awareness was organised providing relevant information for capturing the indicators.

Observations (RADIOLOGY)	Corrections done
• Unstructured data was there without any format	Processing of the data with complete format
• Numerator and denominator was not mentioned	Numerator and denominator were provided with proper format
• Target not mentioned	Intimated to concerned person

RECOMMENDATIONS

- There should be a training organised for NABH awareness as many of the new staff which have joined post NABH accreditation are not aware about the standards and protocols of the same.
- There should be a QUALITY CHAMPION that should be assigned in each and every department so that proper management and monitoring of the data pertaining to the indicators can be done.
- A revision of the internal targets or benchmarks should be done so that those indicators which are consistently getting lower results than targets may achieve initial targets first and then the higher targets.
- There has to be a set documented guidelines for establishing the internal targets and that should be present and circulated with all the departments of the hospital.
- Monthly meetings should be conducted for all the departments to study the trend of the ongoing indicators and what corrections and amendments needs to be done for the proper goal achievement.
- Random and frequent audits to be done to monitor the compliance and take corrective and preventive actions for the discrepancies found.
- A proper format or method should be devised for capturing and evaluating the departmental data incorporating the quality team also.

CONCLUSION

Patient Safety is one of the major key areas for a hospital to provide proper and quality care to its patients. Accreditation is one of the means to assure the same that without any of the lacking or obstacles, the patient safety is not being compromised. Accreditation authority makes sure through continuous surveillance and audits that there is no loop hole in the standards of care being provided to the incoming patients as well as the staff working there.

Going through the various indicators of multiple departments, it was found that the hospital follows a strict adherence to the standards laid down by the NABH which is the accreditating body there.

But there were a few short comings, none of them being major, which can be corrected by giving necessary training to the concerned staff and strict implementation of the same.

The analysis was found to be more than satisfactory which in turn defines continuous progress towards achieving the best.

Therefore it can be concluded that a few of the recommendations needs to be implemented so that the highest level of care can be provided overcoming all the obstacles, rest all being completely positive towards the Goal.

REFERENCES

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THANK YOU