PERFORMANCE IMPROVEMENT INDICATORS OF MEDICAL RECORD DEPARTMENT IN C.K. BIRLA HOSPITAL: A RETROSPECTIVE STUDY

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Introduction

- With increasing frequency, hospitals in various countries report and monitor indicator data in order to improve the quality of care . Quality indicators aim to detect sub-optimal care either in structure, process or outcome, and can be used as a tool to guide the process of quality improvement in health care . Monitoring the health care quality makes hospital care more transparent for physicians, hospitals and patients. Furthermore, it provides information to target quality improvement initiatives. However, collection of indicator data also implies an administrative burden for physicians and hospitals; therefore, the use of this information should be optimized. It is unclear which implementation strategy for quality indicators is optimal, and what effects can be achieved when quality improvement is guided by indicator information.
- The implementation of quality indicators as a tool to assist quality improvement requires effective communication strategies and the removal of hindrances. Evidence suggests that audit and feedback based on indicator data can be effective in changing health care professional practice . Monitoring the indicator data may also help to target specific quality improvement initiatives such as educational programs and development of protocols.
- The effect of monitoring indicator data to promote quality improvement, and ultimately patient care, has been demonstrated in specific situations.
- Since hospitals deal with the precious human life, the quality of healthcare services rendered becomes a major concern for the entire health care system. Much of the interest in quality of care has developed in response to recent dramatic transformations of health care systems.
- Quality management in healthcare focuses in improving effectiveness of treatments and increase patient satisfaction with the service. With an increase in population and rising health care costs, quality in healthcare is gaining attention. A healthcare system comprises small and large entities, such as pharmacies, medical clinics and hospitals, and all components need to provide quality service for the system to work properly.

OBJECTIVE:

AIM:

The aim of this study is to describe performance improvement indicators of the Medical Record Department of the hospital.

Objective:

To review the performance improvement indicators of hospital MRD.

METHODOLOGY:

- **STUDY SETTING**: C.K. BIRLA HOSPITALS, JAIPUR
- **STUDY DESIGN**: Retrospective study design
- **SAMPLING METHOD**: Convenience Sampling Method.
- **STUDY TIME PERIOD**: 3 months
- **STUDY AREA**: Medical Record Department
- **DATA COLLECTION TECHNIQUE**:

Secondary data was collected from existing hospital records for the nine months.

LIST OF QUALITY INDICATORS INCLUDING CQI & KPI STUDIED IN MEDICAL RECORD DEPARTMENT.

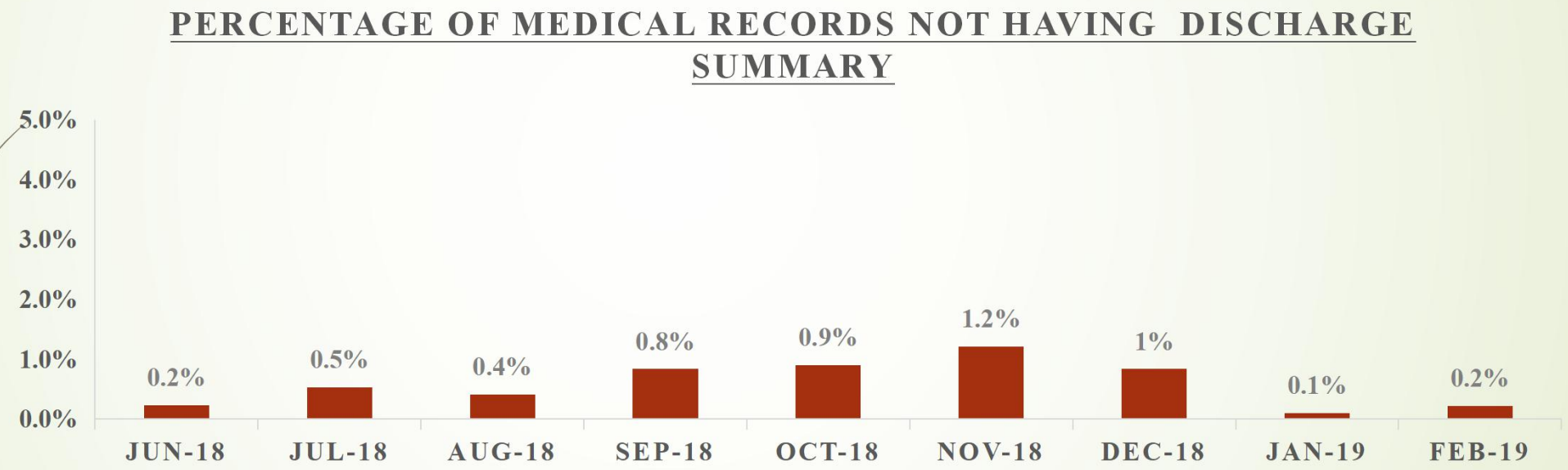
DEPARTMENT	INDICATORS
Medical Record Department	Percentage of medical records not having Discharge summary
Medical Record Department	Percentage of medical records not having codification as per International Classification of Diseases (ICD)
Medical Record Department	Percentage of missing records
Medical Record Department	Mortality rate (Gross Death Rate)
Medical Record Department	Completion of Nutritional Assessment (Percentage of a case -in-patient wherein screening for nutritional needs has been done)
Medical Record Department	Percentage of case(in-patients) wherein care plan with desired outcomes is documented and counter-signed by the clinician
Medical Record Department	Completion of Initial Assessment (Time for initial assessment of indoor arrived patients)
Medical Record Department	Completion of Initial Nursing Assessment (Percentage of case- in patients wherein the nursing care plan is documented)
Medical Record Department	Proportional maternal mortality rate
Medical Record Department	Proportional infant mortality rate

Results

- **Percentage of Medical Records not having discharge summary.**

Formula: Number of medical records not having discharge summary ÷ Number of discharges and deaths x 100

Internal Target – 0%



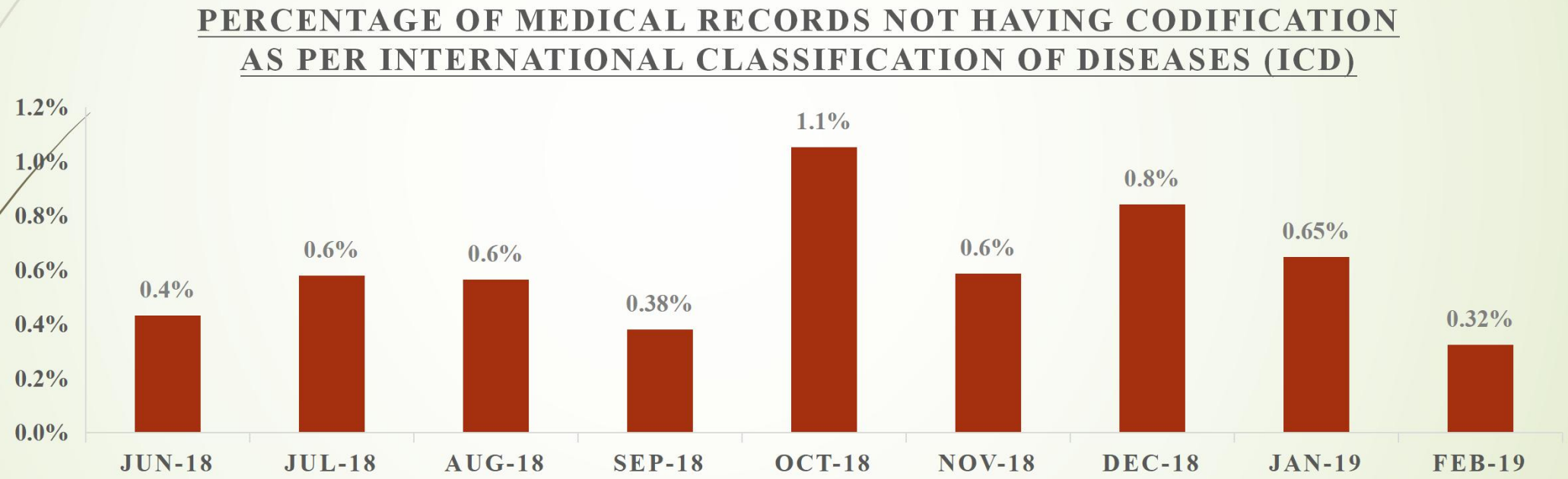
Interpretation: Increased from the benchmark. There should be zero medical records not having discharge summary as set by internal target. In nov'18 there were 12 medical records out of 988 discharges and deaths in which there no discharge summary. akriti CQI (1).xlsx

Results

- **Percentage of Medical Records not having codification as per International Classification of Disease.**

Formula: Number of medical records not having codification as per International Classification of Diseases (ICD) ÷ Number of discharges and deaths x 100

Internal Target- <5%



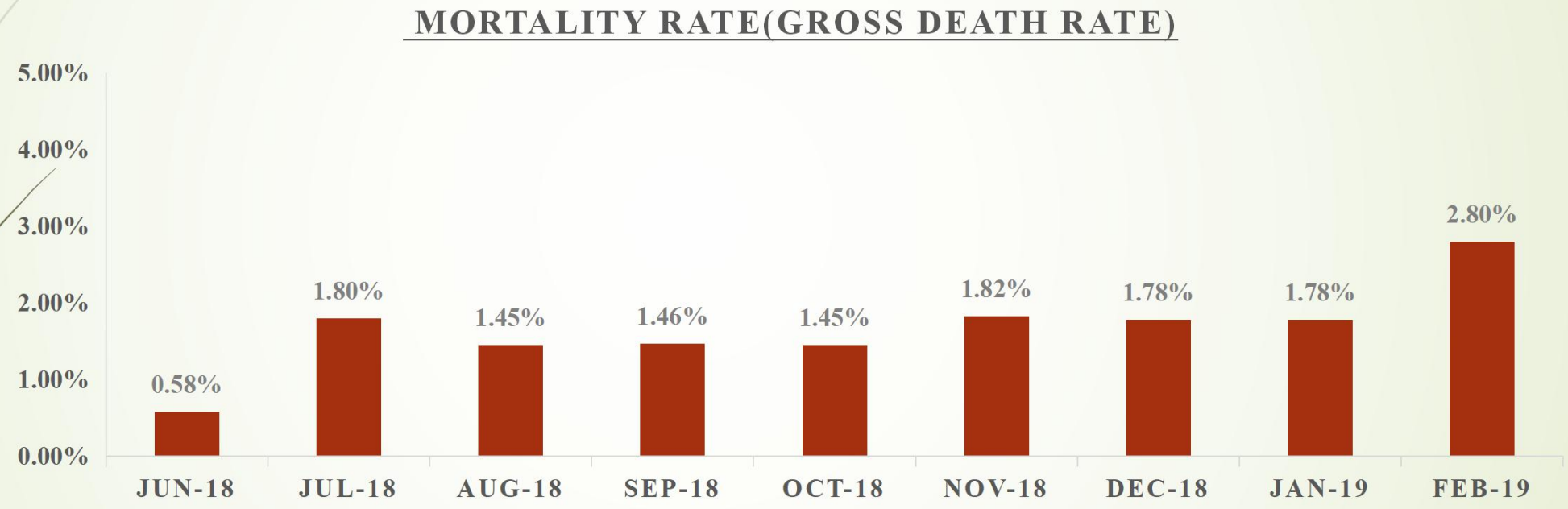
Interpretation: Within target throughout but variation in the data. In oct'18 there were 4 medical records not having codification as per international codification of diseases (ICD) out of 380 discharges and deaths. akriti CQI (1).xlsx

Results

- **Mortality Rate (Gross Death Rate)**

Formula: Number of deaths ÷ Number of discharges and deaths x 100

Internal Target- 0%



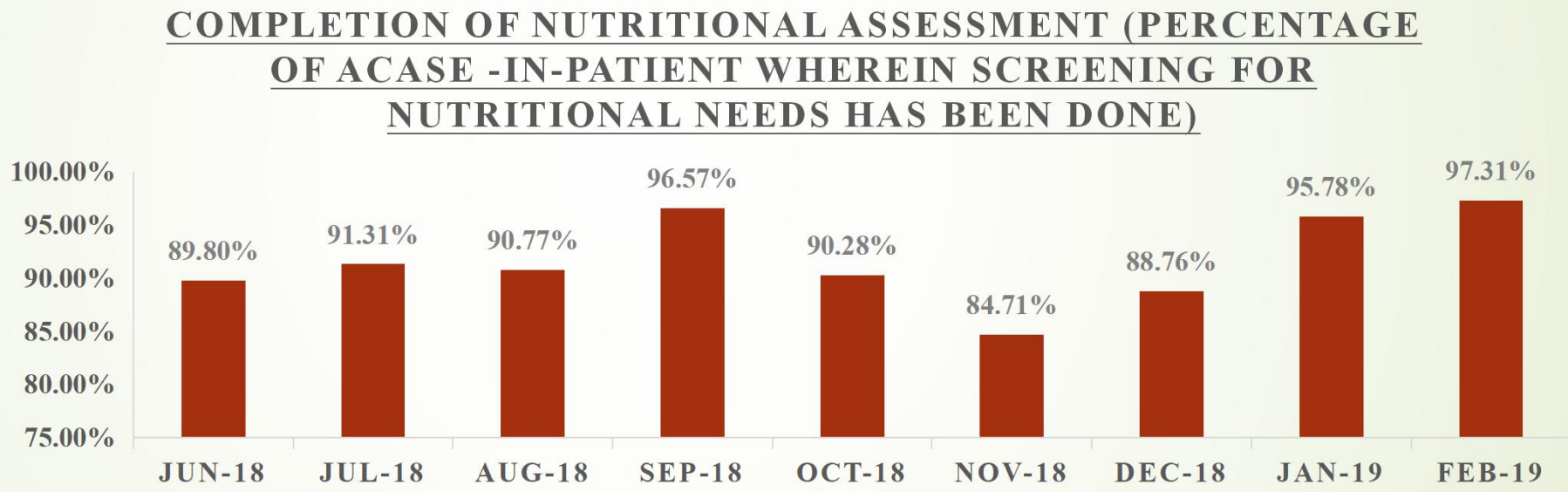
Interpretation: Increased from the benchmark. Highest in Feb'19. In feb'19 there were total no of deaths were 26 in which out of 26, 2 were cardiac cases, 1 of CTVS, 9 of Internal Medicine, 4 of Neurology, 4 of Pulmonology, 2 of GI Surgery, 1 of Paediatric & 1 of Nephrology. akriti CQI (1).xlsx

Results

- **Completion of Nutritional Assessment (Percentage of a case-in patient where screening for nutritional needs has been done)**

Formula: Number of in- patient case records wherein the screening for nutritional assessment has been documented ÷ Total number of patients x 100

Internal Target- 90-100%



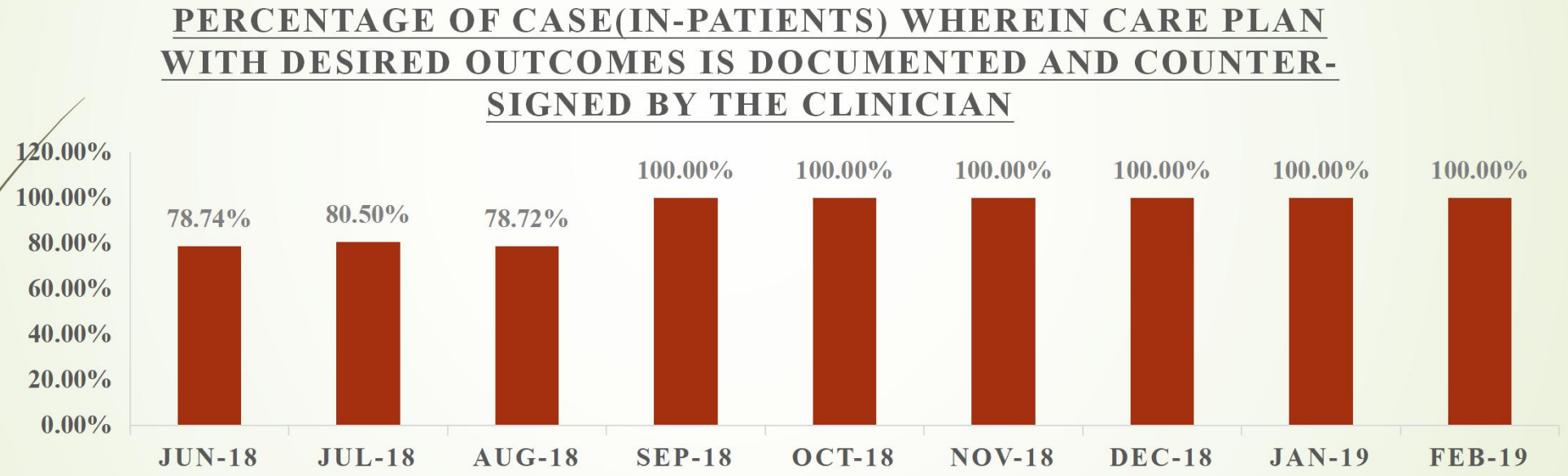
Interpretation: Lower than internal target in jun'18 & nov'18. In june'18 in 47 cases dieticians did not fill form & in nov'18 in 52 cases dieticians did not fill form. akriti CQI (1).xlsx

Results

- **Percentage of case(in-patients) wherein care plan with desired outcomes is documented and counter-signed by the clinician**

Formula: Number of in- patient case records wherein the care plan with desired outcomes has been documented and counter-signed by the clinician ÷ Total number of patients x 100:

Internal Target- 90-100%



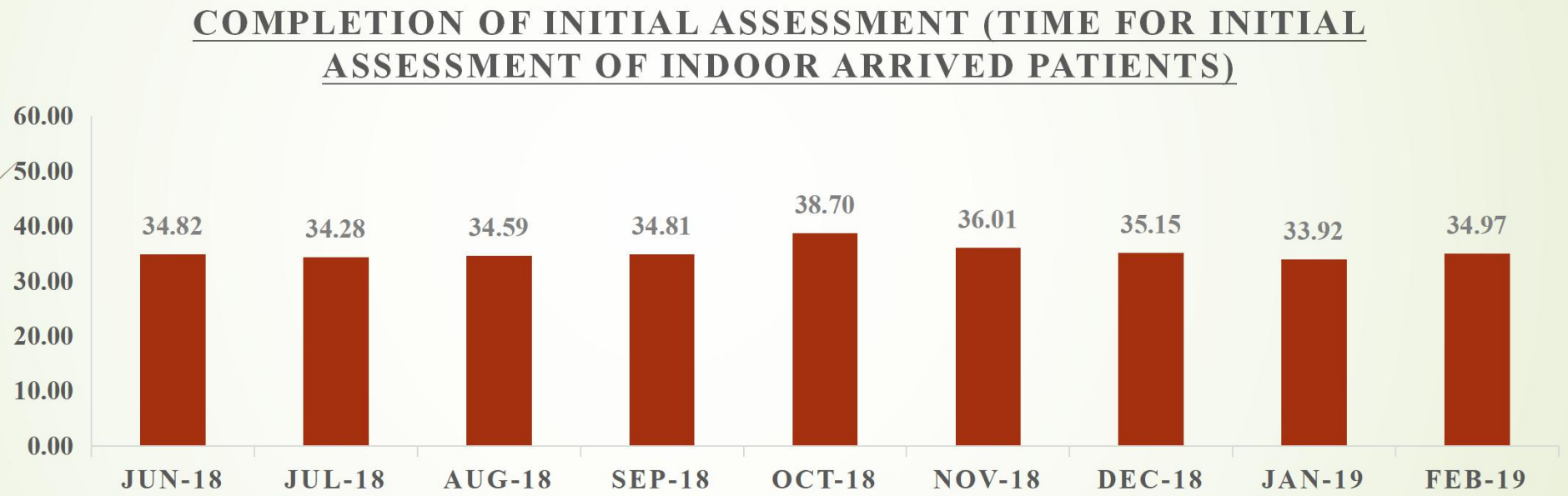
Interpretation: Lower than internal target in jun'18, jul'18, aug'18. In jun'18 in 98 cases there were no counter signed by clinician. In jul'18 there were 101 cases in which there were no counter sign by clinician. In aug'18 there were 113 cases in which there were no counter sign by clinician. akriti CQI (1).xlsx

Results

- **Completion of Initial Assessment (Time for initial assessment of indoor arrived patients)**

  Formula: Sum of time taken for the assessment ÷ Total Number of patients in indoor x 100

  Internal Target- <60 minutes.



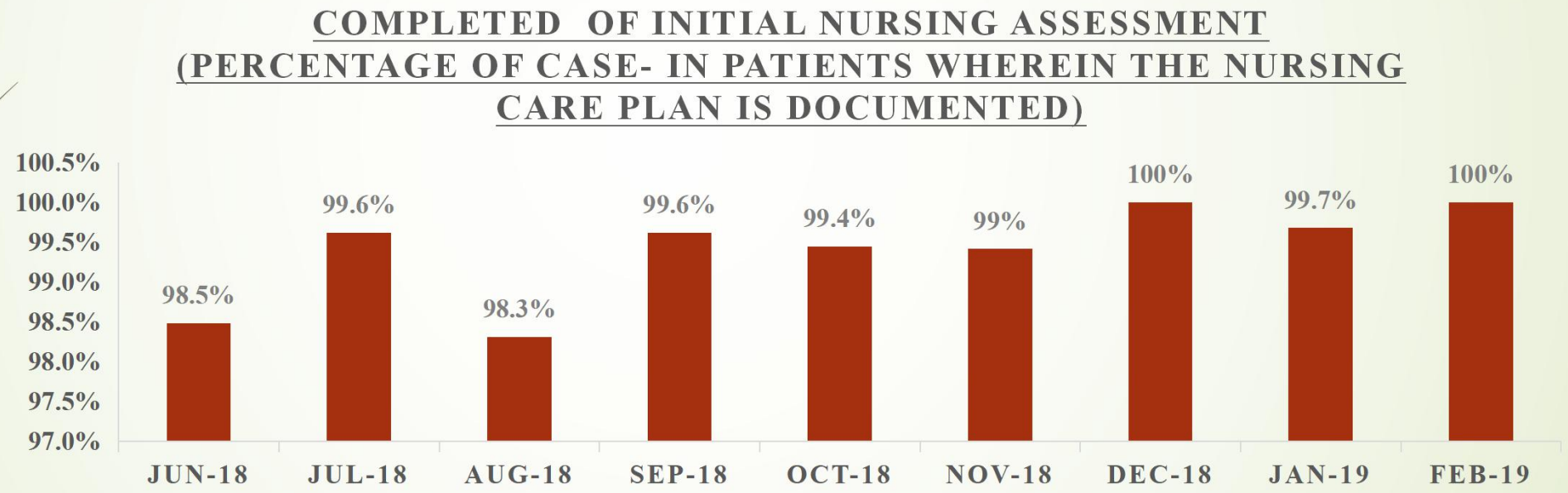
Interpretation: Within target throughout but variation in data. In oct'18 sum of time taken for initial assessment of indoor arrived patients was 13932 mins in 360 indoor patients. akriti CQI (1).xlsx

Results

- **Completion of Initial Nursing Assessment (Percentage of case- in patients wherein the nursing care plan is documented)**

Formula: Number of in-patient case records wherein the nursing care plan has been documented ÷ Total number of patients x 100

Internal Target- 90-100%



Interpretation: Within target throughout but variation in the data. In aug'18 there were 522 in patient records wherein the nursing care plan has been documented out of 531 patients. There were 9 case records in which nursing care plan has not been documented. akriti CQI (1).xlsx

Results

- **Proportional maternal mortality rate**

  Formula: Total no. of maternal deaths ÷ Number of live birth x 100,000

  Internal target- 0

  There were no maternal deaths occurred in all the nine months. Copy of akriti kpi (1) (1).xlsx

- **Proportional infant mortality rate**

  Formula: Total no. of infant deaths ÷ Number of live births x 1000

  Internal Target- 0

  There were no infant deaths occurred in all the nine months. Copy of akriti kpi (1) (1).xlsx

- **Percentage of Missing Records.**

  Formula: Number of missing records ÷ Number of records x 100

  Internal Target- 0%

  There were no missing records in all the nine months. akriti CQI (1).xlsx

SUGGESTIONS

- Based on completion nutritional assessment results show that the percentage has gone below internal targets, which suggests compromise on quality care. It is recommended that proper training of dieticians should be carried out so that there should be proper and timely screening of nutritional needs for each patient.
- It is recommended that there should be proper maintenance of discharge summary in MRD. Hospital should emphasize that majority of the patients should get discharged with summary unless otherwise. Hospital should define TAT for cases where discharge summary is not ready at the time of discharge and set process so that file is completed and dispatched to MRD within TAT. Hospital should review their discharge process and make necessary changes so that issue of pending discharge summaries get nullified.
- There should be a surveillance system to increase awareness and review of deaths and even the hospital policy should be revised and strengthened to reduce potential hospital acquired infection. Special attention should be diverted towards mortality meets so that the rate of deaths in hospital can be brought down within target.
- Staff should be properly trained on latest ICD coding so that all the files which are going to MRD should be completed with codification. MRD staff should be trained to cross check the same and raise an alert if same is not completed. There should be proper coding of medical records as per ICD to review previous cases of a given disease to provide insight into the management of current patient's health problems. Proper training of staff should be there to have proper codification of medical records as soon as the file comes to MRD.

CONCLUSION

Results of the study support the fact that hospital performance is associated with hospital level quality indicators. Effective strategies if implemented in daily practice can improve healthcare quality. Regular collection of quality indicator data and their analysis gives way to continuous improvement programmes which in turn lead to quality of service/ patient care. It also helps in development of process and modification of the existing process which can significantly contribute to the increase in the level of the hospital performance. But there is significant variation in process and data depending upon different healthcare setups and different departments, thus individual look into different indicators at each level will define the level of improvement achieved.

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