Assessment of Quality Indicators for NABH Accreditation in Sankara Eye Hospital, Coimbatore

Presented by: Dr. Nikhita Bhalla (0948)

Guided by: Dr. Susmit Jain (Associate Professor and Guide)

Introduction

- The Sankara Eye Foundation, India (SEFI) was established 43 years ago and it has since remained a Not-for-Profit organisation.
- The primary aim of SEFI is to provide quality eye care services. The services of SEFI is more focused towards the poor and marginalised sections of the society. Quality is an integral part of Sanakra Eye Hospital, Coimbatore as it is a Pre NABH accredited hospital.
- Sankara Eye Hospital is a Pre NABH Accredited Hospital.
- The National Accreditation Board for Healthcare Organizations (NABH) is a constituent board of the Quality Council of India (QCI).
- The NABH was founded with the goal of improving the health-care system and fostering continual quality improvement and patient safety.
- The rationale of the study is know the compliance and relevance of the quality indicators in Sankara Eye Hospital, Coimbatore.

- Benchmarks are used to compare these indications to previously defined targets. These benchmarks assess the process' effectiveness against a set of NABH standards. Benchmarking may improve hospital processes, however as a strategy, it is not well characterized and may not be too well developed as yet, for improving the quality in hospitals according to Van Lent et al.

- Finding relevant recordable data that can measure the quality of treatment in all of its entirety still remains a difficult goal to achieve.

- The study's goal is to determine the importance of all quality indicators for ongoing quality improvement at Sankara Eye Hospital in Coimbatore, as well as the level of adherence to various indicators across numerous departments.

In this study, the following indicators were calculated and compared to the NABH guidelines:

Inpatient Department
1. Surgical site infection rate
2. Bed Occupancy
3. Time taken for initial assessment of in patients
4. Time taken for discharge

Patient care	
1. Percentage of adverse drug reactions	
2. Incidence of falls	
3. Number of code blue events	
3. OP Satisfaction Index	
4. IP Satisfaction Index (paying)	
5. IP Satisfaction Index (community)	
6. Average Waiting time	
7. Total no. of miss events	
8. Total no. of adverse events	
9. Total no. of sentinel events	
10. Percentage of medication errors	
11. Percentage of needle stick injuries	
12. Compliance of hand hygiene practice	
13. Critical equipment downtime	

HRD
1. Employee Attrition rate
2. Employee satisfaction rate
3. Employee abseentism rate
4. % of staff that are aware of their rights, responsibilities and welfare schemes available to them.

Ophthalmology specific indicators
1. Percentage of post operative inflammation

Laboratory
1. Percentage of the staff/employees those who are adhering to safety precautions while working in diagnostics section of the hospital
2. Percentage of reporting errors per 1000 investigations
3. Percentage of Re dos

Methodology

Research Question - What is the relevance and compliance of numerous quality indicators or benchmarks that are being assessed continuously for the sustained quality improvement at Sankara Eye Hospital, Coimbatore?

Objectives

- To study the quality indicators for Sankara Eye hospital issued by NABH.
- To assess the adherence and compliance of quality indicators in various departments i.e. IPD, Patient care, HRD, Ophthalmic and Laboratory.
- To suggest interventions to eliminate any deviations from quality indicators issued by NABH.

Materials and Methods

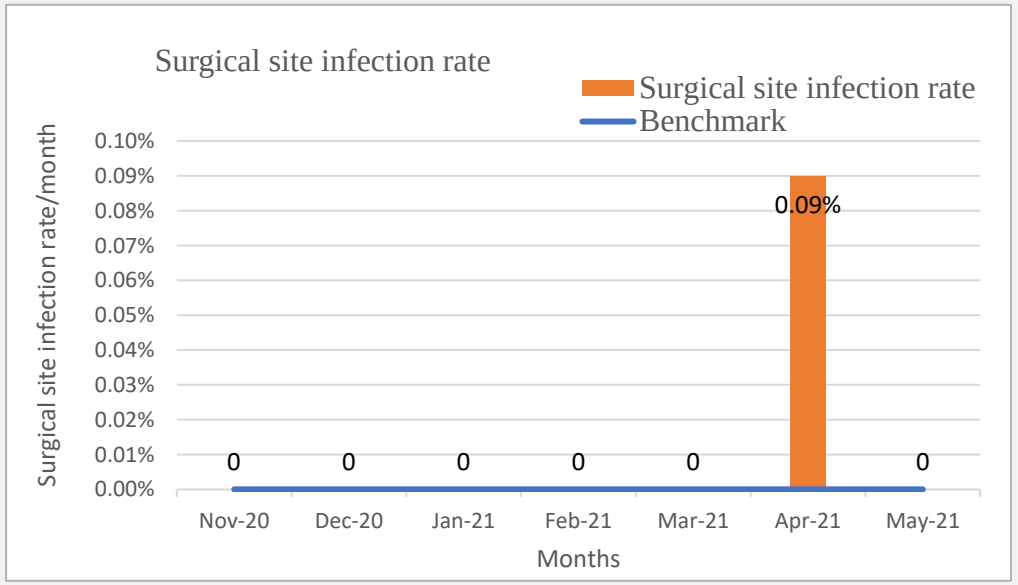
- Study design – Descriptive and observational
- Data type – Secondary data based on the capture sheets of quality indicators maintained by the hospital
- Research Approach – Quantitative
- Period of the Study – 22nd March to 22nd June2021
- Duration of the data to be analyzed – Past 7 months (November 2020 to May 2021)

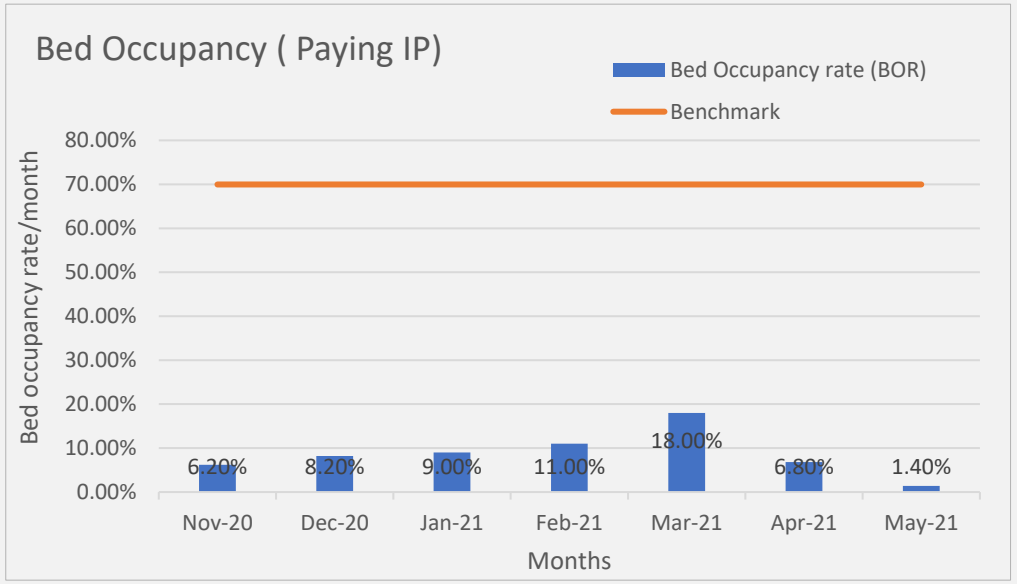
Inclusion criteria	Exclusion Criteria
1. IPD	1. OT indicators
2. Patient care	2. Stores & Pharmacy
3. HRD	3. Ethics/Research Indicators
4. Ophthalmology specific	4. Management related
5. Laboratory	5. Medical Records

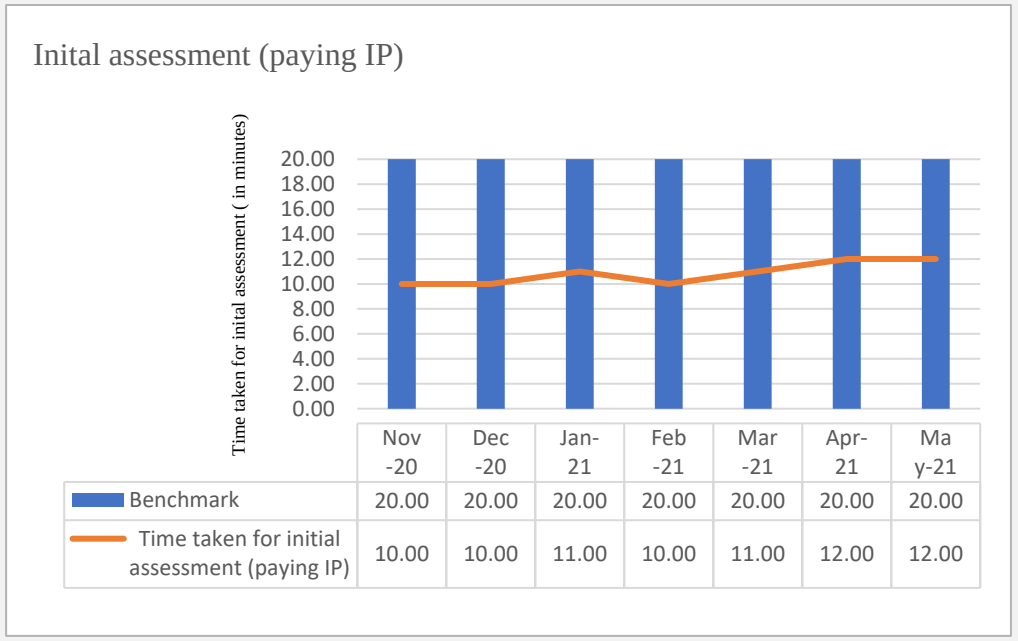
- Data Collection – Secondary sources for data collection include hospital records, NABH recommendations, capture sheets, and hospital rules and manuals.
- From the capture sheets, secondary data was gathered from all of the above-mentioned departments.
- For the last seven months, from November 2020 to May 2021, the processed data was put in an excel file. The data collected consists of a numerator and denominator that have been validated and evaluated using a formula.
- For the month of May, observations were made to examine the indicators and check for compliance with each indicator in order to obtain a precise analysis.
- Interaction with individual department heads and coordinators was then conducted in order to determine what was missing behind the occurrence of outliners, as well as to analyze and draw conclusions about the deviation.

RESULTS AND DISCUSSIONS

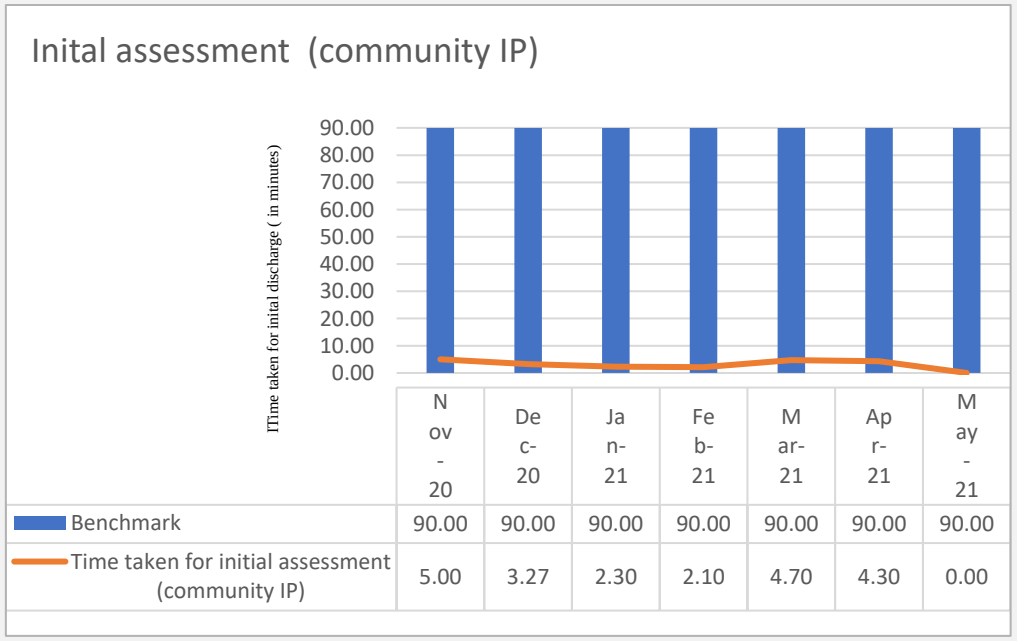
IPD INDICATORS





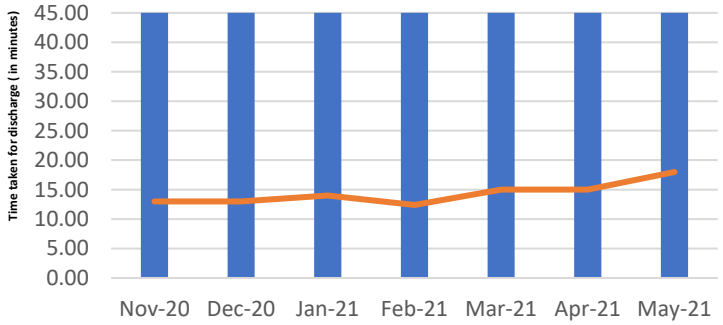


	Nov -20	Dec -20	Jan-21	Feb -21	Mar -21	Apr-21	May-21
Benchmark	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Time taken for initial assessment (paying IP)	10.00	10.00	11.00	10.00	11.00	12.00	12.00



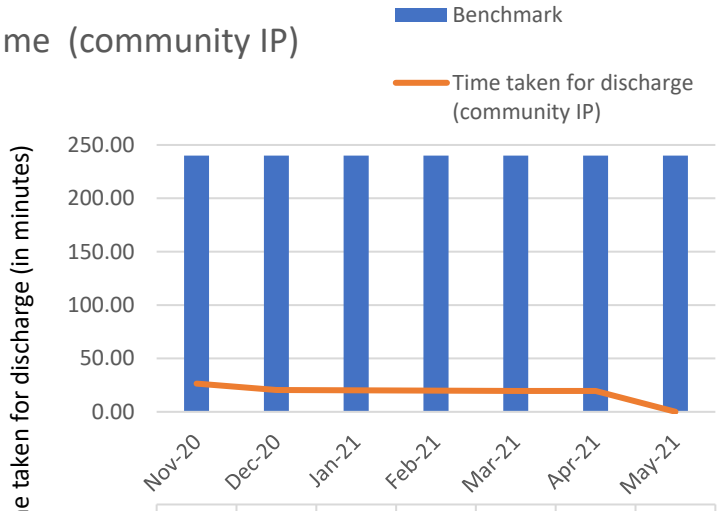
	Nov -20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21
Benchmark	90.00	90.00	90.00	90.00	90.00	90.00	90.00
Time taken for initial assessment (community IP)	5.00	3.27	2.30	2.10	4.70	4.30	0.00

Discharge Time (paying IP)



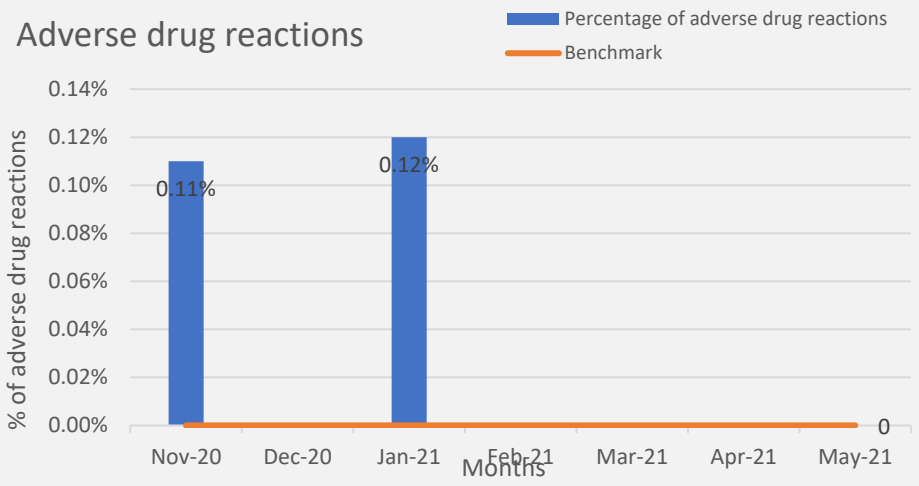
	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21
Benchmark	45.00	45.00	45.00	45.00	45.00	45.00	45.00
Time taken for discharge (paying IP)	13.00	13.00	14.00	12.40	15.00	15.00	18.00

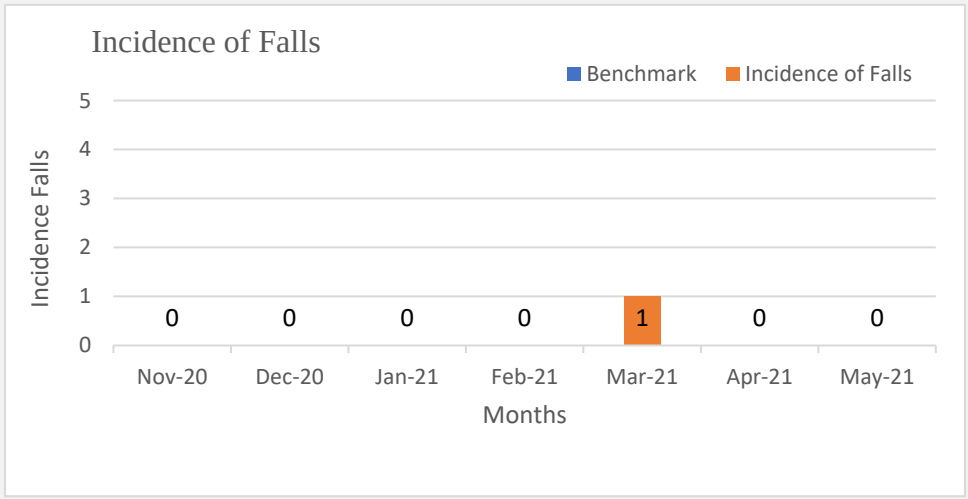
Discharge Time (community IP)

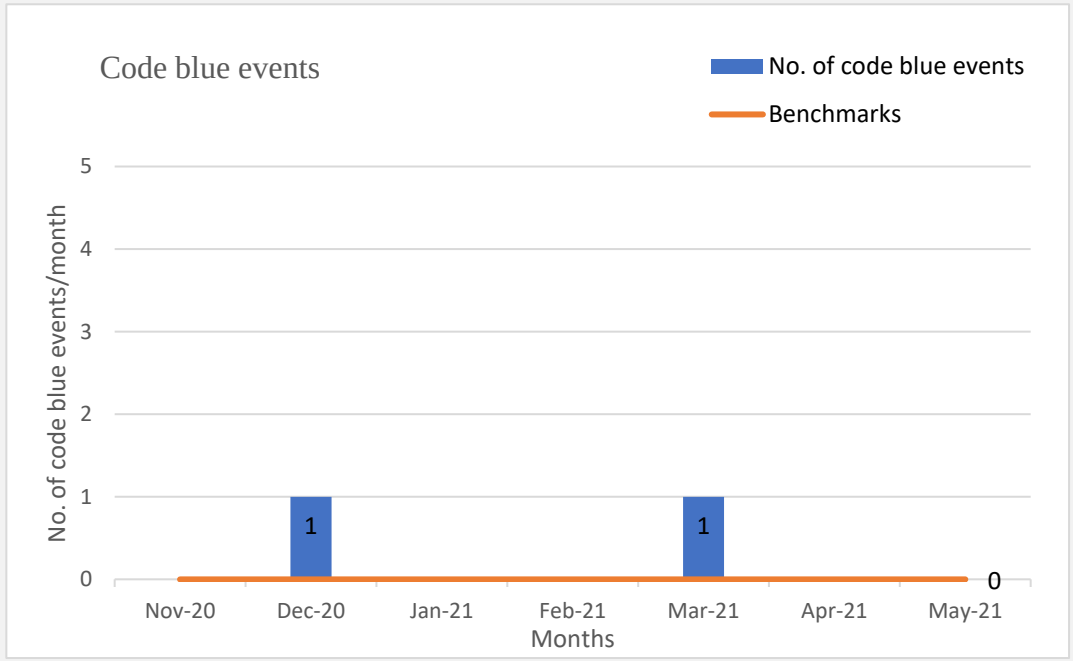


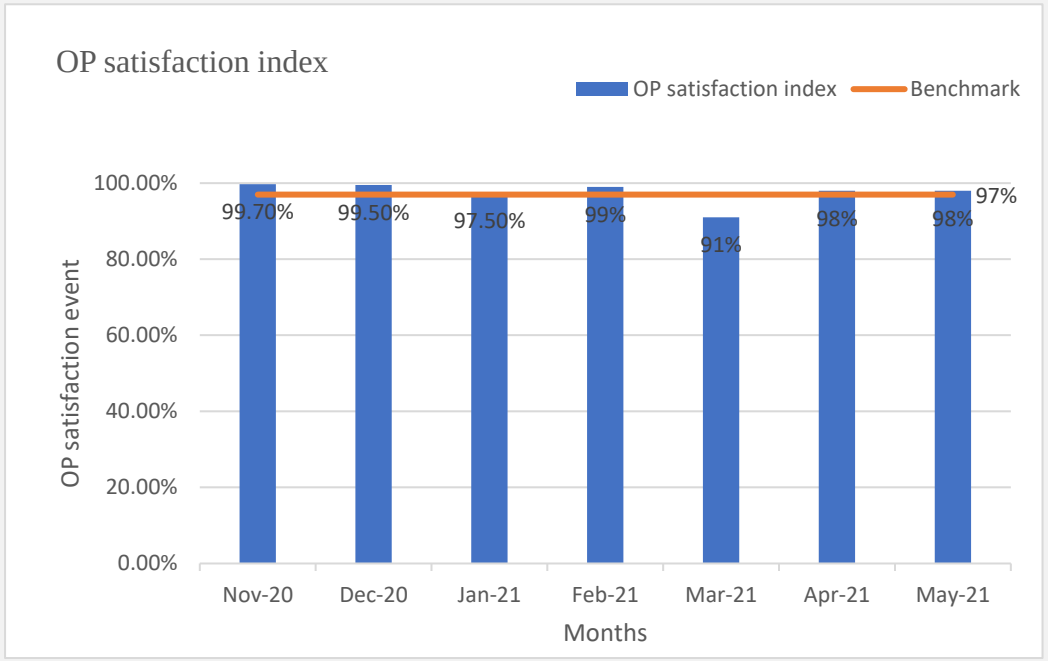
	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21
Benchmark	240.00	240.00	240.00	240.00	240.00	240.00	240.00
Time taken for discharge (community IP)	26.36	20.50	20.12	19.91	19.60	19.55	0.00

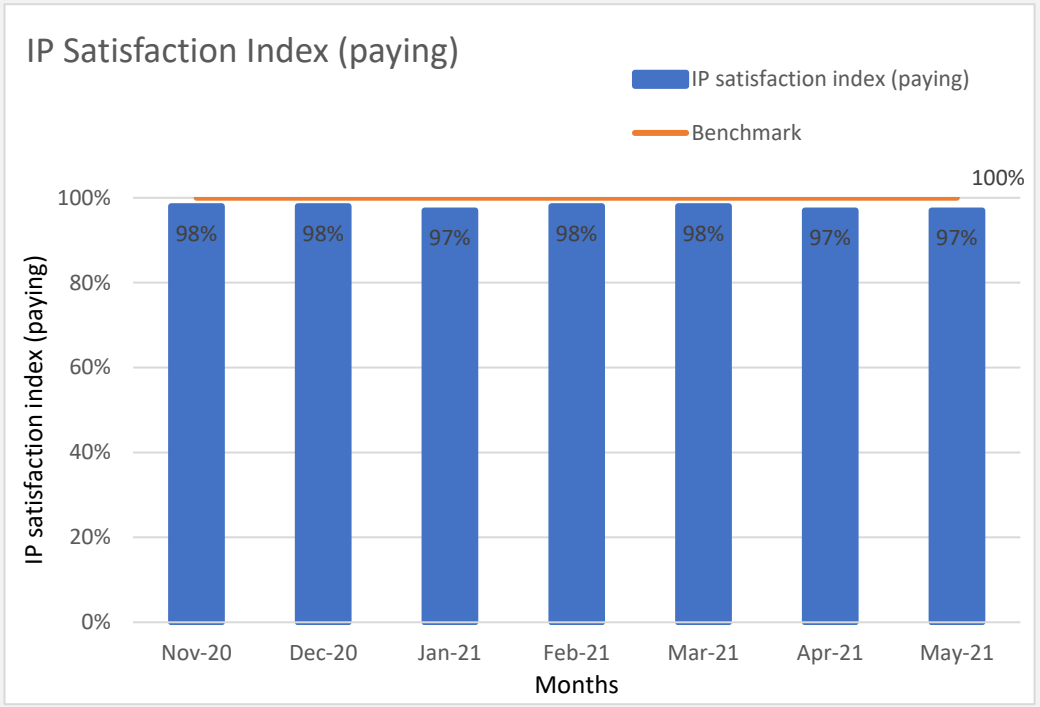
PATIENT CARE INDICATORS

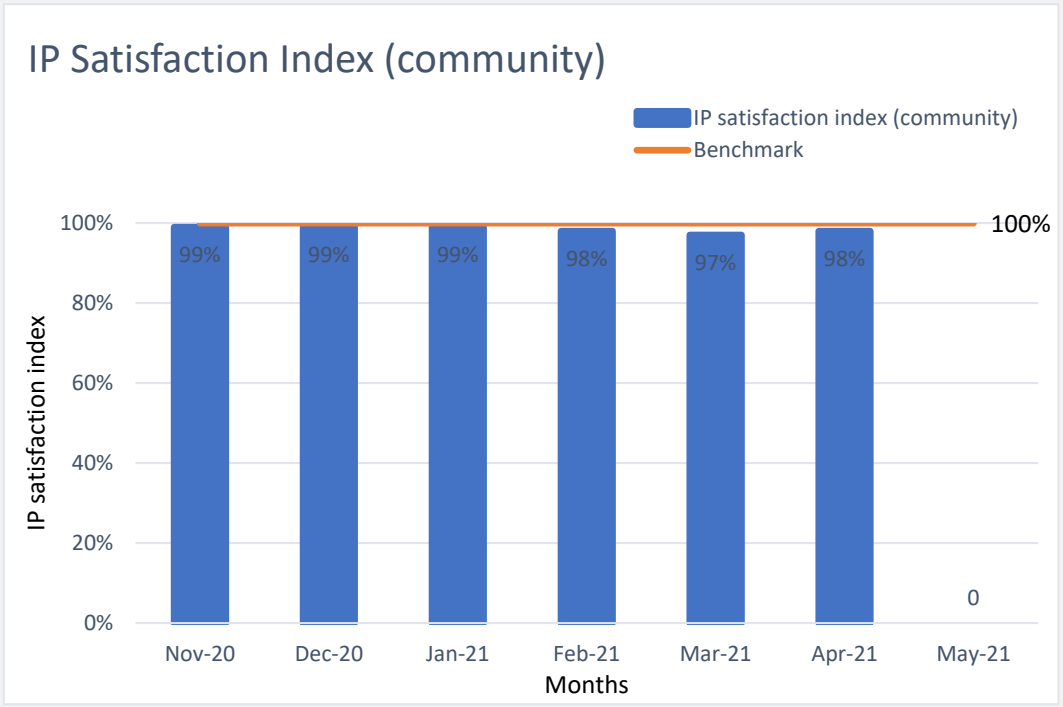


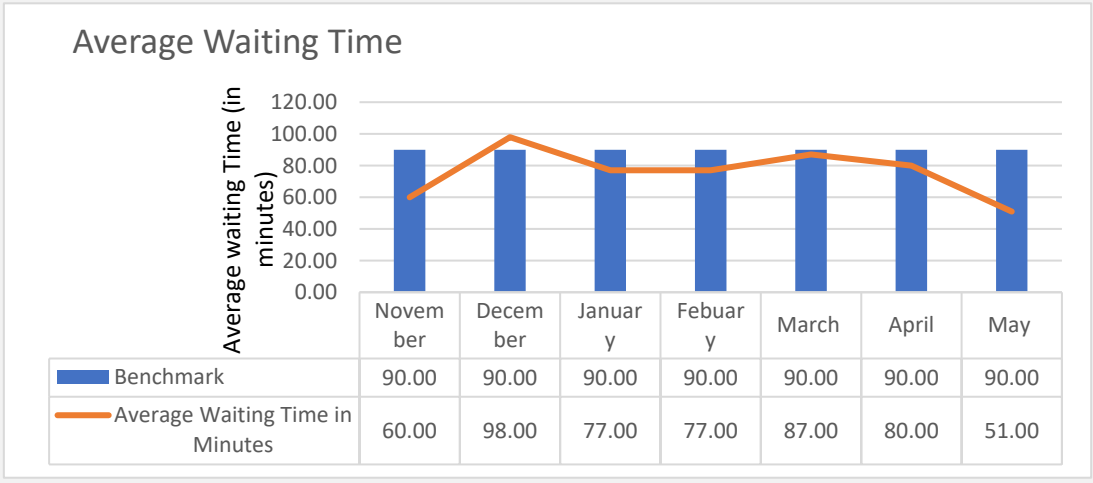


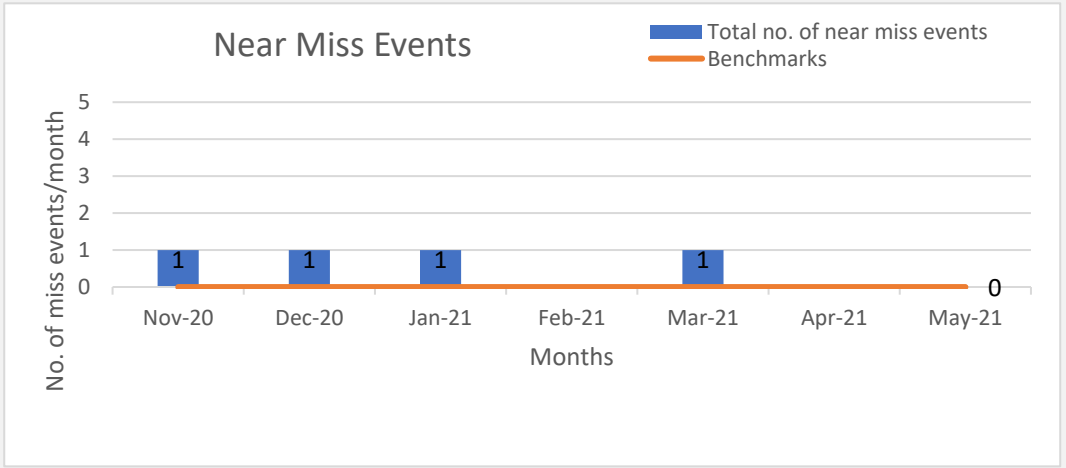


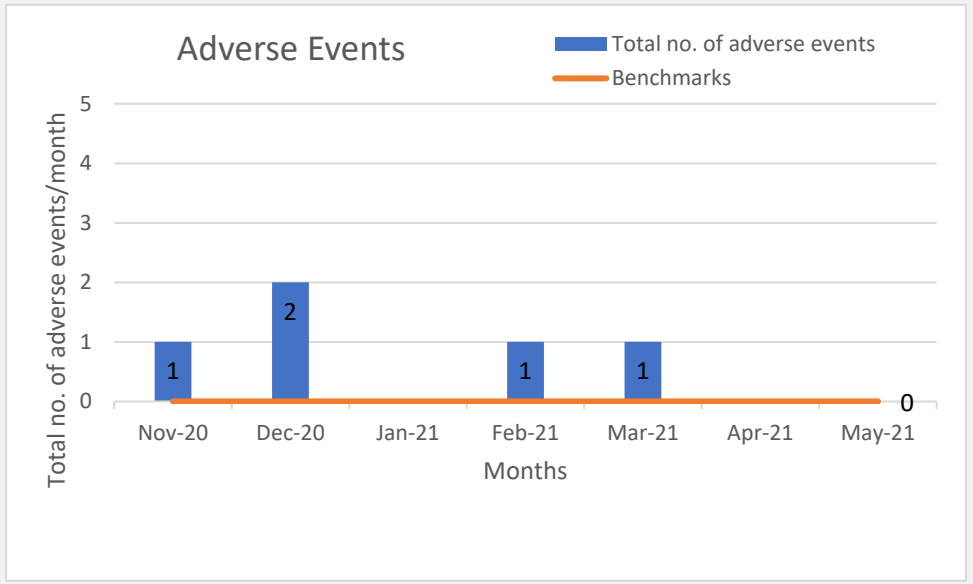


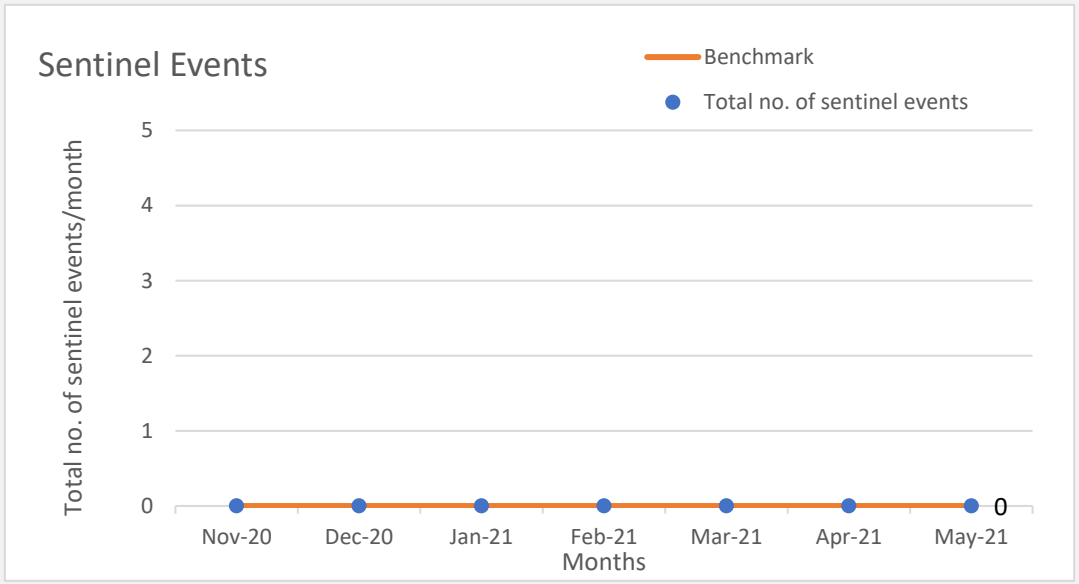

IP Satisfaction Index (paying)
IP satisfaction index (paying)
Benchmark
100%
98%
98%
97%
98%
98%
97%
97%
IP satisfaction index (paying)
Nov-20
Dec-20
Jan-21
Feb-21
Mar-21
Apr-21
May-21
Months

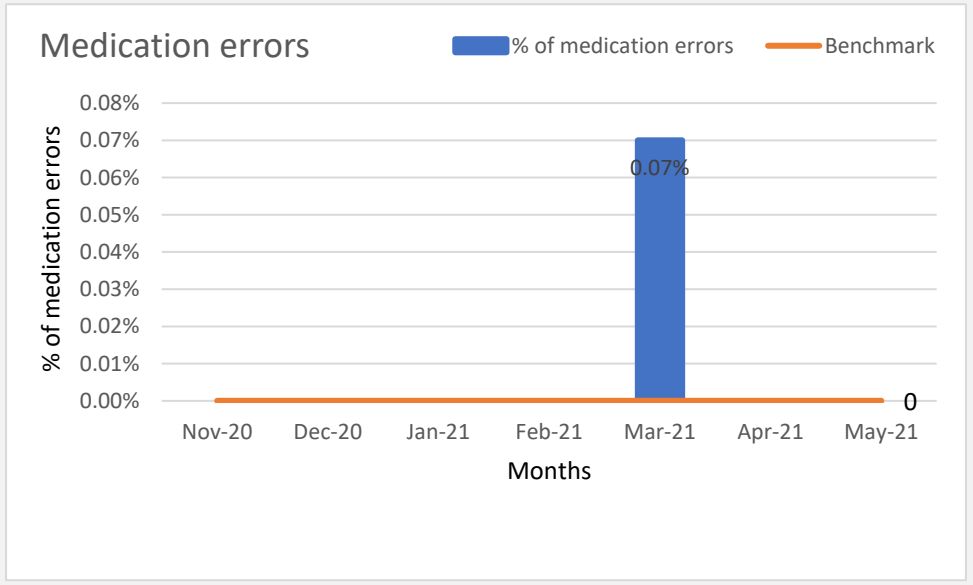

IP Satisfaction Index (community)
IP satisfaction index (community)
Benchmark
100%
99%
99%
99%
98%
97%
98%
0
IP satisfaction index
Nov-20
Dec-20
Jan-21
Feb-21
Mar-21
Apr-21
May-21
Months

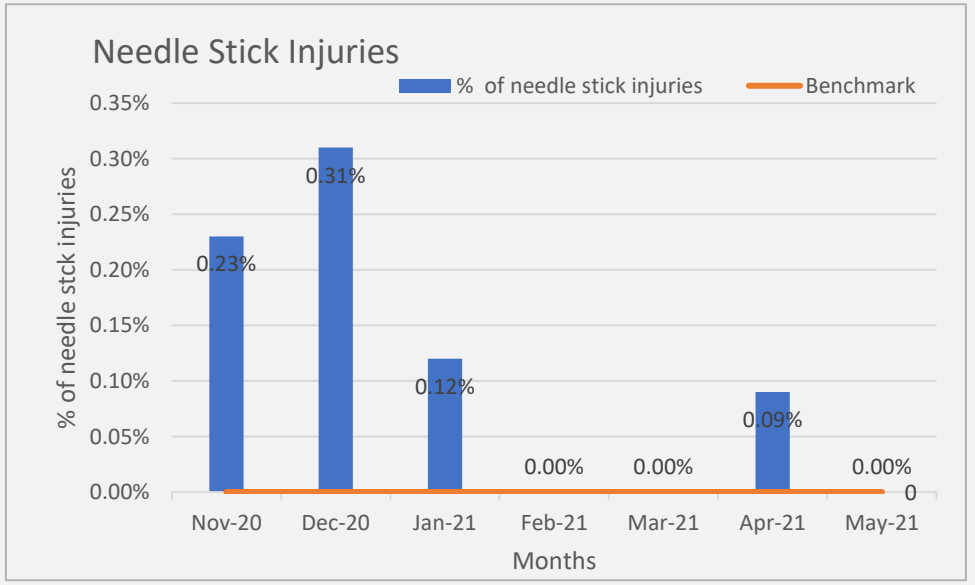

Average Waiting Time
Average waiting Time (in minutes)
November
December
January
Febuary
March
April
May
Benchmark
90.00
90.00
90.00
90.00
90.00
90.00
90.00
Average Waiting Time in Minutes
60.00
98.00
77.00
77.00
87.00
80.00
51.00


Near Miss Events
Total no. of near miss events
Benchmarks
No. of miss events/month
1
1
1
1
0
Nov-20
Dec-20
Jan-21
Feb-21
Mar-21
Apr-21
May-21
Months

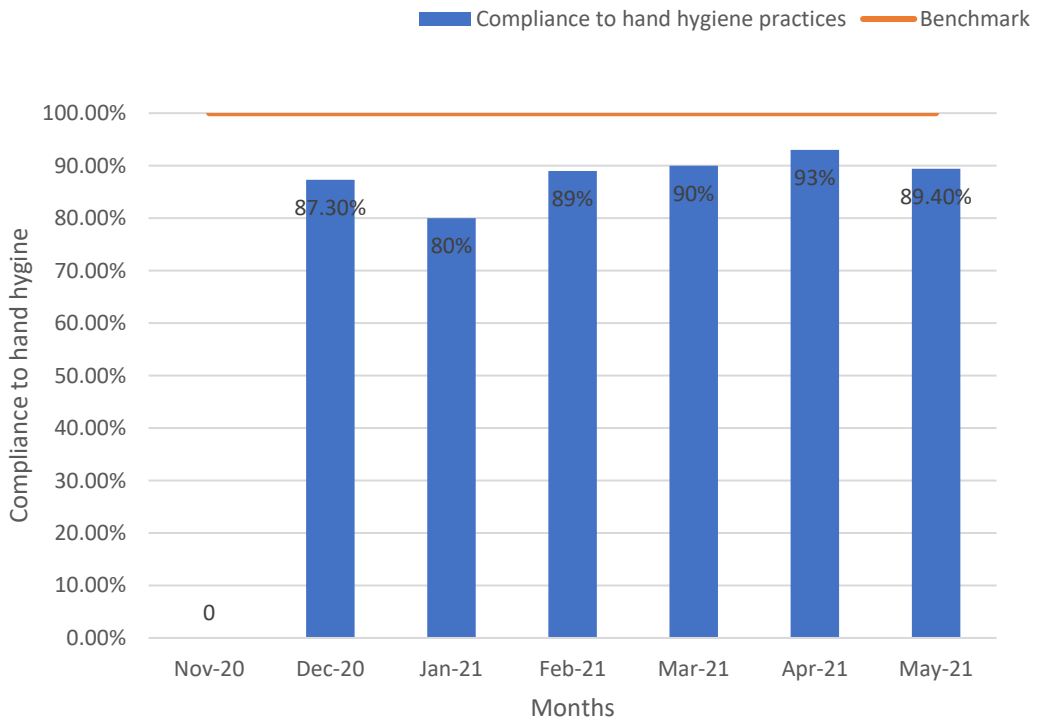

Adverse Events
Total no. of adverse events
Benchmarks
Total no. of adverse events/month
5
4
3
2
1
0
1
2
1
1
0
Nov-20
Dec-20
Jan-21
Feb-21
Mar-21
Apr-21
May-21
Months


Sentinel Events
Benchmark
Total no. of sentinel events
Total no. of sentinel events/month
5
4
3
2
1
0
0
Nov-20
Dec-20
Jan-21
Feb-21
Mar-21
Apr-21
May-21
Months

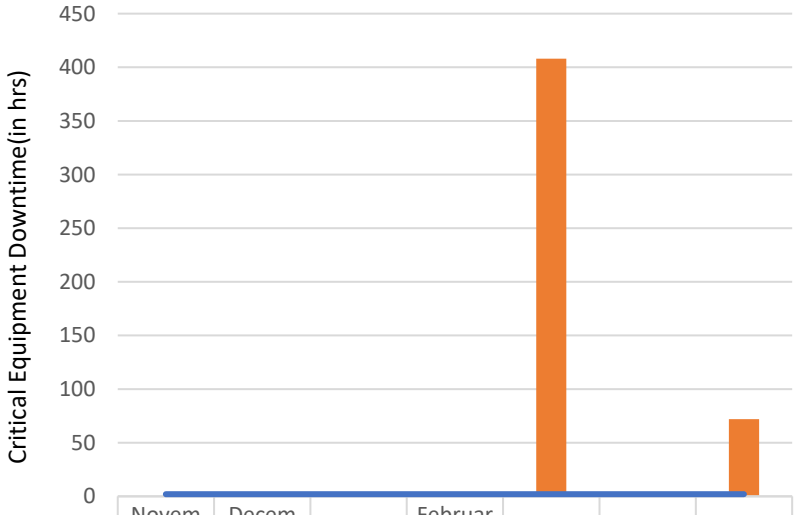

Medication errors
% of medication errors
Benchmark
% of medication errors
0.08%
0.07%
0.06%
0.05%
0.04%
0.03%
0.02%
0.01%
0.00%
0.07%
0
Nov-20
Dec-20
Jan-21
Feb-21
Mar-21
Apr-21
May-21
Months


Needle Stick Injuries
% of needle stick injuries
Benchmark
% of needle stck injuries
0.35%
0.30%
0.25%
0.20%
0.15%
0.10%
0.05%
0.00%
0.23%
0.31%
0.12%
0.00%
0.00%
0.09%
0.00%
0
Nov-20
Dec-20
Jan-21
Feb-21
Mar-21
Apr-21
May-21
Months

Hand hygiene practice

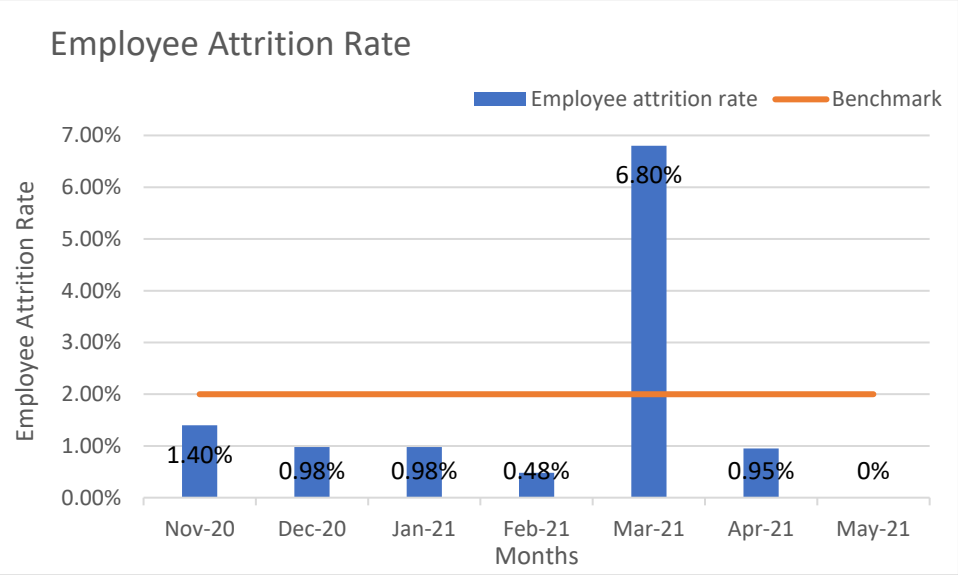


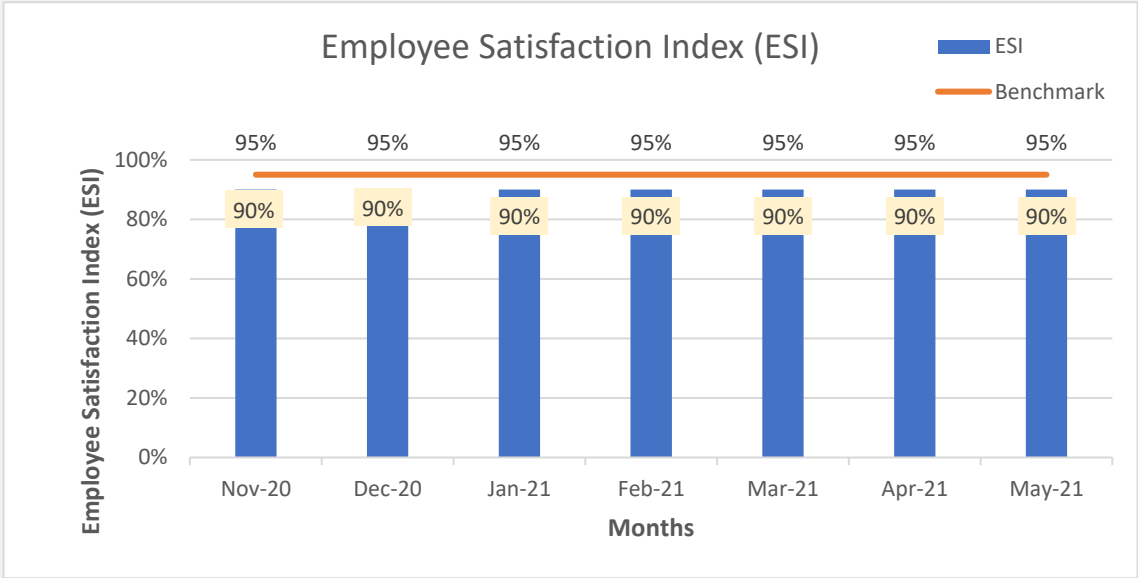
Critical Equipment Downtime

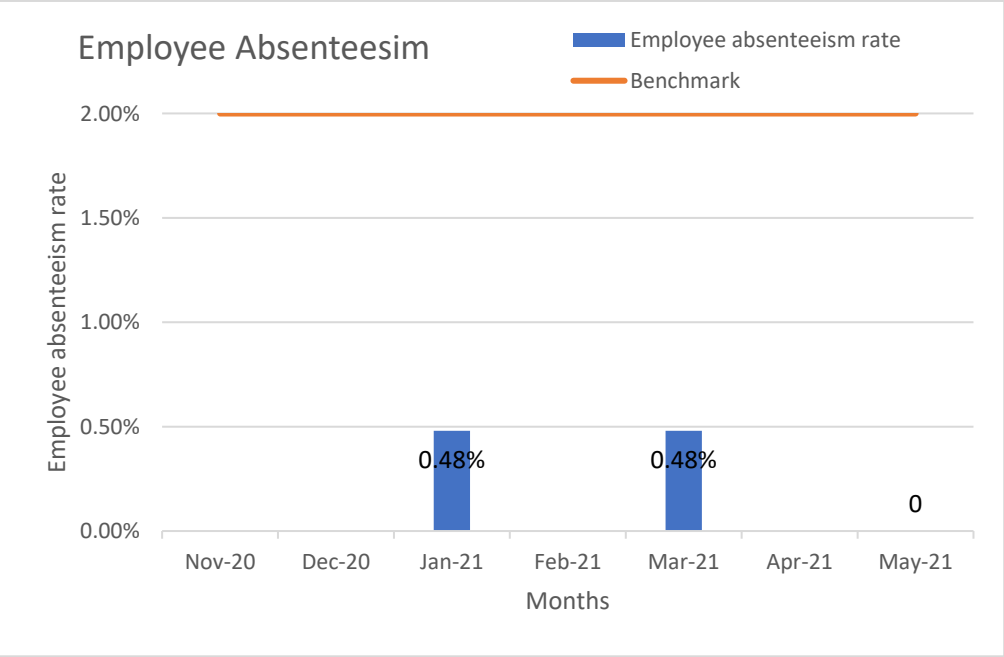


	Novem ber	Decem ber	January	Februar y	March	April	May
Crtical equipment downtime (in hrs)	0	0	0	0	408	0	72
Benchmark	2	2	2	2	2	2	2

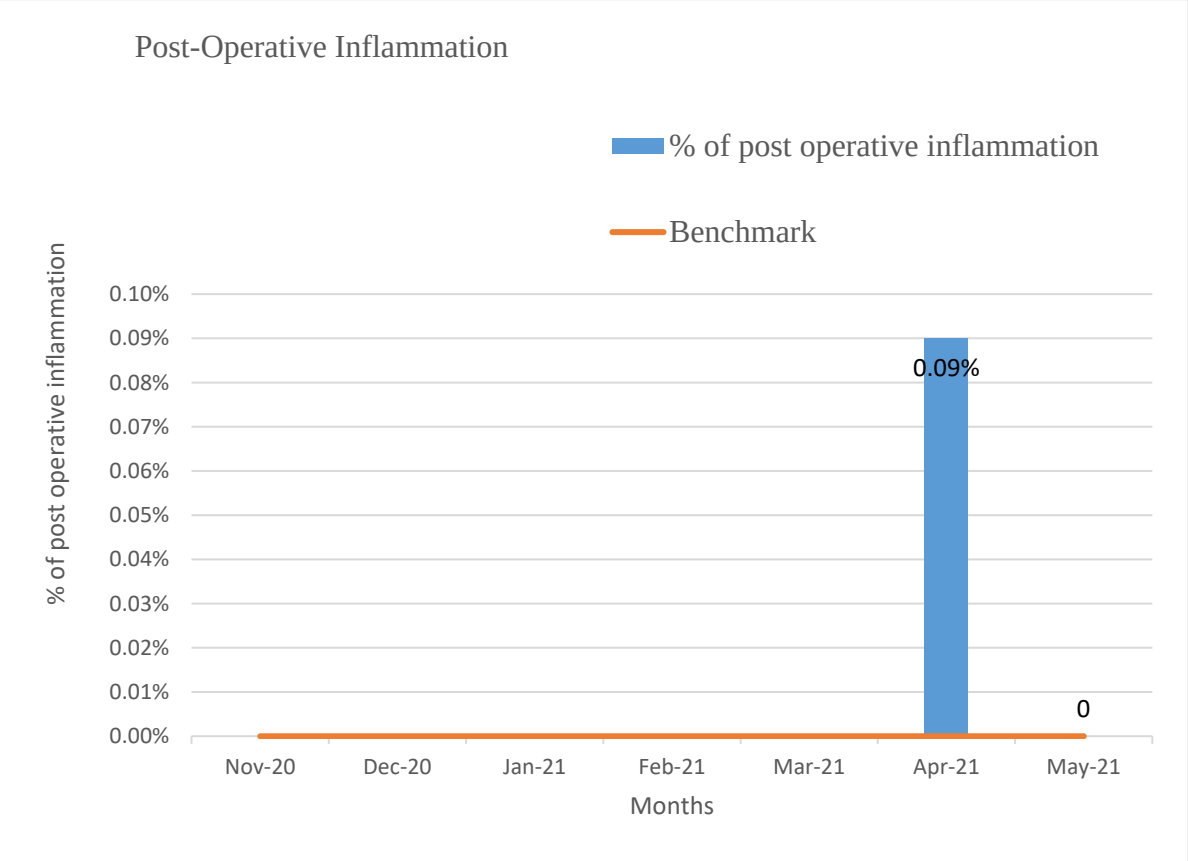
HRD INDICATORS



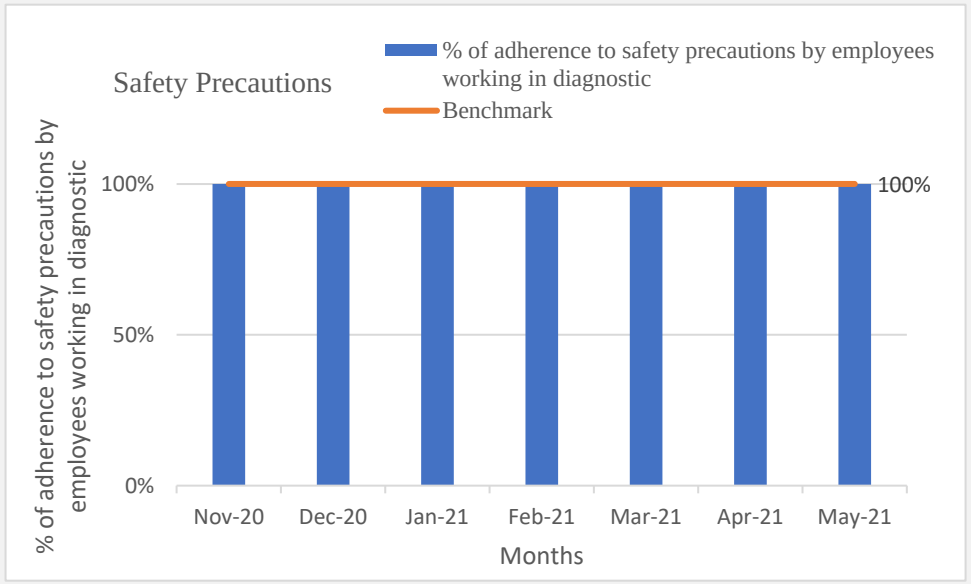


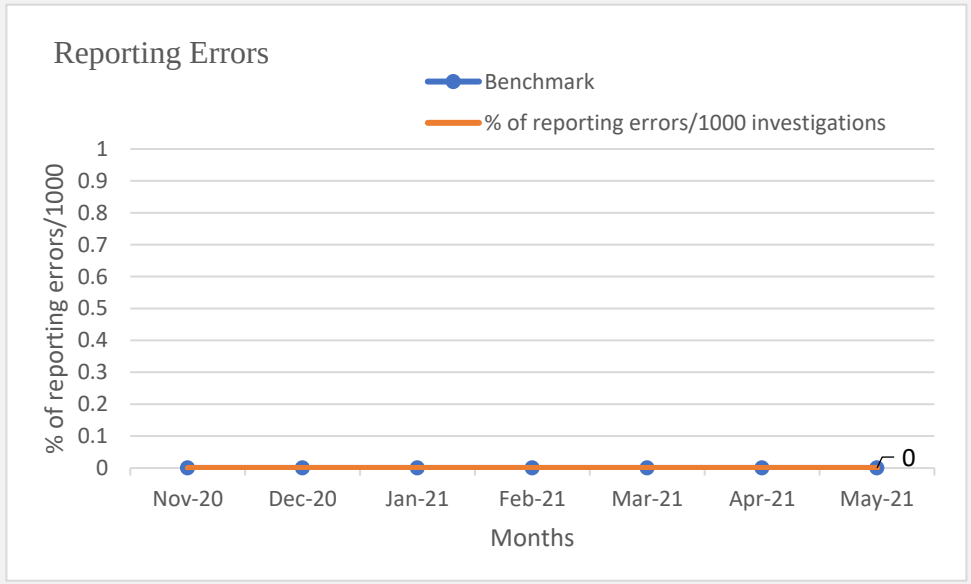


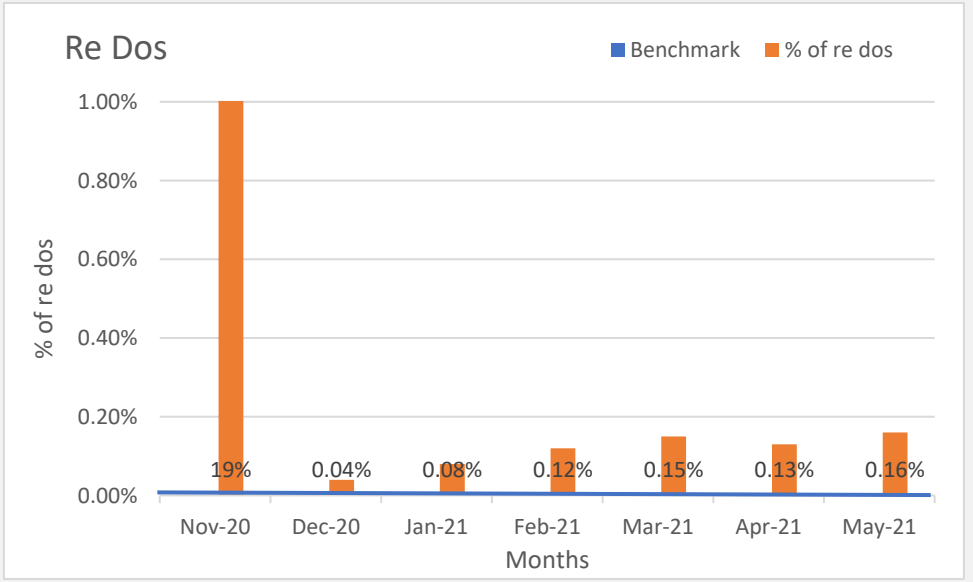
OPTHALMOLOGY SPECIFIC INDICATORS



LABORATORY INDICATORS







Recommendations

- Regular training or refresher should be organized by each department, if feasible on a monthly basis for awareness of quality indicators and NABH guidelines.
- The bed occupancy being low in the paying section of the In Patient (IP) department of the Sankara Eye Hospital can be improved by increasing the footfall of the patients which can happen only after the COVID and lockdown situation..
- The monthly meetings for all departments should be held to examine the trend of ongoing indicators and what improvements may be done in order to achieve 100% quality care.
- It is equally important to have just like department wise programs, a quarterly collective joint meeting amongst the staff of all departments.
- If certain indicators are not being measured according to the set targets or not able to meet up to the required standards, then the benchmarks set guidelines should be revised and followed according to the practicable process.

Conclusion

- This study was carried out for assessment of quality indicators for NABH accreditation in Sankara Eye Hospital, Coimbatore. & it was learnt that there are various quality indicators in Sankara Eye Hospital and how these indicators help in assessing and achieving high quality of care.
- The study was more focused on criteria set for In-Patient Department, Patient's care, Ophthalmology specific indicators, HRD and Laboratory.
- The functioning of the department, maintenance of records, monitoring for assessment, steps to address the gaps, the direct impact of actions and other processes were understood during the study. The interaction with functionaries of the hospital helped in gaining insight into the processes of various departments in the hospital.
- The evaluation of the available records as well as daily observation helped in assimilation of the standard procedures followed by the hospital staff.
- During the comparison of quality indicators set by various departments, it was observed that in most of the cases the deviations were isolated cases or not within the control of the organisation because of state imposed lockdown due to COVID-19 pandemic.
- However, there were few departments or processes where the deviation from the set benchmark was regular and not meeting the desired goals. The steps taken by the department where isolated cases of deviation was recorded was studied for the efficacy.
- The deviation observed were discussed with the staff of the respective departments for better understanding of the shortfalls and check on the steps taken to analyse and mitigate the reoccurrences.

References

1. Lioutas, V. A. (2020). August 2020 Highlights. *Stroke*, *51*(8), 2281. https://doi.org/10.1161/STROKEAHA.120.031430

2. (National Accreditation Board for Hospitals and Healthcare Providers) https://www.nabh.co/Resources.aspx

3. Canel, C., Mahar, S., Rosen, D., & Taylor, J. (2010). Quality control methods at a hospital. *International Journal of Health Care Quality Assurance*, *23*(1), 59–71. https://doi.org/10.1108/09526861011010686

4. Assi, L., Rosman, L., Chamseddine, F., Ibrahim, P., Sabbagh, H., Congdon, N., Evans, J., Ramke, J., Kuper, H., Burton, M. J., Ehrlich, J. R., & Swenor, B. K. (2020). Eye health and quality of life: An umbrella review protocol. *BMJ Open*, *10*(8), 1–6. https://doi.org/10.1136/bmjopen-2020-037648

5.https://en.wikipedia.org/w/index.php?title=National_Accreditation_Board_for_Hospitals_%26_Healthcare_Providers&oldid=892813019

(Wikipedia contributors. National Accreditation board for Hospitals and

Health care providers.)


Thank You