

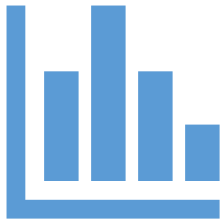
Performance Improvement Indicators of Medical Record Department in American Oncology Institute Hospital

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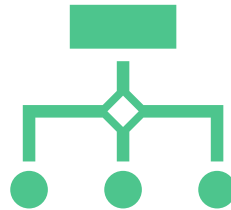
introduction

Hospitals worldwide increasingly track indicator data to improve care quality. Operational indicators help identify gaps in structure, process, or outcomes, making healthcare more transparent and guiding targeted improvements. While collecting this data incurs administrative costs, its effective use—through clear communication, audit and feedback—can influence clinical practice and support initiatives like staff education and protocol development. However, the optimal use and impact of these indicators in driving quality improvement remain areas for further understanding.

objective



To assess the key performance indicators of the Medical Records Department.



To identify gaps in documentation, coding, and record management.



To suggest improvements for enhancing MRD efficiency and quality.

Aim of project



To evaluate and improve the performance of the Medical Records Department (MRD) at the American Oncology Institute, Nagpur, by analyzing key performance indicators (KPIs) and identifying gaps in documentation, coding, and record management to enhance operational efficiency and quality of healthcare services.

Methodology

STUDY SETTING: American Oncology Institute (AOI), Nagpur

STUDY DESIGN : observational study design

SAMPLING METHOD : convenience sampling method

SAMPLING SIZE:200 Inpatient medical records

STUDY TIME PERIOD: 2-month period

STUDY AREA : Medical Records Department (MRD)

DATA COLLECTION TECHNIQUE:

A . Direct Observation

B. Document Review



LIST OF QUALITY INDICATORS INCLUDING KPI STUDIED IN MRD OF OPERATION

- **KPI 1) Medical Record Completion Rate:**
 - **KPI 2) Deficiency Rate in Records**
 - **KPI 3) Coding Accuracy Rate:**
 - **KPI 5) Record Availability at Point of Care:**
 - **KPI 6) Confidentiality Breach Incidents:**
 - **KPI 7) Average TAT for record Completion**
 - **KPI 8) Physician Queries for Incomplete Document:**
 - **KPI 9) Number of Record Rejected During Audit:**
 - **KPI 10) Indexing & Scanning Accuracy (Digital MRD):**
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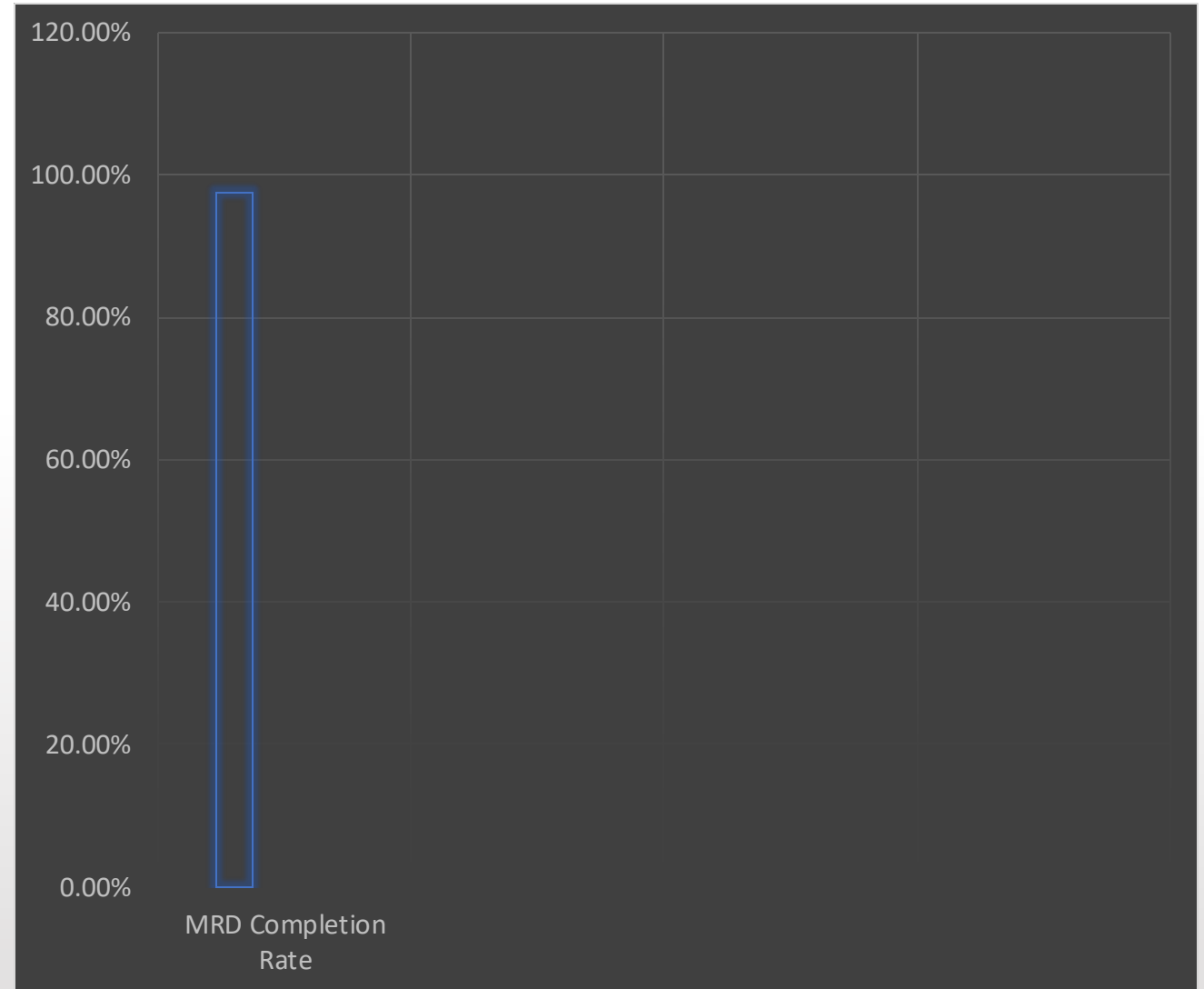
LIST OF QUALITY INDICATORS INCLUDING KPI STUDIED IN MRD OF OPERATION

Percentage of records completed within
defined time

Formula: $(\text{Records completed within timeframe} / \text{Total discharged records}) \times 100$

Target :100%

Result :97.5%



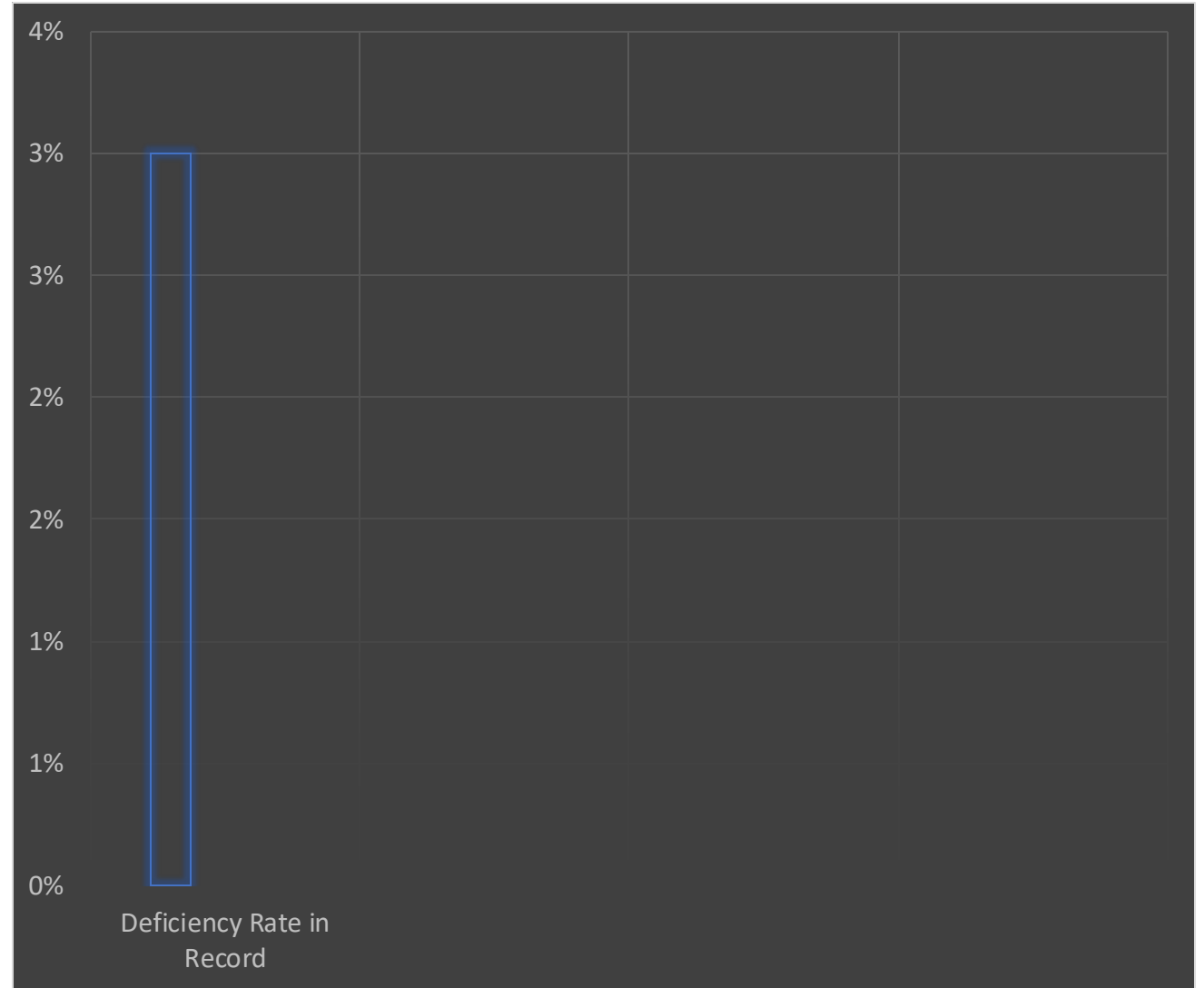
Deficiency Rate in Records

Measures records with missing or incomplete documentation.

Formula: $(\text{Deficient records} / \text{Total records audited}) \times 100$

Target: 2%

Result: 3%



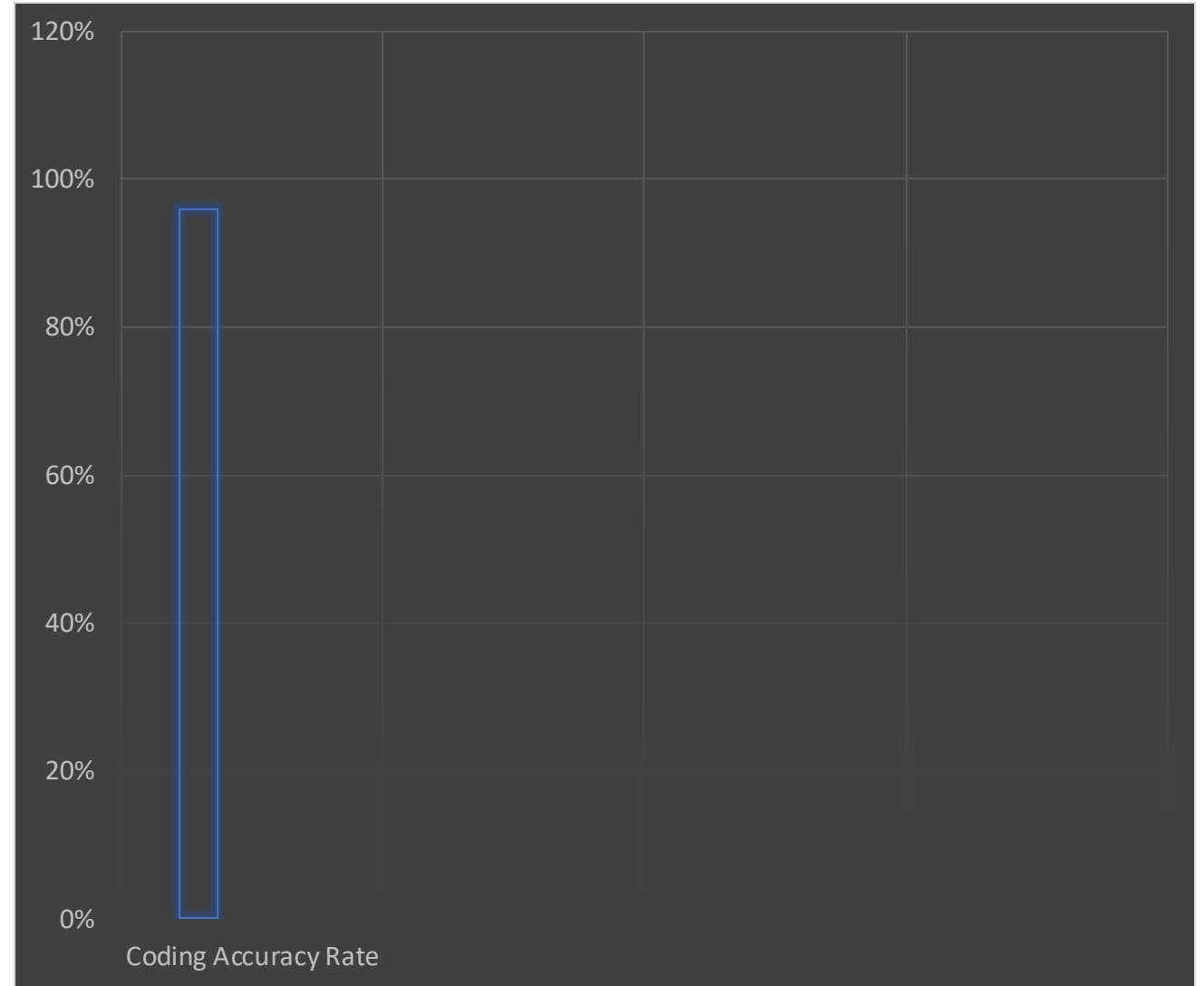
Coding Accuracy Rate

Ensures that disease and procedure codes (ICD/ICD-10-CM) are correct.

Formula: $(\text{Correctly coded records} / \text{Total coded records}) \times 100$

Target: 95%

Result : 96%



Average Record Retrieval Time

- Measures efficiency of MRD to retrieve records for care/legal/audit use.
 - **Formula:** Total retrieval time / Number of requests
 - Target:10 Minute
 - Result :7 minute
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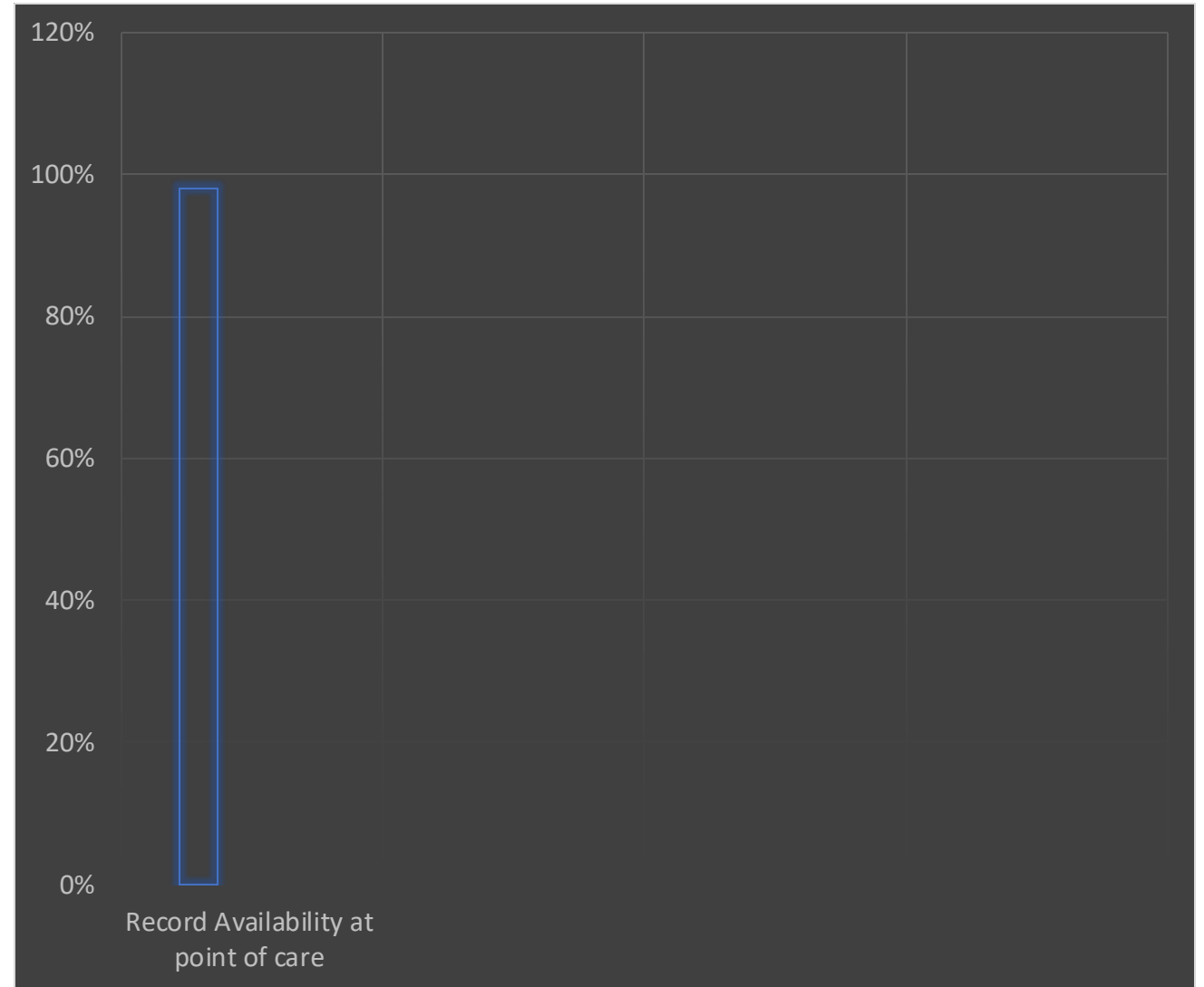
Record Availability at Point of Care

Ensures records are accessible at time of treatment.

Formula: $(\text{Available records at care point} / \text{Total cases}) \times 100$

Target: 98%

Result: 98%



Confidentiality Breach Incident

Number of
unauthorized
access or loss of
patient data.

Formula: Total
number of
breaches reported
Target:0

Result:0

Average TAT for record Completion



Average Turn Around Time for record Completion.



Formula: Total Days for Completion / Number of Records



Target: 7 days



Result :4.8 days

Physician Queries for Incomplete Document

Measures gaps in initial documentation quality.

Formula: Total queries raised to clinicians

Target: Trend Monitor

Result: 15 Queries

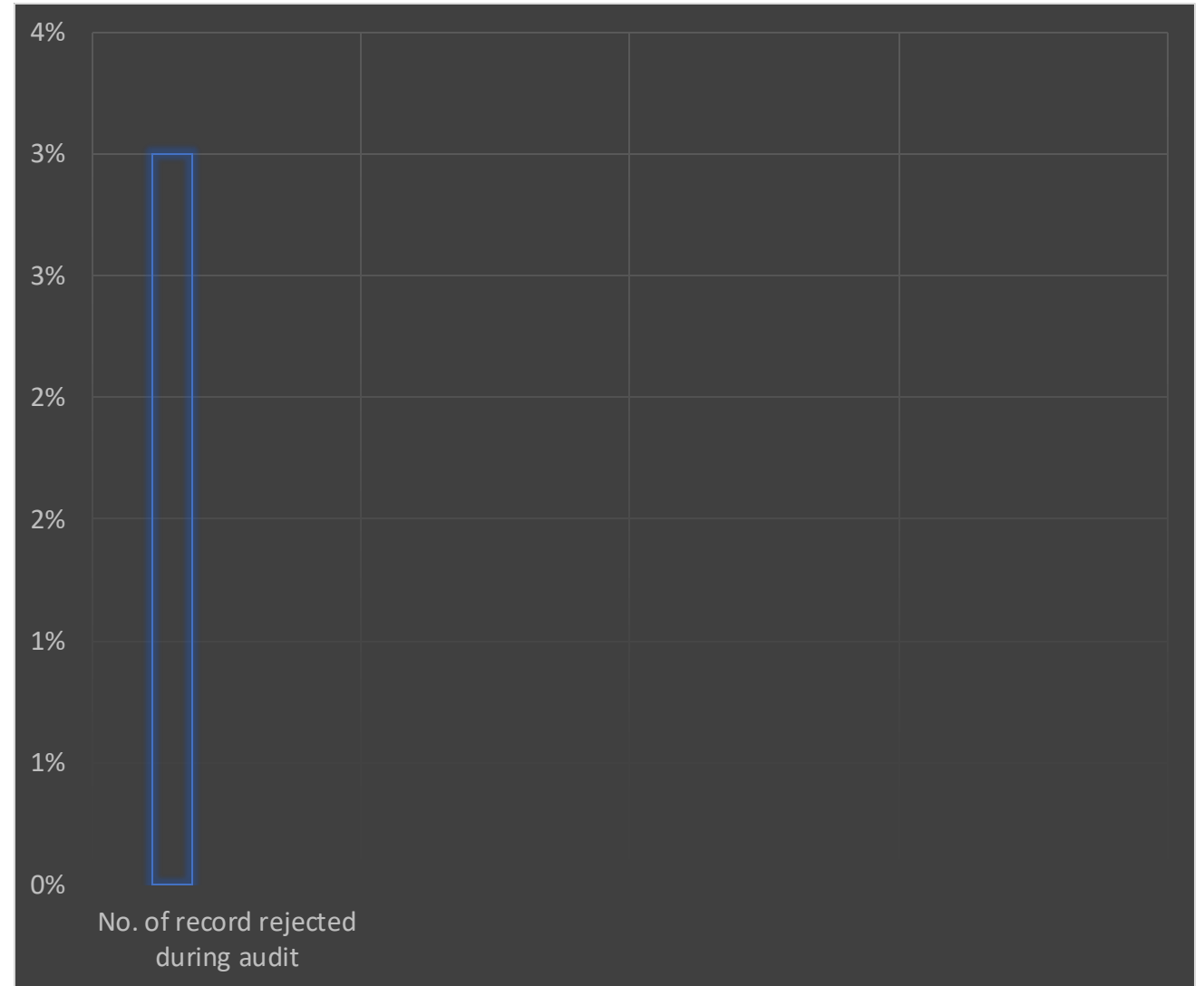
Number of Record Rejected During Audit

Count of record returned by Quality Team or External Auditor due to incompleteness or errors.

Formula:
$$\left(\frac{\text{No. of Rejected Records}}{\text{Total Records Audited}}\right) \times 100$$

Target:2-5%

Result:3%



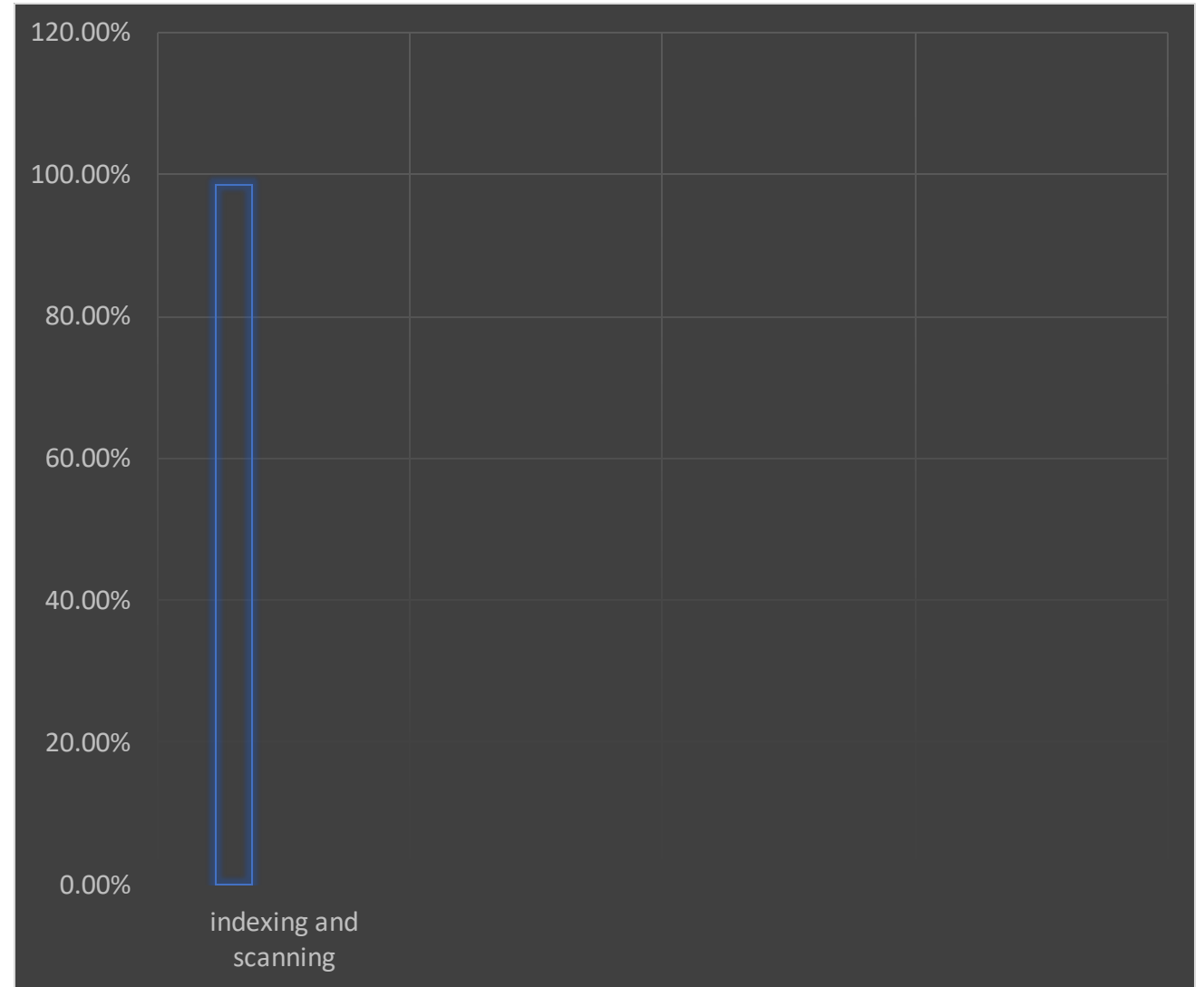
Indexing & Scanning Accuracy (Digital MRD)

Percentage of records correctly indexed and digitized.

Formula: $(\text{Correctly scanned records} / \text{Total scanned}) \times 100$

Target :98%

Result:98.5%



Suggestion

Upgrade	Upgrade EMR with alerts for incomplete records and delays.
Use	Use AI/NLP tools for better coding and documentation accuracy.
Conduct	Conduct regular training for staff on ICD coding and confidentiality.
Implement	Implement SOPs for documentation and scanning processes.
Perform	Perform regular audits to monitor record quality and timelines.
Establish	Establish feedback loops between MRD staff and clinicians.
Link	Link KPIs to staff performance appraisals.
Improve	Improve infrastructure with better scanning tools and secure storage.
Ensure	Ensure data privacy as per NABH and JCI norms.

Conclusion

The study conducted at the Medical Records Department of the American Oncology Institute (AOI), Nagpur, provides significant insights into the performance level of MRD in terms of quality, accuracy, and operational efficiency. The evaluation of ten key performance indicators revealed that while the department performs well in areas such as record availability, scanning accuracy, and record turnaround time, certain areas—like documentation deficiencies and physician query rates—require targeted improvements.



CONCLUSION

Thank you