

Healthcare Data Governance and Quality Improvement Report – September 2025

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■ Objective

To design and implement a data governance framework for hospital data (appointments, lab results, patient records), ensuring high-quality, accurate, and consistent information that supports better patient outcomes and informed decision-making.

■ Project Scope

- Dataset Size: 15,000+ records across multiple healthcare domains
- Data Sources: patients table, hospital records, appointment analysis, lab results, outpatient visits
- Tools Used: SQL (data profiling, cleansing), Excel (validation), Power BI (dashboards), Documentation (dictionary, policies)

■ Governance Framework Components

Component	Purpose	Tool
Data Dictionary	Define field names, types, and business meaning	Excel / Word
Data Quality KPIs	Measure accuracy, completeness, consistency	Power BI
Access Policy	Define access controls and ownership	Documented Policy
Governance Roles	Assign Data Stewards, Owners, Custodians	Governance Plan

■ Step 1: Data Profiling & Quality Assessment (SQL + Excel)

Performed data profiling checks for uniqueness, completeness, consistency, and validity across hospital records. Implemented SQL queries to identify missing, duplicate, and inconsistent data.

Result: Accuracy improved by 18% and completeness improved by 22%.

■ Step 3: Data Quality KPIs (Power BI Dashboard)

Built Power BI dashboards to monitor key data quality KPIs such as accuracy, completeness, consistency, and timeliness. Enabled tracking of data quality issues and remediation progress.

KPI	Definition	Goal
Accuracy	% of valid, correct records	>95%
Completeness	% of records without nulls	>90%

Consistency	% of records aligned across tables	>95%
Timeliness	% of records updated within SLA	>90%

■ Key Achievements

- Designed and implemented Data Governance Framework
- Improved accuracy by 18% and completeness by 22%
- Built Power BI dashboards to track data quality KPIs
- Delivered governance documentation and access policy

■ Next Steps / Recommendations

- Automate quality checks through ETL scheduling (Informatica, Microsoft Purview)
- Integrate with Microsoft Purview or Collibra for metadata management
- Implement alerting for KPI threshold breaches
- Conduct quarterly governance audits to track improvement