

PhenoQC Quality Control Report

Source file: comprehensive_input.csv

Summary

Imputation Strategy	Mean
Schema Validation Score	0.00%
Missing Data Score	92.98%
Mapping Success Score	0.00%
Overall Quality Score	30.99%

Imputation Settings

Global Strategy	knn
Global Params	{'n_neighbors': 5, 'weights': 'uniform'}
Tuning Enabled	True
Best Params	{'n_neighbors': 7}
Tuning Score	11.2896 (MAE)

Data Quality Scores:

Schema Validation Score: 0.00%
Missing Data Score: 92.98%
Mapping Success Score: 0.00%
Overall Quality Score: 30.99%

Schema Validation Results

Format Validation: False
Duplicate Records: 2 issues found.
Conflicting Records: 2 issues found.
Integrity Issues: 1000 issues found.
Referential Integrity Issues: No issues found.
Anomalies Detected: 17 issues found.

Invalid Mask: 1000 issues found.
Accuracy Issues: No issues found.
Redundancy Issues: No issues found.
Traceability Issues: 2 issues found.
Timeliness Issues: No issues found.

Additional Quality Dimensions

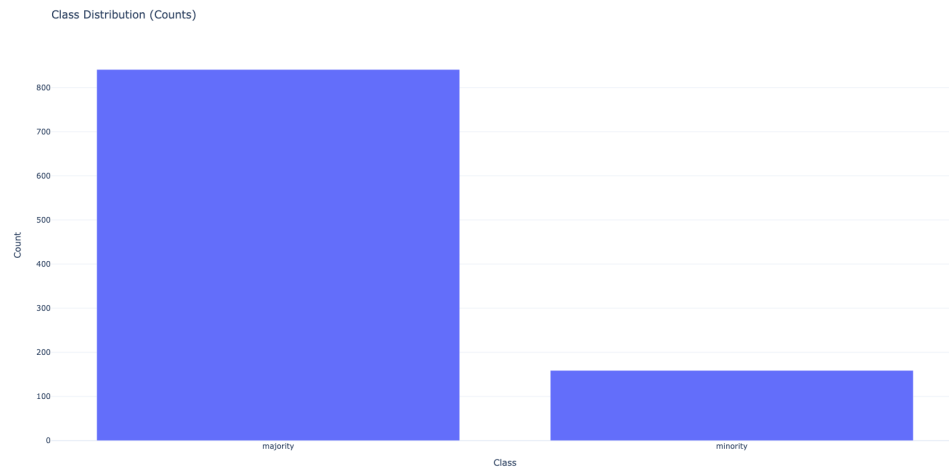
Accuracy Issues: No issues found.
Redundancy Issues: No issues found.
Traceability Issues: 2 issues found.

row	issue
0	duplicate_identifier
1	duplicate_identifier

Timeliness Issues: No issues found.

Class Distribution

Class	Count	Proportion
majority	841	84.10%
minority	159	15.90%



Missing Data Summary

Column	Missing Count
Creatinine_mgdl	214
PrimaryPhenotype	159
Cholesterol_mgdl	152
DiseaseCode	148
Glucose_mgdl	123
Height_cm	89
Weight_kg	76
BP_diastolic	57
BP_systolic	35

Records Flagged for Missing Data: 672

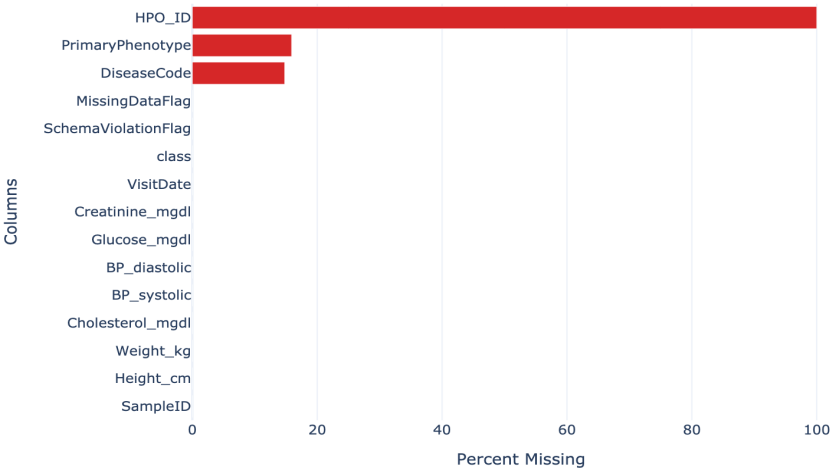
Ontology Mapping Summary

Ontology	Total Terms	Mapped	Success Rate
HPO	4	0	0.00%

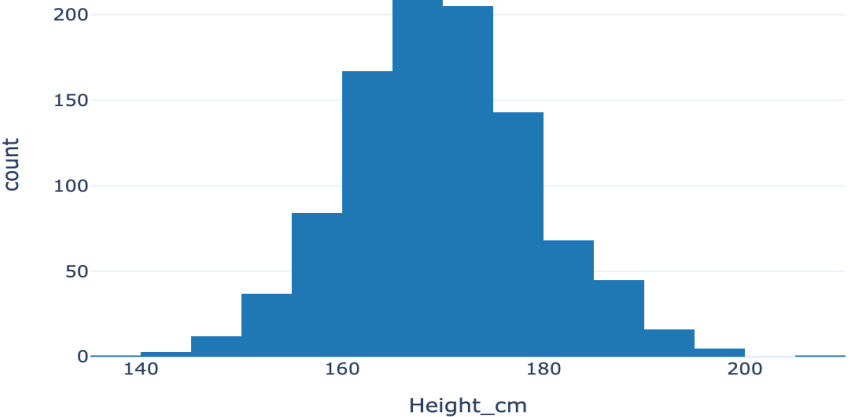
Visualizations



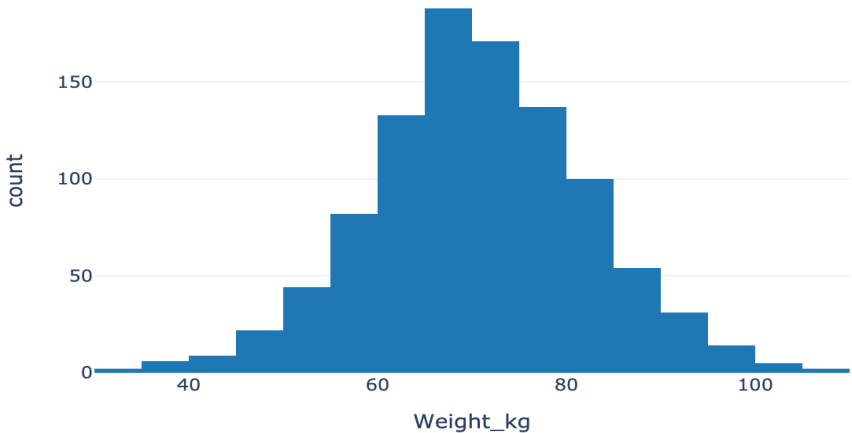
Percentage of Missing Data by Column



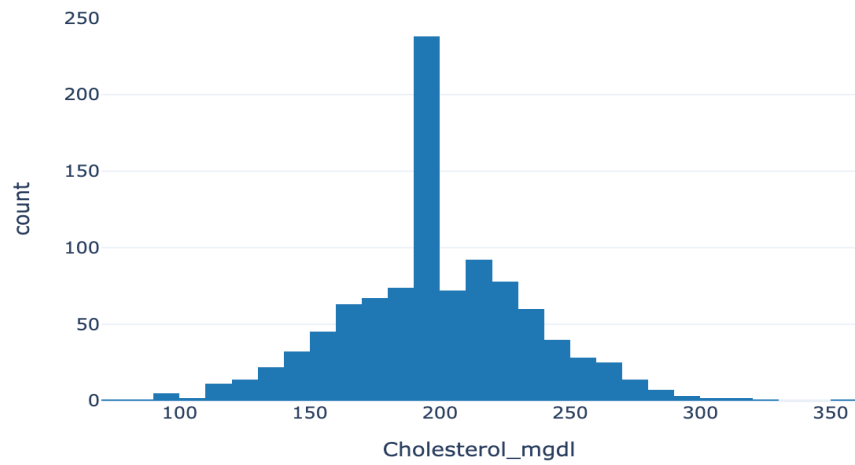
Distribution of Height_cm



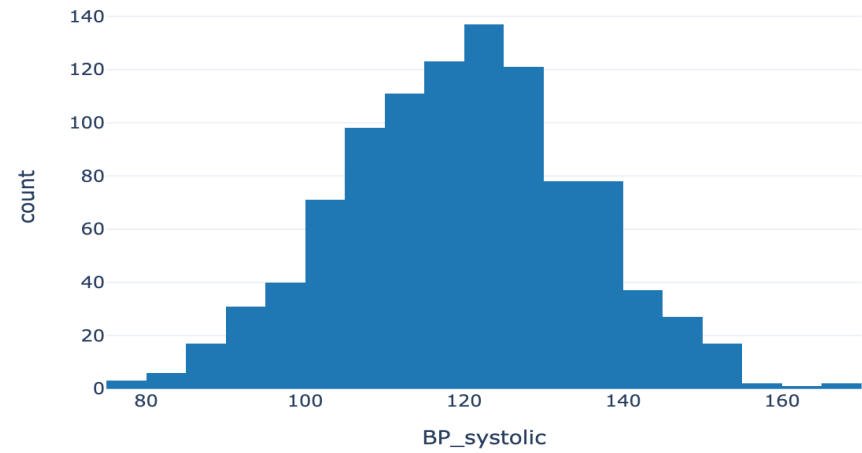
Distribution of Weight_kg



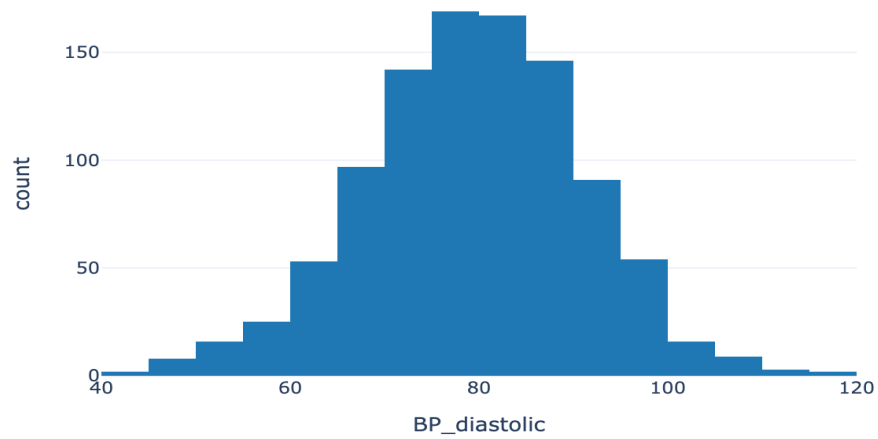
Distribution of Cholesterol_mgdl



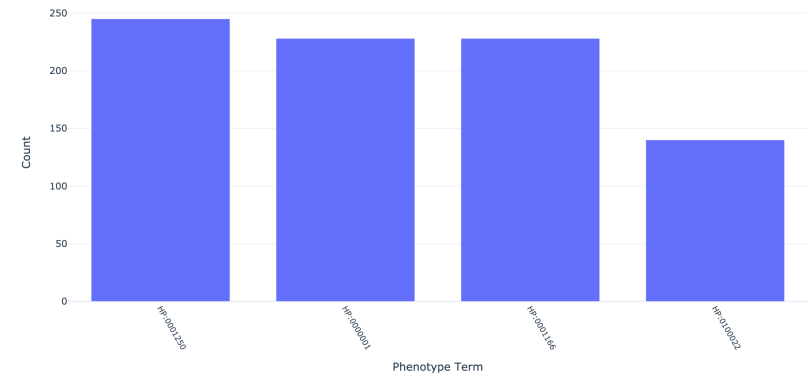
Distribution of BP_systolic



Distribution of BP_diastolic



Top 20 Most Common Terms in PrimaryPhenotype



Mapping Results: PrimaryPhenotype → HPO

