

PhenoQC Quality Control Report

Source file: data.csv

Summary

Imputation Strategy	Knn
Schema Validation Score	100.00%
Missing Data Score	92.50%
Mapping Success Score	0.00%
Overall Quality Score	64.17%

Imputation Settings

Global Strategy	knn
Global Params	{'n_neighbors': 5}
Tuning Enabled	True
Best Params	{'n_neighbors': 5}
Tuning Score	55.1553 (MAE)

Data Quality Scores:

Schema Validation Score: 100.00%
Missing Data Score: 92.50%
Mapping Success Score: 0.00%
Overall Quality Score: 64.17%

Schema Validation Results

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

Invalid Mask: 800 issues found.

Additional Quality Dimensions

Redundancy Issues: 1 issues found.

column_1	column_2	metric	value
feat1	feat2	correlation	0.9997319157158756

Imputation Stability & Bias

Stability (repeatability)

Imputation Stability (top variables): 5 issues found.

column	repeats	metric	mean_error	sd_error	cv_error
outcome	5	MAE	0.1699	0.0394	0.2319
feat1	5	MAE	0.3968	0.066	0.1663
feat2	5	MAE	0.8232	0.0942	0.1144
feat3	5	MAE	2.6111	0.2373	0.0909
SampleID	5	MAE	216.7087	14.2919	0.0659

Warning rules: SMD \geq 0.1 | Var-ratio \notin [0.5,2.0] | KS p<0.05

Variables evaluated: 3
: 3 issues found.

Variable	n_obs	n_imp	SMD	Var-ratio	KS p	Triggers	Warn
feat1	640	160	-0.017	0.861	0.0	KS p<0.05	True
feat2	640	160	0.026	0.886	0.008	KS p<0.05	True
feat3	640	160	-0.021	0.842	0.0	KS p<0.05	True

Variable	Status	Triggers
feat2	WARN	KS p<0.05
feat1	WARN	KS p<0.05

feat3	WARN	KS $p < 0.05$
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Missing Data Summary

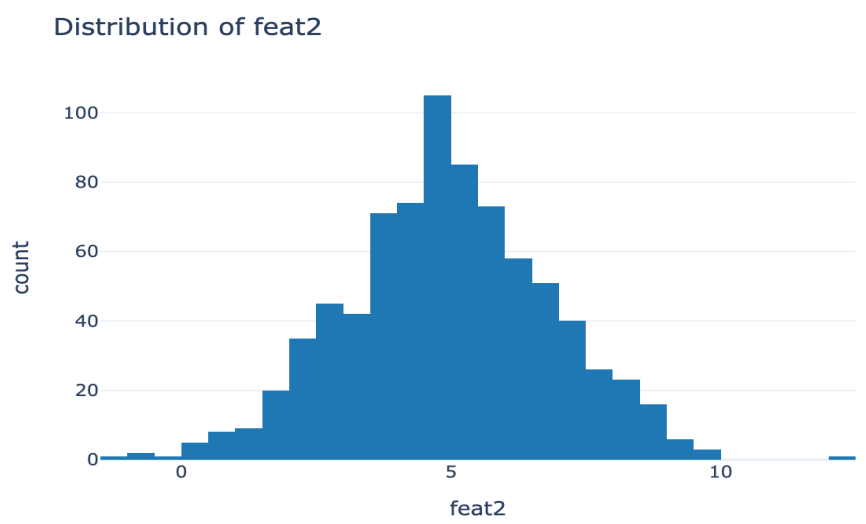
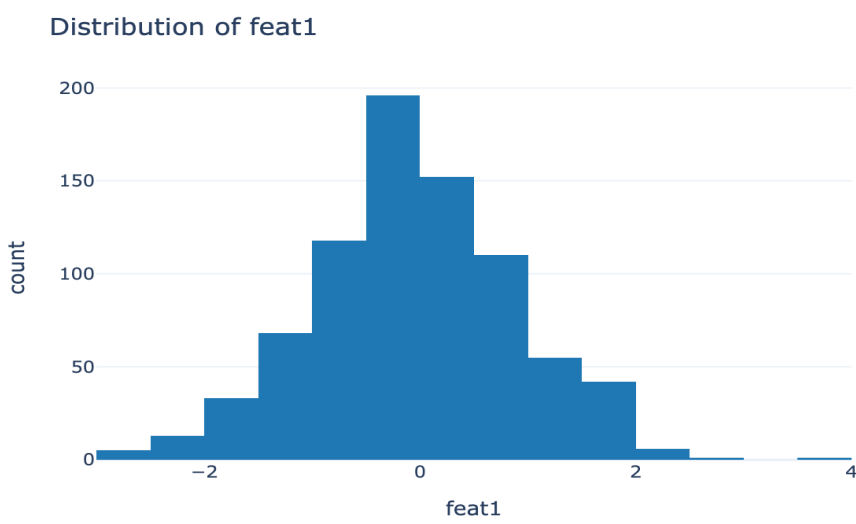
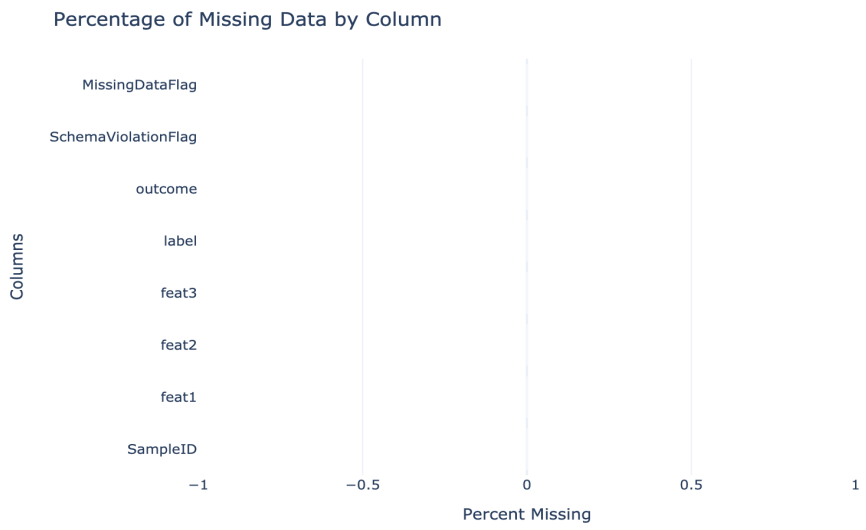
Column	Missing Count
feat1	160
feat2	160
feat3	160

Records Flagged for Missing Data: 384

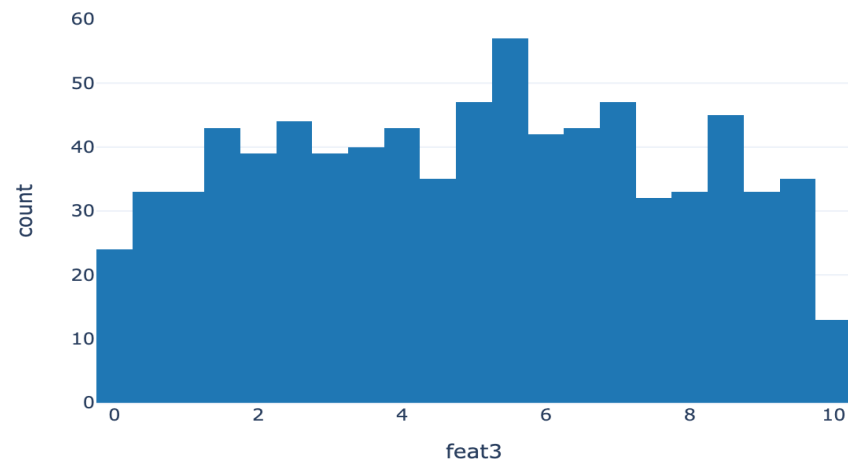
Ontology Mapping Summary

Ontology	Total Terms	Mapped	Success Rate
HPO	0	0	0.00%
DO	0	0	0.00%
MPO	0	0	0.00%

Visualizations



Distribution of feat3



Distribution of outcome

