

Reporting checklist for the evaluation of imputation methodology

Aims

e.g. simulation scope

- simulation design (incl. pseudo-code or flow diagram)
 - required level of precision (incl. number of simulation repetitions)
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Data-generating mechanisms

e.g. data generation and missingness generation

- data source (incl. model-based or design-based, sampling variance)
 - data characteristics (incl. multivariate relations and data structures such as clustering)
 - missingness mechanisms (incl. type or functional form of the missing data model)
 - missingness patterns (incl. missingness proportion)
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Estimands

e.g. complete data target

Methods

e.g. missing data methods and analytic method

- imputation methods (incl. parameters such as the number of imputations)
 - estimation method (incl. reference methods such as complete case analysis)
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Performance measures

e.g. evaluation of estimates and imputed values

- statistical properties (incl. comparative performance, if applicable)
 - validity of imputations (incl. imputation model fit and distributional characteristics)
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