How to document your research data



Data that possesses little or no documentation will have only limited use. Sufficient information should be recorded to enable those unfamiliar with the data – collaborators, end users and your future self - to understand its content, the context in which it was created, and how it may be used. Documentation should be recorded throughout the research process, as opposed to being written at the end of the study.

Documentation practice

Documentation practices often differ between study types and research disciplines. Factors to consider when deciding what to document include:

- Research context: Specific information may be needed to understand the research context. For example: What is the research question/hypotheses being tested? What methods and sampling frame were used to obtain the data? What variables were captured? What do they measure? How are they measured?
- Target audience: Consider who will review your research outputs and the purpose for which they may use it. What questions would they ask?
- Domain standards: Many disciplines use common practices and standards for describing research outputs. For example, Standard Operating Procedures (SOPs), CDISC for clinical trials, the Data Documentation Initiative (DDI) standard for social scientists, and the Statistical Data and Metadata eXchange (SDMX) format for statisticians. Relevant standards can be found at https://biosharing.org and http://www.dcc.ac.uk/resources/metadata-standards.

Documentation practices for data sharing

LSHTM researchers wishing to publish data in a digital repository, such as LSHTM Data Compass, should provide the following documentation:

- A User Guide that provides a high-level description of your data.
- A codebook / data dictionary that describe its content
- The Informed Consent form & participant information sheet
- Questionnaires, interview guide, and other data collection tools
- Research protocols and Standard Operating Procedures that were applied by the project

Support documentation should be made available as open access, irrespective of the access status of the associated data, to provide researchers with a better understanding of the content.

Further information:

- LSHTM: Create Data Documentation
 https://lshtm.sharepoint.com/Research/Research-data-management/Pages/data_documentation.aspx
- UK Data Service: Documenting qualitative data
 https://www.ukdataservice.ac.uk/manage-data/document/data-level#/tab-qualitative-data
- UK Data Service: Documenting quantitative data http://ukdataservice.ac.uk/manage-data/document/data-level.aspx#/tab-tabular-data
- UK Data Archive: Documenting qualitative data using NVivo 9 tutorial http://www.data-archive.ac.uk/create-manage/document/overview
- MANTRA online learning module: Documentation and Metadata http://datalib.edina.ac.uk/mantra/

https://doi.org/10.17037/DATA.50 Reviewed: July 17, 2017