# TEMPLATE FOR A DATA MANAGEMENT PLAN

The following **template** should be used to develop a Data Management Plan (DMP) to accompany a research proposal. The notes (*in italics*) provide further context and guidance for its completion. Where substantial data is generated from the research, the DMP will be more in depth and therefore likely to be 2 or 3 pages long [(3 pages maximum length - See MRC Je-S Help and Guidance for DMP)](https://je-s.rcuk.ac.uk/Handbook/pages/GuidanceonCompletingaStandardG/CaseforSupportandAttachments/MRCSpecificGuidance.htm#Data_Management_Plan__exactly_1__Mandatory_requirement___Maximum_of_1_DMP) for low impact studies generating small amounts of data, DMPs will be short ie less than half a page.

If you opt NOT to use the template the topics listed in the template MUST be addressed.

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| **0. Proposal name** |
| *Exactly as in the proposal that the DMP accompanies* |
| **1. Description of the data** |
| **1.1 Type of study** *Up to three lines of text that summarise the type of study (or studies) for which the data are being collected.***1.2 Types of data***Types of research data to be managed in the following terms: quantitative, qualitative; generated from surveys, clinical measurements, interviews, medical records, electronic health records, administrative records, genotypic data, images, tissue samples,...***1.3 Format and scale of the data***File formats, software used, number of records, databases, sweeps, repetitions,… (in terms that are meaningful in your field of research). Do formats and software enable sharing and long-term validity of data?* |
| **2. Data collection / generation** |
| *Make sure you justify why new data collection or long term management is needed in your Case for Support. Focus in this template on the good practice and standards for ensuring new data are of high quality and processing is well documented.***2.1 Methodologies for data collection / generation***How the data will be collected/generated and which community data standards (if any) will be used at this stage*.**2.2 Data quality and standards***How consistency and quality of data collection / generation will be controlled and documented, through processes of calibration, repeat samples or measurements, standardised data capture or recording, data entry validation, peer review of data or representation with controlled vocabularies.* |
| **3. Data management, documentation and curation** |
| *Keep this section concise and accessible to readers who are not data-management experts. Focus on principles, systems and major standards. Focus on the main kind(s) of study data. Give brief examples and avoid long lists.***3.1 Managing, storing and curating data.***Briefly describe how data will be stored, backed-up, managed and curated in the short to medium term. Specify any community agreed or other formal data standards used (with URL references). [Enter data* security *standards in Section 4].*Data will be stored in the PI’s University of Reading OneDrive account/on the University of Reading local network. This will provide data security, replication in separate data centres, automated backup, and 3-month file recovery.**3.2 Metadata standards and data documentation***What metadata is produced about the data generated from the research? For example descriptions of data that enable research data to be used by others outside of your own team. This may include documenting the methods used to generate the data, analytical and procedural information, capturing instrument metadata alongside data, documenting provenance of data and their coding, detailed descriptions for variables, records, etc.***3.3 Data preservation strategy and standards***Plans and place for long-term storage, preservation and planned retention period for the research data. Formal preservation standards, if any. Indicate which data may not be retained (if any).*Data will be deposited in the University of Reading Research Data Archive for long-term preservation and access on conclusion of the study and publication of findings. |
| **4. Data security and confidentiality of potentially disclosive information** |
| *This section MUST be completed if your research data includes* ***personal data relating to human participants in research****. For other research, the safeguarding and security of data should also be considered. Information provided will be in line with you ethical review. Please note this section concerns protecting the data, not the patients.***4.1 Formal information/data security standards***Identify formal information standards with which your study is or will be compliant. An example is ISO 27001.If your organisation is ISO compliant, please state the registration number.*Information held under the authority of the University is managed in accordance with the University’s Information Compliance policies.**4.2 Main risks to data security***All personal data has an element of risk. Summarise the main risks to the confidentiality and security of information related to* human participants*, the level of risk and how these risks will be managed. Cover the main processes or facilities for storage and processing of personal data, data access, with controls put in place and any auditing of user compliance with consent and security conditions. It is not sufficient to write not applicable under this heading.**MRC guidance on the* [*Confidentiality and data security*](https://www.mrc.ac.uk/publications/browse/mrc-policy-and-guidance-on-sharing-of-research-data-from-population-and-patient-studies/) *is provided (please see page 24 of the PDF file generated by selecting the above or adjacent* [*link*](https://www.mrc.ac.uk/publications/browse/mrc-policy-and-guidance-on-sharing-of-research-data-from-population-and-patient-studies/)*).*The main risk is of disclosure of the identities of participants and of data collected from them, which may be of a sensitive nature, to unauthorised persons. Data will be stored in secure access-controlled University infrastructure at all times, with access limited to members of the study team. Paper documentation such as consent forms and questionnaires will be stored in a locked cabinet in an office that is locked when not in use. Where possible, hard copies will be digitised and the originals destroyed. Participants will be represented by a unique participant code in data files, with a link table linking the code to participant details stored separately. Participants’ identifiable information will only be shared with members of the study team on a need-to-know basis. Data prepared for public preservation and sharing at the end of the study will be fully anonymized by removal of linked codes and other direct and indirect identifiers. All members of the study team will have undertaken information security and data protection training provided by the University of Reading. |
| **5. Data sharing and access** |
| Identify any data repository (-ies) that are, or will be, entrusted with storing, curating and/or sharing data from your study, where they exist for particular disciplinary domains or data types. [Information on repositories is available here.](http://www.wellcome.ac.uk/About-us/Policy/Spotlight-issues/Data-sharing/Guidance-for-researchers/WTX060360.htm) **5.1 Suitability for sharing***Is the data you propose to collect (or existing data you propose to use) in the study suitable for sharing? If yes, briefly state why it is suitable.**If No, indicate why the data will not be suitable for sharing and then go to Section 6.*All data will be suitable for sharing, as they will be fully anonymised.**5.2 Discovery by potential users of the research data***Indicate how potential new users (outside of your organisation) can find out about your data and identify whether it could be suitable for their research purposes, e.g. through summary information (metadata) being readily available on the study website, in the MRC gateway for population and patient research data, or in other databases or catalogues. How widely accessible is this depository?**Indicate whether your policy or approach to data sharing is (or will be) published on your study website (or by other means).*A metadata record describing the data deposited in the University of Reading Research Data Archive will be made freely available online. A Digital Object Identifier (DOI) will be assigned to the dataset, so that it can be cited and linked to from related publications and other sources. **5.3 Governance of access***Identify who makes or will make the decision on whether to supply research data to a potential new user.**For population health and patient-based research, indicate how* [*independent oversight of data access and sharing*](https://www.mrc.ac.uk/publications/browse/mrc-policy-and-guidance-on-sharing-of-research-data-from-population-and-patient-studies/) *(please see page 10 of PDF file generated by selecting the above or adjacent* [*link*](https://www.mrc.ac.uk/publications/browse/mrc-policy-and-guidance-on-sharing-of-research-data-from-population-and-patient-studies/)*) works (or will work) in compliance with MRC policy.**Indicate whether the research data will be deposited in and available from an identified community database, repository, archive or other infrastructure established to curate and share data.*Prior to publication of project results, any decision to share data outside the project will be at the discretion of the PI. Once data have been deposited in the University of Reading Research Data Archive, they will be freely available under an open licence. **5.4 The study team’s exclusive use of the data***MRC’s requirement is for timely data sharing, with the understanding that a limited, defined period of exclusive use of data for primary research is reasonable according to the nature and value of the data, and that this restriction on sharing should be based on simple, clear principles*. *What are the timescale/dependencies for when data will be accessible to others outside of your team? Summarize the principles of your current/intended policy.*Data will be freely accessible on publication of findings. This is expected to be no later than 12 months after the end of the study. Prior to this point, any decision to share data will be at the discretion of the PI.**5.5 Restrictions or delays to sharing, with planned actions to limit such restrictions***Restriction to data sharing may be due to participant confidentiality, consent agreements or IPR. Strategies to limit restrictions may include data being anonymised or aggregated; gaining participant consent for data sharing; gaining copyright permissions. For prospective studies, consent procedures should include provision for data sharing to maximise the value of the data for wider research use, while providing adequate safeguards for participants. As part of the consent process, proposed procedures for data sharing should be set out clearly and current and potential future risks associated with this explained to research participants.*Only anonymised data will be shared. Participants will be informed that data collected from them will be preserved and made available so that they can be consulted and used by others, and they will consent to participate in the study on this understanding.We envisage generating IP with commercial potential. We will consult with the University’s Intellectual Property and Licensing Manager to clarify any requirements related to disclosure of data. Access to data may be restricted for a period pending confirmation of IP protection, but the data will be made accessible as soon as possible once findings have been published.**5.6 Regulation of responsibilities of users***Indicate whether external users are (will be) bound by* [*data sharing agreements*](https://www.mrc.ac.uk/publications/browse/mrc-policy-and-guidance-on-sharing-of-research-data-from-population-and-patient-studies/)*, setting out their main responsibilities (please see page 13 section 7, titled* [*Data-sharing agreements*](https://www.mrc.ac.uk/publications/browse/mrc-policy-and-guidance-on-sharing-of-research-data-from-population-and-patient-studies/) *of the PDF file generated by selecting either of two links above).*Any pre-publication sharing of data will be subject to a data sharing agreement between the University of Reading and the recipient organisation. On publication, data will be made available under the terms of an open licence (such as Creative Commons Attribution), providing broad permission to re-use the data, subject to an attribution requirement. |
| **6. Responsibilities** |
| *Apart from the PI, who is responsible at your organisation/within your consortia for:** *study-wide data management*
* *metadata creation,*
* *data security*
* *quality assurance of data.*

The PI has responsibility for all aspects of data management within the project. Data held on University infrastructure will be managed in accordance with the University’s information security policies. |
| **7. Relevant institutional, departmental or study policies on data sharing and data security** |
| *Please complete, where such policies are (i) relevant to your study, and (ii) are in the public domain, e.g. accessible through the internet.**Add any others that are relevant* |
| **Policy** | **URL or Reference** |
| Data Management Policy & Procedures | Research Data Management Policy: <https://www.reading.ac.uk/research-services/research-data-management/about-research-data-management/research-data-management-policy>  |
| Data Security Policy | Information Compliance policies: <https://www.reading.ac.uk/imps/information-compliance-policies>  |
| Data Sharing Policy | See Research Data Management Policy |
| Institutional Information Policy | See Information Compliance policies |
| Other: |  |
| Other |  |
| **8. Author of this Data Management Plan (Name)** and, if different to that of the Principal Investigator, their **telephone & email contact details** |
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