# University of Aberdeen

# UNIVERSITY OF ABERDEEN: MRC DATA MANAGEMENT PLAN TEMPLATE

The template in this document can be used to develop a MRC Data Management Plan (DMP).

**KEY**

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| ***Italicised blue text:*** | *MRC guidance on the information to be considered for each section – should be deleted from the final DMP.* |
| **Highlighted text** | Suggested / exemplar text provided by UoA (DDIS and R&I); can be used or adapted to individual project DMPs. |
| **UoA comment:** | Additional internal guidance. |

**ADDITIONAL SUPPORT**

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| **Further internal advice and support to review & check draft DMPs** | The UoA [Digital Research team](mailto:digitalresearch@abdn.ac.uk) will advise on IT security, data management, network and infrastructure queries and are happy to review and comment on draft DMPs.  R&I Research Development Executives will also review your DMP and advise on compliance with MRC requirements as part of their review of your full application. |
| **MRC Guidance** | Please read before completing your DMP: [here:](https://www.ukri.org/about-us/mrc/our-policies-and-standards/research/data-management-and-sharing/) |
| **Examples of completed MRC DMPs** | Some examples are available on DMP Online (see below). R&I can also provide examples. |
| **DMP Online** | UoA staff also have the option of using the Digital Curation Centre’s [DMP Online tool](http://www.dmponline.dcc.ac.uk) (accessed via UoA Shibboleth login) to develop a MRC DMP in a format which can be uploaded to JeS. |

**To meet MRC requirements your DMP must be:**

* **Completed in a sans serif font e.g. Arial**
* **Font size 11**
* **No more than 3 pages:** Note population cohorts, genetic, omics and imaging data, biobanks, and other collections that are potentially a rich research resource may be up to 3 pages. Otherwise, DMPs can be as short as a quarter of a page, where the scale and costs of data management and sharing are less complex.

**PLEASE DELETE THIS PAGE FROM YOUR DATA MANAGEMENT PLAN**

# DATA MANAGEMENT PLAN

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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].*  The data will be stored on the central data storage facilities operated by the University of Aberdeen Digital & Information Services (DDIS). DDIS provides a resilient, centrally managed, unstructured data storage service with live data replicated in two physically separated data centres. Where data is stored in research-specific shared-drives, it is subject to a robust backup regime: backups are accessible for 6 months. Data will be stored on a shared drive, set up for the team. The PI will be the shared drive owner with the following responsibilities: i) approving access and access levels to the shared drives; ii) approving remote access, for example via ‘Remote VPN (Virtual Private Network)’; iii) curation of data held in the drive (this includes data management, retention, and deletion), and iv) delegation of any of above to a deputy. File names/locations will have an appropriately descriptive title, including the date the data was received/generated.  **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).*  *E.g.* The project data will be stored in PURE/ INSERT REPOSITORY NAME / OTHER LOCATION for a X year period after the project has concluded. Any data selected for publication will be publicly available in X for X years. The metadata of the data will be stored in PURE, the University of Aberdeen research information system. The PURE portal is findable, searchable, accessible, and the metadata are standardised. The PURE portal, as a data catalogue, will also maintain metadata accessibility even if the data is no longer available. | |
| **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 your 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.*  DDIS provides a resilient and secure campus network. The following measures are in place to protect against malicious intent: Intrusion Defense: Email spam filtering, Malware protection, Blacklists to provide security for the University email system, Antivirus software is installed on all servers, Electronic data and data in transit are encrypted and password protected using an acceptable standard of encryption. Currently approved algorithms for the encryption are 3DES, AES (FIPS197), Blowfish and are used at a recommended 256-bit strength. The University of Aberdeen aligns closely to ISO27001 standards.  **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/)*).*  No personal data will be collected in our study and therefore there is no risk of disclosure of personal information.  OR  E.g. We will apply for ethical approval to allow us to collect [INSERT AS NECESSARY e.g. linked anonymised data from participants / limited personal data from participants]. Identifiable and non-identifiable project data will be stored separately with access to identifiable data restricted to the PI / and one other member of the research team. Participants will be assigned a unique identifier to allow anonymisation of personal data and data will be aggregated. Access to study datasets will be limited to certain members of the team. Access will be via a secure shared drive, with access permissions controlled by the PI. All data will be archived in their original format ensuring no alterations following SOPs. We will use a transcription company which has been assessed as being compliant with UoA data security requirements. | |
| **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.*  **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 data availability statement, including a Digital Object Identifier (DOI) requested via the DataCite scheme, detailing how the study data can be accessed will be published [**INSERT WHERE e.g. study website, PI webpage**].  **IF PLAN TO USE PURE:** Datasets (metadata and DOI) will be catalogued in PURE with the entry in the PURE Research Portal linking to the **INSERT** repository where the dataset is held.  **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.*  Datasets will be deposited in PURE and made publicly available through the PURE Research Portal under an open / permissive re-use or open database license.  **Or**  Data will be available through the **INSERT** repository and will be available to access under **an open / safeguarded / controlled data license.**  **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.*  The study team will have a limited, defined period of exclusive use of data in recognition of researchers’ intellectual contribution and in order for the research team to have a first opportunity to publish. This will be until the main study publication has been made and will be no longer than X months after the end of the study.  **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.*  Restrictions or delays to data sharing will be limited to only where necessary to ensure novelty for publication or where appropriate to allow protection of IP, otherwise data will be shared as widely as possible. Advice will be sought from the University Research and Innovation section in relation to disclosure and protection of potential IP.  **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).*  Where data or resources are provided to an external user the external user will be required to consult the PI to determine whether the PI and/or research team should be included as authors or acknowledged as providers of data on any arising publication. Research and Innovation will advise whether a Data Transfer Agreement may be required in order to safeguard or detail any terms of access. | |
| **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.*   **Data Security** is a shared responsibility. Research data is the responsibility of the PI who will be responsible for managing access and deletion. The maintenance and security of our networks, systems and storage infrastructure is the responsibility of DDIS. See 4.1 for further information. All University staff receive mandatory training in data security; with additional or advanced training offered where specific data is being worked with. | |
| **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** |
| Research Data Management | [Research Data Management Policy.pdf (abdn.ac.uk)](https://www.abdn.ac.uk/staffnet/documents/policy-zone-research-and-knowledge-exchange/Research%20Data%20Management%20Policy.pdf) |
| Data Security Policy | [Information Security Policy (abdn.ac.uk)](https://www.abdn.ac.uk/staffnet/documents/policy-zone-information-policies/Information%20Security%20Policy.pdf) and [Information Security Policy (abdn.ac.uk)](https://www.abdn.ac.uk/staffnet/documents/policy-zone-information-policies/Information%20Security%20Supporting%20Policies.pdf)  [Data Protection policy.pdf (abdn.ac.uk)](https://www.abdn.ac.uk/staffnet/documents/policy-zone-governance-and-compliance/Data%20Protection%20policy.pdf)  [Records Management Policy](https://www.abdn.ac.uk/staffnet/documents/policy-zone-information-policies/Records_Management_Policy.pdf) |
| Data Sharing | See Research Data Management policy, above. |
| Institutional Information | [ResearchGovernanceHandbook.pdf (abdn.ac.uk)](https://www.abdn.ac.uk/staffnet/documents/policy-zone-research-and-knowledge-exchange/ResearchGovernanceHandbook.pdf) |
| Other: | [Guidance for Policy on Policies (ukri.org)](https://www.ukri.org/wp-content/uploads/2021/08/MRC-0208212-MRC-Data-Sharing-Policy-v2-2.pdf) and [MRC-0208212-MRC-policy-and-guidance-on-sharing-of-research-data-from-population-and-patient-studies-Word-version-v01.02.pdf (ukri.org)](https://www.ukri.org/wp-content/uploads/2021/08/MRC-0208212-MRC-policy-and-guidance-on-sharing-of-research-data-from-population-and-patient-studies-Word-version-v01.02.pdf) |
| **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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