

What is a data management plan?

1. A data management plan (DMP) is a key tool for Principal Investigators (PI) to show the funder how the PI will meet, or already meets, their responsibilities to the funder for research data quality, sharing and security.
2. A DMP is submitted as part of a research funding proposal.
3. The DMP reflects institutional and study data management policies, systems and procedures - which should be implemented and embedded into research procedures and regularly reviewed throughout the research cycle. The DMP is not the detailed documentation itself.
4. The DMP will be reviewed as integral part of the grant or fellowship application, or institute/unit Quinquennial Review proposals. Reviewers will have guidance on how to evaluate a DMP.
5. Further details of what is required in a DMP and how long it can be are given below.

Why a data management plan?

1. A good DMP helps the study team manage research data for its own, MRC-funded analyses, as well as for collaborative research and other forms of data sharing beyond their own involvement.
2. Through the DMP, the PI can identify specific factors that may promote or limit data sharing.
3. A clear DMP also helps the PI to justify the resources and funding required not only for their own research but also to meet MRC's data policies.
4. A good DMP helps clarify at an early stage individual and institutional roles and responsibilities.
5. The DMP helps peer reviewers by demonstrating whether the PI has carefully considered how data quality, security, confidentiality and sharing will be managed; and whether they have identified information-related risks and planned for their management.

When is a DMP submitted?

The DMP is submitted as part of the research grant or fellowship proposal, and is reviewed by peer reviewers along with the Case for Support.

1. For all research grant and fellowship proposals submitted to the MRC, applicants submit a DMP, as described here, as part of the [Je-S Proposal Form opens in new window](#) as an attachment (called "Data Management Plan"). This includes applications for the extension or renewal of existing funding. The DMP should be in line with the [MRC's policy on research data sharing](#).

2. Additionally, for all [population & patient based studies](#), the DMP should indicate how the study meets the requirements of the MRC's detailed [guidance on data sharing for population and patient studies, \(PDF, 512KB\)](#) particularly around access criteria and independent oversight, the means for ensuring the study and its variables are readily discoverable, and specificity about use of formal data standards.
3. For MRC Institutes and Units, a DMP is developed as part of the Quinquennial Review (QQR) report (Directors may choose to develop more than one DMP, specific to particular programmes).

What is required of a DMP?

Concise, specific and informative

1. Write for two audiences: (a) scientists in your broad field; and (b) technical experts who know the prevailing data management practices in your field. Most of your readers will be of type (a).
2. Keep your data management plan concise. The detail should be proportionate to the complexity of the study, the types of data being managed, their anticipated long-term value, and the anticipated data security requirements.
  - For population cohorts, genetic, omics and imaging data, biobanks, and other collections that are potentially a rich resource for the wider research community, a DMP may be up to 3 pages of A4.
  - Longitudinal studies, involving a series of data collections, may exceed this limit if needed.
  - Otherwise, DMPs may be as short as a quarter of a page, where the scale, complexity and costs of data management and sharing are less substantial.
3. Be specific without being detailed, and avoid vague statements. These are some examples where precision is important: how data are made discoverable to other researchers; how access is managed and - for population and patient data resources - how independent oversight is managed and by whom; and any formal standards you use, e.g. for data collection and coding (e.g. ICD-10), information security (such as ISO 27001) and metadata exchange (e.g. DDI-2 and 3).
4. Unless specially requested by MRC, do not reproduce detailed local policies or standard operating procedures.

Summary metrics for past performance

5. For studies with a history of active data sharing, the DMP should include brief summary statistics on the performance and outputs of sharing (see the 'reporting on data sharing' section of the [policy and guidance \(PDF, 512KB\)](#)).

## Improving and innovating

6. MRC expects you to use your best judgement, expert advice and other sources of good practice to improve and innovate data management. If this means your DMP departs from some aspect of this guidance (or that on Data Sharing), explain succinctly why and how this is or will be more appropriate than the MRC guidance.

## Existing MRC-funded data resources

7. Custodians of previously collected/generated research data ('legacy data'), applying for funds to use legacy data as part of a new funding request, should ensure that the DMP covers both existing and new data collection/generation.

## Multiple funding agencies

8. Where research is co-funded between MRC and another organisation, the MRC's data sharing policy and these guidelines on the DMP will still apply. The relevant policies of the major UK funders of biomedical research are aligned on principles and most of their detailed requirements. Discuss any apparent conflict in co-policies with your Programme manager within the MRC Head Office Research Programmes Group, or email [MRCdatasharing@headoffice.mrc.ac.uk](mailto:MRCdatasharing@headoffice.mrc.ac.uk)

## Information on funding requested

9. Applicants should include in their [Je-S Proposal Form opens in new window](#) the resources and funding for managing and sharing substantial data resources/collections. This could be for people, equipment, infrastructure and tools to manage, store, analyse and provide access to data.
10. Where the costs of managing legacy data and sharing are substantial, your proposal should differentiate in broad terms between the resources and funding for:
  - collecting and "cleaning" new data
  - own research on newly-acquired and legacy data
  - ongoing data curation and preservation
  - providing access and data sharing.

## Review and implementation

11. After being funded, review the DMP periodically (annually) within the study team to check that the planned procedures are implemented and to adapt them as necessary. Also update the plan where needed.

## Format

12. The [data management plan template \(DOC, 98KB\)](#) can be used to develop a DMP to accompany a research proposal. The notes (in italics) provide further context and guidance for its completion.
13. If you opt NOT to use the template, then the topics listed in the template must be addressed.
14. As an alternative to using the template, the Digital Curation Centre's [DMP Online](#) opens in new window tool can be used to develop a DMP. DMPonline has a customised MRC template with the MRC guidance included.