

# **ESRC Data Management Plan Guidance**

# Introduction

All applicants for ESRC funding planning to generate data as part of their award must

the UK Data Service ESRC Data Management plan and policy guide.

The

# Data Management Plan (attachment)

A maximum of three sides of A4 (using a minimum font size of 11) is allowed for the plan. The plan should use the headings specified by ESRC, as follows. ESRC guidance is reproduced, with some additional guidance in italics.

# Assessment of existing data

- x An explanation of the existing data sources that will be used by the research project, with references.
- x An analysis of the gaps identified between the currently available and required data for the research.

Where research grant applicants plan to create new data as part of their ESRC-funded proposal, they must demonstrate that no suitable data are available for re-use.

ESRC encourages the re-use of existing data and therefore encourages applicants and grant holders to consider the breadth of data available from various sources before committing to primary data collection.

Using standardised and interchangeable data formats ensures the long-term usability of data. Clear and detailed data descriptions and annotation, together with user-friendly accompanying documentation on methods and contextual information, makes data easy to understand and interpret and therefore shareable and with long-lasting usability.

#### Guidance on data formats

# Guidance on documenting data

# **Quality assurance of data**

Quality control of data is an integral part of a research process. The procedures for quality assurance that will be carried out on the data collected at the time of data collection, data entry, digitisation and data checking should be described.

For example this may include:

- x Documenting the calibration of instruments.
- x Taking duplicate samples or measurements.
- x Standardised data capture, data entry or recording methods.
- x Data entry validation techniques.
- x Methods of transcription.
- x Peer review of data.

# Guidance on data quality control

# Security and backup of data

Describe the data security and backup procedures that you will adopt to ensure the data

- x digitising hard copy data, including consent forms, for secure digital storage, and destroying paper originals;
- x storing hard copy data, including consent forms, in a locked cabinet in an office on University premises that is locked when not in use;
- x storing participant records separately from research data in folders/areas accessible only to authorised users;
- x de-identifying/pseudonymising/link-coding research data by removing direct identifiers and using a unique code to designate each participant that is linked to SDUWLFLSDQWV¶GHWDLI©kMableQDVHSDUDWHVHFXUF
- x establishing protocols for sharing of data within the project team, covering secure transfer between locations as necessary. Use secure end-to-end encrypted methods of transfer wherever possible, e.g. OneDrive or Teams, or VPN connection to the University network; avoid less secure methods, e.g. email, and encrypt files if necessary.

Refer to the University ¶ Encryption Policy for guidance on encryption.

Methods of version control might include: making raw data and files and milestone versions read-only to prevent overwriting; recording dates in <u>ISO 8601</u> format (i.e. 20221103 or 2022-11-03) or version numbers in file names whenever a new version of a file is created; and including a version table in document headers.

# Management and curation of data

Outline your plans for preparing, organising and documenting data. A crucial part of making data user-friendly, shareable and with long-lasting usability, is to ensure they can be understood and interpreted by other users. This requires clear and detailed data description, annotation and contextual information, as well as well-structured and organised data files.

Guidance on documenting data

Guidance on transcribing qualitative data

Guidance on organising data

#### Difficulties in data sharing and measures to overcome these

Identify any potential obstacles to sharing your data and explain possible measures you can apply to overcome these. State explicitly which data may be difficult to share and why. If ethical issues could cause difficulties in data sharing, explain your strategies for dealing with these issues in the relevant section of the Je-S form, e.g. discussing data sharing with interviewees as part of consent discussions or anonymising data.

The ESRC supports the position that most data can be curated and shared ethically, provided researchers pay attention right from the planning stages of research to the following aspects:

- x When gaining informed consent, include consent for data sharing.
- x Where needed, protect parti FLSDQWV¶ LGHQWLWLHV E\ DQRQ\

Consent is not required to share anonymised data, although as a matter of good practice research participants should always be informed of plans to make any data collected from them available to others.

# Consent, anonymisation and strategies to enable further re-use of data

Make explicit mention of the planned procedures to handle consent for data sharing for data obtained from human participants, and/or how to anonymise data, to make sure that data can be made available and accessible for future scientific research.

If you are unsure of how issues of confidentiality are to be addressed to facilitate data sharing, please get in touch for advice.

# Guidance on consent and ethics

#### Guidance on anonymising data

You must ensure that your consent procedures inform participants correctly about data sharing intentions and do not preclude or unnecessarily limit sharing of research data, either as open data or on a restricted basis if necessary. Do not set a time limit on the retention of the data collected from participants, or state that all data will be destroyed at the end of the project, or undertake that data will not be shared outside of the project. Such undertakings are not required by data protection law or research ethics policy, and they will prevent you from making your research data accessible to others, even if they have been anonymised. If you are planning to share data as open data, do not say they will made available to certain groups of users only, e.g. researchers. Open data by their nature can be used by anyone.

A sample consent form, with consent formulae for sharing of anonymised open data, and for restricted sharing of data under safeguards, can be found on the <u>IMPS website</u>. The UK Data Service guidance on consent also includes a model consent form.

#### Copyright and

For collaborative projects explain the coordination of data management responsibilities across partners in your Data Management Plan.

Guidance on data management roles and responsibilities

Guidance on how to cost data management