

## Duke NIH Data Management and Sharing Plan Checklist

(adapted from Bohman, L., Hertz, M., & Orłowska, D. (2022). *Example DMS plans*. Working Group on NIH DMSP Guidance. <https://doi.org/10.17605/OSF.IO/UADXR>)

This Data Management and Sharing (DMS) Plan Checklist addresses the [6 required elements](#), numbered 1-6 on this worksheet, in the [NIH DMS Policy](#), effective January 25, 2023 for all new grant proposals that generate scientific data.

**This should be used to help you incorporate important information into your DMSP.**

- Refer to the [NIH Guidance](#) and check for [other data policies](#) outlined by the ICO, specific Request for Applications or Funding Opportunity Announcement, or institutional policies.
- Keep track of plan elements that can be included in the budget (see below).

### 1. Data type

**Summarize the [scientific data](#) necessary to validate your findings.**

- List or create a table to describe the datasets that will be created or used as part of the study, including:
  - [Data type](#), format, size and number of files (estimate quantities as necessary).
  - Which datasets will be shared.
  - The level of aggregation, de-identification, or processing/cleaning that will be done prior to sharing.
  - The source of any secondary data, previously collected data reused in this project.
- List the metadata and other documentation (e.g. a [README file](#)) that will be shared with your data to facilitate interpretation.

### 2. Related Tools, Software, and/or Code

**Identify tools, software, and/or code necessary to access or manipulate the shared data.**

- State whether specialized tools are needed.
- For each tool that is necessary, list:
  - Version Number and operating system
  - How they can be accessed (i.e., open source and freely available, generally available for a fee in the marketplace, or available only from the research team or some other source)
  - How long they will be available (if known)

### 3. Standards

**List the standards that will be used for sharing data and [metadata](#).**

- State whether or not there are data standards for your field that are applicable to your project.

Typical data standards include:

- Metadata schemas
- Standard Terminologies ([Controlled Vocabulary](#) and [Ontologies](#))
- Content/Encoding Standards
- [Common Data Elements](#)
- Standardized Instruments
- Identifiers ([PIDs](#))

#### 4. Data Preservation, Access, and Timeline

**Provide details and timelines for sharing and preserving data for long term usability.**

- Name the repository(ies) where data will be archived:
  - If a particular metadata standard is required, list it in the standards section.
  - A specific [NIH repository](#) may be required in the funding opportunity announcement.
- Specify which type of unique identifier is used by the repository (DOI, handle, ID number, accession number). Note that an identifier is NOT required at the time of the DMS plan submission.
- Revisit your data list from Section 1 and state when the data will be made available (portions of the data may be released at different times). Timelines required by the policy are:
  - Data will be made available when the work is published or the award/support period ends (whichever comes first) OR
  - Data will be made available earlier.
- State the minimum number of years data will be available, based on repository policies.

#### 5. Access, Distribution, or Reuse Considerations

**Describe how sharing will be maximized while respecting restrictions.**

- Describe any considerations that may affect the extent of data sharing:
  - Legal
  - Technical
  - Ethical
- Consider whether data can be shared with [access controls](#) or, if there are [intellectual property](#) concerns, an [embargo period](#), rather than refraining from sharing altogether.
- If you have [human subjects data](#), describe how you will protect the privacy, rights and confidentiality of study participants (de-identification, consent forms, etc.).

#### 6. Oversight of Data Management and Sharing

**Identify who will be responsible for plan compliance and oversight.**

- Include the following language in this section of your DMS plan.
 

*“The Office of Scientific Integrity at Duke University has a data management and sharing plan review and compliance procedure. Consistent with the procedure, the Office will monitor compliance with the DMS plan, including the deposition of award relevant scientific data into the selected data repository, through attestation of the principal investigator(s) listed on the award at milestone reporting periods. The University will also leverage its internal audit function for periodic review of study team adherence with DMS elements.”*
- List the names and titles/roles of everyone on the research team who will be responsible for monitoring compliance with the data management plan. Update the plan as needed.
- State how often compliance with the data management and sharing plan will be verified by team members (e.g. every X months, on the first of each month, etc.)

As part of the 2023 NIH DMS Policy, costs associated with data management and sharing incurred during the performance period can now be charged as direct costs to the grant, contract, or other funding mechanism. These costs are requested via a line item in the Other Direct Costs section of the budget, labeled as “Data Management and Sharing Costs” with a brief summary of the dataset to be shared and a description of the requested DMS costs in the budget justification.

These costs can generally be divided into three main cost categories:

1) Personnel Service Fees\* for:

- Curating data
- Developing supporting documentation
- Formatting data according to accepted community standards, or for transmission to and storage at a selected repository for long-term preservation and access
- De-identifying data
- Preparing metadata to foster discoverability, interpretation, and reuse

*\*Please note that personnel effort (i.e., calendar months of effort) should not be placed in the Other Direct Costs section. The “Data Management and Sharing Costs” line item within the Other Direct Costs section is for service costs and fees which may include personnel effort as part of an overall service fee (e.g., honest broker services or de-identification services).*

2) Repository Fees:

- Data Deposit fees incurred by preserving and sharing data through established repositories

3) Specialized Infrastructure Fees

- Local data management considerations, such as unique and specialized information infrastructure necessary to provide local management and preservation during the active phase of research

Check all that apply below to aid in developing your budget and budget justification. If you select any below, reach out to that entity to ask for a quote and description for your DMS plan.

I will be using a de-identification service

*(This can include both [PACE and non-PACE honest brokers](#), as well as imaging de-identification out of the [Multi-D Image Processing Lab](#) or the [Center for Advanced Magnetic Resonance Development \(CAMRD\)](#))*

I will be using a paid data curation service

I will be using a data formatting service

My chosen repository(ies) has a data deposit fee

My chosen repository(ies) has other fees

I will be using the [Protected Analytics Computing Environment \(PACE\)](#)

I will be using one or more of the [Duke Compute services](#)

I will be using specialized infrastructure during the active phase of research

I am a campus-based researcher and collecting, analyzing or otherwise [working with sensitive data](#)