FAQs - 2023 NIH Data Management and Sharing (DMS) Policy

The National Institutes of Health (NIH) has issued a new Policy for Data Management and Sharing (DMS) when research funded or conducted by NIH results in the generation of scientific data. This policy goes into effect on January 25, 2023.

These FAQs are intended to help clarify the implementation of the NIH Policy for Data Management and Sharing at Joslin Diabetes Center, and will be updated on an ongoing basis. For more FAQs, please refer to the NIH FAQ list.

1) What is considered "scientific data" for the purposes of this Policy?

The final NIH Policy defines Scientific Data as "The recorded factual material commonly accepted in the scientific community as of sufficient quality to validate and replicate research findings, regardless of whether the data are used to support scholarly publications. Scientific data do not include laboratory notebooks, preliminary analyses, completed case report forms, drafts of scientific papers, plans for future research, peer reviews, communications with colleagues, or physical objects, such as laboratory specimens."

Even the scientific data that are not used to support a publication are considered scientific data and within the final DMS Policy’s scope.

What does that mean?

In consultation with our peer institutions, we are interpreting this to mean that, at a minimum, the data behind any tables or figures in a publication need to be part of the Data Management and Sharing Plan (DMSP), as well as any data collected alongside it.

2) What are the FAIR Data Principles as stated in the Policy?

NIH encourages data management and sharing practices to be consistent with the FAIR (Findable, Accessible, Interoperable, and Reusable) data principles and reflective of practices within specific research communities. In 2016, the ‘FAIR Guiding Principles for scientific data management and stewardship’ were published in Scientific Data. The principles emphasize machine-actionability because humans increasingly rely on computational support to deal with data as a result of the increase in volume, complexity, and creation speed of data.

3) Does the 2023 Policy apply to grants already in progress?

No. The policy only applies to new competing grant applications; it does not retroactively apply.

The effective date of the DMS Policy is January 25, 2023, including for the following:

- Competing grant applications that are submitted to NIH for the January 25, 2023 and subsequent receipt dates
- Proposals for contracts that are submitted to NIH on or after January 25, 2023
- NIH Intramural Research Projects conducted on or after January 25, 2023
- Other funding agreements (e.g., Other Transactions) that are executed on or after January 25, 2023, unless otherwise stipulated by NIH

For guidance on applications for receipt dates BEFORE January 25, 2023, refer to the 2003 NIH Data Sharing Policy.

4) How will DMSPs be assessed?

NIH program staff will assess the DMSPs, but peer reviewers may comment on the proposed budget for data management and sharing. "The final DMS Policy maintains NIH Program Staff assessments of Plans’ merits. However, peer reviewers may comment on the proposed budget for data management and sharing, although these comments will not impact the overall score…Over time, and through these reviews, we hope to learn more about what constitutes reasonable costs for various data management and sharing activities across the NIH portfolio of research.” See more under Section VI of the Final NIH Policy.
5) What is a data or metadata standard? What standards are relevant to my research?

Data standards specify how data and related materials should be stored, organized, and described.

In the context of research data, the term typically refers to the use of specific and well-defined formats, schemas, vocabularies, and ontologies in the description and organization of data. However, for researchers within a community where more formal standards have not been well established, it can also be interpreted more broadly to refer to the adoption of the same (or similar) data management-related activities, conventions, or strategies by different researchers and across different projects.

6) Am I expected to share all data generated during my research?

No. Under the DMS Policy, researchers are expected to maximize the appropriate sharing of scientific data, which is defined as data commonly accepted in the scientific community as being of sufficient quality to validate and replicate the research findings. Not all data generated during NIH-supported research will constitute scientific data under the DMS Policy. See the NIH FAQ for more detail.

NIH Institutes, Centers, or Offices (ICOs), Notice of Funding Opportunities (NOFOs), funding opportunity announcements (FOAs), and other NIH policies (e.g., the Genomic Data Sharing Policy) may have additional expectations for what data should be shared.

Researchers are expected to maximize appropriate sharing of any new, derived data generated as a result of their research.

Note that use of data obtained from repositories or other sources and derived data may be subject to limitations on sharing as a condition of access.

8) What data repository should I use?

Some programs, types of data, ICOs, or Funding Opportunity Announcements (FOAs) may require data deposition in particular data repositories, and "primary consideration should be given to data repositories that are discipline or data-type specific to support effective data discovery and reuse."

NIH encourages the use of established repositories. To select a repository relevant to your data consider:

- Is there a specific NIH repository named in the FOA?
- Is there a data repository specific to the data type(s) relevant to your research and your scientific discipline?
- Is there a data repository specified by the journal in which you are publishing or hope to publish?
- If there are no relevant discipline-specific repositories, is there a generalist data repository you can use?

For data generated from research for which no data repository is specified by NIH, researchers are encouraged to select a data repository that is appropriate for the data generated from the research project and is in accordance with the NIH Desirable Characteristics for All Data Repositories. To learn more, check out the NIH guidance on selecting a data repository.

9) Can I make my data available only upon request?

NIH expects that researchers will take steps to maximize scientific data sharing, but acknowledges that certain factors (i.e., ethical, legal, or technical) may necessitate limiting sharing, to some extent.

Foreseeable limitations (e.g., bounds of consent documentation, substantial risk to privacy of data subjects, restrictions imposed by regulations or contract), the proposed method for disseminating such data and the rationale must be described in the DMSPs for the NIH to assess.

10) When do I need to make my data available?

NIH encourages scientific data to be shared as soon as possible, and no later than at the time of an associated publication or the end of the performance period, whichever comes first.

- The time of an associated publication: Scientific data underlying peer-reviewed journal articles should be made accessible no later than the date on which the article is first made available in print or electronic format.
- The end of the performance period: Scientific data underlying findings not disseminated through peer-reviewed journal articles should be shared by the end of the performance period unless the grant enters a no-cost extension.
a no cost extension is permitted then the recipient should share the data by the end of the extended performance period.

- These scientific data may underlie unpublished key findings, developments, and conclusions; or findings documented within preprints, conference proceedings, or book chapters.
  - For example, scientific data underlying null and negative findings are important to share even though these key findings are not always published.
  - Researchers should also be aware that some preprint servers may require the sharing of data upon preprint posting, and repositories storing data may similarly require public release of data upon preprint posting.

11) What happens if I do not comply with the NIH policy or make my data available as described in the DMSP?

NIH Program Staff will be monitoring compliance with the policy during the funding period. “Noncompliance with Plans may result in the NIH ICO adding special Terms and Conditions of Award or terminating the award. If award recipients are not compliant with Plans at the end of the award, noncompliance may be factored into future funding decisions.” See more under Section VIII of the Final NIH Policy.

12) How do I get started writing my plan, is there a template?

Yes, NIH has a [template](#). We also recommend using DMPTool, which is used by many of our peer institutions. This tool walks you through each section of the NIH form, along with helpful guidance.

13) What data management and sharing costs can I include in my grant?

Allowable costs can include the following:

- Data curation and developing documentation (i.e., formatting data, de-identifying data, preparing metadata, curating data for a data repository)
- Data management systems (e.g., unique and specialized information infrastructure
- Necessary to provide local management and preservation before depositing data in a repository)
- Preserving data in data repositories (i.e., data deposit fees)

Read the [NIH Supplemental Information on Allowable Costs for Data Management and Sharing](#).

15) Are there any tools to help plan my budget?

A generic cost estimation tool has been shared in the NIMH Data Archive (NDA) and may be of help to study investigators, available [here](#).