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NIH Data Management and Sharing Plan Guidance

The GCO has prepared this guidance document to help you comply with National Institutes of Health (NIH) Data Management and Sharing Plan (DMSP) policy. The NIH provides a designated format for the plan, and additional sections of the competitive application require either the inclusion of data management and sharing information or information on the plan is encouraged to support overall cohesiveness. This guidance consolidates the sections within the NIH application where data management and sharing is addressed, incorporates guidance from the NIH, the Grants and Contracts Office, and the Levy Library, includes relevant NIH and institutional resources for data sharing and storage, and clarifies the distinctions between the NIH 2023 DMSP policy and the updated 2026 DMS Plan format.

This document is organized in the following sections:

I. Policy and Scope

Under the 2023 Data Management and Sharing (DMS) Policy, the National Institutes of Health (NIH) requires a data management and sharing plan (DMSP) for any NIH-funded or conducted research that will generate scientific data. The NIH expectation is that researchers maximize the appropriate sharing of scientific data while taking into account factors such as legal, ethical, or technical issues that may limit

the extent of data sharing and preservation. If an application is subject to NIH's Genomic Data Sharing (GDS) Policy, it must also address GDS-specific considerations within the DMSP.

For more information on what constitutes scientific data, refer to Research Covered Under the Data Management & Sharing Policy.

Allowable immediately and effective for applications submitted for due dates on or after May 25, 2026, as part of its ongoing efforts to increase efficiency and minimize applicant burden, NIH issued NOT-OD-26-046: Updated Elements of an NIH Data Management and Sharing Plan. **The 2023 Data Management and Sharing (DMS) Policy remains in place, but the format of the Data Management and Sharing Plan used to enforce the policy has changed (NOT-OD-26-046).** This notice supersedes NOT-OD-21-014.

Awards Requiring a DMS Plan

If your award is for research (even under a training or career development mechanism) and produces scientific data, it must include a DMSP. If your NIH award is for training, education, or career development and does not involve research data, it is not subject to the DMSP. Click here for a comprehensive listing of all activity codes that generally require applicants to submit a DMSP. Read the notice of funding opportunity (NOFO) carefully. Requirements may differ from general activity code applicability for a small number of opportunities.

Review **NIH's Writing a Data Management and Sharing Plan** which addresses the following topics to help you develop your plan:

- Preparing a Data Management and Sharing Plan
- Maximum Appropriate Sharing of Scientific Data
- Submitting Data Management and Sharing Plans
- Assessment of Data Management and Sharing Plans
- Revising Data Management and Sharing Plans
- Additional Considerations
- Additional Resources

The 2026 Pilot DMS Plan format is required for due dates on or after May 25, 2026. The NIH will accept both the 2023 and 2026 formats for due dates prior to May 25, 2026.

The Data Management and Sharing (DMS) Plan is only seen by NIH staff and will not be used by reviewers to evaluate the scientific merit of the application unless data sharing is integral to the project design and specified in the NOFO.

II. **New 2026 DMSP Format** (required for due dates on or after May 25, 2026)

There is no "form page" for the Data Management and Sharing Plan. The DMS Plan must be provided in this format and include the following elements. Tips from NIH's Writing a Data Management and Sharing Plan as well as from the GCO and the Levy Library are also included as noted.

DMS Plans are included within the "Other Plan(s)" field on the PHS 398 Research Plan or PHS 398 Career Development Award Supplemental Form as indicated in the NIH SF424 Application Instructions.

1. Will there be **maximum appropriate sharing** of scientific data underlying peer-reviewed publications and other findings resulting from the work supported by this award (including preprints, referenced papers reported at conferences, and other findings)? [YES/NO]

   Justifiable Factors

   The NIH provides examples of justifiable factors for limiting scientific data sharing. These are:

   - informed consent will not permit or will limit the scope or extent of sharing and future research use
   - existing consent (e.g., for previously collected biospecimens) prohibits sharing or limits the scope or extent of sharing and future research use
   - privacy or safety of research participants would be compromised or place them at greater risk of re-identification or suffering harm, and protective measures such as de-identification and Certificates of Confidentiality would be insufficient
   - explicit federal, state, local, or Tribal law, regulation, or policy prohibits disclosure
   - restrictions imposed by existing or anticipated agreements (e.g., with third party funders, with partners, with repositories, with Health Insurance Portability and Accountability Act (HIPAA) covered entities that provide Protected Health Information under a data use agreement, through licensing limitations attached to materials needed to conduct the research)
   - datasets cannot practically be digitized with reasonable efforts

   ISMMS Tip: If the project has one or more of the justifiable factors above, answer Yes to Element 1. The project is still considered sharing scientific data that is "maximum" and "appropriate."

   Unjustifiable Factors

   The NIH provides examples of reasons that would generally not be justifiable factors limiting scientific data sharing.

   - data are considered to be too small
   - data that researchers anticipate will not be widely used
   - data are not thought to have a suitable repository

ISMMS Tip: If the project has one or more of the unjustifiable factors above, either rethink your decision to limit sharing, consider whether there are also any justifiable reasons to limit sharing that allow you to say Yes, or answer No to Element 1.

2. Will the scientific data underlying peer-reviewed publications **be shared by the time of publication or, for other findings, by the end of the period of performance**, which includes no-cost extensions? [YES/NO]
3. Will shared scientific data **be made available for at least as long as required by applicable data repository policies and/or journal policies**? [YES/NO]

   ISMMS Tip: Answering "Yes" to 1-3 means you will align these expectations with resulting publications' data sharing statements.

4. If you answered "no" to elements 1, 2, or 3, or if you anticipate that sharing will be limited in some other way, please describe these limitations and the ethical, legal, or technical factors for them (see for example FAQ B.5 and other relevant FAQs). Your response should specify a particular reason(s) for limiting sharing. [300 words maximum]

   ISMMS Tip: Do not use one of the unjustifiable factors provided in Element 1 above.

5. If scientific data derived from **human research participants** will be shared, will privacy, rights, and confidentiality of participants be protected as outlined in NOT-OD-22-213, including whether any scientific data will be shared using access controls? [YES/NO]
6. In the **table** below, please list [100 words maximum]:

   a. Key types of scientific data anticipated to be generated during the project, including the species and modality, if known (e.g., "human genomic data," "rat functional magnetic resonance imaging data"). NIH recognizes that not all data types expected to be generated in the study will meet the definition of scientific data or can be anticipated in advance. If a data type does not appear on the list, it does not imply that that data type will not be shared if it is generated in the study.

   b. The repository or an example of a repository where the scientific data may be managed and shared, if the scientific data is known at time of application. NIH expects the use of established repositories for preserving and sharing scientific data when they are available.

Expected Data Type	**Established Repository or Example**

ISMMS Tip: Established Repository or Example
Because the table permits listing either an established repository or an example, the likelihood for prior approval would be required for a significant change in repository is significantly lessened.

Also take into consideration that you will be reporting on the compliance with this plan in the Research Performance Progress Report. See the RPPR section of this document for more details.

NIH provides additional information to assist in selecting suitable repositories: NOT-OD-21-016. First priority is if the FOA or Institute specifies a repository, in which case that repository must be used. The next priority is approved Open Domain-Specific Data Sharing Repositories. If neither of those considerations fit, they offer other potentially suitable options: attaching data files up to 2 GB as supplementary material to author manuscripts submitted to PubMed Central with no embargo, approved generalist repositories, or an organization's institutional repository if you have collaborators at institutions with institutional repositories.

ISMMS does not have a public-facing institutional repository for all research data at this time.

Refer to the NIH Where to Submit Genomic Data site for information about genomic data repositories.

7. **For studies subject to the NIH Genomic Data Sharing Policy (GDS)** (e.g., using NIH funds to generate large-scale human genomic data):

    a. Will you share all large-scale human genomic and associated data in a NIH-designated repository according to the accelerated timelines expected in the GDS Policy? If "no," address in element 4. *[YES/NO/Not Applicable]. If "no," address in element 4.*

        - For human genomic data:

            - Consult Where to Submit Genomic Data for repositories acceptable under the Genomic Data Sharing Policy.

            - Consult NIH's Data Submission and Release Expectations. Share human genomic data according to documented expectations or by the end of the performance period, whichever comes first.

    b. Do you anticipate that when sharing large-scale human genomic data that you will be able to meet the expectations of the Institutional Certification in the GDS Policy

(https://grants.nih.gov/grants/guide/notice-files/NOT-OD-14-124.html; IV.C.5)? *[YES/NO/Not Applicable]* If "no," address in element 4.

Consult Completing an Institutional Certification Form for different versions of certification forms for use based on source of NIH Funding, when samples were collected, and consent status for samples collected.

For data derived from de-identified samples collected AFTER the effective date, informed consent is required for research use and data sharing regardless of whether data meet definitions of de-identified under the Common Rule.

ISMMS policy can be found at Final 2018 ISMMS NIH Human Genomic Data Sharing Policy and Guidelines (9.13.18) 2025 Update.

III. Key Differences Between 2023 and 2026 DMS Plan Formats

The Data Management and Sharing Plan requirements underwent a significant redesign and reconceptualization, shifting from a narrative-based format to question-based simple response approach.

2023 DMS Plan Format

- Six narrative elements (1. data type, 2. tools/software/code, 3. standards, 4. data preservation, access and timelines, 5. access, distribution, or reuse considerations, 6. Oversight of DMSP)
- Recommended 2 page limit written in prose.

2026 DSM Plan Format

- Seven total elements, of which five (1, 2, 3, 5, and 7) are primarily structured as Yes/No questions.
- A justification text box (element 4) when answering No to element 1, 2, 3, or 7.
- One short data table (element 6)

The NIH still refers to each section as "elements," however, there is no relationship between the old and new elements. The NIH has simplified them and streamlined the new format to reduce applicant burden and improve compliance monitoring.

Fewer requests for NIH prior approval are anticipated with the use of the 2026 DMS Plan format, as less granular details are required.

IV. Competitive Application sections addressing the DMS Plan

The DMS Plan format page does not stand alone. There are sections of an application where investigators can strengthen the coherence of their proposal by discussing data management and sharing and other sections where DMS information is required. All of the excerpts are from the NIH

SF424 Application Instructions.

A. **Facilities and Resources**
Ensure that all data sources and data and code storage environments that you will use in the DMS Plan that are organizationally-provided are mentioned in this section. Be clear if some are core services that charge so that there is no confusion about budgeted items versus what is covered in the indirect.

NIH Instructions:

10. Facilities & Other Resources

Content:

Describe how the scientific environment in which the research will be done contributes to the probability of success (e.g., institutional support, physical resources, and intellectual rapport). In describing the scientific environment in which the work will be done, discuss ways in which the proposed studies will benefit from features of the scientific environment or from unique subject populations or how studies will employ useful collaborative arrangements.

B. **Research Strategy – Approach**
If you have a sequence of publications described for each aim or activity of the grant, when you mention the publication, also indicate that the data will be deposited at the time of publication. This is required by most journals.

You may have generated data or scripts in addition to those that are tied to a publication. If that is the case, those should be deposited for sharing as well by the end of the period of performance.

If you have a timeline, it is important to add "ensuring all data is deposited" as the last point.

NIH Instructions:

3. Research Strategy

Approach

- Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Describe plans to address weaknesses in the rigor of the prior research that serves as the key support for the proposed project. Describe the experimental design and methods proposed and how they will achieve robust and unbiased results. Include how the data will be collected, analyzed, and interpreted, and reference any Resource Sharing Plans and the Data Management and Sharing (DMS) Plan, as appropriate. Resources and tools for rigorous experimental design can be found at the Enhancing Reproducibility through Rigor and Transparency website.

C. **Protection of Human Subjects (if applicable)**
Where the Risks to Human Subjects section discusses confidentiality, anonymity or de-identification of data and the consent, it should include the risks and consent for public deposit of de-identified data, or if that is not possible, of the associated aggregated metadata.

Check that the human subject section information in the application is consistent with any information disclosed in the DMS Plan re: human subject involvement.

D. **Budget**

Making data accessible and reusable for other researchers may incur costs. Request funds for these costs in your budget and describe them in the budget justification.

Additional budget justification is required in both modular and non-modular budgets whether or not funds are requested. Please see the budget justification section for more details.

These questions are designed to assist in budget development by prompting the inclusion of relevant costs.
Adapted from COGR's Project-Based and Institutional Cost Considerations: Budgeting & Costing Chap. 4

- Is there a deposit fee for any of the repositories you plan to use?
- Will you need dedicated personnel time to support data management and sharing activities to meet repository requirements?
- If you do not need dedicated personnel time, will you need to engage the services of a core or vendor to complete tasks such as the following:
  - data curation
  - developing supporting documentation
  - formatting data according to accepted community standards or for transmission and storage at a selected repository
  - preparing metadata
  - de-identifying data (including data that may require more expensive methodologies to satisfy de-identification requirements for NIH)
- Where are you planning to store the data while the project is active? Is there an associated fee?
- Is there a fee associated with any tools or software you plan to use to collect or analyze the data?
- Are you planning to publish in a journal with required data sharing. What are their requirements and does that incur a cost?

Allowable Costs

Reasonable, allowable costs may be included in NIH budget requests 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
- Local data management considerations, such as unique and specialized information infrastructure necessary to provide local management and preservation (for example, before deposit into an established repository).

- Preserving and sharing data through established repositories, such as data deposit fees.
- If the Data Management & Sharing (DMS) plan proposes deposition to multiple repositories, costs associated with each proposed repository may be included.

All allowable costs submitted in budget requests must be incurred during the performance period, even for scientific data and metadata preserved and shared beyond the award period. For instance, if an established repository charges a deposition or hosting fee, it should be calculated for the length of the hosting period and it must be paid before the end of the period of performance. All original laboratory data in any format from which a publication is derived must be stored in the laboratory for a minimum of six years from the date of publication. Click on the Data Retention accordion for further details

Unallowable Costs

Budget requests cannot include:

- Infrastructure costs that are part of institutional Facilities and Administrative costs.
- Costs associated with the routine conduct of research, including costs associated with collecting or gaining access to research data.
- Costs that are double charged or inconsistently charged as both direct and indirect cost.

Budget format

- Request in the appropriate cost category (e.g., personnel, equipment, supplies, and other expenses.)
- Do not combine separate cost categories (e.g., personnel, equipment, supplies, and other expenses) into one single line item.

The NIH states: "The Data Management and Sharing justification must be clearly labeled as "Data Management and Sharing Justification" *within the budget justification attachment* followed by the estimated dollar amount (total direct costs). See the budget justification section in this document for more details. Please note that this means the amount in this one section can be duplicative of items already justified in other sections; for instance, a portion of salary for a person already justified in the personnel section.

NIH Instructions:

Special Instructions for Applications Submitted with a Data Management and Sharing (DMS) Plan:

For applications submitted for due dates on or after October 5, 2023, NIH recognizes that making data accessible and reusable for other researchers may incur costs. If a Data Management and Sharing Plan is required in the proposed application (see instructions for the "Other Plan(s)" attachment on the PHS 398 Research Plan Form and the PHS 398 Career Development Award Supplemental Form, as applicable), costs to support these activities, may be requested in the appropriate cost category. Details regarding Data Management and Sharing costs must be specified in the Budget Justification attachment (L), pursuant to the instructions.

Allowable and Unallowable Costs: Allowable costs submitted in budget requests must be incurred during the performance period, even for scientific data and metadata preserved and shared beyond the award period. Budget requests must NOT include: Infrastructure costs that are included in institutional overhead (for instance, NIH Grants Policy Statement Section 7.3 Facilities and Administrative costs); costs associated with the routine conduct of research, including costs associated with collecting or gaining access to research data; or costs that are double charged or inconsistently charged as both direct and indirect costs. For more information, see Budgeting for Data Management & Sharing on the NIH Scientific Data Sharing website and additional details to help Develop Your Budget.

E. **Budget Justification**

Additional budget justification is required for all modular and non-modular budgets to describe Data Management and Sharing activities and their associated costs.

It is required whether or not funds are requested. Below are instructions.

- Clearly label as "Data Management and Sharing Justification" followed by the estimated total direct dollar amount.
- Include a justification of the proposed activities proposed in the DMS Plan that will incur costs.
- Provide a brief summary of type and amount of scientific data to be preserved and shared. *Even if there are no costs, include.*
- Provide the name of the established repository(ies) where data will be preserved and shared. *Indicate whether those are free or have a charge.*
- Indicate general cost categories, such as curating data and developing supporting documentation, local data management activities, preserving and sharing data through established repositories.
- Include an amount for each general cost category above and a brief explanation for each. See suggested explanations to use as appropriate.
    - Data creation/active management *(if not budgeted in the project itself)*
      Example: To preserve all the data for sharing, you need additional local data storage space during the active research stage that is not already provided centrally at no additional charge.
    - Data curation/preparation (e.g. metadata, documentation, deidentification)
      Have you mentioned that expertise exists or will be developed within the project staff?

- Data sharing
  Give the annual and total charge for storage for at least the minimum Mount Sinai-required six years of retention.
- Recommended length is no more than half a page.
- One or more of the personnel sections (Senior/key personnel or Other personnel) should state who will do the data curation and deposit.
- Specify if no costs will be incurred.
- For modular grants, use the "Additional Narrative Justification" attachment.

NIH Instructions:

L. Budget Justification

Special Instructions for Applications Submitted with a Data Management and Sharing (DMS) Plan:

If a Data Management and Sharing Plan is required in the proposed application (see instructions for the "Other Plan(s)" attachment on the PHS 398 Research Plan Form and the PHS 398 Career Development Award Supplemental Form, as applicable), include a brief justification of the proposed activities that will incur costs. The Data Management and Sharing justification must be clearly labeled as "Data Management and Sharing Justification" within the budget justification attachment followed by the estimated dollar amount (total direct costs). Provide a brief summary of type and amount of scientific data to be preserved and shared and the name of the established repository(ies) where they will be preserved and shared. Indicate general cost categories such as curating data and developing supporting documentation, local data management activities, preserving and sharing data through established repositories, etc., including an amount for each category and a brief explanation. Specify in the justification if no costs will be incurred for Data Management and Sharing, if applicable. The recommended length of the justification should be no more than half a page. For more information, see Budgeting for Data Management & Sharing on the NIH Scientific Data Sharing website and additional details to help Develop Your Budget.

Additional NIH instructions for Modular Budgets:

Additional Narrative Justification:

Special Instructions for Applications Submitted with a Data Management and Sharing (DMS) Plan: If a Data Management and Sharing (DMS) Plan is required in the proposed application, (see instructions for the "Other Plan(s)" attachment on the PHS 398 Research Plan Form and the PHS 398 Career Development Award Supplemental Form, as applicable), the Additional Narrative Justification is required.

F. **Resource Sharing Plan** *(do not address in this section unless specified in the NOFO)*
A common error is that investigators provide DMS information in the Resource Sharing Plan. Do not do so unless the NOFO specifies this. Peer reviewers are not asked to comment on the DMS Plan and the plan is not factored into the Overall Impact score, unless sharing data is integral to the project design and specified in the funding opportunity (see NOT-OD-22-189).

Excerpt from SF424 Application Instructions

10. Resource Sharing Plan(s)

Note: Effective for due dates on or after January 25, 2023, Data Management and Sharing (DMS) Plans are now included in Section 11. Other Plan(s). Plans for Genomic Data Sharing should be provided as part of the Data Management and Sharing Plan.

Format:

Attach this information as a PDF file. See NIH's Format Attachments page.

Content:

Sharing Model Organisms: Regardless of the amount requested, all applications where the development of model organisms is anticipated are expected to include a description of a specific plan for sharing and distributing unique model organisms or state why such sharing is restricted or not possible. **For more information**, see the NIH Grants Policy Statement, Section 8.2.3.2: Sharing Model Organisms.

Research Tools:

NIH considers the sharing of unique research resources developed through NIH-sponsored research an important means to enhance the value and further the advancement of the research. When resources have been developed with NIH funds, and the associated research findings published or provided to NIH, it is important that they be made readily available for research purposes to qualified individuals within the scientific community. For more information, see the Research Tools Policy Website and the NIH Grants Policy Statement, Section 8.2.3: Sharing Research Resources.

V. **Research Performance Progress Reporting**

In the C.5.c DMS Plan section, the instructions state "describe activities related to the approved DMSP," and the NIH is reviewing whether the responses to the DMS questions in this section are consistent with the information provided in the DMS plan of your competitive application. For example, if you listed three key types of scientific data you anticipate generated during the project but only report on one in the RPPR, this will need further explanation.

These questions are asked

- If **data has not been generated and/or shared as outlined in the approved Plan**, describe why, and identify any corrective actions that have or will be taken to comply with the approved plan
- Are **significant prospective changes to the Data Management and Sharing Plan being requested** for the coming year (e.g., change in repository, change in timeline, or change in scientific direction)?"
  PIs report if there is a change, describe the change, and upload a revised DMS Plan.

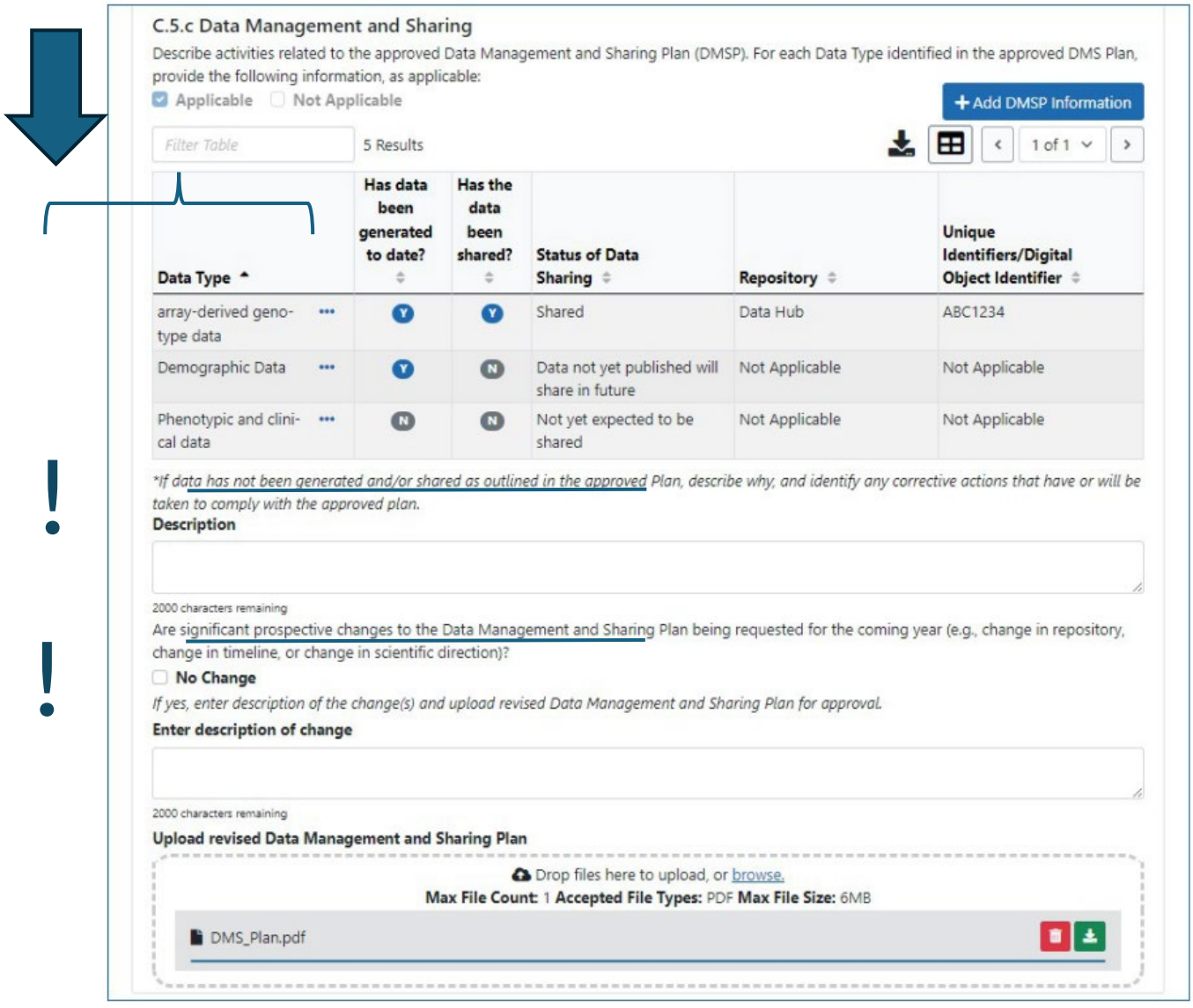
Please see these NIH Instructions and screenshot below.

Excerpts from the NIH RPPR Instruction Guide

For each Data Type identified in the approved DMS Plan, provide the following information, as applicable:

- Data Type
- Has data been generated to date? (Y/N)
- Has the data been shared (i.e., made available for use by others)? (Y/N)
- If data has NOT been shared, what is the status of data sharing (e.g., being prepared for submission, submitted to repository, not yet expected to be shared)
- Repository
- Unique Identifiers/Digital Object Identifier (DOI)

FROM THE APPROVED DMS PLAN ELEMENT 6 TABLE



VI. Compliance and Prior Approval

Both the 2023 and 2026 formats require the approved plan to be a term of award and both formats require prior approval if research plans change. See details in NOT-OD-24-176: Updated Processes for Requesting Revisions to an Approved Data Management and Sharing (DMS) Plan.

The prior approval request must be submitted by the Authorized Organization Representative (AOR) at least 30 days in advance of the requested change. The currently approved DMS Plan remains in effect for the award until the request is approved by the NIH.

Refer to GCO's Prior Approval Requirements and Rebudgeting Policy for submission and documentation details.

VII. Resources

A. NIH

NIH websites, FAQs, and other resources are being updated to reflect the 2026 DMS Plan Format.

- 2026 Data Management and Sharing Plan Format Page
- 2026 Writing a Data Management and Sharing Plan
- NOT-OD-26-046: Updated Elements of an NIH Data Management and Sharing Plan
- NIMH/NIAAA Cost Estimator Tool
  This cost estimator tool may be useful for projects that involve extensive work with sensitive human data and that have highly specified finder requirements.
- 2023 Data Management and Sharing (DMS) Policy Site
- 2023 Data Management and Sharing Policy FAQs
- SF424 Application Instructions
- NIH RPPR Instruction Guide
- Visit the NIH site for Selecting a Data Repository information.

B. ISMMS Resources for Repository Selection, Data Storage and Retention

For information on repositories that can accommodate project data that may need to be controlled/restricted or embargoed/delayed

- See Repository Selection - Research Data Management and Sharing - Levy Library Guide.

Data Storage Options Prior to Sharing

- Low volume up to 5 TB link to Storage-Options
- Low volume within your LabArchives Electronic Lab Notebook
- High volume - Consult with Research Data Services

Software Storage Option Prior to Sharing

- GitHub Enterprise for Mount Sinai Log In

Research Data Retention Requirements

- Faculty Handbook Data Retention Policy and Graduate School Student Handbook

C. **GCO DMSP Resources**

Updated Elements of an NIH Data Management and Sharing Plan

Apr 15, 2026 GCO Grants Forum Presentation I Slide Set

presented at 51:20 - 59:23; 1:00:35 - 1:02:02