NIH Data Management and Sharing Policy
Kerry Sewell

Scope: Who is Subject to the DMS Policy?

APPLICABLE TO:

All research generating scientific data

Including, but not limited to:

- Research Projects
- Certain Career Development Awards (Ks)
- Small Business SBIR/STTR
- Research Centers

NOT APPLICABLE TO:

Research <u>not</u> generating scientific data

Including, but not limited to:

- Training (Ts)
- Fellowships (Fs)
- Certain non-research Career Awards (e.g., KM1)
- Construction (C06)
- Conference Grants (R13)
- Resources (Gs)
- Research-Related Infrastructure Programs (e.g., S06)

Policy Requirements—A Few, Key Points

1. **All applicants will be required to submit** a Data Management & Sharing Plan with **all applications for funding** beginning January 25, 2023

2. Researchers are asked to '**maximize data sharing**'

3. Data must be shared at the time of publication or at the end of the award period, *whichever comes first*

4. The costs of data management and sharing are **allowable costs in budgets**

5. **Compliance** with the Data Management and Sharing Plan approved by the funding NIH Institute, Center, or Office

The NIH Data Management and Sharing Policy vs. Data Management and Sharing Policies for Specific Institutes and Centers

Trans-NIH Data Management and Sharing Policy: researchers producing data must provide a Data Management and Sharing Plan as part of their application, and they are asked to maximize data sharing

Specific Institutes and Centers (IC) may have stronger mandates for data management and sharing (i.e., requiring data sharing in specific repositories). Make sure the applicant has checked the data management and sharing policies for the specific IC https://sharing.nih.gov/other-sharing-policies/nih-institute-and-center-data-sharing-policies

A Brief Aside about the Impacts of this policy...

Researchers and everyone else are pretty stressed about the implementation details related to

- Writing Data Management and Sharing Plans

- Appropriately budgeting for Data Management and Sharing

- Sharing data—including the sometimes laborious processes for sharing (unless it's already a disciplinary norm)

- Reporting processes

Data Management and Sharing Plans (DMSPs)

- Plans should be no more than 2 pages in length

- Templates can be found at DMPTool.org

- The NIH has an optional formatted page that researchers can use, aligning with the required formatting and elements for DMSPs

- Details and sample plans can be found on the NIH site, far down on this page: https://sharing.nih.gov/data-management-and-sharing-policy/planning-and-budgeting-for-data-management-and-sharing/writing-a-data-management-and-sharing-plan

Data Management and Sharing Plans (DMSPs)

- *Technical note*: **NO** hyperlinks are permitted in a DMSP, even hyperlinks/URLs for government sites.
  - "As you develop your Data Management and Sharing Plans, make sure you do **not** include hypertext (e.g., hyperlinks and URLs) in the DMS Plan attachment**.** Our **hyperlink policy** applies to DMS Plans as well, and NIH may withdraw your application from consideration if you include them. Don't risk it!" (Office of Extramural Research, NIH. January 10, 2023. https://nexus.od.nih.gov/all/2023/01/10/dms-plan-tip-leave-the-hypertext-at-home/?_ga=2.93180885.931548137.1674586677-1045169161.1674586677)

Data Management and Sharing Plans (DMSPs)

- PIs can request consultation and review for their DMSP
  - Send them to directly to me (browderk@ecu.edu)
    - We are looking to hire a Research Data Specialist to help with this work, so additional support will be available in the near-ish future

  - Please let PIs know that I/the Research Data Specialist need a few days to provide the level of review necessary to ensure the DMSP adequately addresses the different elements the NIH requires

DMSPs: A note on Subawards

- "Projects involving subawards should include a single DMS Plan outlining plans to manage and share scientific data generated by the project as a whole, whether such activities will be carried out by the recipient or through subawards.

- "The responsibilities of the subrecipient is dependent on the data management and sharing agreed to by all research partners and then indicated in the DMS Plan.

- "Any factors related to subawardee relationships that may affect the extent to which scientific data are preserved and shared should be outlined in the DMS Plan."

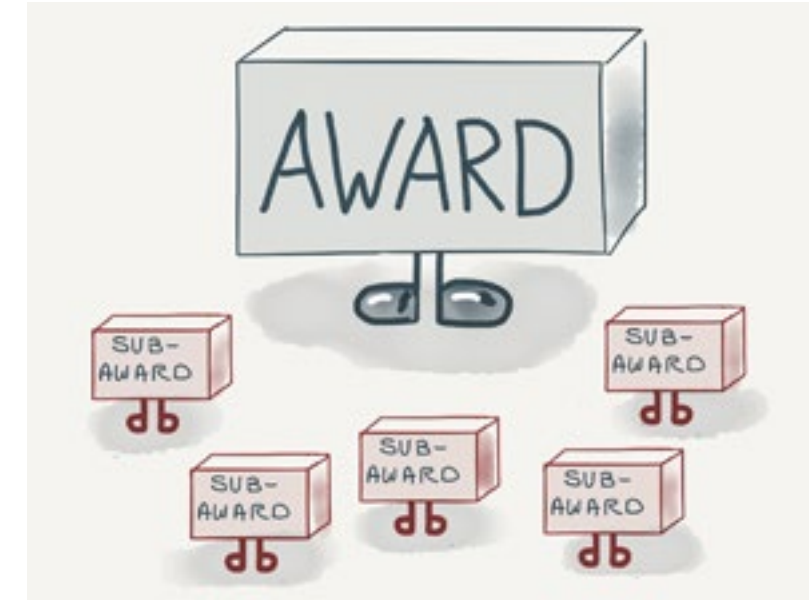Wann, E. Health Science Policy Analyst, Office of Science Policy. Email correspondence. September 30, 2022.

Image source:
http://www.research.ucr.edu/spa/lifecycle/outgoing-subawards.aspx

Application Instructions—Data Management and Sharing Plans

- **Extramural (grants)**:DMS Plans should be included within the "Other Plan(s) field on the PHS 398 Research Plan or PHS 398 Career Development Award Supplemental Form. This allows for a PDF attachment

- **Extramural (contracts)**: as part of the technical evaluation

Research Plan Section

		Add Attachment	Delete Attachment	View Attachment
5. Vertebrate Animals		Add Attachment	Delete Attachment	View Attachment
6. Select Agent Research		Add Attachment	Delete Attachment	View Attachment
7. Multiple PD/PI Leadership Plan		Add Attachment	Delete Attachment	View Attachment
8. Consortium/Contractual Arrangements		Add Attachment	Delete Attachment	View Attachment
9. Letters of Support		Add Attachment	Delete Attachment	View Attachment
10. Resource Sharing Plan(s)		Add Attachment	Delete Attachment	View Attachment
11. Other Plan(s)		Add Attachment	Delete Attachment	View Attachment
12. Authentication of Key Biological and/or Chemical Resources		Add Attachment	Delete Attachment	View Attachment

Data Management and Sharing Costs

ALLOWABLE COSTS:

- Curating data/developing supporting documentation
- Preserving/sharing data through repositories
- Local data management considerations
- **IMPORTANT:** Must be incurred during the performance period

UNALLOWABLE COSTS:

- Infrastructure costs typically included in indirect costs
- Costs associated with the routine conduct of research (e.g., costs of gaining access to research data)

Budgeting for Data Management and Sharing: Challenges

- Forecasting the costs of data management and sharing is HARD for most researchers, unless they work in a discipline that already routinely shares data and they are familiar with the personnel, infrastructure, and other costs associated with it

- Many PIs and Co-Is will simply take on the work and lump it in with their personnel cost calculation. Signs indicate the NIH will want some of this separated out (more on this in a moment)

- NIMH has a tool to assist with calculating data management and sharing costs: https://s3.amazonaws.com/nda.nih.gov/Documents/NDA_Data_Submission_Cost_Estimation_Tool.xlsx

Suggested Questions to Talk Through with a PI:

- Is there a deposit fee for any of the repositories you are planning to use?
  - Does the repository allow pre-payment via a single deposit fee or is there an annual recurring fee? (Note: If an annual fee, fees incurred after the period of performance cannot be charged to the award.)
- Will you need dedicated research staff time to support any data management and sharing activities to meet repository requirements? If not staff time, will you need to engage the services of a core/service center or vendor to complete:
  - Data curation?
  - Developing supporting documentation?
  - Formatting data according to accepted community standards or for transmission and storage at selected repository?
  - Preparing metadata?
  - De-identifying data?

- 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 are planning to use to collect or analyze the data?
- Do you have subrecipients?
  - If yes, will they be responsible and need to budget for data management and sharing activities?
- Do you anticipate any expenses related to the DMSP after the end of the period of performance of the award? If so, how should those costs be covered as they cannot be charged to the award?

Application Instructions for Budgets

- Request any direct costs to support the activities proposed in the DMS Plan. These costs must be labeled as "Data Management and Sharing Costs" as follows:
  - *R&R Detailed Budget Form:* Include the "Data Management and Sharing Costs" line item under F. Other Direct Costs "8-17 Other" on the R&R Budget Form.
  - *PHS 398 Modular Budget Form:* Use the Additional Narrative Justification attachment of the PHS 398 Modular Budget Form

Some Stress-Inducing Details from the Application Instructions

- NIH application instructions indicate that personnel costs specific only to data management and sharing activities should be included in the Data Management and Sharing line item rather than in the personnel section of the budget. Personnel costs associated with all other project activities should remain in the personnel section

[EVIL LAUGHTER]

"If a Data Management and Sharing Plan is required in the proposed application, personnel costs specific to Data Management and Sharing activities must not be included here but listed as a specific line item under Section F.8.-17 Other" (p. 62 of 155, https://grants.nih.gov/grants/how-to-apply-application-guide/forms-h/research-forms-h.pdf)

RESEARCH ADMINISTRATION AND COMPLIANCE

Some Stress-Inducing Details from the Application Instructions

"If a Data Management and Sharing Plan is required in the proposed application, personnel costs specific to Data Management and Sharing activities must not be included here but listed as a specific line item under Section F.8.-17 Other" (p. 62 of 155, https://grants.nih.gov/grants/how-to-apply-application-guide/forms-h/research-forms-h.pdf)

Other universities appear to be advising that "all effort/salary for the PI(s) and any Senior/Key Personnel should still be included in the personnel section and not separately listed within the Data Management and Sharing Costs line item. As noted above, effort/salary for other personnel necessary to support data management and sharing activities should be included in the *Data Management and Sharing Costs* line item."

Budget Justification

- For any FOA that will make an applicant subject to the DMS Policy, a brief justification of the data management and sharing activities proposed in the DMSP is required. It must include:
  - a brief summary of type and amount of scientific data to be preserved and shared
  - the name of the established repository(ies) to be used
  - general cost categories

Budget Justification

- The justification should be labeled as "Data Management and Sharing Justification" and shouldn't be more than half a page.

  - *R&R Detailed Budget Form:* Use the [Budget Justification](#) attachment of the R&R Budget Form.
  - *PHS 398 Modular Budget Form:* Use the [Additional Narrative Justification](#) attachment of the PHS 398 Modular Budget Form

Budget Justifications, continued

- Even if applicants indicate that there are no costs associated with their data management and sharing activities, the NIH has indicated that they need to justify why they are requesting $0.00 for Data Management and Sharing.
  - This is particularly important if the DMSP indicates that data will be shared and that the data have to be cleaned, documented, etc.
  - In most cases like this, the $0.00 is likely because the PI and Key Personnel have lumped data management and sharing costs into their personnel calculations and the repository has no fee [for them]. Consider here that they may want to state something along the lines of "an additional x and y hours of personnel time for [PI] and [Senior Personnel Name], respectively, were calculated for this work. The repository we will use is supported by institutional agreements and subscriptions, incurring no cost to the study team."

Budget Weirdness, continued

- Peer reviewers won't see the DMSP at all, but they will see the Budget Justification. Comments the peer reviewers make will not impact the score.

Compliance reporting

- The policy **requires** that the PI report on data management and sharing activities in all Research Performance Progress Reports

  - A new section of the RPPR is being added for just this purpose: C.6 Data Management and Sharing.
    - C.6. a. Has scientific data been generated and shared during this reporting period? Describe activities related to the approved Data Management and Sharing Plan. Enter response below. ▪
    - C.6.b. Are there changes to the Data Management and Sharing Plan?
      - ❑ No Change
      - ❑ Enter description of change and upload revised Data Management and Sharing Plan

Questions?

Resources for the Policy

1. Your friendly, local Research Librarian (Kerry Sewell, browderk@ecu.edu)

2. DMPTool.org (for data management & sharing plan creation)

3. Sharing.nih.gov site

4. Guide on the NIH Policy: https://libguides.ecu.edu/nih_dmsp

5. Tool to assist with calculating data management and sharing costs