

National Institutes of Health Office of Science Policy

NIH Policy for Data Management & Sharing

NIH Council of Councils May 21, 2021

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Data Stewardship Goals

• Advance rigorous and reproducible research

- Enable validation of research results
- Make high-value datasets accessible
- Accelerate future research directions
- Increase opportunities for citation and collaboration





Promote public trust in research

- Foster transparency and accountability
- Demonstrate stewardship over taxpayer funds
- Maximize research participants' contributions
- Support appropriate protections of research participants' data



NIH Policy for Data Management and Sharing

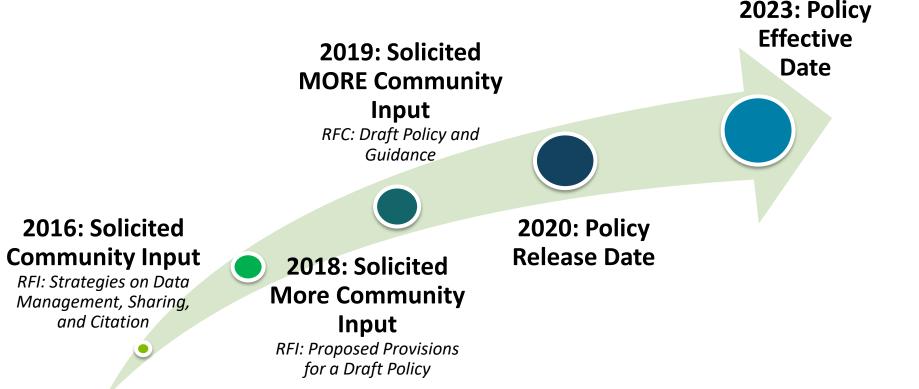
- Submission of Data Management & Sharing Plan for all NIH-funded research (how/where/when)
- **Compliance with the ICO-approved Plan** (may affect future funding)
- Effective January 25, 2023 (replaces 2003 Data Sharing Policy)
- Supplemental info available to assist
- Aims to foster data stewardship

An Iterative Policy Development Process

- Sought public comment repeatedly
- Tribal Consultation^{*}

*Details provided in "NIH Tribal Consultation Report: NIH Draft Policy for Data Management and Sharing"

 Intersection with other government agencies & Secretary's Advisory Committee for Human Research Protections



The Devil is in the Details...

- Scope: All NIH-supported research generating scientific data
 - 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
 - **Does not include** lab notebooks, preliminary analyses, peer reviews, physical objects
- Timelines:
 - For when to share data, no later than <u>publication</u> or <u>end of award</u> (for unpublished data)
 - For how long to share data, consider relevant requirements and expectations (e.g., repository policies, retention requirements, journal policies) for minimum time frames



Which brings us to my next point."

Additional Expectations for Plans

• SHARING SHOULD BE ...

The default practice

- All scientific data should be managed; not all scientific data must be shared
- Maximize appropriate data sharing; Plans may justify exceptions (i.e., ethical, legal, technical factors)

Responsibly implemented



- Plans should outline protection of privacy, rights, and confidentiality
- Existing laws, regulations, and policies continue to apply

Prospectively planned for

- During informed consent, including communicating how data will be used and shared
- Data submission, including whether access to data, even if de-identified, should be controlled

Plan Submission and Review

Extramural Grant Awards*

Plan Submission

With application for funding in Budget Justification section

Plan Assessment

Peer reviewers only comment on (not score) budget

NIH program staff assess Plans

Plans can be updated

Plan Compliance

Incorporated into Terms and Conditions

Monitored at regular reporting intervals – mechanisms and tools to support oversight under development

Compliance may factor into future funding decisions

*Analogous requirements for contracts, OTAs, IRP

Supplemental Info to the Policy: Allowable Costs

Reasonable costs allowed in budget requests

- Curating data/developing supporting documentation
- Preserving/sharing data through repositories
- Local data management considerations

• <u>NOT</u> considered data sharing 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)

Supplemental Info to the Policy: Repository Selection

- Encourages use of established repositories
- Helps investigators identify appropriate data repositories
 - E.g., use of persistent unique identifiers, attached metadata, facilitates quality assurance
 - Refers to list of <u>NIH-supported Data</u> <u>Repositories</u>
- NIH ICs may designate specific data repository(ies)



Implementation Considerations: NASEM Workshop, April 28-29

Changing the Culture of Data Management and Sharing

A WORKSHOP

Apr 28, 2021 11AM – 4PM ET Apr 29, 2021 11AM – 3PM ET

> The National Academies of Academies of MEDICINE

- Implementation requires a systemwide culture shift
 - Need for aligned incentives and resources
- Impactful data sharing is key to successful policy implementation
 - Practices mindful of secondary data users are necessary for useful data sharing
 - Metrics are needed to assess value
 - Data citation key for adoption and monitoring
 - Trust needs to be earned for success

Resources for Implementation

What's Next?

- Engage in outreach to develop additional supplemental information (including tribal-specific considerations)
- Develop tools for estimating data management and sharing costs (informed by the <u>2020 NASEM report on forecasting costs</u> & <u>April 2021</u> <u>NASEM workshop on the culture of data management & sharing</u>)
- **Develop approaches** for incentivizing good data sharing practices
- Clarify interactions with other NIH-wide (e.g., GDS Policy) and ICOspecific data sharing policies
- Develop FAQs and other resources to aid policy implementation

~2-year implementation window!

Thank You!

- OSP Data Management and Sharing Website
- <u>NOT-OD-21-013</u> Final NIH Policy for Data Management and Sharing
- <u>NOT-OD-21-014</u> Supplemental Information to the NIH Policy for Data Management and Sharing: Elements of an NIH Data Management and Sharing Plan
- <u>NOT-OD-21-015</u> Supplemental Information to the NIH Policy for Data Management and Sharing: Allowable Costs for Data Management and Sharing
- <u>NOT-OD-21-016</u> Supplemental Information to the NIH Policy for Data Management and Sharing: Selecting a Repository for Data Resulting from NIH-Supported Research

Questions? sciencepolicy@mail.nih.gov