Is your organization considering adopting a data sharing policy (DSP), but you’re not sure where to begin? HRA members have built this guide to provide an overview of the process and highlight available resources.

Note: The steps outlined below are not necessarily linear – you may find that a different sequence is more conducive to your organization’s goals, requirements, or timeline.

Explore and research

Determine whether it's the right time. Do you have the resources and support to undertake a large organizational change?

• Do the grants your organization fund generate big data (e.g. genomic databases, clinical trial databases, imaging databases, computational models)?
• Do you have enough administrative and programmatic support to adjust your grant practices to incorporate a DSP?

Consider taking incremental steps before/while your organization develops its own policy:

• Ask awardees to submit a data sharing plan absent of incentive and without encouragement in a particular direction.
• Add encouragement by stating that the organization wants data sharing, and that applications including data sharing plans that promote broad, rapid sharing will be scored favorably.
• Ultimately, your organization may require, score, and benchmark applications based on strong data sharing plans.

Notes & comments:

Resources:

Introduction to Data Sharing
- HRA webinar (July 2017)
- Summary with links to additional resources

(Re)Introduction to Data Sharing
- HRA webinar (March 2019)

Efforts to Implement a Data Sharing Policy: Lessons Learned (So Far)
- Presentation by Jason Gerson, PCORI

Implementation of a Data Sharing Policy
- Presentation by Belinda Orland, AHA
Discuss data sharing with leaders and stakeholders in your organization. Have high-level conversations to ensure they are committed to the idea of data sharing and willing to invest the time and resources into implementing a policy. It is possible that your organization may need a third party expert to help steward this conversation.

Notes & comments:

Resources:

Transparency and Openness (TOP) Guidelines
Self-assessment & recommendations
Create a draft DSP

Based on your organization’s mission and goals, define parameters such as:

- The type(s) of data your grantees will be expected to share
- The time frame expected for release of data
- Criteria for acceptable data sharing repositories, if not mandating a repository (e.g. permanent, well-curated), as well as the duration over which shared data will be maintained, if applicable
- Budget support, if any, grantees will receive for data sharing services (e.g. bioinformatics, harmonization, storage)
- Whether you will encourage or require grantees to get a Creative Commons Attribution license to allow others to use their data
- Will you require data sharing plans for of all grantees/grants or only some (new/junior vs. senior/tenured; small lab vs. big team science)? If not required, will it affect the way proposals are scored? Will you consider and allow exceptions on a case by case basis?

Notes & comments:

Resources:

Incentivizing the sharing of research: Funder Blueprint

Guides through selection/revision of specific language for a DSP

Funder Data-sharing Policies: Overview & Recommendations

Robert Wood Johnson Foundation
Discuss your DSP draft with key stakeholders in your organization (e.g. scientific advisors, researchers, grantees). In some cases, this step may come after the creation of educational content (educational materials, templates) so that those can be shared as well.

Resources:

- The State of Open Data
- Figshare annual report (2017)
- Curated articles & analyses
Create educational materials

When you publish the DSP on your foundation’s website, also ensure you have media to educate relevant audiences. Consider:

- **Applicants**: Provide *specific* resources for applicants; for example, links to useful websites (e.g. BioArchiv, Creative Commons Attribution license). Consider providing an FAQ page with tips for navigating the data sharing portion of the grant application.
- **Reviewers**: Explain how reviewers should interpret the data sharing expectations as they review new grant applications. Determine if specific reviewer expertise might be required, and perhaps add those reviewers.
- **Institutions**: Attach or link the DSP to each applicable request for proposal (RFP), so administrators are aware of the new data sharing requirements.
- Consider creating a [glossary](#) of data sharing and technical terms.

**Notes & comments:**

**Resources:**

- **OSF** by Center for Open Science
  - Project management repository

- **DMPTool** by University of California
  - Helps grantees build data management plans

- National Network of Libraries of Medicine
  - *Data Thesaurus*
  - Definitions and links to additional resources

- “Best Practices for Biomedical Research Data Management”
  - Harvard Biomedical Library [online course](#)
Revise grant procedures

Modify grant application templates to add specific data management questions, such as:

- What data will be produced during the course of research, and where will it be shared? Who will be in charge of preparing the data to share?
- What data standards will be used, and why? Which metadata will be released?
- What are the expected costs of preparing and sharing data?

Modify reviewer templates to include questions about how well data management (collection, annotation, sharing of data outputs) was incorporated into the study.

- Is your review committee equipped to assess and score data sharing plans?
- Are clearly stated plans for each step included? Did they address specific/required questions?

Modify the grant contract. Include the DSP as an appendix to the contract to facilitate institutional awareness and compliance.

Notes & comments: 
Monitor compliance

Develop processes to determine if compliance has been achieved. Even if you do not have a strict requirement, it may be useful to gather information on how many of your grantees do share data in some capacity. For example, you could fact check whether Digital Object Identifiers (DOIs) exist, and that data is ‘discoverable’ in the platform of choice.

If your organization uses progress report questionnaires, consider adding questions about data sharing progress:

- What data has been produced, and has it been shared/is there a planned release date?
- Are appropriate measures in place to protect confidentiality of subjects, if applicable?
- What platform and/or data standards are being used?

Notes & comments: