DOI: dx.doi.org/10.5195/jmla.2024.1871

The DMPTool NIH DMSP Templates Project

Nina Exner; Seonyoung Kim; Katy Smith

See end of article for authors' affiliations.

The DMPTool NIH Data Management and Sharing Plan (DMSP) Templates Project was launched in response to the 2023 NIH Data Management and Sharing (DMS) Policy. This new policy introduced a more structured framework for DMS Plans, featuring six key elements, a departure from the 2003 NIH DMS policy. The project aimed to simplify the process for data librarians, research administrators, and researchers by providing a template with curated guidance, eliminating the need to navigate various policies and guidelines. The template breaks out each Plan section and subsection and provides related guidance and examples at the point of need.

This effort has resulted in two NIH DMSP Templates. The first is a generic template (NIH-Default) for all ICs, complying with <u>NOT-OD-21-013</u> and <u>NOT-OD-22-198</u>. More recently, an NIMH-specific template (NIH-NIMH) was added based on <u>NOT-MH-23-100</u>. As of October 2023, over 5,000 DMS Plans have been written using the main NIH-Default template and the NIH-NIMH alternative template.

Keywords: Research data management; Data management and sharing plans; DMPTool; NIH grant compliance; NIH data management and sharing plans

CONTEXT, AIMS, AND SIGNIFICANCE OF THE VIRTUAL PROJECT

When the National Institutes of Health (NIH) announced that expanded Data Management and Sharing (DMS) Plans would be part of the Final NIH Policy for Data Management and Sharing, effective January 25, 2023, data librarians wanted support. An existing virtual platform – the DMPTool– was already established as a source of templates for writing data management plans (DMPs) from other agencies.

DMPTool templates are constructed manually, so a new <u>DMPTool NIH Template Working Group</u> formed. The working group (WG hereafter) combined librarians with different strengths. Together this WG worked to synthesize and curate NIH DMSP templates as the 2023 NIH DMS Policy rolled out.

The main goals of this initiative were to:

- 1. Develop a generic NIH template that aligns with the NIH's Policy and optional Plan format.
- Incorporate Genomic Data Sharing requirements, following <u>NOT-OD-22-198</u>, into the generic NIH Template.
- 3. Offer expanded example language across various disciplines, helping researchers understand how each element applies to their specific fields.
- 4. Evaluate the necessity for tailored templates for specific NIH Centers and Institutes (IC) and create IC-specific NIH DMS templates if deemed necessary.

The new 2023 NIH DMS policy affects multiple disciplines, from basic sciences to clinical and biobehavioral. The WG aimed to help researchers see how the new Plan format connects to their disciplines via example answers in the template. To support the increasing number of new medical centers joining the DMPTool, the WG also developed training materials (<u>slide</u> <u>deck</u> and <u>flyers</u>) and collaborated on a <u>DMPTool training</u> <u>workshop</u> for the Network of the National Library of Medicine.

BRIEF DESCRIPTION OF THE VIRTUAL PROJECT

As the DMPTool was well-established before the NIH template project began, the NIH template goal was to use it to create a useful, standalone Plan template based upon the 2023 NIH DMS policy. The template provides not only writing prompts based on the NIH's <u>Elements of a DMS</u> <u>Plan</u> but incorporates other NIH documentation to support the writing prompts. Synthesized information plus example answers are labeled as "from DMPTool" to delineate them from NIH official text.

As shown in Figure 1, a user starts by selecting a funder to open the template tailored to that funder's guidance. For example, the template for writing DMPs for nutrition research funded by the USDA is different from that for nutrition research funded by the NIH. This project focused solely on a template for the NIH DMSP.

The user then encounters tabbed options. The "write plan" tab opens an accordion-menu-style screen with options

DOI: dx.doi.org/10.5195/jmla.2024.1871

Figure 1

new		역 🖞 🛧
STOOL		Nina Exner 👻 Language 🛩
Build your Data Management Plan My Dashboard Create Plan Funder Requirem	nents Public DM	Ps Help
Virginia Commonwealth University (vcu.edu) VCU UMP Tool help VCU UBranies data management pade VCU Ubranies ROM Team		Admin w
Create a new plan		
Before you get started, we need some information about your research project to set you up with the	e best DMP template	for your needs.
* What research project are you planning?		
tet		mock project for testing, practice, or educational purposes
* Select the primary research organization		
Research organization Virginia Commonwealth University (vcu.edu)	· er ·	In research organization associated with this plan or my research organization is not listed
Research organization (virgina Commonwealth University Locu adu) * Select the primary funding organization		lited
Research organization Virginia Commonwealth University (scs.edu) * Select the primary funding organization	.er.	
Research organization Virginia Communewith University (sex edu) * Select the primary funding organization Funder		lited
Nexast-logarization Velopia Communeable University (sea adul * Select the primary funding organization Forder Instrumt		lited
Neurosk operativelity (soc.ob) Virginis Communeal Hildening organization Annone Cannone Minimum Institutions of Health (soft gars)		lited
Nexast-operations Virplac Community Statushing Organization Fader server Martinal Institutes of Insalth (shi gen) National Costenie and Remogencies Administration (meas.gov)		lited
Nexuest operations Original Community (Journal) Select the primary funding organization Nexue Seriod Instrume Institutes of Installs (militype) Retiread Counties and Remargineric Administration (nesa gon) Retiread Counties (Margina)		lited
Neurosh repeatations (Seption Commonship (no. 44)) * Select the primary funding organization Reve unions Restoral Testistates of Health (nh. gov) National Restorators Fundition (no.6 gov) National Second code (no.6 gov) National Revealates and Speec Admonstration (seas.gov)		lited

Figure 2

← → C △ é dmptool.org/plans/106792/edit?phase_id=2281	Q	٥	☆	æ		6 8	*		B E
See DMP Tool					N	ina Exn	er 🕶	Langu	age 🕶
Build your Data Management Plan My Dashboard Create Plan Funder Requirements Public DMPs Help									
Virginia Communeath University (vca.edu)								Ad	min 🔻
test NIH Default dmsp-v9									
Project Details Collaborators Write Plan Research outputs Finalize Download									
This plan is based on the "NIH Default DMSP" template provided by National institutes of Health (nih gov) - Iver; 9, pub; 2023-07-06), expand all (collapse all eraz									
+ Data Type (0 / 3)								1	+
+ Related Tools, Software and/or Code (0 / 1)									+
+ Standards (0 / 1)									+
+ Data Preservation, Access, and Associated Timelines (0 / 3)								1	+
+ Access, Distribution, or Reuse Considerations (0 / 3)								ŀ	+
+ Oversight of Data Management and Sharing (0 / 1)									+
									_
Alexi Guidettin Termul'Uni Screenalegt Gibin Assessibility Site May CO CO Marco and a construction of the									

Figure 3



specifically reflecting the NIH DMSP structure. This is where the value of the template becomes apparent: menus are based on the WG-created template. Figure 2 illustrates the menu of the main sections, with the sub-section menus closed. Clicking on one section bar opens the WG curated content. Each element or sub-element includes the official prompt from the Policy above the text-entry box followed by example answers below the text-entry box, with curated guidance in the right column under the NIH Guidance Tab. Figure 3 provides an example of the layout of Element 4 section.

The template has grown iteratively. In 2020, the DMPTool's Editorial Board created an initial 6-part template. Then a UC/Stanford-based team built the initial Example Answers version (v2), followed by the current WG version (v3), documented in an <u>August 2022</u> <u>DMPTool blog post</u>. Evolutions such as integrating NIH sharing website content, harmonizing GDS policy considerations, and reflecting the <u>optional Plan format</u> (v4 - v9) were described in the <u>January 2023 blog update</u>. It has taken many librarians with various expertise to create the evolving product.

TECHNOLOGY USED

The DMPTool is a free digital template platform provided by the California Digital Library (CDL). Anyone with an email can sign up to use it, at no cost. Institutions can become institutional participants if they work with the CDL/DMPTool team to integrate single sign-on and assign an administrator to run the institution-specific functions. The DMPTool also allows users to do collaborative authoring and route for feedback from the institutional DMPTool administrator(s) who are often data librarians.

IMPACT

The primary impact is how many DMS Plans have been created using the templates we designed. Over 1,854 test or mock plans have been created from the NIH-Default template, plus 12 test plans from the NIH-NIMH template, which had been out for less than two months at count. Users can flag plans they create for test or mock-project uses like exploration or instruction.

Ultimately, the impact is in the non-test plans created. As of October 2023, DMPTool NIH Data Management and Sharing Plan (DMSP) Templates users have created 54 non-test plans with the NIH-NIMH template and 5,122 non-test-flagged plans with the main NIH-Default template.

AUTHOR CONTRIBUTIONS

Nina Exner: conceptualization; writing – original draft; writing – review & editing; Seonyoung Kim: writing – original draft; writing – review & editing; Katy Smith: writing – original draft; writing – review & editing. DOI: dx.doi.org/10.5195/jmla.2024.1871

AUTHORS' AFFILIATIONS

Nina Exner, <u>nexner@vcu.edu</u>, <u>https://orcid.org/0000-0002-8746-8364</u>, Research Data Librarian/Associate Professor, VCU Libraries, Virginia Commonwealth University, Richmond, VA

Seonyoung Kim, <u>seonyoung.kim@wustl.edu</u>, <u>https://orcid.org/0000-0002-8854-287X</u>, Senior Support Scientist in Data Management and Sharing Services Group, Bernard Becker Medical Library, Washington University School of Medicine in St. Louis, St. Louis, MO

Katy Smith, PhD, MA, <u>katy.smith@slu.edu</u>, <u>https://orcid.org/0000-0003-3195-3317</u>, Health Sciences Librarian, Medical Center Library, Saint Louis University, St. Louis, MO

Received October 2023; accepted February 2024



Articles in this journal are licensed under a <u>Creative</u> <u>Commons Attribution 4.0 International License</u>.



This journal is published by the <u>University Library System</u> of the <u>University of Pittsburgh</u> as part of its <u>D-Scribe</u> <u>Digital Publishing Program</u> and is cosponsored by the <u>University of Pittsburgh Press</u>.

ISSN 1558-9439 (Online)

JMLA