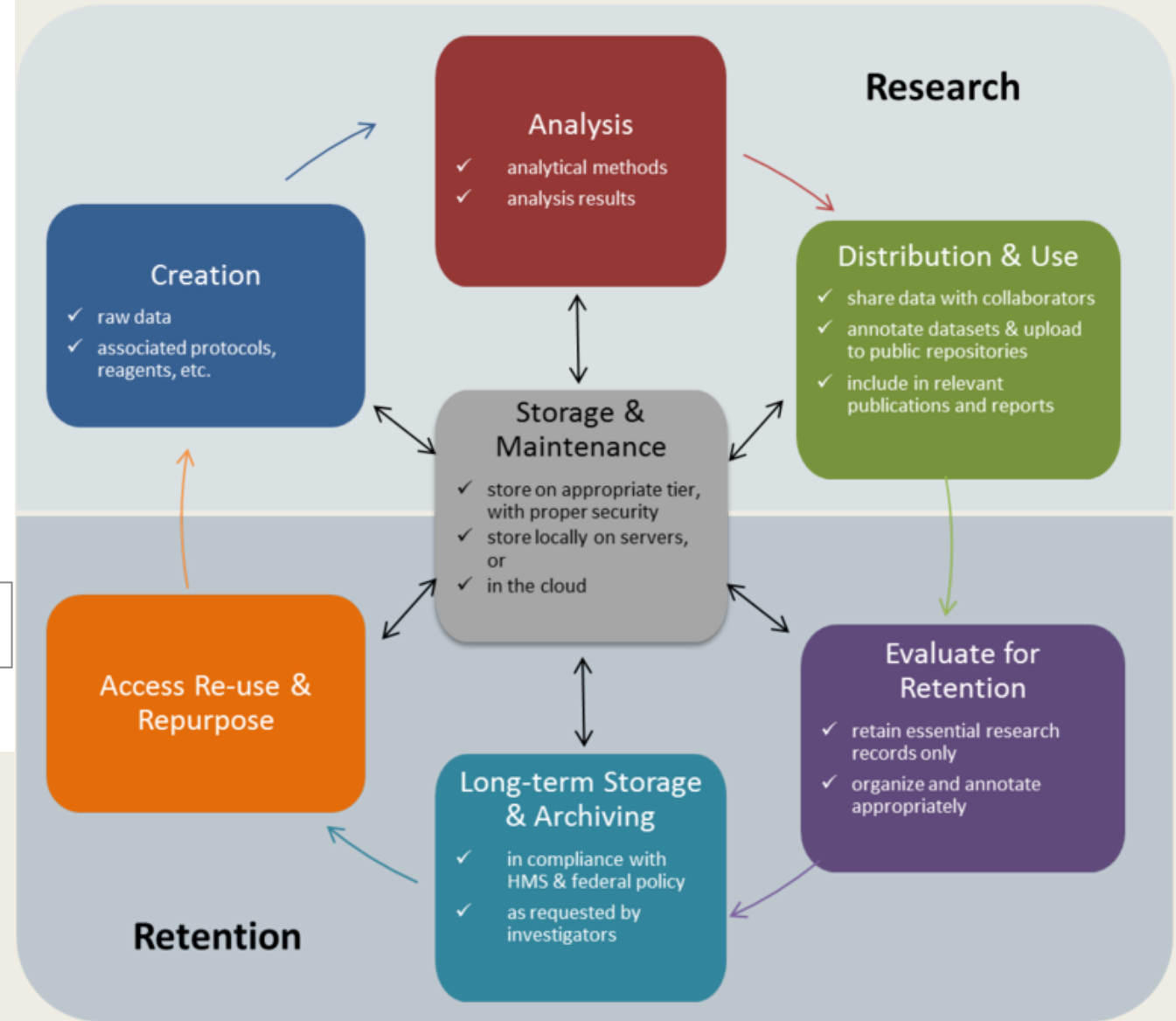
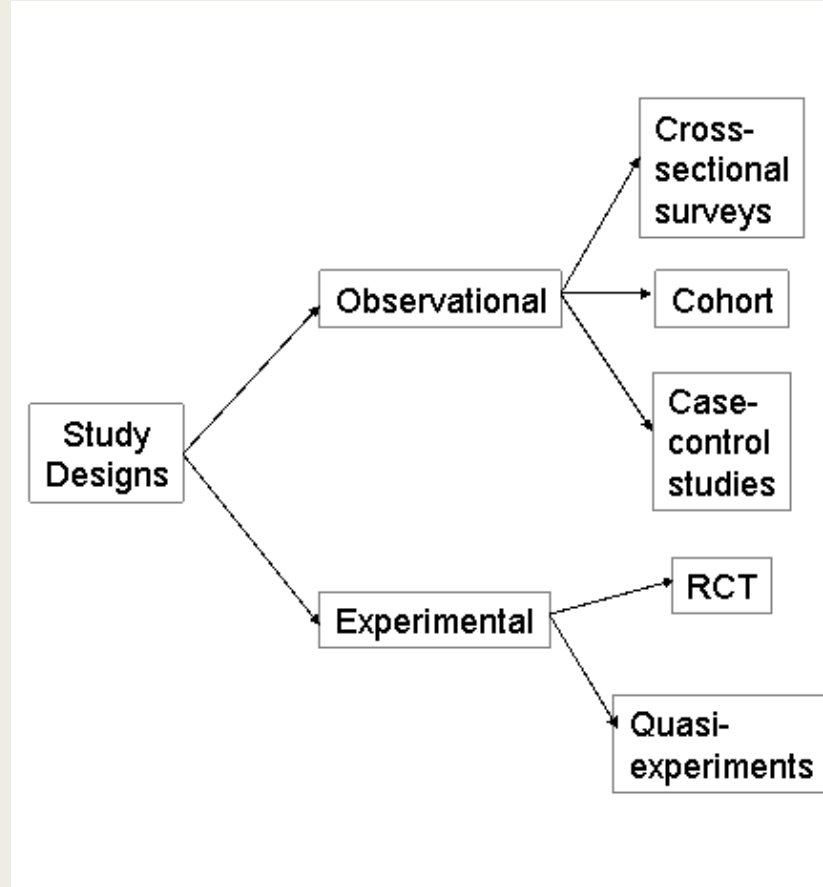




RESEARCH DATA MANAGEMENT



Data lifecycle for biomedical research



Data managed well can be more easily stored, discovered, shared, accessed, interpreted, and reviewed.

A data management plan (DMP) is a written document that describes the data you expect to acquire or generate during the course of a research project, how you will manage, describe, analyze, and store those data, and what mechanisms you will use at the end of your project to share and preserve your data.

Data Management Planning Tool

Create, review, and share data management plans that meet institutional and funder requirements.

Get Started

The screenshot shows the DMPTool website interface. At the top, there's a navigation bar with links: Home, My Dashboard, DMP Requirements, Public DMPs, News, Help, Contact Us, About, and a Log Out button. Below the navigation bar, the user is logged in as Jacqueline Cellini. The main content area is titled 'DMP REQUIREMENTS' and includes a search bar and a table of templates and funder links.

Template	Funder	Funder Links	Sample Plans (if available)
BCO-DMO NSF OCE: Biological and Chemical Oceanography	National Science Foundation	NSF OCE Sample and Data Policy, May 2011 (PDF) NSF GEO Data Policies	
National Aeronautics and Space Administration	National Aeronautics and Space Administration (NASA)	NASA Plan for Increasing Access to the Results of Scientific Research	FAQ & Example DMPs
National Institute of Justice (DOJ)	National Institute of Justice (DOJ)	NIJ Data Archiving Plans NIJ Submitting Data Under the Data Resources Program	
NEH-ODH: Office of Digital Humanities	National Endowment for the Humanities	Guidelines	NEH-ODH Sample
NIH-GDS: Genomic Data Sharing	National Institutes of Health	Guidance	NIH-GDS: Sample Plans
NIH-GEN: Generic	National Institutes of Health	Guidance	NIH: Sample Plans

Raw data

What is being measured or observed? This is the data that is being generated during the research project.

Processed data

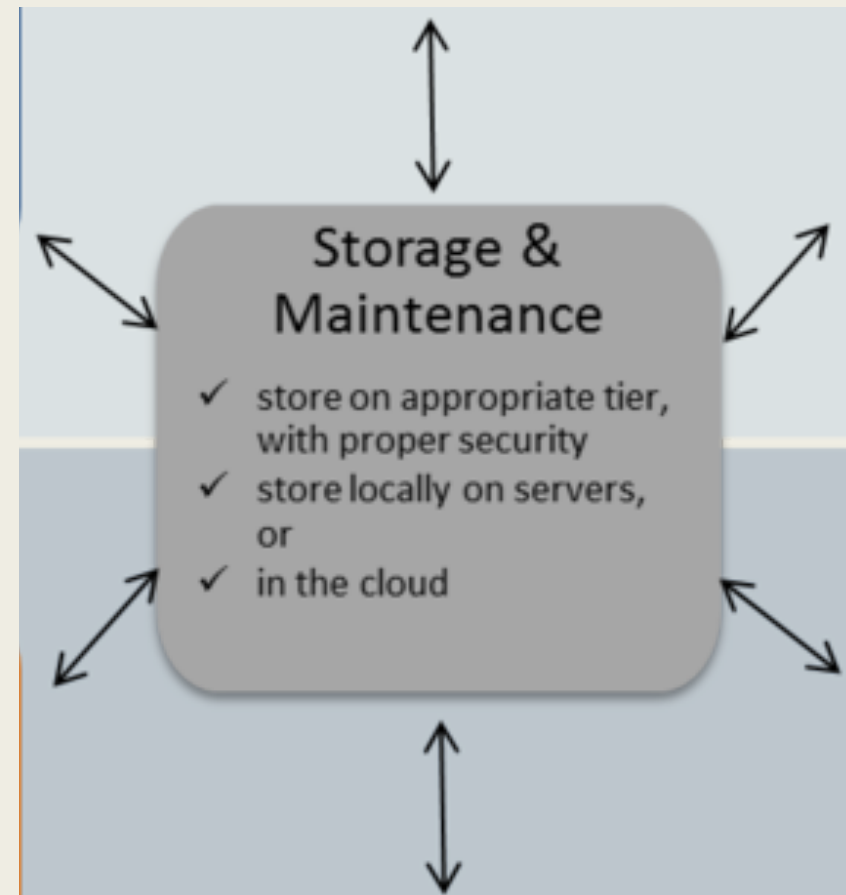
How can the raw data be made useful- able to be manipulated?

Analyzed data

What does the data tell us? Is it significant? How so?

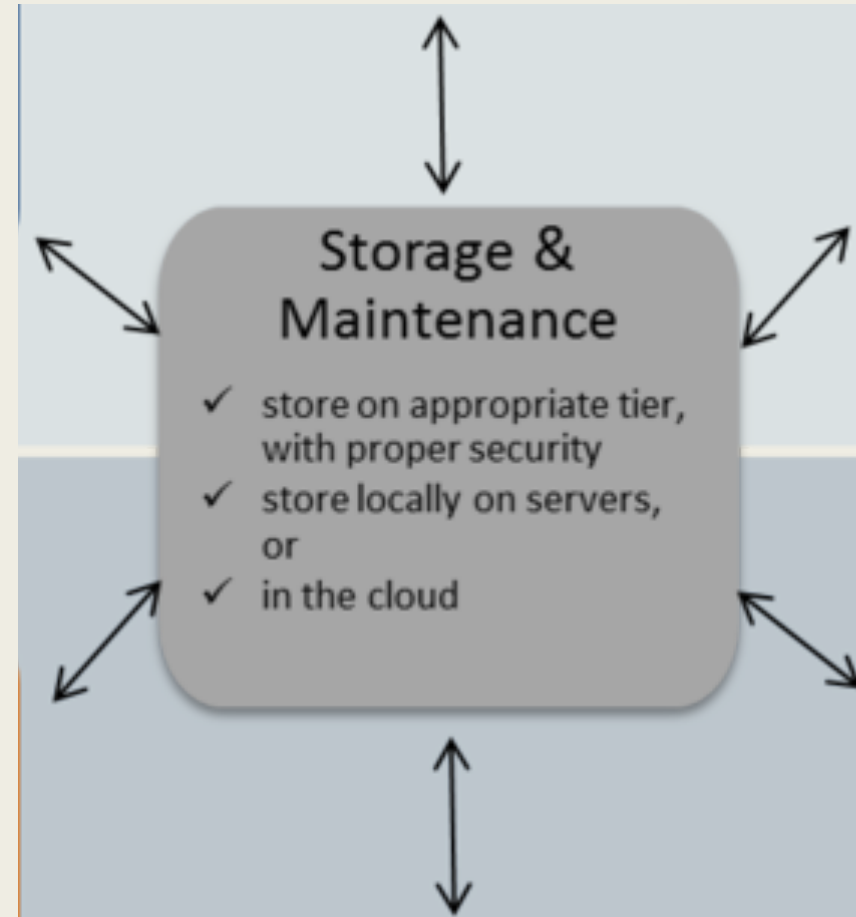
Finalized/published data

How does the data support your research question?



“Good metadata is standardized, consistent and interoperable, and facilitates discovery, preservation and archiving of data.”

Storage, backup, and security are interrelated.



Access: limiting the availability of your data

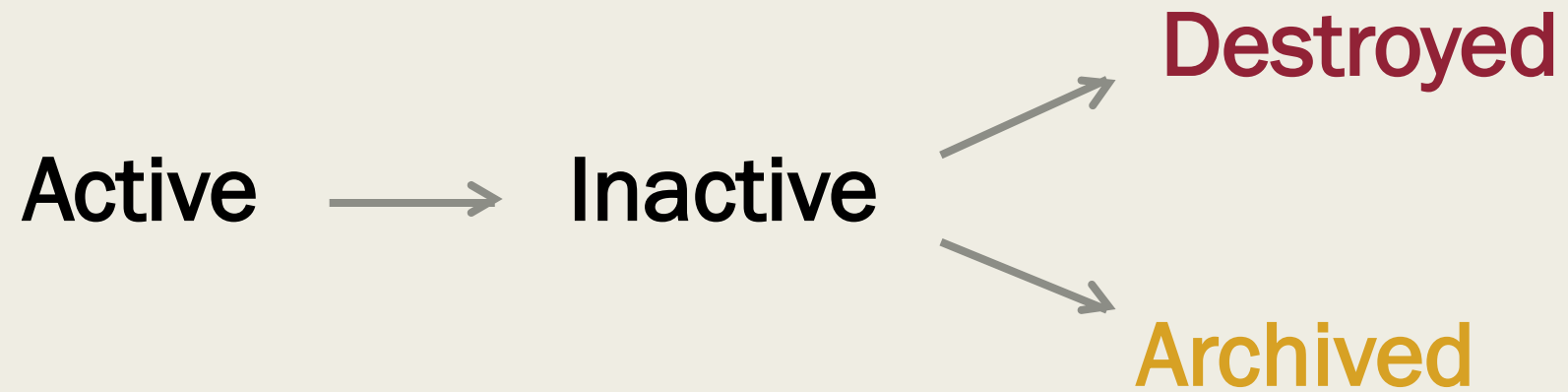
Systems: protecting your hardware and software

Data Integrity: Ensure that your data is not manipulated in an unauthorized way

LEVEL 1	Public information	Level 1 Data Types
LEVEL 2	Level 2 is information the University has chosen to keep confidential but the disclosure of which would not cause material harm.	Level 2 Data Types
LEVEL 3	Level 3 information could cause risk of material harm to individuals or the University if disclosed.	Level 3 Data Types
LEVEL 4	Level 4 information would likely cause serious harm to individuals or the University if disclosed.	Level 4 Data Types
LEVEL 5	Level 5 information would cause severe harm to individuals or the University if disclosed.	Level 5 Data Types

Who owns the data?

4 Types of Records



Data Sharing

When establishing data sharing and access policies and provisions, consider *whom* you will share your data with, *how* it will be shared, and *when* in the research process you will share it.

Citation / Attribution of Data

Acknowledgement of the use of someone else's information or work is a long-accepted practice in scholarly communication.

The following elements are generally considered the core elements of a data citation:

- Author/Creator(s): the creators of the data; can be one or more people or organizations
- Title: the title of the data set
- Version: the exact version or edition of the data set used
- Publication Date: the date when the data set was published or released
- Publisher/Archive: the data center or repository that is archiving and distributing the data
- Identifier/Locator: URL or other linkable locator for the data; a persistent, permanent URL such as a DOI (Digital Object Identifier) or a handle is preferred

Data Repositories

- Institutional repository (“IR”)
- Disciplinary repository (“DR”)
- Open Repository (“OR”)

Retention

Data retention requirements are put in place by funding agencies and sponsoring institutions for a number of reasons, including:

- the need to make research findings available for corroboration,
- to promote the reuse of data within and across disciplines, to support open data initiatives,
- and the need to protect intellectual property rights.

Appraisal & Archiving

Questions?

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<http://datamanagement.hms.harvard.edu/>


References: <http://www.edc.pitt.edu/about/data-management/>
https://www.med.uottawa.ca/sim/data/Study_Designs_e.htm

Editor: Lamar Soutter Library, University of Massachusetts Medical School

the title of the work: New England Collaborative Data Management Curriculum

the URL where the original work can be found: <http://library.umassmed.edu/necdmc>

DCC. (2013). *Checklist for a Data Management Plan*. v.4.0. Edinburgh: Digital Curation Centre. Available online: <http://www.dcc.ac.uk/resources/data-management-plans>



give credit
get credit
cite data