

#### Facilitate Open Science Training for European Research







#### Why is data management important? And how can I get started? 10 July 2015

Pauline Ward Data Library University of Edinburgh

## **Research Data Management**

- Research data management (RDM) is caring for, facilitating access to, preserving and adding value to research data throughout its lifecycle.
- Data management is part of good research practice.
- Good research needs good data.
- Take good care of your data, and it will take care of you!

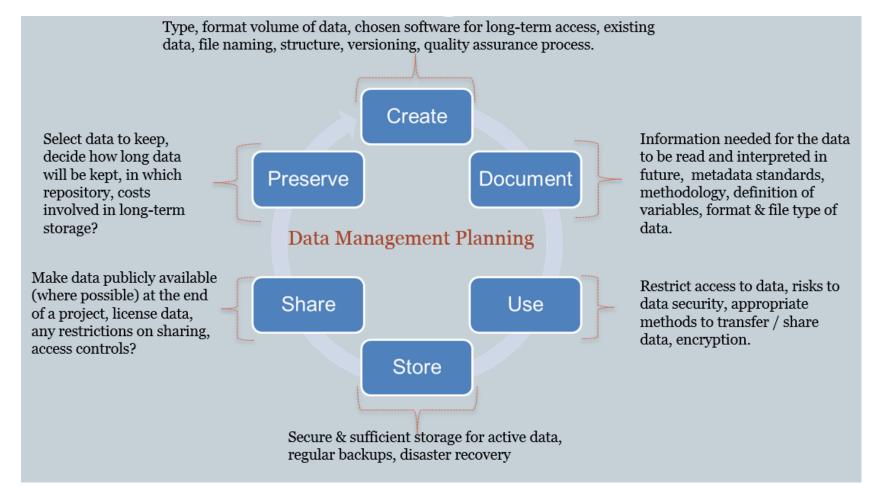


## Activities involved in Research Data Management

- Data management planning
- Creating data
- Documenting data
- Storage and backup
- Sharing data
- Preserving data



## Activities involved in Research Data Management





- So you can find and understand it when needed.
- To avoid unnecessary duplication.
- So you can finish your PhD/MSc!
- To validate results if required.
- So your research is visible and has impact.
- To get credit when others cite your work.



"Data management... if you're getting public funding to collect data, you have to leave data in a way that is usable for other people unless there [are] very good reasons not to do that. And you won't leave it in ways that are usable for other people if you haven't had good procedures for documenting it as you've gathered it. So even if you're all right, because it fits your purpose, you're diminishing its public value ..."

Professor Lynn Jamieson, Sociology, University of Edinburgh



"I think people often imagine secondary data analysis to be a highly planned, predictable activity. In practice it's rarely like that. It's fairly rare to plan to do something, to do it, and it works the way you wanted it to work first time. ... It's important to log what you do as you do it each step of the way."

Professor John MacInnes, Sociology, University of Edinburgh



"...having a clear data management plan in research, ... I think it is very helpful to know what you want from your data. So to sit down and think about:

- > What sort of data do I need?
- > Where will I get it from?
- What might be the risks or problems of me getting that data?

..and to then be able to write down how you're going to make use of that data can be very helpful because you can refer back to it back later as you are going through things."

Ellie Bates, 3<sup>rd</sup> year PhD student (Geosciences, University of Edinburgh, looking at patterns of vandalism)



## **Drivers for data sharing**



Organisation for Economic Co-operation and Development describes data as a public good that should be made available

**Research Councils UK** in its 2009 code of good research conduct says data should be preserved and accessible for 10 years +





**Research Funder** data policies increasingly demanding of institutional commitment and provisions...



## **ESRC Research data policy**

- "We believe that a structured approach to data management results in better quality data that is ready to deposit for further sharing."
- "Planning how you will manage your research data should begin early on in the research process ..."



## **ESRC Research data policy**

- "Data are the main assets of economic and social research. We recognise publicly-funded research data as valuable, long-term resources that, where practical, must be made available for secondary scientific research."
- "The data must be made available for re-use or archiving with the ESRC data service providers within three months of the end of the grant."
- "Whilst not compulsory, ESRC-funded students are strongly encouraged to offer copies of data created or repurposed during their PhD for deposit at the UK Data Service as it is considered good research practice."

## University of Edinburgh Research Data Management Policy

"All new research proposals [from date of adoption] must include research data management plans or protocols that explicitly address data capture, management, integrity, confidentiality, retention, sharing and publication."



# **Creating a Data Management Plan**

MANTRA

- ≻is a free online course in Research Data Management, created by the Data Library team at the University of Edinburgh
- has a module to guide you through the process of creating and updating your Data Management Plan
  has a Word template for your Plan.



# **Useful links**

#### MANTRA

datalib.edina.ac.uk/mantra datalib.edina.ac.uk/mantra/Data\_management\_plan\_template\_MANTRA.docx

#### Digital Curation Centre (DCC): Data management plans

www.dcc.ac.uk/resources/data-management-plans

• Economic and Social Research Council: Research Data Policy (March 2015)

www.esrc.ac.uk/about-esrc/information/data-policy.aspx

## What questions do you have?