

#5 Responsible Management of Data

V1.2 | October 2019

Contents

1. About this sheet
2. National guidelines
3. What does data and 'primary materials' refer to?
4. Principles and responsibilities
5. Research data plan
6. Transport/movement of data and primary materials
7. Sensitivity
8. Access control
9. Minimum retention
10. Longer retention
11. Sharing and banking

Continued overleaf

1) About this sheet

This sheet in the Research Integrity Resource Sheet series contains guidance about responsible management of data over the lifecycle of a project.

2) National guidelines

The [Australian Code for the Responsible Conduct of Research \(2018\)](#) is the Australian standard for research integrity/the responsible conduct of research.

The [Australian Code \(2018\)](#) is complemented by a good practice guide, [Management of Data and Information in Research](#).

This resource sheet provides advice to Griffith University researchers to assist them to adhere to the [Code](#) and the [Good Practice Guide](#).

3) What does data and 'primary materials' refer to?

A useful definition of, and discussion about, data (at least in human research) can be found [Chapter 3.1 of the National Statement \(2007 updated 2018\)](#) in Element 4.

At 2. [Management of Data and Information in Research \(2019\)](#) refers to data including:

... primary research records such as laboratory notebooks, transcripts of interviews or notes of observations.

In discussing source materials, it states it:

...may also include 'raw materials' such as geological samples, soil samples or biological material, or physical or digital objects such as artefacts, questionnaires, sound recordings or video that are the source of data or information used in the project.

Use in this resource of the term primary materials is intended to include both the essential foundations that underpin the data that will/have been analysed and the source material that was analysed.

The specifics of the required primary materials, their use/role and need for retention will be shaped by the (sub)discipline, methodology and project design.



#5 Responsible Management of data and primary materials

- 12. Research reuse
- 13. Wider use
- 14. Record keeping
- 15. Ownership, Copyright and intellectual property
- 16. Strengthened export controls considerations
- 17. Breaches of the Code
- 18. Scope of these matters
- 19. Sources of advice and information

4) Principles and responsibilities

The [Australian Code \(2018\)](#) at **Principles 2, 3 and 7, Institutional Responsibilities 1, 2, 3, 7 and 8** and **Researcher Responsibility 22** relate to this responsible management of data and primary materials.

PRINCIPLES

P2 Rigour in the development, undertaking and reporting of research, which requires that research be characterised by attention to detail and robust methodology and that researchers avoid or acknowledge biases.

P3 Transparency in declaring interests and reporting research methodology, data and findings, which requires researchers to share and communicate research methodology, data and findings openly, responsibly and accurately

P7 Accountability for the development, undertaking and reporting of research so as to comply with relevant legislation, policies and guidelines and ensure good stewardship of public resources used to conduct research.

INSTITUTIONAL RESONSIBILITIES

Section 2 (pp2-4) of the [Data Management good practice guide](#) describes the institutional responsibilities with regard to the responsible management of data. This resource sheet outlines and links to Griffith University's services, guides, training, policies and procedures that address those responsibilities.

RESERCHER RESONSIBILITY

R22 Retain clear, accurate, secure and complete records of all research including research data and primary materials. Where possible and appropriate, allow access and reference to these by interested parties.

Further guidance with regard to the responsibilities of researchers can be found in Section 3 (pp4-7) of the [Data Management good practice guide](#).

5) Research data plan

Formulating and maintaining a research data plan can be an essential component of a successful project (especially for collaborative research), assist with adhering to the principles and responsibilities of the Australian Code (2018) and help researchers avoid common missteps. Below is a summary of the items which should be considered for inclusion in the research data plan:

- Ownership, copyright and intellectual property of the data and primary materials
- Any human research ethics requirements including:
 - privacy and/or confidentiality
 - cultural sensitivities
 - discussion about required minimum retention and consent for longer retention

#5 Responsible Management of data and primary materials

Griffith University Research Integrity web page

<https://www.griffith.edu.au/research/research-services/research-ethics-integrity/research-integrity>

ON THE WEBPAGE

❖
[Link to Australian Code](#)

❖
[Link to Griffith University's responsible research policy](#)

❖
[The Research Integrity Resource Sheets](#)

❖
[A resource paper about HDR candidate research outputs](#)

❖
[List of RIAs and their contact details](#)

❖
[Aboriginal Knowledge and Intellectual Property Protocol Community Guide](#)

❖
[Research Data Management](#)

❖
[International links](#)

- whether consent will/has been obtained for the retention of data in a de-identified form, or if permission has been obtained for the reuse of that data
- Discussion about storage and security of data and primary materials across different elements of the project's lifecycle
- Discussion about post project archiving datasets, including location and custodial arrangements, key metadata, data or file documentation, durable file formats, and licensing data for reuse post project.

6) Transport/movement of data

This refers to any transport/movement of data/primary materials between locations (whether physical or digital).

This includes movement of data or primary material between collaborators, and the field and the office.

This can be especially important if there are security, privacy/confidentiality, risk or ethical sensitivity or other issues that could be a source of harm.

One strategy is to transport/move the data or primary materials in a coded form and take measures to separate the code key and the information. The consequence of this being a single occurrence of unauthorised access could not result in the data or primary materials being decoded.

The required sophistication, complexity and security of these arrangements (including the coding of the information) should be proportionate to the risks and ethics sensitivities involved.

7) Sensitivity

The Commonwealth and State (ACT, NSW, NT, QLD, TAS, VIC) privacy legislation define very specific kinds of identified personal information as sensitive:

- racial or ethnic origin,
- political opinions or memberships,
- religious beliefs or affiliations or philosophical beliefs,
- membership of professional or trade association or a trade union,
- sexual preferences or practices, or
- criminal record

The privacy acts have specific direction for sensitive information with regard to access/collection/generation, use, publication/sharing, security, changes/control and consent.

From an ethical standpoint, individuals may have a broader set of information they would consider sensitive – generally information that could expose them to risk (even if that is only discomfort) if it were to become known by third parties.

#5 Responsible Management of data and primary materials

Griffith University digital data resources, guides and services

[Best practice guidelines for researchers: Managing research data and primary materials. Contact library@griffith.edu.au for further research data planning support](#)



[Research Storage Services - Griffith University offers various storage services to all researchers and research students affiliated with the University.](#)



[More information on data storage, computation and data capture for Griffith researchers](#)



In cases where the legal requirement listed above don't apply, individuals may have similar expectations for information they might consider sensitive.

8) Access control

Access control refers to password gateways, encryption and other security features intended to limit the unauthorised access to the data/primary materials.

This may be used to limit what external unauthorised parties can access, but can also be used within a research team.

For example – Perhaps only some members of a research team should be able to access personally identified data. The rest of the team should only be able to access data where personal identifiers have been removed. This might be necessary to conceal the participatory status of individuals to preserve the voluntary nature or to negate/minimise the risk (such as a reputational/social risk).

9) Minimum retention

The primary reason for minimum data retention periods is so the data, and in some cases the primary material, can be produced to substantiate a claim in a research output.

Griffith University's registered retention periods reflect the minimum periods listed by the 2007 version of the Australian Code.

The following refinement is recommended. This adheres to the Australian Code (2018) and will be explored the next time the University's disposal schedule is reviewed. A researcher who follows the below recommendation would still meet the minimum retention period described by the current schedule.

Project/situation	Min. retention
Clinical trials	15 years
Other clinical research	12 years
Gene therapy/modification	Permanently
Implanted medical device	Permanently
Work is of community or heritage value (see below)	Permanently, preferably within a national collection
All other research	5 years
Research involving children/young people	+18 years beyond the minimums discussed above
Findings contested or alleged breach	+10 years beyond the minimums discussed above and the conclusion of any formal investigation
Research output is only for student academic assessment	2 years

Suggested reading

p1 of 2

Caring for Data: Law, Professional Codes and the Negotiation of Confidentiality in Australian Criminological Research.

[Paper](#) | January 2005

Creating a Community of Data Champions

[Paper](#) | February 2018

Figure errors, sloppy science, and fraud: keeping eyes on your data

[Paper](#) | March 2019

Guest Post: Encouraging Data Sharing: A Small Investment for Large Potential Gain

[Scholarly Kitchen](#) | January 2019

Indigenous data sovereignty

[Book](#) | January 2019

The main obstacles to better research data management and sharing are cultural. But change is in our hands

[LSE Impact Blog](#) | November 2018

10) Longer retention

- (i) There are generally three reasons researchers may wish to keep research data beyond the minimum retention periods discussed above: the information has heritage, cultural or other value that warrants its retention – sometimes it would be disrespectful to participants not to retain the data for longer
- (ii) the researcher knows the information would support further analysis, so should be retained for reuse – there could be compelling ethical reasons for this retention (see below)
- (iii) there is a potential wider use for the data/primary materials.

Increasingly funding bodies and some publishers have been encouraging researchers to share data/primary materials with other researchers. It is Griffith University policy that data should be shared (subject to ethical constraints). See 11 (below) for more on data sharing.

10.1 ETHICAL REASONS FOR DATA RETENTION/REUSE

There three ethical reasons why it can be ethical to retain and reuse data/primary materials:

- 1) The collection of the data involves significant risk/burdens (especially if this is upon participants).
- 2) The participants are members of a 'highly-researched' population.
- 3) The participants are vulnerable.

10.2 PERMISSION FOR LONGER RETENTION

It may be necessary to seek permission/consent for the retention/reuse.

- 1) HUMAN RESEARCH – From participants and/or gatekeepers. Refer to [Booklet 42 of the GUREM](#) for further guidance on this topic.
- 2) The permission of the licensor, custodian, source, owner gatekeeper of the information may also be required.

11) Sharing and banking

As was discussed in 10, funding bodies, journals, the Australian Code (2018) and University policy encourages researchers to bank and share data and primary materials. Data sharing reflects **Researcher Responsibility 22**.

Where ethical (such as confidentiality, risk and consent), privacy, commercial, intellectual property and permissions are a factor, Griffith University should take appropriate steps to mitigate the concern, annotate the data to record this has been done and obtain the necessary agreements.

12) Research reuse

The publication ethics directive to only publish a research analysis once (see

#5 Responsible Management of data and primary materials

Suggested reading

p2 of 2

Opinion 05/2014 on Anonymisation Techniques - ARTICLE 29 DATA PROTECTION WORKING PARTY

[Paper](#) | April 2014

Publishing and sharing data papers can increase impact and benefits researchers, publishers, funders and libraries

[LSE Impact Blog](#) | October 2016

Research Ethics and New Forms of Data for Social and Economic Research

[Paper](#) | November 2016

Safeguards for human studies can't cope with big data

[Nature](#) | April 2019

Sensitive Data can be Shared

[YouTube](#) | November 2014

Whitepaper: Practical challenges for researchers in data sharing

[Paper](#) | December 2018

Who Owns Patient Data in Clinical Research?

[Collabrx](#) | March 2019

RIRS #4) does not preclude a researcher conducting additional analyses on existing data. As was discussed at 10.1 there might be compelling ethical reasons to reuse existing data, rather than collecting new data. Such reuse is consistent with Australian Code (2018) **Principle**.

P7 Accountability for the development, undertaking and reporting of research...

Ensure good stewardship of public resources used to conduct research information, including exploring whether they are willing to be contacted about future research projects (see GUREM [Booklet 22](#) for more information about consent an [Booklet 42](#)) for more about retesting in human research similar permissions should be sought when negotiating access to existing documents, data and primary records.

13) Wider use

In addition to extra research uses such as retesting and data sharing, research data from materials can be used for research related activities such as to illustrate conference presentations and research outputs. They may also be useful for wider purposes such as in educational and promotional general. Consent/permission must also be sought for these uses.

14) Record keeping

It is essential that good records are maintained about the matters discussed and decisions made in this resource sheet, including data documentation and relevant meta data. This should be documented in the research data plan discussed at 5 on page 2.

15) Ownership, Copyright and intellectual property

When conducting collaborative research it is essential both to have discussions about ownership of the primary materials and to [establish](#) copyright and intellectual property. This should be covered in a collegiate conversation and being confirmed via email.

Advice on these matters can be obtained from [Griffith Enterprise](#), the University's [Information Policy Officer](#) and the [Office for Research](#).

A shared understanding of these matters should definitely be reached by collaborating researchers and documented in the data plan.

16) Strengthened export controls considerations

Australia has a number of strengthened export controls. This includes such matters as exports to countries, companies or individuals to whom sanctions or export controls apply. Australia has an economic, diplomatic or strategy interests related to the export/sharing/publication of military technology, knowledge and goods. Australia's strengthened export controls arrangements

#5 Responsible Management of data and primary materials

OR CONTACTS

Manager, Research Ethics and Integrity

Tel: (07) 373 54375
research-ethics@griffith.edu.au

Policy Officer, Research Ethics and Integrity

Tel: (07) 373 58043
research-ethics@griffith.edu.au

Research Ethics Systems and Support Officer

Tel: (07) 373 5 2069
research-ethics@griffith.edu.au

apply to circumstances where technologies/goods/knowledge should be characterised as 'dual use'.

The implications of Australia's strengthened export controls may impact upon sharing of data and primary materials within a research team, with collaborators, reference groups or peer reviewers. It may also require additional security, which online services can be used and require additional data encryption and projection.

Researchers who are not confident how these arrangements apply to their work should contact the [Policy Officer, Research Ethics and Integrity in the Office for Research](#) (see contact details left).

In light of the above, Griffith University researchers are encouraged:

- (i) when seeking consent in human research to explore whether participants are willing to provide specified, extended or unspecified consent for the further research use of their information.
- (ii) Check whether they are willing to be contacted about participating in future research.

17) Breaches of the Code

Section 4 (pp7-8) of the [Data Management good practice guide](#) discusses breaches of the Australian Code (2018) relating to the management of research data and materials.

Griffith University has produced a resource paper about the investigation of alleged breaches/complaints.

18) Scope of these matters

These guidelines apply to all Griffith University research, regardless of whether the work requires ethical or biosafety clearance, the expertise of the parties, the methodology/design used, and/or the funding for the work (if any).

19) Sources of advice

Researchers are urged to consult the [other resource sheets](#) produced in this series. Researchers with further questions should consult:

A Research Integrity Adviser ([RIA](#)) (whether in their Group or elsewhere in the University) or the Office for Research.

HDR candidates and supervisors can also contact the Griffith Graduate Research School for advice.

For data planning advice, contact library@griffith.edu.au

For data storage advice, contact eresearch-services@griffith.edu.au

This Research Integrity Resource Sheet which was developed by the Office for Research, Griffith University, is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](#)

