Create, organise, keep and find: Data management practices of health and medical researchers

Michelle Krahe[1], Julie Toohey[2], Malcolm Wolski[3], Paul Scuffham[4], Sheena Reilly[1]

1. Health Group, Griffith University, Gold Coast, Australia;
2. Library and Learning Services, Griffith University, Gold Coast, Australia;
3. eResearch Services, Griffith University, Nathan, Australia;
4. Menzies Health Institute Queensland, Griffith University, Gold Coast, Australia

Setting the Scene:

Research data management (RDM) is part of every research process and includes:
- How you create data and plan for its use;
- Organise its structure and maintain integrity;
- Keep it stored securely and well preserved, and;
- Ensure others can find, access, integrate and reuse it.

RDM best practice is of particular importance to higher academic Institutions. Therefore, understanding researcher practices will help articulate planning strategies for institutional services and support, and outline essential areas for future investment in data management.

Objective:

To understand the current RDM practices of health and medical researchers to assist in designing interventions for future RDM skills training and development, process and policy, and support services.
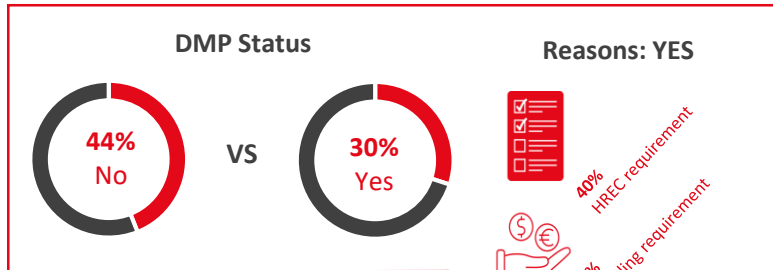
Methods:

Participants were invited to complete an online survey, developed through an iterative process between the study investigators, in consultation with research leaders, and a review of the published literature. Participation in the study was voluntary and approved by the HREC of Griffith University.

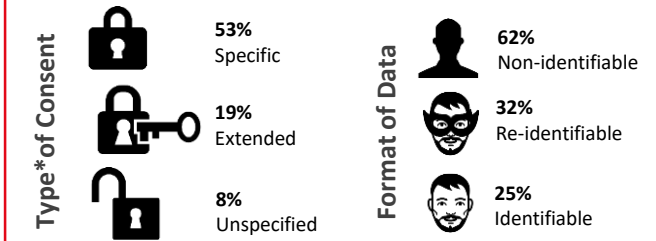## Research Data Management Practices

A convenience sample of 81 members of a research Institute, comprising of 68 academic staff and 13 post-graduate students were collected. Our evaluation indicates that RDM tasks associated with planning of research, data collection, and processing and analysis of data vary greatly and likely influenced by the level of research experience and RDM practices within immediate teams. Selected data from the survey are presented below.
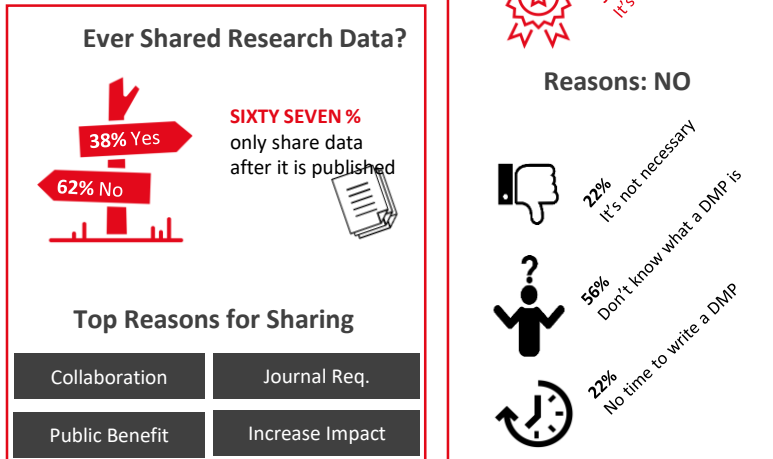
Create Data

DMP Status

44% No VS 30% Yes

Reasons: YES

40% HREC requirement
9% Funding requirement
95% It's good practice

Reasons: NO

22% It's not necessary
56% Don't know what a DMP is
22% No time to write a DMP

Find and Share Data

Ever Shared Research Data?

38% Yes
62% No

SIXTY SEVEN % only share data after it is published

Top Reasons for Sharing

Collaboration	Journal Req.
Public Benefit	Increase Impact

Organise Data

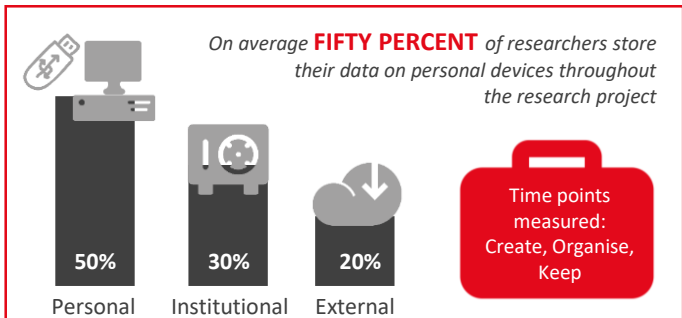*Preparing for future reuse and sharing of data requires the correct type of consent and formatting of data*

Type* of Consent
- 53% Specific
- 19% Extended
- 8% Unspecified

Format of Data
- 62% Non-identifiable
- 32% Re-identifiable
- 25% Identifiable

*According to the NHMRC National Statement of Ethical Conduct in Human Research 2007 (updated May 2015)

Keep Data

*On average **FIFTY PERCENT** of researchers store their data on personal devices throughout the research project*

- 50% Personal
- 30% Institutional
- 20% External

Time points measured: Create, Organise, Keep

Key Outcomes:

- ✓ This study recognises that targeted institutional strategies will strengthen researcher capacity, instil good research practice, and overall improve health and research data quality.
- ✓ Outcomes from this study will be used to design best practice training and education, support services, and guidelines to address areas of need.

For more detail about this study contact
Michelle Krahe
m.krahe@griffith.edu.au

Griffith UNIVERSITY Queensland, Australia