

Developing Research Data Management at a University Hospital Library – an International Collaborative Project

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Presentation outline



The Project

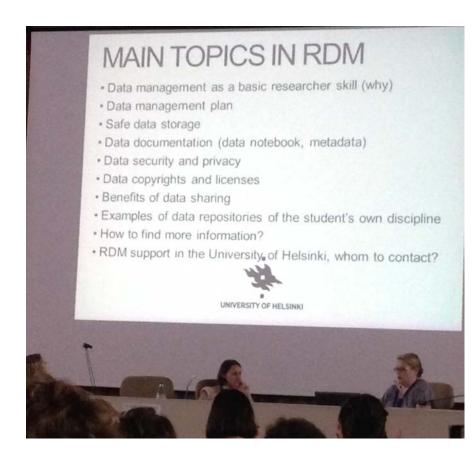
- 1. Background (official version and the backstory)
- 2. Objectives
- 3. Methods
- 4. Results
- 5. Conclusion and lessons learned

EAHIL 2014 Rome



Presentation on about RDM at Helsinki University Medical Campus Library Terkko

An opportunity for an international collaboration – but how to make it work?



Quick facts about Helsinki University



In Helsinki Finland

8000 employees 35 000 students 4700 graduate students

Helsinki University Medical Campus Library Terkko

- Offers research data services
- Gives RDM training for graduate students
- Leads a national data
 management planning tool –
 project
 https://www.dmptuuli.fi





Quick facts about Barwon Health

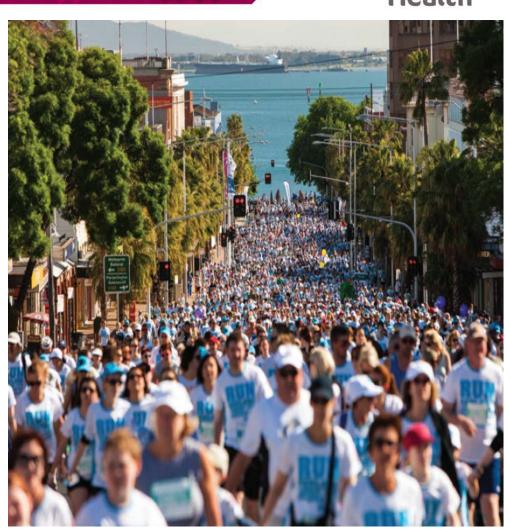


Geelong Hospital & 21 facilities in south/west regional Victoria

Catchment population 350-500,000

Largest employer in the region

- 6,600 staff , ~5,000 clinicians
- >400 beds, all acute services (except neurosurgery), + rehabilitation, aged care, community health, health promotion
- Teaching & Research
 - Joint hospital/university positions => clinician researchers
 - 450 junior doctors have a 'research imperative'
 - 2014 special fund to develop BH's academic & research profile -> The Project



OUR VALUES / RESPECT / COMPASSION / COMMITMENT / ACCOUNTABILITY / INNOVATION

Literature review



Health libraries' involvement in RDM depends on:

- 1. The organisation has a research mission
- 2. Economic drivers, government funding, regulations & codes
- 3. Capitalising on libraries' existing research services & infrastructure
- 4. Developing new skills
- 5. Resources to enable flexibility
- 6. Experimentation

Research Data Project July-Sept 2015



Purpose:

to provide the information for developing good research data management (RDM) practices, guides and services to assist researchers to manage their data well, in the context of the research lifecycle.

Objectives



- 1. To develop library and research services at Barwon Health
- 2. To draft a research data policy
- To create a data management planning (DMP) checklist
- 4. To mentor Barwon Health librarians in the skills associated with managing research data.

Methods



- Exploratory and consultative
- Interviews with key informants discussion points
- Desktop research
- Mentoring, role modelling and informal teaching

Results



- Mapped current RDM practices in the research lifecycle and identified gaps
- Policy and checklist drafted, consulted widely, endorsed by executive governance
- Skills development

Research data lifecycle – existing support

- Research Ethics, Governance & Integrity
- Research design support
- Guides
- Library literature search support + training

Re-using data

- •follow-up research
- new research
- undertake research reviews

Preserving data

- back-up and store data
- archive data
- control access
- establish copyright
- •promote data

Data analysis

- Interpret and derive
- produce research outputs
- prepare data for preservation

Project start up

- locate existing data
- •collect data (experiment, observe, measure, simulate)

RedCap end user support + training

Data warehouse

Processing data

Proposal planning &

writing

•plan data management

design research

ethics approval

- describe data. capture and create metadata
- anonymize data

- Principal Investigators' help is crucial
- Learning by doing (error => success)
- **RFGI**

Support for statistical analysis

Basic data analysis software



Gaps & problems

Hard to reuse data

- Ownership unclear
- Lack of documentation
- Concerns of security and confidentiality

Re-using data

- •follow-up research
- •new research
- undertake research reviews

Missing infrastructure Preserving data

- Missing data archive
- Who is responsible for preserving data?
- Paper copies of old data lie around

and policy

- back-up and store data
- archive data
- control access
- establish copyright
- promote data

Data analysis

- Interpret and derive
- produce research outputs
- prepare data for preservation

Hard to find information needed

- Lack of data management policy (policy and checklist now drafted)
- Support needs are greater than resources

Proposal planning & writing

- design research
- ethics approval
- •plan data management

Project start up

- locate existing data
- collect data (experiment, observe, measure, simulate)

- Security concerns
- Lack of skills, training and access to training

Processing data

- describe data, capture and create metadata
- anonymize data

Data governance is not an easy task

- Security concerns
- Theory/practice gap
- Learning by doing (error => success)

IT infrastructure doesn't support tools needed for analysis

- Lack of reference management software
- Lack of systematic review support



Conclusions and lessons learned



- Australia & Finland: hospitals and university libraries at various stages of maturity of RDM practices; being a research organisation is a driver
- Strength in Australia = national guidelines, ANDS
- Strength in Finland = national technical infrastructure development
- Critical need for librarians' skill development, plus resources enabling flexibility and willingness to experiment
- An international project is a good learning opportunity, comparisons and single focus give time to explore and develop creative solutions

Next steps



Implement recommendations of final report, including:

- Pilot RDM in a research unit, implementing policy provisions, creating a registry (catalogue) of research data sets with a metadata standard
- Research literacy training workshops in the Library (following training needs analysis with ethics approval to model good research practice)

More international collaborations!