Making RDM services sustainable: Lessons from 4 UK institutions

Mary Donaldson
University of Glasgow
The Funder Requirements Project 2018

- Part of the Jisc Business case and costings for RDM project
- Research and summarise what Research Funder policies require in terms of Research Data Management (RDM), drawing on funder policies and previous work in this area.
- Determine what RDM activities funders will support through grant funding.
- Examine how grant funding is and can be used by institutions to support RDM activities.
- Produce guidance for use in the Jisc Business Case and Costing for Research Data Management (BCCRDM) Project.
A cautionary note…

• Our initial intention was to gather examples of how grant funding was being used to pay for RDM activities

• Funders couldn’t provide examples but said that potentially anything was in scope if it was well justified

• Researchers couldn’t provide examples as it isn’t done routinely

• Widened out the scope of our case studies to look at sustainability of RDM services more generally
Institutional case studies
Glasgow’s timeline in RDM

2012:
- Initial foray into RDM (draft policy and RDM webpages)

2013:
- Research data registry up and running

2014 / 2015:
- Establishment of RDM service
- Start trying to make service fully sustainable

2016:
- Harmonised policies
- Extended our training offerings
- Continue trying to make service fully sustainable

2017:
- Staff posts made permanent
- Still trying to make service fully sustainable

2018:
- All PGR students need a DMP to progress to 2nd year
- Still trying…(maybe starting to get somewhere?)
Our service provision

- Research Data Management - planning support
- Training - formal, informal and online
- Enquiry service and webpages
- Institutional data repository - Enlighten: Research Data
The issues that never go away

**Issues:**

**University:**
- Initial resistance to creating / funding a service.

**Researchers:**
- Worries about misinterpretation and plagiarism
- ‘The policies will change in two years so why bother?’
- ‘What an expensive waste of time’.
- ‘Creating documentation take too long’.

**Other things:**
- How to manage preservation?
- How to determine which datasets have long-term value?
- **How to cost RDM activities into grant applications.**

**University of Glasgow**

- Further integration of systems
  - DMPonline with research system
  - Live storage with data repository
  - System field for funding for RDM activities
- Requirement for a DMP in all funding applications.
- Clarity on timescales from funders.
- Recognition of datasets as legitimate research outputs.
- **Clearer guidance from funders on eligible RDM costs and how to justify.**
- Greater resilience within our RDM service.
Costing RDM activities

- Data storage
- Data archiving
- Transcription services
- Anonymisation / de-identification
- Access to commercial datasets
- Dataset preparation for deposit
- Data management staff for project when less than 1 FTE
- How long is a piece of string?
Making systems work

- Can we make the system ask for RDM costs?
  - All applications from Glasgow have to go through this system.
  - Ideal solution would routinely bring up the issue of costing RDM activity.
  - The more regularly the question is asked, the more likely it is to be addressed.
- Can we make the people who use the system ask about RDM costs?
  - The next best thing—only project coordinators enter costing information about applications on the system.
  - Train the coordinators so they understand the need for good RDM and the potential to cost RDM activities into applications.
  - Training the coordinators will also create local sources of RDM information with links to research groups.

**BUT**

- Recent development:
  - Still no movement on the research system...
  - …the RDM service has been invited to speak to the research coordinators about costing RDM activities

Extensive development roadmap for new system.

Team in charge of modifications are unconvinced of need for addition as a priority

We haven’t given up!

High staff turnover in project coordinator roles.
Loss of expertise from this cohort.
Large opportunity loss to the University.
• Research Data Working Group setup in 2009 to review researchers’ data management practices. Final report recommended establishment of an RDM Service https://doi.org/10.17037/PUBS.03409897

• RDM Service setup in 2012 as part of Archives & Records Management Service. Wellcome Trust Infrastructure Support Fund covered 2012-15 period.

• Research Data Manager became permanent role in Library & Archives Service in 2015.

• Broadened remit to cover other reusable objects – software, collection tools, etc. – in 2016.

• ‘RDM Service’ removed from literature in 2018, replaced with ‘Research Data Manager based in Library & Archives Service’ to emphasise integration with wider unit.
Recognise resource needs and allocate costs

**GENERAL GUIDANCE**
- Written material on Service Desk / SharePoint
- Training

**DIRECTED GUIDANCE**
- Submit question via ServiceDesk tool
- Display FAQ based upon text

**1-to-1 advice**
- Face-to-face, telephone, or email advice

Work with studies to:
- Determine cost rules
- Identify resources needed at each stage
- Identify projects that have performed similar work
- How do they obtain resource?
  - Borrow, purchase in UK & export, or purchase in-country
Data collection scenario

**Labour**
- Project staff develop, implement & monitor SOPs
- Field workers to collect data
- IT staff to prepare devices for use in field
- Support staff to setup meetings

**Equipment**
- Mobile devices (tablet, phone, audio recorders, drones)
- Licence for specialised collection software
- Tablet enclosure, locks & other security

**Services**
- Pay for data provision e.g. public health organisation
- Data preparation: anonymization, translation
- Technical infrastructure (ISO 27001 hosting, domain, etc.)

**Facilities**
- In-country lab or other facility with analysis devices
- Local storage & processing environment
Support required

POLICIES & PROCEDURES
- Research Governance & Integrity
  - Ethics, human tissues act, clinical trial regulation, research governance & conduct, etc.
- Research Data Management
  - DMPs & SOPs on secure collection, storage & transfer de-identification, etc.
- Research Operations
  - Contracts collaboration agreements, DTAs
- ORK Service
  - Open Data Kit
  - 3D printer
  - Tablet lending
- Legal Team
  - GDPR and country regulations
  - Also provide expertise to research operations
- Procurement
  - Procure materials needed for research

LEGAL

IT Services
- DB development
- Storage & transfer services
- Device setup

Resources
Lauren Cadwallader  Deputy Head of Scholarly Communications
Danny Kingsley Deputy  Director of Scholarly Communications
Initial sustainability proposal

Guidance from RCUK (April 2013) — it is permissible to recover costs from grants through direct charges or overheads, but institutions must not charge twice... it is permissible for institutions to recover costs of RDM facilities as other Small Research Facilities...

Cambridge’s proposal

- Establish the Research Data Facility as a Small Research Facility according to the Transparent Approach to Costing (TRAC) methodology.
- Recover facilities costs from grants as directly allocated (DA) costs. This option had two significant advantages — transparency to the funder of the Facility’s activities and awareness raising with researchers for the need to consider RDM seriously (both time and money).
- The total direct annual cost of the Facility would be less than £200,000, and would cover 3.2 FTEs, and other service costs, but not repository costs, which would be charged directly.

How much to charge?
The Cambridge team investigated many different models for charging RDM services to grants:

- Ideally, the Facility cost would be accurately measured based on information provided in a Data Management Plan, but not all funders require DMPs, and DMPs do not necessarily estimate the amount of RDM assistance required during the lifetime of the grant.
- Charging based on the number of people in a research team. Since the training component of the Facility was measurable by attendees to workshops, this was investigated as an option. But, this information was not easy to extract from grants and this could cause problems in charging for collaborative grants.
- Charging every grant using the Facility services an amount proportional to the size of the award. But, there was no evidence that large grants required more Facility assistance.
- Charging every grant using the Facility a flat rate. This model had the fewest ‘buts...’ and was also the most cost effective in terms of administration. This model was included in the eventual business case.

Funder feedback

The business case for funding the Research Data Facility from grant income was put out for consultation with members of the research community at Cambridge. The business case was then presented and cleared through the necessary committees of the University. Once mature, the business case was shared with research funders to ensure that they would be willing to support the proposal.

Wellcome Trust — would not allow direct charging to grants for this facility. They considered these costs to be overheads, which they do not pay.

Cancer Research UK — was positive about the transparent approach to costing. On discussion with senior management at CRUK, they agreed to consider RDM costs as direct costs on grant applications, but only on a case-by-case basis, if appropriately justified in the application.

RCUK — considered the proposal but decided that these costs had to be charged to grants as overheads instead of direct costs.

Eventual Sustainability Solution

In 2017, the Office of Scholarly Communication (of which the Research Data Facility is part) was subject to a University review [8] of service provision and staffing levels. The highly positive outcome of this review supported an application to the annual University Planning Round for ongoing central funding. This was a lengthy process (almost a year), but the application was granted, meaning that the service — in the form outlined in the sidebar above — is now financially stable.

The data repository storage is hosted in the main University Data Centre and is paid for by the University Library. The cost for long-term storage of research data is charged to researchers’ grants at a rate of £4/GB, for datasets over 20GB. Storage for datasets under this size is not charged to grants.
It took 3.5 years to secure a long-terms funding model for the Research Data Facility.

During this time…

- Work done during business case development to ensure management and financial systems were able to manage the costing of RDM services into grants was wasted.

- Work done to train all administrative staff involved in managing grants of the need to cost RDM services into research grants was wasted.

- Staff were kept on temporary contracts for years (and some were lost).
At Lancaster…
…RDM staff are funded from Library personnel budget

…archival data storage provided in Lancaster University Data Centre (CapEx funded)

BUT… they want to demonstrate the value of services staff currently receive, so operate a show-back model

• should there be a change in their cost-recovery model in the future, researchers should already be aware of the potential costs of data management.
Lessons learned

• Everything takes longer than anticipated
• Supportive senior management is essential
• Communication is important, with all stakeholders
• Justification of costs is the key to getting money for RDM activities (internally and externally)
• Stay positive!
Links to outputs

Systematic review
https://doi.org/10.5281/zenodo.1421063

Case studies
LSHTM  https://doi.org/10.5281/zenodo.1408822
Cambridge https://doi.org/10.5281/zenodo.1408857
Lancaster  https://doi.org/10.5281/zenodo.1408869
Glasgow https://doi.org/10.5281/zenodo.1409501
Thank you for your attention
Are there any questions?