

## CASE STUDY: Austin Health Research Online (AHRO)

Refers to: NSQHS Standard 1 Governance

Keywords: Clinical Governance, Information Services, Publications, Research Report

### **Introduction**

In 2014-2015 the Austin Health Sciences Library (AHSL) in Melbourne recognised the growing need for Austin Health to have an online repository, to capture the research output of the organisation and its affiliated research partners. The National Health and Medical Research Council (NHMRC) and the Australian Research Council (ARC) had recently mandated that publications arising from research supported by NHMRC or ARC grant funding had to be deposited into an open access institutional repository (or be made available via alternate open access format) within a year from the date of publication. In addition there was a requirement for the Board of Austin Health to be informed biannually of the quantity of publications produced by Austin Health researchers and staff.

Therefore to assist with meeting the mandatory funding requirements and to raise the profile of the research being conducted on the Austin Health sites, the AHSL examined the requirements for establishing an online repository.

### **Background**

AHSL had previously created an online repository utilising the free ePrints software, however this venture had not been maintained. By 2014 there was an increased awareness of the need for a repository by particular research areas in Austin Health and therefore it was a good opportunity to revisit the conversation and look into options to implement a new repository. Research statistics were being kept, however when the library's investigation uncovered that Austin Health contributed between 25 to 30 articles a week to PubMed alone, the business case became more compelling.

### **Method**

AHSL staff researched the availability of open access repository software, examined different institutional repositories within Australia and overseas, investigated different offerings from vendors who supplied and maintained repositories, and held several meetings with key stakeholders from Austin LifeSciences and Austin Hospital. Austin LifeSciences is a multidisciplinary alliance which brings together over 800 researchers from Austin hospital departments, The University of Melbourne, and institutes including: *The Florey Institute of Neuroscience and Mental Health, Olivia*

*Newton John Cancer Research Institute, Institute for Breathing and Sleep, Parent-Infant Research Institute, Spinal Research Institute, Mercy Hospital for Women and Austin Medical Research Foundation.*

During a library staff meeting attended by the CEO, the AHSL outlined the growing need for Austin Health to have a research repository. We presented an affordable, cost effective model and promoted the willingness of the Library team to build and maintain the database. The CEO supported the concept (sealed with a hand shake) and authorised funding to enable the project to move ahead. The only proviso was the start-up funds to establish a repository (project officer salary, vendor and hosting costs) needed to be expended within the existing financial year. This gave us a six week window to complete a project proposal, have it approved, and to implement a basic working model. As part of the project proposal, ongoing funding was also provisioned to be added annually to the library budget to cover yearly platform and hosting costs - staffing time was absorbed into existing library roles. On 1 July 2016 Austin Health Research Online (AHRO) was live: <https://ahro.austin.org.au/austinjspui/>

## **Results**

AHSL selected DSpace as the repository software and chose Prosentient Systems to host and maintain it. In the planning phase, AHSL staff discussed procedural options for repositories with other health libraries, determined the content that would be required for Austin Health's needs, and sought inspiration from the layout of many other DSpace repository sites. With these key components established, meta-content was harvested from PubMed into DSpace and AHRO became live with over 4,000 entries.

To initially populate the repository with content by Austin affiliated authors, a complex search strategy needed to be created for PubMed. This search filter is used weekly to ensure that new metadata is added to the repository. AHSL has plans to extend this search filter to other databases such as Embase to ensure the capture and identification of as many citations as possible. Today researchers can submit their own work to AHRO via a pre-populated form within the repository, and AHSL staff submit content weekly from PubMed.

New research submissions are marketed via the AHSL weekly Bulletin and via Twitter (@Austin\_Library). The repository enables Austin Health staff to be informed of the research being conducted across the organisation and has improved collaborative efforts and interdisciplinary opportunities. This is demonstrated through staff using Twitter to further disseminate and comment on papers published. Austin Health Corporate Communications regularly retweet and place our

postings on the Austin website. Content in AHRO is also findable via Google and in TROVE through the National Library of Australia.

## **Discussion**

Apart from tight deadlines, there were a few other challenges with implementing AHRO. The PubMed search we had built indicated many gaps in years of publication and highlighted the inconsistencies in formatting author names used in publications. On occasion no affiliation was listed, or the record only listed the first author, who might not be from Austin Health. Therefore various tweaks were needed to gather all research records which relate to Austin Health. All authors are encouraged to register with ORCID and we include this information to help distinguish them from other authors with similar names. In addition it enhances the findability of our authors.

There are further opportunities which library staff are exploring to make AHRO more robust. This includes adding content from Embase (Excerpta Medica dataBase) via a bulk upload feature, as well as including additional materials contributed such as 'Legal Deposit' corporate documents (annual report, quality of care reports etc.) to further extend the value of AHRO. Currently AHRO is built as a metadata-only repository, with the full text included only for open access materials. There is potential in the future to chase copyright permission from publishers to allow full text inclusion for other publications. In addition some publishers request that authors make their research data publically available; AHRO is able to support this requirement.

Biannually the library staff report to the Office for Research on publication outputs. This includes outlining: who has published; on what topics; from which departments/institutes, and which external organisations Austin is collaborating with. Individual departments are also using AHRO data to highlight the value of their work and AHRO is well supported in certain pockets of the organisation. Previously many departments kept an ad hoc list of their publications (some current and some not so current); some departments have placed lists of recent publications on web pages which are becoming too resource intensive to keep up to date and maintain. AHRO assists these departments with their research promotion and reporting requirements.

## **Supporting accreditation**

This project touches on many aspects of the NSQHS Standards, in particular Standard 1 (Governance). AHRO provides governance across the research outputs of Austin Health and is strongly tied to our strategic vision at Austin Health: *Changing healthcare for the better through world class research, education and exceptional patient care*. AHRO can also be used by departments

to showcase ongoing work in other areas of the NSQHS Standards. For example in 2016 the hospital published nine articles regarding the prevention of “falls” (NSQHS Standard 10) which demonstrates the work Austin Health is undertaking regarding evidence based practice in this field.

In 2016 the AHSL staff won the Austin Health *Spirit of Anzac Award* which highlighted the amazing teamwork that went into the development of the AHRO repository. Not only did they collaborate as a team, but also externally and internally with a myriad of hospital departments. This project indicates how Austin Health Sciences Library successfully pooled their expertise as a team to build and implement a publicly available repository which will play a vital role in ensuring governance across research publications at Austin Health into the future.