Just in time: integrating library services for literature searches in a hospital library setting

Jackie Edwards  
Northern Sydney Local Health District  
Jackie.Edwards@health.nsw.gov.au  
orcid.org/0000-0003-4223-3606

Katie McKnight  
Northern Sydney Local Health District  
Katie.McKnight@health.nsw.gov.au

Barry Nunn  
Northern Sydney Local Health District  
Barry.Nunn@health.nsw.gov.au

Acknowledgements  
NSLHD Libraries would like to acknowledge the assistance of Courtney Smith, TAFE NSW student in this project.

Conflict of Interest Statement  
The authors certify that they have no affiliations with or involvement in any organisation or entity with any financial interest, or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

Abstract  
Providing timely and comprehensive literature searches is a core service for hospital libraries. These expert searches are mediated across multiple databases and platforms. NSLHD Libraries have pivoted services which were largely site based, to services for staff not just off-site, but when working in isolation across the district. Immediate access to literature searches has been achieved by integrating multiple library services.

Background  
Northern Sydney Local Health District (NSLHD) has a community of almost 1 million residents (HealthStats NSW, 2022). Five libraries support a workforce of more than 10,000 staff which includes nurses, allied health staff, medical professionals, community health centers and health service managers. By adopting a strategy of continuous improvement using technology to reduce barriers, NSLHD Libraries supports the NSLHD Strategic Plan vision to be “Leaders in healthcare and partners in wellbeing.”
NSLHD Libraries
In 2020 NSLHD Libraries implemented several new resources, Springboard (OVID Discovery) Reftracker (Altarama), and Single Sign-On authentication through OpenAthens. After some months embedding these systems into library workflows, Covid-19 changed the workplace. By early 2021 it became apparent that NSLHD libraries needed to find agile ways to support staff. These new technologies enabled a pivot from services which were largely site based, to services for staff who required access not just off-site, but when working in isolation across the district. As Scott (2021) suggests services need to be re-engineered to meet the needs of staff who struggle to be released from their clinical duties. NSLHD Libraries resolved to implement an improved remote service for clinicians.

Changing environment
NSLHD Libraries staff are able to deliver services and adapt to a rapidly changing environment. In doing so this supports the main themes that underpin the NSLHD Strategic Plan (2017-2022) - Evidence Based Decision Making, Responsive & Adaptable Organisation, and an Engaged and Empowered Workforce. All NSLHD Libraries remained open during the pandemic delivering access onsite whilst simultaneously rapidly expanding service delivery offsite and for staff no longer located in their usual place of work. The messaging across the district has been clear and proactive (Haugh, 2021) resulting in a substantial increase of visits to both the NSLHD’s 5 Libraries and offsite access via Springboard.

| Year | Onsite visits | Offsite visits |
|------|---------------|---------------|
| 2019 | 71,124        | 578           |
| 2020 | 65,372        | 40,60         |
| 2021 | 80,203        | 5,195         |

Literature search service
Providing timely and comprehensive literature searches is a core service across the district. These expert searches are mediated across multiple databases and platforms. They contribute to patient care, clinical guidelines, publications, Quality Improvement projects and evidence-based healthcare. In 2020, 423 searches were completed. This increased by 13% to 478 in 2021. 306 of the searches received in 2021 were for clinical research, policy/guideline updates or patient care.

Workflows
Reftacker, a customer relationship management database (CRM) enables customised forms which clients use to request and receive responses to services such as literature searches. Library staff can respond to patron requests whilst onsite or working from home (McKnight & Nunn, 2020). Completed literature searches are returned via the same form with access instructions and an attached Word document. This created several barriers to obtaining articles in full text, and also
created work flow bottle necks. Firstly, users needed to log into the system to download articles or request an article through NSLHD Libraries document delivery service. Any new users needed to create a Springboard account onsite, an additional barrier to accessing the full text. Citation information needed to be copied and pasted into the Discovery search box to locate the required articles.

Removing barriers
Time is one of the 8 pain points identified by Laera et al. (2021) when users are accessing clinical information. With staff offsite, furloughed, upskilling, or taking on extra tasks, time is even more compromised. How could some barriers be removed to provide immediate access to search results? NSLHD Libraries set out address these issues.

Literature service review
NSLHD Librarians reviewed 5 completed literature searches in a range of topics and databases for patient care for the NSLHD. This amounted to 300 references in total. The aim of the sample was to address the following issues: Firstly the number of articles available as full text via NSLHD Springboard; secondly articles requiring the document delivery service; and thirdly any technical issues.

Results
Results were encouraging, 70% of the articles were available immediately in full text. The remaining 30% were conference proceedings and results from obscure journals. These results indicate depth in the NSLHD Libraries collection and reflects the expertise in the selection of relevant journals. Of the 60 citations in an X-Ray search for example, 52 articles were available as full text and only 8 required document delivery (ILLs). No access or authentication issues were identified.

| To assist in the design of a study to look at the effect of a chest X-ray interpretation tool in the Emergency department. | 60 (total citations) | 52 (NSLHD holdings) | 8 (ILLs required) |

Solutions
NSLHD Library staff set out to identify and remove barriers such as the need to fill out an additional form, copying and pasting citations, and the need to contact library staff for assistance. Library staff created a new EndNote output style incorporating Springboard URLs for literature searches. Then by activating the “Auto format” in Microsoft Word the citations could be hyperlinked, ensuring that the user receives direct hyperlinks into Springboard.
Trial of the new service
NSLHD Libraries set up a trial of hyperlinking literature searches in July and August 2021. A short survey for users was added to our library forms for feedback. Survey results, though small, were positive, with no issues reported. Additionally no questions or queries were received via the NSLHD’s phone and email address. Training sessions for the Library team were set up via video call and work instructions provided. In September 2021 the new hyperlinked search results were implemented across the district.

Conclusion
Hyperlinking citations directly to Springboard gives immediate access to articles. For articles not held at NSLHD, an article request form pops up. Details are prefilled using OpenURL functionality through Reftracker. The implementation of single sign-on to our library systems, including our Discovery Service, has meant the complex process of remembering additional logins and passwords are no longer required. Users are familiar with their institutional staff logins and use these to obtain access. This integration represents significant time saving for users and library staff.

References
Haugh, D. (2021). Communicating with medical library users during COVID-19. *Journal of the Medical Library Association, 109*(1), 107-111. https://doi.org/10.5195/jmla.2021.1003
HealthStats NSW. (2022). *Population estimates Local Health Districts NSW: All ages for Persons*. NSW Government. Retrieved 1/02/2022 from https://www.healthstats.nsw.gov.au/#/indicator
Laera, E., Gutzman, K., Spencer, A., Beyer, C., Bolore, S., Gallagher, J., Pidgeon, S., & Rodriguez, R. (2021). Why are they not accessing it? User barriers to clinical information access. *Journal of the Medical Library Association: JMLA, 109*(1), 126.
McKnight, K., & Nunn, B. (2020). These are not normal times... Implementing a customer relations management system during a pandemic. *Journal of Health Information and Libraries Australasia, 7*(3), 13-18.
Scott, R. (2021). A best-fit solution: transforming an NHS Library and Knowledge Service in readiness for a new hospital building without a traditional library space. *Journal of the Medical Library Association, 109*(3). https://doi.org/10.5195/jmla.2021.1167