



JOHILA

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Editorial

Daniel McDonald

Librarian, Darling Downs Health | Editor, JoHILA

HLAnewsed@alia.org.au

Welcome to the first issue of the second volume of JoHILA, the *Journal of Health Information and Libraries Australasia*. While recently cataloguing the fourteenth edition of the book *Berry and Kohn's operating room technique* I was flicking through the contents and happened upon the preface to the first edition of this book. Written in 1955, Edna Berry and Mary Kohn, surgical nurses from Cleveland in Ohio, first outlined the origins of the book and its purpose, then concluded with "expressions of grateful appreciation and thanks to those people who by their interest and cooperation supported them". Included on the list was "To Mrs Geraldine Mink, librarian, for her assistance". As well, while recently collating material for the April 2021 edition of HLA Alerts I came across an article published on 12 February 2021 in the *British Dental Journal*. The article was a lengthy interview with Helen Nield marking 25 years since she began working for the British Dental Association Library. The library itself celebrated its centenary in 2020.

Though published 66 years apart, it was so heartening to read of the work of health librarians being acknowledged and celebrated. One of the joys of editing *JoHILA* is learning about so much good work that is going on in health libraries throughout the region and beyond, and acknowledging and celebrating it by sharing it with a wider audience. This issue is no exception, and my particular thanks to all the authors who have submitted such excellent articles despite myriad burdens on their time and energies. All health libraries face pressures with constrained resources and constant demands and the complex fluctuations of healthcare, yet health libraries continue to demonstrate their resilience and responsiveness and robustness. No doubt all health librarians are happy to simply get on with their job and serve their clients to the best of their ability, but the work you do deserves to be acknowledged and celebrated – whether in a morning tea during the upcoming library and information week, or in the preface of a textbook, or a laudatory article in a dental journal, or indeed in the digital pages of the *Journal of Health Information and Libraries Australasia*. If you have work you think a wider audience may be interested in, please consider submitting to JoHILA via its website or HLAnewsed@alia.org.au

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Convenor's Focus | April 2021

Gemma Siemensma
HLA Convenor
gemma.siemensma@bhs.org.au

It's amazing to look back and reflect on the year that was 2020 – a year of incredible heartache, but also more positively as a year of immense change. COVID opened up opportunities globally like never before and this is what the focus of 2021 will be for ALIA Health Libraries Australia.

In 2020 the online professional development (PD) events that we held were extremely popular. We were overwhelmed with the support given by presenters and attendees. This year we have decided to make it a jam packed year of online PD. In lieu of this decision and the rapidly changing environment we still face, it means our annual face to face conference will be postponed for 2021. We are hopeful that we will all be back together in 2022.

Over the preceding few months the ALIA HLA Executive have worked hard to bring together an incredible line up of PD events. See the calendar in this issue of *JOHILA* to find out more. We've teamed up with local and international presenters to bring you PD on topics such as expert searching, searching tools, research services, marketing, design, open access, advocacy and digital health. We hope to add some networking opportunities into the calendar too.

The ALIA HLA Executive are also holding a strategic planning day to map out our priorities. If you have suggestions on where you think HLA should focus its energy please let me know.

Otherwise please enjoy this fabulous issue of *JOHILA*. I love reading about other health libraries and the amazing initiatives, research and roles that occur in other organisations.

See you online soon, Gemma

HLA Professional Development Calendar 2021

The HLA PD calendar below presents a veritable smorgasbord of events that will stimulate your intellect, satisfy your thirst for knowledge, and leave you craving more from the continuously evolving program. Keep an eye out on the ALIA Health e-list, [the HLA website](#), and other HLA communication channels for further details and registration options for the events listed below. All events will be held online.

Date	Event and contact	Presenter/Speaker(s) + topic	Registration: Members/non-members	Duration/Format
March				
16 th	Automation Tools for Systematic Searching Workshop #3 / Gemma Siemensma	Justin Clark, The Institute for Evidence-Based Healthcare, Bond University <i>Automation Tools for Systematic Searching</i>	\$25/\$50	2 hour zoom workshop
April				
27 th	Automation Tools for Systematic Searching Workshop #4 / Gemma Siemensma	Justin Clark, The Institute for Evidence-Based Healthcare, Bond University <i>Automation Tools for Systematic Searching</i>	\$25/\$50	2 hour zoom workshop
May				
Thu 20 th 1-2.15pm	PRISMA 2020 Lunchtime Webinar / Angela Smith	Steve McDonald, Cochrane Centre <i>PRISMA 2020 important changes, implications and opportunities for health librarians involved in systematic reviews</i> Welcome and update from HLA Convenor and presentation of HLA/MD Innovation Award (1-1.15pm)	\$0/\$15	1.25 hour zoom webinar
Tue 25 th	Automation Tools for Systematic Searching Workshop #5 / Angela Smith	Justin Clark, The Institute for Evidence-Based Healthcare, Bond University <i>Automation Tools for Systematic Searching</i>	\$25/\$50	2 hour zoom workshop
June				
Wed 9 th 1-2pm	Librarians' Research Services Lunchtime Seminar / Gemma Siemensma	Sally French, QUT – <i>Registered Reports</i> Gemma Siemensma, Ballarat Health Services, Vic – <i>A librarian's role on a Health Research Ethics Committee (HREC)</i> Beth Flack Latrobe University – <i>Research profiles</i> Debbie Booth, University of Newcastle – <i>Bibliometric and organisational impact</i> Suzanne Lewis, Central Coast Local Health District, NSW <i>CARE digital archive</i>	\$0 / \$15	1 hour Zoom webinar
Thu 17 th 3-4.30 pm	Systematic Searching webinar Part 1 / Angela Smith	Wichor Bramer, Erasmus University Medical Centre, Rotterdam, Netherlands Systematic Searching Introductory webinar <i>NOTE: participants must attend the webinar in June prior to attending the workshops in September.</i>	\$50 / \$75	1.5 hour zoom webinar

Date	Event and contact	Presenter/Speaker(s) + topic	Registration: Members/no n-members	Duration/Format
Tue 29 th 1-2:30pm	My Health Record Workshops / Daniel McDonald	Australian Digital Health Agency & HLA <i>Train-the-trainer for health librarians</i>	Free event with free health literacy materials for attendees	1.5 hour zoom workshop
July				
Thu 15 th & Thu 22 nd	'All Things Open' – updates on the current state of Open Scholarship in Australia. / Ann Ritchie Seminar 1: Thursday 15th July 1.00-2.30pm Seminar 2: Thursday 22nd July 1.00-2.30pm	Catherine Clark, Curtin University Librarian and CAUL Director, Advancing Open Scholarship Program Prof Virginia (Ginny) Barbour, Director, Open Access Australasia <i>Catherine and Ginny will co-present on the work that they have been doing at a national level to progress an open research strategy, including regarding implications for health researchers and health research leaders.</i> Dr Danny Kingsley, Visiting Fellow, Australian National Centre for the Public Awareness of Science, ANU <i>Hard won: the challenges of obtaining scholarly communication knowledge & skills</i> This talk will consider the challenges associated with identifying and acquiring the skills needed in scholarly communication. Lisa Kruesi, PhD Candidate, Monash University <i>Results and discussion about Lisa's PhD research into a conceptual Australasia open biomedical repository from a knowledge management perspective.</i> Dr Kate Davis, Director Strategy and Analytics, CAUL Fiona Salisbury, Latrobe University / CAUL Program Director (Enabling a Modern Curriculum) Steven Chang, Coordinator, Digital Literacies and Open Education, Latrobe University <i>Open educational resources and practices, and CAUL's Open Educational Resource projects</i> TBC ARDC <i>Open Research Data Management Presentation</i> Cheryl Hamill, Head of Department, Library & Information Service, South Metropolitan Health Service, WA. <i>OA in health libraries</i>	\$0/\$15	2 x 1.5 hour zoom seminars
Tue 27 th	Automation Tools for Systematic Searching Workshop	Justin Clark, The Institute for Evidence-Based Healthcare, Bond University <i>Automation Tools for Systematic Searching</i>	\$25/\$50	2 hour zoom workshop

Date	Event and contact	Presenter/Speaker(s) + topic	Registration: Members/no n-members	Duration/ Format
	#6 / Gemma Siemensma			
Tue 27 th 1-2:30pm	My Health Record Workshops / Daniel McDonald	Australian Digital Health Agency & HLA <i>Train-the-trainer for health librarians</i>	Free event with free health literacy materials for attendees	1.5 hour zoom workshop
August				
Wed 11 th 1-2pm	Marketing Lunchtime Seminar / Gemma Siemensma	A panel of speakers to be announced.	\$0/\$15	1 hour Zoom Webinar
Thu 19 th 2-4pm	Designing posters and Infographics Workshop / Ann Ritchie	Dr Renee Otmar <i>Designing posters and infographics – how to present your research, evaluations, advocacy, and promotions effectively</i>	\$90 / \$140 (15 maximum)	2 hr zoom Workshop
Tue 31 st 1-2:30pm	My Health Record Workshops / Daniel McDonald	Australian Digital Health Agency & HLA <i>Train-the-trainer for health librarians</i>	Free event with free health literacy materials for attendees	1.5 hour zoom workshop
September				
Thu 2 nd & Thu 16 th 2-4.30 pm	Systematic Searching Workshop Part 2 / Angela Smith	Wichor Bramer, Erasmus University Medical Centre, Rotterdam, Netherlands And co-presenter Workshops <i>NOTE: participants must attend the webinar in June prior to attending the workshops in September.</i>	\$150 / \$250 (25 maximum)	2 x 2.5 hour zoom workshops with homework and feedback
Tue 28 th 1-2:30pm	My Health Record Workshops / Daniel McDonald	Australian Digital Health Agency & HLA <i>Train-the-trainer for health librarians</i>	Free event with free health literacy materials for attendees	1.5 hour zoom workshop
October				
TBC Wed 20 th 1-2pm	Advocacy Lunchtime Seminar / Angela Smith	A panel of speakers to be announced	\$0/\$15	1 hour Zoom
November				
Thu 11 th and Thu 25 th	Advanced Searching Skills Workshop / Angela Smith	Julie Glanville, Independent Consultant in Information Retrieval, Glanville.Info Alison Weightman. <i>Citation Analysis – Discovering New Uses Within Systematic Reviews</i>	\$150 / \$250 (25 maximum)	2 x 2 hour Online workshops

Scholarly communication knowledge and skills in hospital and health services libraries: Report of a survey

Dr Mary Anne Kennan

Adjunct Associate Professor, Charles Sturt University, ORCID <https://orcid.org/0000-0003-1342-9853>

Dr Danny Kingsley

Visiting Fellow, Australian National Centre for the Public Awareness of Science, ORCID <https://orcid.org/0000-0002-3636-5939>

Dr Joanna Richardson

Scholarly Communication Consultant, Griffith University, ORCID <https://orcid.org/0000-0002-1871-6707>

Introduction

This brief report discusses the early findings focussing on hospital and health service librarian responses, from a survey designed to shed light on the respondents' self-perception of their competency in specific areas of scholarly communication. The full data set includes participants in Australia and New Zealand academic and research libraries and other professionals, such as hospital and health services librarians who work in the scholarly communications area. A detailed analysis of the full data is underway and will be published later 2021 in another source. The specific areas of scholarly communication covered by the survey include:

- Institutional repository management
- Publishing services
- Research practice
- Copyright services
- Open access policies and the scholarly communication landscape
- Data management services
- Assessment & impact metrics

These core competencies in scholarly communication were developed by the researchers using the "NASIG Core Competencies for Scholarly Communication Librarians" developed by the North American Serials Interest Group (NASIG, 2017), the "Librarians' Competencies Profile for Scholarly Communication and Open Access" developed by the Confederation of Open Access Repositories (COAR, 2016) and our own knowledge of, and experience in, the Australian academic and research library sector.

The impetus for the study came from a number of areas. First, library-based roles in some areas of scholarly communication are relatively recent. A 2012 systematic review identified scholarly communications librarians as one of many new roles

within the health sciences for librarians (Cooper & Crum, 2013). Second, recent research in other jurisdictions found that academic librarian respondents exhibited elements of Impostor Phenomenon in their scholarly communication roles more than in their other academic librarian duties (Owens, 2021 accepted). Third, it is anecdotally reported that many of these emerging scholarly communication skills are not taught explicitly in Australian and New Zealand library and information studies programs.

While this report focuses on the responses from librarians in hospitals and health services it also compares these health librarians' results with some of the results from people working in scholarly communications in the wider context. The survey was open to anyone working in scholarly communication as we defined it. The questions did not ask what role the respondents held, only which institution they worked at. For this reason, it was not possible to identify which respondents worked in a health library within academic institutions. The respondents discussed in this report were all working in a health organisation.

It should be noted that in contrast with the Australian Library and Information Association (ALIA) *Foundation Knowledge, Skills and Attributes relevant to Information Professionals working in Archives, Libraries and Records Management* (2015), the ALIA *Health Library Association (HLA) Competencies* do specifically mention scholarly communication tasks. The *HLA Competencies* include "data science, research data management", "promoting scholarly communication", "promoting open science and open access to government-funded research outputs", "content, learning, research data, repository, and database management systems" and "digitisation and digital repository management" (ALIA 2018).

Method

In order to reach as many librarians as possible working in the scholarly communications space a survey instrument was deemed appropriate. Questions in the survey were compiled using a number of sources. A recent survey titled "Impostor Phenomenon and Skills Confidence among Scholarly Communications Librarians in the United States" provided a starting point (Owens, 2021 accepted). The research team made a decision to focus on the questions of confidence and the educational and training background of respondents. The questions relating to Impostor Phenomenon were not included in the study. The questions were further adapted to the Australian and New Zealand context.

The survey was built using the Qualtrix survey software, and analysed using Excel for the quantitative questions, and NVivo and manual thematic coding for the qualitative questions. Once the survey was approved by the Australian National University's ethics process the survey was distributed via email lists, Twitter, and to people identified as working in scholarly communications roles on Australian and New

Zealand University web pages. The survey opened on 21 October 2020 and closed on 3 December 2020.

One hundred and sixty valid responses were received, of which only six were from health and hospital librarians and these were all from Australia. This short paper provides a brief analysis of some of the data from the health librarians. As an indicator of proportional responses from the university sector and the hospital and health service sector, a census of health librarians in 2014-15 reported that there were an estimated 760 health librarians (Kammerman, 2015). While not directly comparable, the Council of Australian University Librarians (CAUL) statistics show that in 2014 in 39 Australian university libraries there were 1,619 professional librarian positions (https://statistics.caul.edu.au/pre2018/inst_data.php). This means the number of health and hospital librarians who responded to the survey is proportionally lower than what would be a representational number from the full set of responses.

A fuller research paper will be published separately with more detailed analysis of all the results. As the numbers for the hospital and health services librarians are very small, the results need to be treated with caution and are reported as percentages in order to facilitate comparison. Please note percentages are rounded to one decimal point, so will not always add to 100 and also for some questions, respondents were permitted more than one response.

Findings and discussion

Background data

The health services librarians who responded to the survey had all worked in libraries for more than 16 years and thus were very experienced. This is in contrast to the total responses where 42% of respondents had more than 16 years experience and 16% were in their first five years of work (see Table 1).

Answer	All N=159	All %	Health N=6	Health %
0-2 years	7	4.4		
3-5 years	19	11.9		
6-10 years	33	20.8		
11-15 years	32	20.1		
16-20 years	19	12.0	1	16.6
21+ years	49	30.8	5	83.3

Table 1: Number of years worked in libraries

All six health services respondents had a library and information sciences (LIS) qualification. The percentage was also high for other respondents of whom 88% had a LIS qualification, however 10% of the overall cohort did not have a LIS qualification (Table 2).

Answer	All N=160	All %	Health N=6	Health %
Yes	141	88.1	6	100.0
No – I am currently working toward it	3	1.9		
No – I do not have a library and/or information sciences qualification	16	10.0		

Table 2: Respondents with Library and information science qualifications

With regard to qualifications other than in LIS, 50% of the health services librarians had a higher education qualification in addition to their LIS qualification, in this case a lower percentage than the whole cohort, where 81% had another higher education qualification. The other qualifications from the health services librarians were reported as health informatics, a master of business administration and a bachelor degree in education. The respondent with a health informatics qualification said that it was not of much assistance in the scholarly communications aspect of their role but was useful in the other health librarianship aspects of their role. The respondent with the education qualification reported that it gave them "...great insight to communicate aka educate". As to be expected from the greater numbers of respondents for the whole cohort, there was a wider range of additional qualifications, which varied widely, from the arts (for example, history, philosophy, English) to business and law, to nursing and education, science and mathematics. Levels studied ranged from Bachelor to Doctorate.

Answer	All N=160	All %	Health N=6	Health %
Yes	130	81.3	3	50.0
No – I am currently working toward one	3	1.9		
No – I do not have a qualification other than library and/or information sciences	27	16.9	3	50.0

Table 3: Respondents with qualifications other than library and information science.

Not unexpectedly given their length of time in the LIS professions (Table 1), only one (16.6%) of the health services librarians reported having done any formal training in the last five years that resulted in some sort of recognition such as a certification, and this training was reported as "research impact training". This is not greatly different to the respondents overall as while 33 in raw numbers of the total respondents had completed such training, the percentage is only 20.5% of the total respondents.

With regard to professional development (e.g. supervisor or colleague-assisted training, live or virtual classes, conference sessions, webinars) related to scholarly communication completed within the past five years 66% (4) of the health services librarians had completed some, as opposed to 83.8% of the total respondent cohort. This may be related to the context of health librarians, who often work in smaller libraries with fewer colleagues and thus fewer opportunities for such activities. Conversely the health services librarians in percentage terms have much greater take-up in self-directed learning which is where the individual chooses, plans and enacts their own learning experience (Follman, Hall & Omotade 2012). Whether or not an individual participates in self-directed learning can be influenced by an individual's level of motivation, their autonomy within their work role, and their current competences as well as the social environment in which the learning is occurring (Garrison, 1997, Straka, 2000). Health librarian participants engaged in much higher numbers and percentages in all listed self-directed learning options, but in especially high numbers participate in Listservs and reading journal and conference papers (Table 4).

Answer	All	All %	Health N=6	Health %
Twitter	76	11.9	2	33.3
Blogs	92	14.4	2	33.3
Listsers	73	11.4	5	83.3
Wikis	22	3.4	2	33.3
LinkedIn	40	6.2	1	16.6
Open courses	66	10.3	3	50.0
Podcasts	35	5.4	2	33.3
Audiobooks	3	0.4		
Other	26	4.1		
No self-directed learning	9	1.4		
Journal and conference papers	115	18.0	5	83.3
Grey literature - reports etc.	81	12.7	3	50.0

Table 4: Respondents participation in self-directed learning

Of the respondents that reported "Other" the activities listed were: "Peer discussions, conferences, committee work, etc.". Many respondents from all areas commented on the diversity of the field of scholarly communication and the lack of time they had in their work roles to pursue self-directed learning, with one health service respondent stating: "This topic area is huge, and while I would like to know more and be more involved, running two libraries on part time hours simply doesn't leave me enough time to engage with the myriad sections of the process". It may also be that as people are longer in their roles they are busier and/or come to know their roles better, as alluded to in the comment about time spent of self-directed learning: "It

varies. When I started my current position, I spent 5-10 hours a week, currently less than 2 a week”.

A big difference between health librarians’ responses and the responses of all the other participants was that all of the health librarians felt that work in scholarly communication was ‘just part of their job’ (Table 5). Now we move on to scholarly communications work performed by respondents.

Answer	Count N=200	%	Health N=6	Health %
It interested me	68	34.00%		
It was a promotion	23	11.50%		
I was asked to do so	15	7.50%		
It is just part of my job	83	41.50%	6	100%
Other	11	5.50%		

Table 5: Why move into a role in scholarly communications?

Scholarly communications work reported as part of health librarians’ responsibilities

In this brief paper we cannot provide the analysis of the confidence with which health librarians reported they approached their scholarly communication work, as the numbers are just too small for such analysis. We can however, report which scholarly communication tasks were reported as forming a part of respondents’ responsibilities. As can be seen from Figure 1, the most common was tasks associated with ‘Institutional Repository Management’ (5/6 or 83.3%), and 50% (3) were clear that ‘Open Access’ and ‘Assessment and Impact’ were their responsibility. None, however, reported that ‘Publishing Services’ were a clear part of their role, although a small majority (4 of 6 or 66%) were unclear.

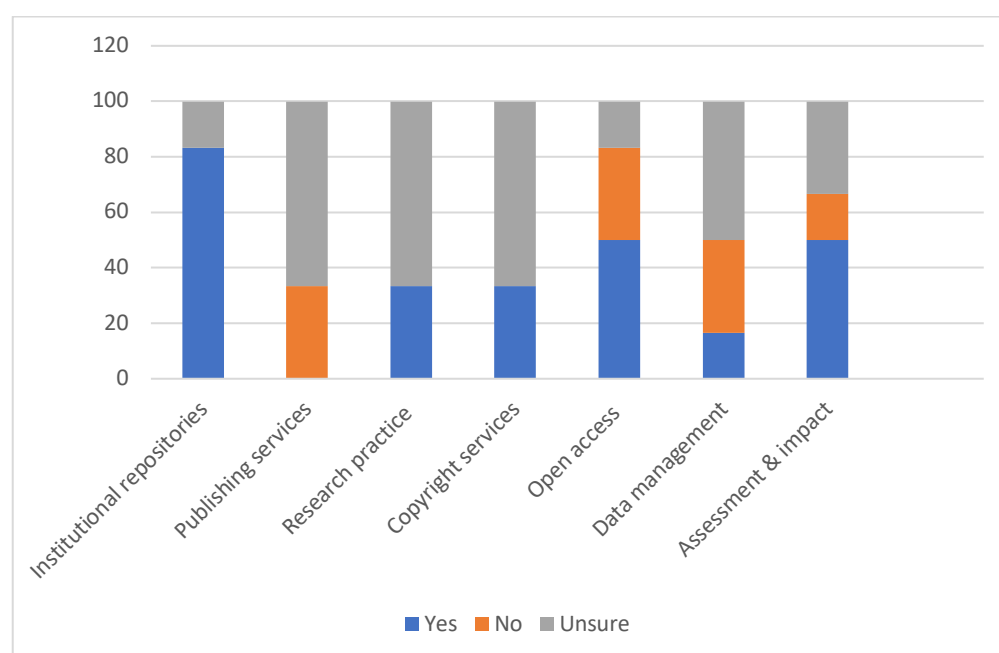


Figure 1: Scholarly communications tasks reported as forming a part of health librarians’ responsibilities

In order to understand what work comprised the most reported (five of six respondents, 83.3%) scholarly communication role; it was that of 'Institutional Repository Management', the surveyed tasks included:

- Collect, store, and preserve researcher, staff, and student intellectual output
- Knowledge of and ability to apply publisher policies on deposit
- Knowledge of and ability to apply metadata schemata
- Knowledge of and experience with repository solutions
- Ability to develop policies
- Reporting statistics in support of outreach and education

These roles, especially metadata, policy development and collecting & storing research output, have been traditional library roles for a long time. In the comments section of the question on institutional repositories one respondent stated: "The organisation is not very engaged, I look after our intellectual property because it needs to be done. No resource allocation."

Conversely roles in 'Publishing Services' which comprises:

- Knowledge of and experience with publishing platforms
- Knowledge of and experience with the full life cycle of publishing
- Knowledge and experience with minting identifiers
- Possess a basic knowledge of relevant metadata schemata
- Provide technical support
- Perform system administration and programming
- Collect and disseminate assessment metrics

are more emerging roles for librarians which may account for no health services librarians reporting this work as forming a part of their responsibility (the majority were unsure). Of the entire cohort of respondents, Publishing Services was also the least reported area of responsibility (see Figure 2). This is potentially because there is not a generally agreed understanding of what comprises roles in 'Publishing Services'.

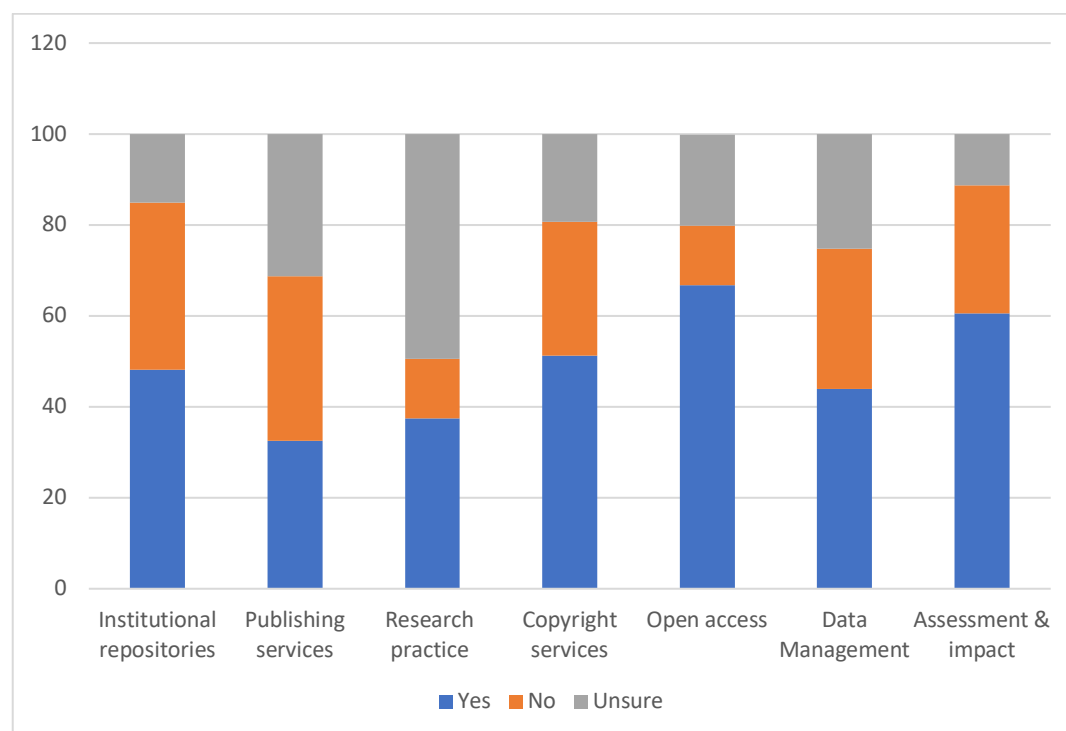


Figure 2: Scholarly communications tasks reported as forming a part of all respondents' responsibilities

Referring back to Figure 1, a majority of health service respondents reported that they were unsure if 'Publishing Services', 'Research Practice' and 'Copyright Services' were a part of their role. This may be related to the varied and complex roles of hospital and health librarians. Hospital and health services libraries are often small. According to a 2011 report 20% of hospital libraries were one person libraries and 47% had two to five staff members (Hallam et al., 2011). While 2011 is some time ago, these numbers are unlikely to have changed dramatically. Small staff numbers in libraries serving large organisations is likely to indicate workplaces where people do a wide variety of work and there is less specialisation than in, for example, a university library which may have tens or hundreds of staff and more specialisation may be evident. As this research was only investigating one aspect of their varied role, their scholarly communication responsibilities, that may account for the high levels of uncertainty about whether emerging areas of scholarly communication were a part of their role.

On these small figures a higher percentage of health services librarians than academic librarians are actively participating in 'Scholarly Publishing', notably 50% (N=3) have been authors, peer reviewers and editors. The percentages are much lower for the full cohort of participants (See Table 6). In the comments field for this question one health respondent reported that they had participated in advanced literature searching repeatedly and received no recognition for this, when they felt their contribution should have received some acknowledgement. We take this to refer to participation in the systematic review process and note that this issue has

also been raised recently in the literature in academic libraries as well. Librarians' participation in the systematic review process is time consuming and requires expertise. One university library reported that co-authorship is required for participating librarians offering premium consulting and search services (Russell & Muir 2020) based on the criteria for authorship as defined by the International Committee of Medical Journal Editors (ICMJE) (2019). Another reported increasing interest in systematic reviews from library users and the development of their own library's charter which specifies either acknowledgement or co-authorship depending on a number of criteria including hours invested (Luca & Ulyannikova, 2020).

Answer	Count N=241	%	Health N=6	Health %
Authoring	75	31.12%	3	50.0
Peer review	41	17.01%	3	50.0
Editorial board	15	6.22%	1	16.6
Editing	29	12.03%	3	50.0
Have not participated in the scholarly publication process	63	26.14%	1	16.6
Other (please specify)	18	7.47%	1	16.6

Table 6: Participation in the scholarly publication process.

Conclusion

Examining the health librarian's responses, we note that the challenges brought about by working in smaller libraries are clearly evident. Not only does this mean that scholarly communication work is just one aspect of a very diverse role, it also reflects the reality that health librarians cannot spend too much time on any one aspect of their role, and they often would not have the time nor the staff back up to take time for lengthy professional development courses out of the work place. This is despite, in the words of one health librarian, that professional development is "an absolute must to stay current in health librarianship environment", just as it is in evolving roles in scholarly communication. One conclusion to draw from this is that it would be wise to consider a wide range of formats and options when developing professional development on emerging roles for librarians in scholarly communication.

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Appendix 1 – Data used in Figures 1 and 2

Q12a- Are any Institutional Repository Management tasks part of your responsibilities?

Answer	Count	%	Health N=6	Health %
Yes	77	48.13%	5	83.3
No	59	36.88%		
Unsure	24	15.00%	1	16.6
Total	160	100.00%		

Q13a - Are any Publishing Services tasks part of your responsibilities?

Answer	Count	%	Health N=6	Health %
Yes	52	32.50%		
No	58	36.25%	2	33.3
Unsure	50	31.25%	4	66.6
Total	160	100.00%		

Q14a - Are any Research Practice tasks part of your responsibilities?

Answer	Count	%	Health N=6	Health %
Yes	60	37.50%	2	33.3
No	21	13.13%		
Unsure	79	49.38%	4	66.6
Total	160	100.00%		

Q15a - Are any Copyright Services tasks part of your responsibilities?

Answer	Count	%	Health N=6	Health %
Yes	82	51.25%	5	83.3
No	47	29.38%	1	16.6
Unsure	31	19.38%		
Total	160	100.00%		

Q16a - Are any Open Access Policies and Scholarly Communication Landscape tasks part of your responsibilities?

Answer	Count	%	Health N=6	Health %
Yes	107	66.88%	3	50.0
No	21	13.13%	2	33.3
Unsure	32	20.00%	1	16.6
Total	160	100.00%		

Q17a - Are any Data Management Services tasks part of your responsibilities?

Answer	Count	%	Health N=6	Health %
Yes	70	44.03%	1	16.6
No	49	30.82%	2	33.3
Unsure	40	25.16%	3	50.0
Total	159	100.00%		

Q18a - Are any Assessment and Impact Metrics tasks part of your responsibilities?

Answer	Count	%	Health N=6	Health %
Yes	97	60.62%	3	50.0
No	45	28.13%	1	16.6
Unsure	18	11.25%	2	33.3
Total	160	100.00%		

A Collaboration between Information Specialists and a Public Health Researcher to Investigate Search Strategies in Systematic Reviews in Interdisciplinary Topics: A Progress Report

Bronwen Forster, Liaison Librarian, Nguma-bada Campus, James Cook University

Janet Catterall, Liaison Librarian, Nguma-bada Campus, James Cook University

Alan Clough, Professor of Epidemiology, Nguma-bada Campus, James Cook University

This research collaboration in Northern Queensland comprises a Law Librarian, Health Librarian and a Public Health researcher with an interest in mental health law. This collaboration developed from librarian support of teaching and research in a Public Health postgraduate subject at JCU at Nguma-bada Campus (Cairns). Students were required to develop systematic review protocols for topics in a subject with substance misuse, mental health, regulation and policy content. Published research in this area is typically found in legal as well as health and social care databases. Hence our collaboration described here (Forster & Catterall, 2021; Research Support Community Day 2021, 2021).

Searches revealed that systematic reviews are being undertaken in complex interdisciplinary areas that necessitate both health and legal research. We are curious to investigate the calibre of systematic reviews in these areas. Recognising that the results of a review can only be as robust as the literature search which provides the data set (McGowan et al., 2016; Rethlefsen et al., 2021) our project aims to assess the quality of search strategies in a selection of systematic reviews that span health and legal questions.

Literature searches are being performed in Scopus, Medline (OVID), Westlaw Classic and Lexis Advance. We determined that articles for evaluation needed to address a research question situated at the intersection between mental health and law and include at least one author affiliated with a law department, law school or legal practice. Articles needed to list databases used, search terms and at least one search strategy as run to be included in the analysis. A pilot search of one database, Scopus, resulted in more than 200 articles that potentially would fit these criteria.

The initial article set reflects a surprising diversity of cross discipline subject matter. For example, one systematic review examined the role of evidence from neuroscience in criminal judgement and sentencing (Chandler et al., 2019); another analysed the effect on women's health of United States TRAP laws (Austin & Harper, 2018); yet

another looked at non-consensual 'sexting' in the psychological and legal literature (Krieger, 2017). The search strategies also reflected a surprising diversity, from simple keyword searches (Chandler et al., 2019) to highly complex searches constructed by an Information Specialist (King & Gamarel, 2021). Our preliminary sense is that the searches described in the publications are more robust than expected. A higher proportion of articles utilised the input of an Information Specialist than anticipated, which produced searches that were more rigorous. Others that did not indicate the involvement of an Information Specialist or Librarian so far show much less rigor and reproducibility. As is the case with other areas, Information Specialist involvement demonstrably improves the quality of the searches and their reporting (Kallaher et al., 2020; Koffel, 2015; Rethlefsen et al., 2015). In an interdisciplinary arena where the databases searched require diverse subject and searching expertise, Librarian or Information Specialist involvement would seem even more necessary.

Coming from a health perspective there is a long tradition of making systematic reviews more rigorous to support evidence-based practice (*Cochrane Handbook for Systematic Reviews of Interventions*, 2021). The legal discipline lacks an equivalent tradition. In line with authoritative recommendations from health and social care disciplines (*Cochrane Handbook for Systematic Reviews of Interventions*, 2021; *JBIM Manual for Evidence Synthesis*, 2020) we have selected the Peer Review of Electronic Search Strategies (PRESS) (McGowan et al., 2016) evidence-based checklist developed by the Canadian Agency for Drugs and Technologies in Health as an evaluation tool for this investigation. We wish to trial adaption of this tool to interdisciplinary topics that reach beyond health. We have therefore selected articles dated after the publication of the updated PRESS Checklist in 2016. The PRESS checklist is regarded as best practice for research projects in human health that involve a Librarian or Information Specialist in the construction of the search (*Cochrane Handbook for Systematic Reviews of Interventions*, 2021; *JBIM Manual for Evidence Synthesis*, 2020).

Even in an environment dedicated to rigor, many search strategies are not reaching the standard required by the PRESS guidelines (Franco et al., 2018). Therefore it will not be surprising if search strategies in the health/legal field do not meet those guidelines either. Initial analysis also indicates that the PRESS guidelines, fashioned as they were for searching in medical databases, Medline in particular, are not an exact fit when applied to legal databases. Subject headings are not applicable for example. Interdisciplinary systematic reviews will need to develop their own guidelines and protocols that can flexibly adapt to discipline specific databases with varying search mechanisms offering different entry points to the materials. However, in the interim, we are finding that the PRESS guidelines still provide a robust foundation for considering the quality of search strategies. The PRESS guidelines are also aimed at peer review of the search strategy, where it is assumed that the initial search was authored by an Information Specialist or Librarian.

At time of writing, articles are still being reviewed for inclusion in this project. One outcome that has emerged is the significant number of reviews in the initial set that have to be excluded because they lack at least one author affiliated with a law department, law school or legal practice. Even articles with words like 'legal issues' and 'case law' in the title do not have a researcher affiliated with law in the research team or search the legal databases (Normahani et al., 2020; Podgorica et al., 2020; Rahimzadeh et al., 2020). The focus of these excluded studies may well not mandate such a requirement; for the purposes of this project, however, they will not be included or analysed.

It appears that literature searches for systematic reviews undertaken in the intersection between mental health and law are additionally compromised by the evolving nature and heterogeneity of the area, and the lack of guidelines and standards for cross-disciplinary searching (Baude et al., 2017).

This project is highlighting the benefits of a close collaboration between a public health researcher and information specialists. It is enabling the researcher to better construct and refine library search skills which facilitates much more efficient use of research time. The quality of the outputs is much higher than if the project did not utilise the skills of librarians. The Information Specialists are also improving their purposeful search skills along with a much greater comprehension of the research process, particularly the need for in depth understanding and refining of the research question. This project demonstrates the significant benefits of researchers collaborating closely with information specialists, and the need for cross discipline involvement.

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Tools for initially scoping the literature

Terena Solomons, Research Librarian – Western Australian Group for Evidence Informed Healthcare Practice, a Joanna Briggs Institute Centre for Excellence
t.solomons@curtin.ed.au

Identifying and selecting appropriate keywords and indexed terms is crucial for developing robust search strategies to locate studies for systematic and scoping reviews. At the HLA PD online event in November 2020 I gave a 5 minute Lightning Talk on some of the text-mining and other tools I use for initially scoping the literature to gather keywords and indexed terms prior to developing search strategies for systematic and scoping reviews. This article is an adaptation of that presentation, the recording of which is available:

<https://www.alia.org.au/groups/HLA/hla-professional-development-education-and-training>

For the past 7 years I have worked as a Research Librarian with the Western Australian Group for Evidence Informed Healthcare Practice, conducting literature searches for JBI Systematic and Scoping Reviews plus Evidence Summaries on a variety of topics.

Using the following Scoping Review protocol as a case study I will give an overview of text-mining and other tools used to assist in developing the final search strategy (which is in Appendix 1 of the protocol):

Capper, T., Brown, J., Donovan, H., Hegney, D., Williamson, M., Cusack, L., Solomons, T., & Wilson, S. (2020). Individual and environmental factors that influence longevity of newcomers to nursing and midwifery: a scoping review protocol. *JBI Evidence Synthesis*, 18(6), 1271-1277. <https://doi.org/10.11124/jbies-20-00003>

The objective of this scoping review was to identify and map the literature of why nurses and midwives leave or remain in the profession within the first three years of practice.

The mnemonic for Scoping Reviews is PCC – Population, Context, Concept.

Population: newcomers to nursing & midwifery within the first 3 years of graduating

Concept: Intention to stay or leave the profession

Context: Any clinical setting, hospitals, clinics etc

English is such a rich and varied language and often some words can have multiple meanings. For example the word 'retention'. It can mean retention of staff in a human resources context, but it is also used for urinary retention, fluid retention,

knowledge retention. From my initial scoping of the literature I also discovered that the term attrition also appears in the dentistry literature for tooth attrition.

It is really important to be aware of these multiple meanings and it is through the initial scoping of the literature that these are discovered. I searched the term 'career longevity' which unearthed numerous articles on the racing career longevity of racehorses. Type 'career longevity' into pubmed reminer and you'll see the second journal listed is Equine Vet Journal.

Mesh on Demand

For health-related topics, the first text-mining tool I use is MeSH on Demand <https://meshb.nlm.nih.gov/MeSHonDemand>. This is a software tool that analyzes text and matches it against Pubmed data to generate MeSH - Medical Subject Headings. Copy and paste the text from a systematic review protocol or research proposal into the MeSH on Demand tool and it suggests MeSH subject headings and lists 10 articles based on the text entered. It is machine generated so there is no human intervention or evaluation. When selecting the text to enter into MeSH on Demand it is important that it includes the key points and important words. Generally, I'll include the research question and key background information for the review topic. A similar tool to MeSH on Demand is HelioBLAST <https://helioblast.heliotext.com/>.

PubMed Reminer

PubMed Reminer <https://hgserver2.amc.nl/cgi-bin/miner/miner2.cgi> provides a different overview of PubMed data showing publication trends, prolific authors, journal titles, frequent words & MeSH Subject Headings. I use this tool to see who the key authors are, the trends in publishing over the years, MeSH subject headings and frequently occurring words.

Below is a screenshot of PubMed Reminer searching (new graduate nurse OR new graduate midwife) AND (turnover OR attrition OR retention)

PubMed PubReMiner

Your query resulted in 361 references

Goto PubMed with query Create CV output

Manual adjustment: (new graduate nurse OR new graduate midwife) AND (turnover OR attrition OR retention)

AbstractLimit: 7500 Search with Manual Adjustment

Click on a hyperlink to add that element to your query and Re-Mine or select terms (OR boxes) and press 'Search Again'

Click on the # to directly goto PubMed and view ALL references for that element

Operator: AND Merge similar words: YES Minimalcount: 2 Force update: false Search Again

# OR Year	# OR	Journal	# OR	Author	# Count OR	Word	# OR	Mesh
15	23	J Nurs Adm	6	LASCHINGER HK	325	NURSE*	311	/organization & administration
34	21	J Nurses Staff Dev	6	NURSE P	314	NEW*	201	/humans
30	20	J Nurs Manag	6	BEHZADIFAR M	291	GRADUATE*	183	/psychology
22	20	Nurse Educ Today	5	LALONDE M	275	NURS*	117	/education
26	18	J Contin Educ Nurs	4	AREMILO	224	RETENT*	100	Personnel Turnover
14	14	J Adv Nurs	4	ASSADI R	213	HUMAN*	102	Nursing Staff, Hospital
22	12	Nurse Educ Pract	4	DHARMARATNE SQ	203	EDUCATE*	76	Female
15	10	Int J Nurs Stud	4	EL-KHATIB Z	194	METHOD*	74	/statistics & numerical data
26	10	J Clin Nurs	4	FISCHER E	177	HEALTH	73	Adult
10	10	Nurs Econ	4	HAJ-MIRZAJANI	169	ORGANISE*	72	Male
8	9	J Prof Nurs	4	HALFER D	165	PROGRAM*	71	Job Satisfaction
13	9	Nurs Leadersh (Top Ont)	4	HALL BJ	157	CONCLUS*	70	/methods
17	8	J Nurses Prof Dev	4	HASSEN HY	156	DEVELOP*	69	/standards
12	6	AORN J	4	JONAS JB	156	TURNOVER	60	Attitude of Health Personnel

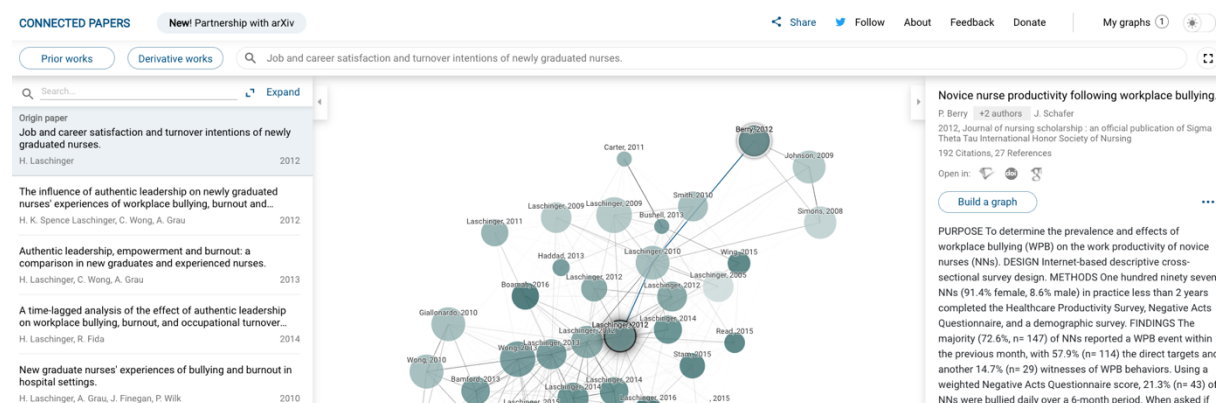
From the PubMed Reminer tool I discovered the author Laschinger (2012) had written about the experiences of newly graduated nurses and had written this highly cited paper: "Job and career satisfaction and turnover intentions of newly graduated nurses".

Connected Papers

This leads me to the next tool which is Connected Papers

<https://www.connectedpapers.com/>. This is a visual tool to help researchers find and explore papers relevant to their field. The papers are arranged according to their similarity. According to the creators of Connected Papers, even papers that do not directly cite each other can be strongly connected based on a "similarity metric based on the concepts of Co-citation and Bibliographic Coupling" (Etian et al, 2020).

Below is a screenshot of the Connected Papers graph where I've entered the Laschinger article "Job and career satisfaction and turnover intentions of newly graduated nurses". In real time when you hover over an author it displays the title. I could see that the group of authors in the top right corner (Johnson, Berry & Simons) were looking at bullying in the workplace. The group of authors in the bottom left of the display were looking at authentic leadership and newly graduated nurses.



I use Connected Papers as a way to initially find more similar articles at the beginning stages of a search.

EndNote Subject Bibliography

In my initial exploration of the literature I add relevant papers to an EndNote Library. EndNote has a feature that allows you to see what the most common keywords are in a group of references. Go to Tools – Subject – Bibliography and select Keywords, it will then generate a list of the keywords and number of times it comes up in that set of papers.

Interpret this list with caution. In this case study the word 'Transition' came up as the most popular term in the set of papers I discovered from initial searches. The

transition of nursing students to the work environment is an important environmental factor. After discussing this with the JBI research team it was decided not to actively search for the term Transition in the search strategy because it gathered too much 'noise' in the search results. It also meant that the search was biased towards finding articles on this factor.

Rayyan

Part of the methodology for systematic and scoping reviews is for 2 researchers to screen the Title & Abstracts of references, then the full text articles for inclusion in the review. This methodology is to mitigate bias. Rayyan (rayyan.ai) is a free software tool used by research teams for this process. I first heard of Rayyan from chatting with a Canadian librarian at the EAHIL conference in 2019. One of her colleagues Martin Morris gives a demonstration of Rayyan in this Webinar: [Management/Analysis Tools for Reviews: Rayyan with Martin Morris](#)

I have used Rayyan for managing the screening process for a number of JBI research teams and find it easy to use. Rayyan has an element of text mining to assist researchers in screening Title & Abstracts. The study by Olofsson (2017, p.280) discovered that the "text-based ranking function of Rayyan effectively assisted reviewers to identify records early in the review process".

I use Rayyan to confirm with the JBI team lead that we are both on the same page and in agreement with which references are "gold standard" or "seed references" from which the search strategy is developed. I export an initial corpus of references from EndNote to Rayyan and invite the team lead to go through the list and tag each reference with Include, Exclude, Maybe. Rayyan has the function to make this process blinded so we are not influenced by each other's decision.

From the included "seed references", the search strategy is grown/developed using the keywords used by authors in the titles and abstracts. I run the titles from these "seed references" through the databases I plan to search to see how these "seed references" are then indexed and note what subject headings (MeSH for Medline, Emtree for Embase etc) are used to describe them.

Acknowledgements

I first learnt about MeSH on Demand and PubMed Reminer text-mining tools from Julie Glanville when attending the HLA's Advanced Searching workshop in Melbourne in 2015.

One of silver linings of COVID has been the ability to attend online seminars offered around the world in real time. When it's daytime in the UK, it's late afternoon or evening in Perth. Last September I attended the "Advanced Search Strategy Design for Complex Topics: Text Analytics and Text Mining" facilitated by expert

searchers Julie Glanville and Carol Lefevbre <https://yhec.co.uk/training/> . This was a fantastic professional development opportunity and I encourage anyone interested in learning more about text-mining tools to consider attending their upcoming webinars in May & June 2021.

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Registered reports as an elegant means of improving research quality

Sally French, Queensland University of Technology
s.french@qut.edu.au
<http://orcid.org/0000-0002-3026-1979>

Sally French is a new health librarian, having joined the QUT Library Health Liaison team in 2020. While having no practical expertise in Registered Reports, she was inspired by the presentation delivered by Brian Nosek from the Center for Open Science to the 2019 AusHSI Research Quality Meeting.

Context

Issues in health research

For effective delivery of services, the public must trust the health care system. Public awareness of scandals in health and research creates outrage (Gille et al., 2021) because a reduction in trust can, among other things, harm the health of patients (Felix et al., 2015). Meanwhile, inside the research community, there is a crisis of reproducibility. Estimates of failure to reproduce results range from 60-90% of research (Baker et al., 2016). Additionally, approximately 85% of health research is avoidably wasted, with about half of funded research never published, and about half of published papers insufficiently written up to be useful (AusHSI, 2019).

The role of librarians

However, all stakeholders in research have some agency to improve the situation. For librarians, it is during our research and publishing consultations where we can advocate for improvements. Registered Reports provide an elegant solution to some of the problems raised above. Since 2018 there has been a jump in publications in this format (Fong et al., 2020), which indicates the research community is willing to engage in bettering the status quo.

Reward systems in research

Citations are the primary basis for rewarding research. Employment, career progression, funding, collaboration, and other opportunities use citation measurements as a proxy for regard, reputation or standing in the field (McKiernan et al., 2016). It is understandable that researchers will put effort into maximising their citation measures, as it is a necessary condition for continuing to research. However, several questionable research practices arise out of the pressure to maximise citation metrics.

Questionable research practices manifesting from incentivising publication and citation

Salami slicing

Salami slicing, or publishing small slices of research in different papers, inflates the author's publication count (Elsevier, 2019). When a study uses the same hypothesis, population, and method but the results are 'sliced' into smaller publishable units, the fragmenting of the research imposes extra costs on the research publishing system. Also, other researchers need to access more papers to get the comprehensive results from that research (Nature Materials, 2005).

Publication bias leading to scooping, p-hacking, and HARKing

Not all research is reported. People prefer stories that are new, have something significant happen, and that have a clear narrative (Scientific Reports, 2021). Publishers need to keep their business running, so are responsive to their markets. The resulting publication bias has led to an imbalance in research literature, where replication, null and statistically insignificant study results are not well represented, in turn affecting the information available to researchers to inform their own research work (Scheel, 2020).

Novelty, scooping and low statistical power

Being the first researcher to publish a discovery confers significant career advantages. These include eponymy (naming a discovery after the scientist who discovered it), financial prizes such as the Nobel Prize, publication in prestigious journals and promotions (Tiokhin et al., 2021). To speed up the research and publication process, researchers may resort to using smaller sample sizes, thereby scooping the rewards of publishing before their peers (Tiokhin et al., 2021). However, smaller sample sizes lower the statistical power of the results, a negative unintended consequence making research less reliable and harming reproducibility (Button et al., 2013).

Significance and p-hacking

P-hacking refers to the practices of changing the method of analysis or continuing to sample until results conform to a publishable outcome, one that appears significant. P-hacking appears to be widespread (Head et al., 2015). Deciding on sample sizes and analysis methods prior to data collection and analysis supports rigor.

Clarity and HARKing

HARKing is developing a Hypothesis After the Results are Known (Kerr, 1998). Because the results are known, a hypothesis can be developed that fits the data closely. This clarity promotes the likelihood of the report being published. It is legitimate to perform exploratory research to detect patterns. However, testing of the hypothesis is more legitimately performed on a different sample set (Kerr, 1998, p. 206).

How are Registered Reports different?

Traditionally, peer review occurs after the research has been performed, when the report is submitted to a journal for publication. If there are flaws in the method, it is too late to rectify them. The results are also considered by the editor in deciding acceptance, which drives publication bias. For Registered Reports, peer review happens in two stages, with in-principle acceptance for publication occurring prior to data collection.

Stage 1 review

The first stage is after the research question and method have been designed. The reviewers consider the validity of the research question and soundness of the method for investigating the question (Gray et al., 2021). If the protocol meets high scientific standards, it is in-principle accepted for the paper to be published. The reviewers can provide feedback, which allows the authors to improve their methods prior to collecting data (Reich et al., 2020). The relationship between reviewers and researchers becomes constructive and collaborative, improving the experience for both parties (Chambers, 2019). Researchers do not discover their efforts have been wasted after their research funding has been expended. Reviewers do not have to deliver the crushing news that a study has been conducted in vain.

Stage 2 review

The second stage of peer reviewing is when the research has been conducted and the report is submitted for publication. The same reviewers from Stage 1 return to assess the extent to which the researchers followed the protocol submitted at stage 1. The results of the research are not considered by the reviewers at all. Compliance with the protocol determines publication of the results: scientific integrity is rewarded. Despite the extra work a second stage of review entails, reviewers have responded enthusiastically to the Registered Report format, with a retention rate between the stages close to 100% (Chambers, 2013).

Conditions and Costs to using Registered Reports

Registered Reports suit hypothesis driven research. Purely exploratory research is not suited to this format (Chambers, 2019). Post-hoc hypothesis is permitted, but must be clearly delineated in the results section to differentiate it from HARKing (Chambers et al., 2014).

The Registered Reports model applies only to original research (Chambers et al., 2014) or for secondary analysis of existing datasets where the researchers have not had prior access to the data (Nature Communications, n.d.).

For unpredictable events where the researchers need to collect data as soon as possible Registered Reports are not suitable, as stage 1 review would hinder timely

data collection. Some examples would be events such as solar flares, black hole collisions, flash floods or mass violence (Chambers, 2019).

The additional rigor involved in committing to a methodology early in the research process takes extra time and effort. This extra start-up cost tends to increase the sample size (Tiokhin et al., 2021) which improves the statistical power of the results. One journal, the Journal of Psychiatric and Mental Health Nursing, has closed their Registered Reports section due to the lack of papers submitted and lack of good quality reports (Elliott, 2021). This highlights existing issues in research quality, rather than being a fault in the format.

To have true transparency, the in-principle accepted protocol needs to be published (Scheel, 2020), so the journal has extra content to accommodate.

Journals also have extra administration in managing two stages of review rather than a single review and maintaining the same reviewers for both stages. While peer reviewers should be well versed in good methodology, stage 1 review particularly highlights this requirement.

Positive outcomes to using Registered Reports

For researchers

The acceptance rate for Stage 1 reviews at Cortex journal is 90% - double that of conventional articles (Chambers, 2019). Registered reports are highly cited, on average exceeding the impact factor of the journal in which they are published (Chambers, 2019). These benefits provide incentives to researchers to be more rigorous in their methods. For early career researchers, in-principle acceptance at Stage 1 allows them to list a publication much sooner than they could for a conventional manuscript (Chambers, 2019).

For the research community

Publication bias appears to have been addressed, with Registered reports 3 times more likely to report null or negative findings (Warren, 2018). By granting in-principle acceptance, questionable research practices like p-hacking, HARKing or using small sample sizes are not incentivised (Reich et al., 2020). Registered Reports establish a new standard for evidence quality because they have a hypothesis that has been checked for flaws (Scheel, 2020). Registered reports also help with valuing research that tests predictive models, not just research that is generating new discoveries (Chambers et al., 2014).

In summary, by modifying the incentive structures for the researcher, researchers are supported in using more rigorous and transparent methods. This helps to address the crisis of reproducibility, which in turn contributes to the credibility of research

evidence with the public. Librarians' role in this can be to advise researchers about the benefits of using Registered Reports.

Resources that may be of particular use for librarians

One page flyer concisely explaining Registered Reports <https://osf.io/yp2um/>

Questionable research practices in the research cycle: Figure 1

<https://doi.org/10.3934/Neuroscience.2014.1.4>

Practical steps through a Registered Report: Figure 1

<https://doi.org/10.1016/j.tins.2019.07.003>

One page editorial summarising how Registered Reports can improve science

<https://doi.org/10.1038/s41598-020-79467-9>

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Librarian Reserve Corps: Literature indexing and metadata enhancement (LIME) observations from a year in the field

Jessica Callaway, Shepherd Center, Atlanta, Georgia, USA
jessica.callaway@shepherd.org

Jessica Callaway, MLIS, AHIP, is Director of the Noble Learning Research Center and Clinical Research Librarian at Shepherd Center, 2020 Peachtree Road, NW, Atlanta, Ga 30309.

Abstract

The Literature Indexing Metadata and Enhancement subgroup of the Librarian Reserve Corps was first formed to assist with the indexing of daily publication lists for distribution within the World Health Organization's Global Outbreak Alert & Response Network (GOARN). Here we reflect on the trends that emerged from this work from a year of cataloguing COVID-19 literature. Preprints are now a crucial part of academic research. It is evident that librarianship is evolving and should continue to evolve post COVID-19. Open Access literature has been beneficial for everyone, including librarians, researchers, the media, and the public. Global collaboration is beneficial to seeing new perspectives. It was also evident during this year that trends in literature took about 10 days to cross over to the media.

Keywords

librarian reserve corps, trends, open access, COVID-19, preprints, collaboration

Note

The Librarian Reserve Corps can be found online at:

<https://librarianreservecorps.libguides.com/home>.

The LIME catalog can be accessed publicly at:

https://www.zotero.org/groups/2477506/lrc-daily_pubs/library

When Life Gives You Limes

Allow me a moment to be dramatic. It is March 11th, 2020, the day the United States shut down. Within hours of each other the following events happened. Dr. Anthony Fauci testified before the House Oversight and Reform Committee warning that the COVID-19 outbreak in the States is going to worsen (House Committee on Oversight and Reform, 2020). WHO (World Health Organization) declares a global COVID-19 pandemic (Ghebreyesus, 2020). Both San Francisco (Breed, 2020) and Seattle (O'Sullivan, 2020) implement orders banning large gatherings. Major (ESPN News Services, 2020) and College (NCAA, 2020) league basketball is cancelled for the rest of the 2020 season. Chicago cancels St. Patrick's Day (Bynum, 2020). Former

President Donald Trump restricts European passenger travel to the U.S. (Mascaro, Taylor, Colvin, & Miller, 2020). And Tom Hanks and Rita Wilson announce they have tested positive for COVID-19 (Hanks & [@tomhanks], 2020).

March 12th, 2020 Elaine Hicks, a Research, Education, & Public Health librarian from Tulane University sends out an email via a listserv through the Medical Librarian Association asking if anyone is interested in helping the Global Outbreak Alert and Response Network (GOARN), which is a special collaborative organization sponsored by the World Health Organization (WHO), to decipher the astronomical number of publications being released every day on COVID-19.

March 13th, 2020 Elaine Hicks (E. Hicks, personal communication, March 13, 2020) sends out this follow-up email:

...This is becoming a librarian version of the Medical Reserve Corps. 26 hours after posting the Medical Library Association listserv, I have over 58 responses which associate names with levels of comfort in emergencies. There is a role for everyone. Those not comfortable, who need structure in order to act, will have a role after we have a process developed. I'm going to close the survey at 3:00 pm today in order for West Coast and international members to respond and have a cadre ready for work as early as Tuesday morning...

And thus, on March 20th, 2020, the Librarian Reserve Corps officially entered the COVID-19 pandemic.

LIME-aid

Since then, the Librarian Reserve Corps (LRC) has grown into a robust group of international volunteers from thirteen countries and growing. The mission of the LRC is "[to] respond to information needs in public health emergencies in partnership with the World Health Organization's Global Outbreak Alert & Response Network. The advanced library and information skills of LRC volunteers contribute to the prevention and control of disease outbreaks and other public health emergencies by providing responders with the latest information relevant to their mission areas." (Librarian Reserve Corps, 2021).

The LRC developed workgroups within itself that focus on individual needs of GOARN members. The Literature Indexing and Metadata Enhancement, or LIME, group was one of the first workgroups to form and with the mission to catalog and classify the daily publications released each day related to COVID-19. As time has moved on, there have been several iterations in the methods LIME uses to review and catalog COVID-19 publications. The following chart breaks down the, as of today, three phases of reference software LIME has used and totals the amount of all screened COVID-19 literature. Additionally, LIME, in collaboration with the WHO library, has developed two special taskforces for COVID-19 literature review.

Date	March 2020-May 2020	June 2020-August 2020	September 2020-April 7, 2021
Reference Management Software Used	Zotero	Distiller SR – independent LRC catalogue	Distiller SR-combined LRC catalogue with WHO catalogue
# of Articles in total screened by LIME	18859	19073	14,475
Total articles screened as of April 7, 2020	52,407		

The LIME Rescue Taskforce focuses on reviewing the publications that were excluded from the COVID-19 publication catalogue and incorporating relevant publications back into the COVID-19 catalogue; this is called rescuing. As of April 7, 2020, the LIME-Rescue Taskforce has reviewed 11,678 publications and rescued 455 relevant articles.

The LIME-DeDup task force reviews publications in the official WHO COVID-19 catalogue for any duplications of publications and removes the duplicate. As of February 25, 2021, LIME-DeDup has confirmed 1,554 duplicate pairs of publications and removed the duplicates from the database. It has been a full year since the formation of LIME. Here are some observations that deserve some limelight.

Librarianship is evolving

When year after year of list is published detailing why librarianship is a dying field, this past year with LIME has, I believe, soured that worn out statement even more. Gone are the days of librarian stereotypes. Those do not belong in this space anymore. Librarians are information professionals. That makes us a first line defense in the war on disinformation. Librarians understand that information is organic and always evolving and, therefore, so should librarians. Ask a librarian what their specialization is? Not a one will say reading books.

Librarians, to name a few, work in data science, data information access and technologies, digital humanities, cultural heritage informatics, knowledge organization, user experience, law, medicine and health, children services, academics, social services, human computer interactions, and many more areas of information and library science that are never parts of the go-to librarian stereotype. The COVID-19 pandemic has proven the adaptability of librarians, whether its curbside services, mobile internet vans, adapting to preprints, or cataloguing COVID-19 literature. The Infodemic exposed crucial roles that librarians can and should fill. Our field is not dying. Our field is evolving into something new and I welcome that.

Global collaboration brings vast perspective

LIME is richer in what it can provide because each member brings a unique perspective to the work being done. As of today, the LRC has members from thirteen countries, as of today, and continues to grow. Not all of the LRC librarians are fluent in the same topics. This sounds like a detriment, but it really worked to our favour. And because of tools like Zoom and Google Docs, we were all able to converse and refine our cataloguing systems that reflected different types of information education, varying levels of medical knowledge, and an equal desire to be collaborative and contribute our skills to pandemic research.

Not only were the different subject expertise from each LRC volunteer useful, but bringing in the perspective of librarians from Australia, Canada, Ireland, Africa, and the United States allowed for cultural nuance that would have been missing without these people involved. This begs the question, then, what other things could librarians accomplish together if we all collaborated globally? And as this is a very easy thing to do with modern technologies, why are we not doing it more?

Preprints aren't going anywhere

A very common theme for 2020 was adapting to non-peer reviewed preprints becoming more acceptable in academic literature and available in the public infosphere. There is a place for preprints in all our libraries and research, COVID-19 has proven that. And while preprints servers were already emerging before the events of 2020, preprints became a crucial method to streamline information and really gained traction and normalcy during the pandemic. Preprints are here to stay. Preprints are more accessible to all because they are not placed behind a paywall and are not peer-reviewed, which shortens the pipeline from submitting your preprint to a server and other researchers having access to it; both practices make preprints a faster method of distributing information. Which has resulted in the ways we review literature having to change as well.

In the last year, I have seen librarians adapt systematic reviewing methods to include preprints. I've assisted medical staff in locating major preprints being discussed in the medical field and the media. The question here is how do we, as librarians, determine what is reputable from preprint servers? LIME volunteers even reviewed preprints for the WHO.

The question is not if preprints are legitimate forms of information, the question is how do we adapt to this new form of information in a safe and responsible way? Is it our responsibility to review preprint text for any forms of academic or scientific fallacies? How can we prevent disinformation from preprints with errors in their research or blatant evidence manipulation from harming those who read it? Is this even something librarians should be considering?

Trends were easy to spot

Perhaps one of the more interesting things to recall from this experience was watching the trends in the literature emerge compared to the trends in the media and how they correlated and worked against each other. Trends emerged in the literature being evaluated by LIME either before or after trends crossed over to the media, but more interesting is the word choices being used and released into public knowledge. Hydroxychloroquine is the best example, although there are others. Appendix 1 contains graphs that have been captured from Google trends. Google trends tracks peak popularity of searches. Numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means there was not enough data for this term (Google, 2021).

Though there are many evident trends in the literature that LIME reviewed, we will focus on the word hydroxychloroquine for an example of the trends LIME could predict. Image 1 shows the Google trends graph for hydroxychloroquine analyzing google searches for the word hydroxychloroquine within the United States from April 1, 2020 to May 31, 2020. This time frame and sample location are used for comparison reasons as the data LIME has currently on media trends relates only to the United States. Google trends data shows that on April 4th searches for the word hydroxychloroquine increased by 86%. For the time period between April 12th and May 17th, Google searches for hydroxychloroquine remained steady in the 5-20% search range then spiked by 100% on May 19th. Compare image 1 to image 2 which contains data gathered from MedicaCloud to represent the use of the word hydroxychloroquine in the media.

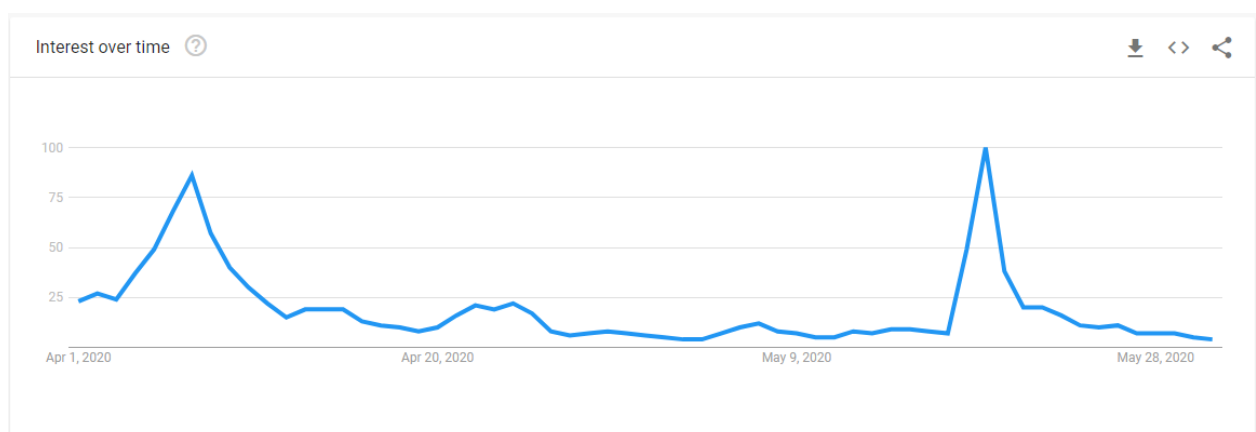


Image 1: Google search trends of hydroxychloroquine from April 1-May 31, 2020.

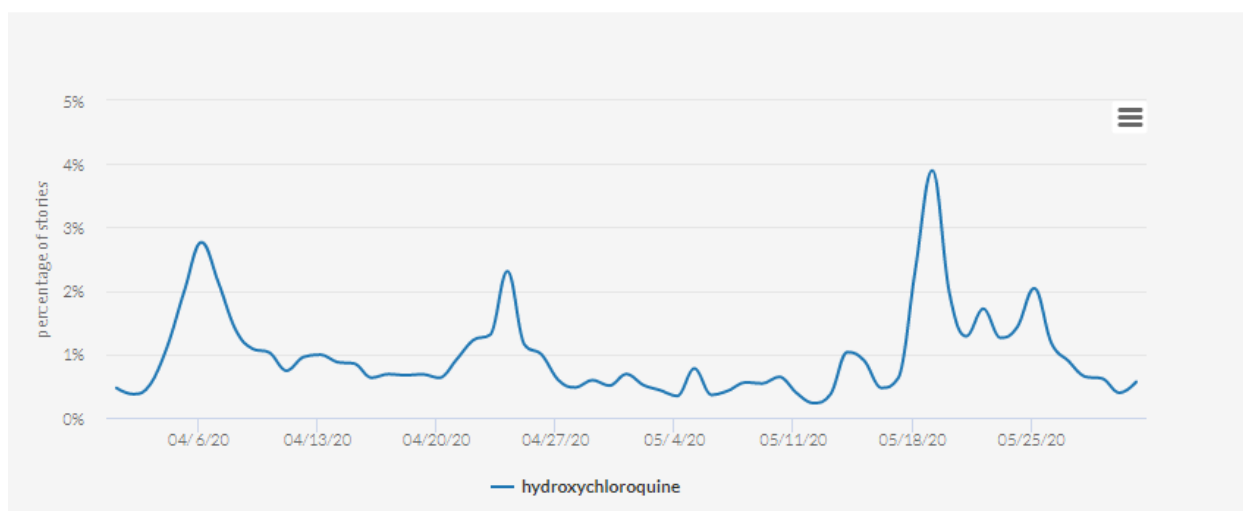


Image 2: Data gathered via MediaCloud on mentions of hydroxychloroquine in the top US media outlets.

Image 2 shows the media mentions of hydroxychloroquine via various news outlets and publications from the United States. From April 5th -7th hydroxychloroquine increased in U.S. media coverage by 2%. March 19th reflects a US media coverage of 3%. From this data a word cloud of the most frequently used words in media can be seen in Image 3. LIME, from April 1st to March 31, 2020, catalogued a total of six hundred seventy-seven publications specifically centered on hydroxychloroquine. From the LRC dataset of publications, we generated a separate word cloud to compare.

hydroxychloroquine trump drug president
covid coronavirus prevent study treatment treat effects
patients donald warned monday medical risk house hospital
doctors health reporters news trial clinical people white claimed
administration week chloroquine malaria evidence potential heart fox day
research tested fda benefit tuesday physician new disease dr death problems
announcement virus told including setting called unproven pelosi found april food
promoting anti-malaria veterans outside mcenany anti-malarial public press measure dangerous
azithromycin positive infection care york serious prescribed month medicine workers touted rhythm
government american support joe cuomo conley time so pandemic help following experts cure university
outweighed lupus discussions defended daily

Image 3: Word cloud of most used words in media between April-May 2020 via MediaCloud.

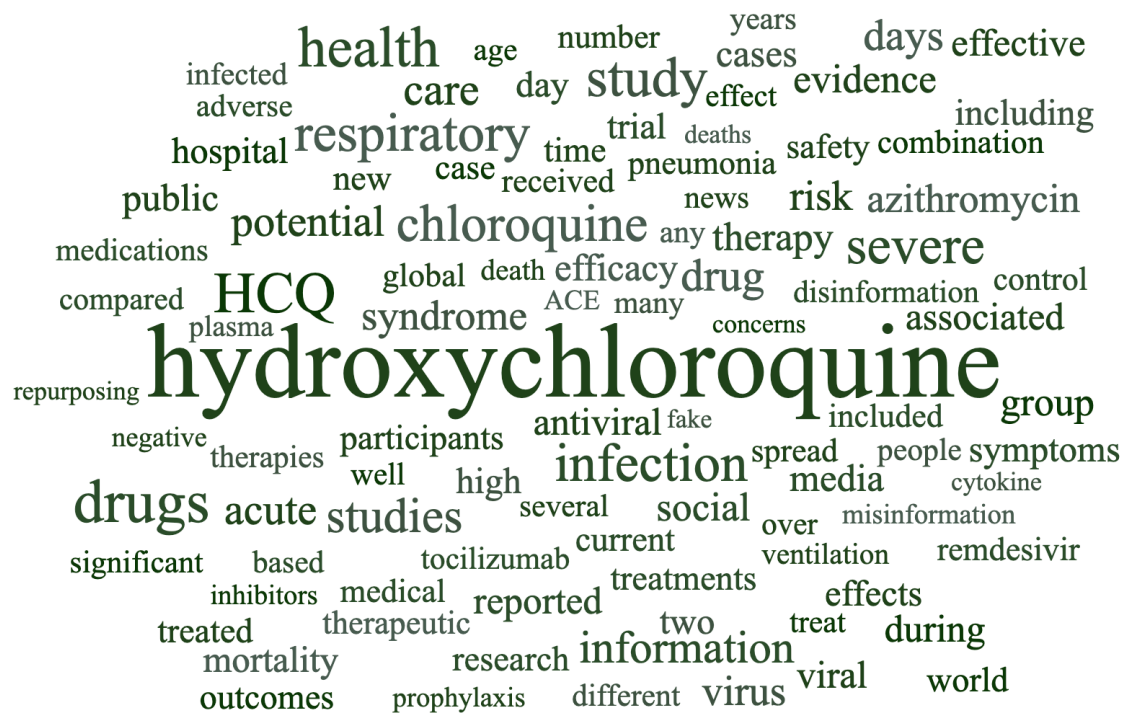


Image 4: Word cloud generated from the LRC database of literature reviewed from April 1st to May 31st centered on hydroxychloroquine.

Open Access should be a global goal

Another observation made was truly how beneficial and life changing global open access is. One could argue that everyone benefits from tearing down paywalls. In the COVID-19 pandemic, scientific discoveries were discovered faster, regulations for patient care were updated faster, and the public had direct access to the materials that are being widely referenced by both the medical community and the media. If a standard like global open access were to stay in place from henceforth everyone would be on equal ground and science would continue to excel. Even for librarians, this has been such a beneficial gift as it would allow library systems to accomplish more for their patrons without having to allocate hundreds of thousands of dollars to journal subscriptions.

Academic journals, local and global news organizations, and even some magazines dropped the paywall for their material so that all would have access to any sort of literature on COVID-19. Correlation does not equal causation but the speed in which the medical and research community were able to communicate with each other and the public, directly benefitted from global open access of materials. As librarians, we are tasked with keeping our clinical staff recent on health-related information. Pay walls are very often a source of confusion and disappointment with the clinical staff. Removing this barrier allowed the librarians to deliver exactly what was needed, to who needed it, instantly and without fees.

Paywalls are controversial. There is no way around that statement. " ...paywalls exacerbate the already substantial inequalities in scholarly resources between the global north and global south, and raise challenging ethical questions about a for-profit approach to knowledge acquisition" (Suzanne Day, 2020). Additionally, paywalls are a method of gatekeeping and prevent not only low income students from access to knowledge, but the public's access to news as well. Already, prominent media organizations, like the New York Times, are pushing their COVID-19 reporting back behind the wall. And with Google receiving more than one billion health related search questions a day (Dress, 2019) an effective way to prevent the spread of disinformation and promote global health equity would be the abolition of paywalls as demonstrated in the COVID-19 pandemic.

What now?

Anytime I encounter this question, I always give the same response- that is for the future to decide. LIME is still active within the LRC and collaborating with the WHO. LIME's volunteers list continues to grow, bringing in new librarians from all over the world. Leading LIME has been one of the most interesting and rewarding things I continue to do.

One thing I think has become evidently clear, from now, is that librarians need to stop being side characters in their own stories. Speak up and ask lots of questions, use your skills to adapt to any situation. Maybe this is an overly idealistic point of view. But seeing as how we have been and continue to live through history, and this history is full of grief and sadness, allow me this moment to feel optimistic. The key to LIME has been collaboration, open communication, and a sublime group of volunteers from all over the planet. Look at what we can accomplish when we all work together.

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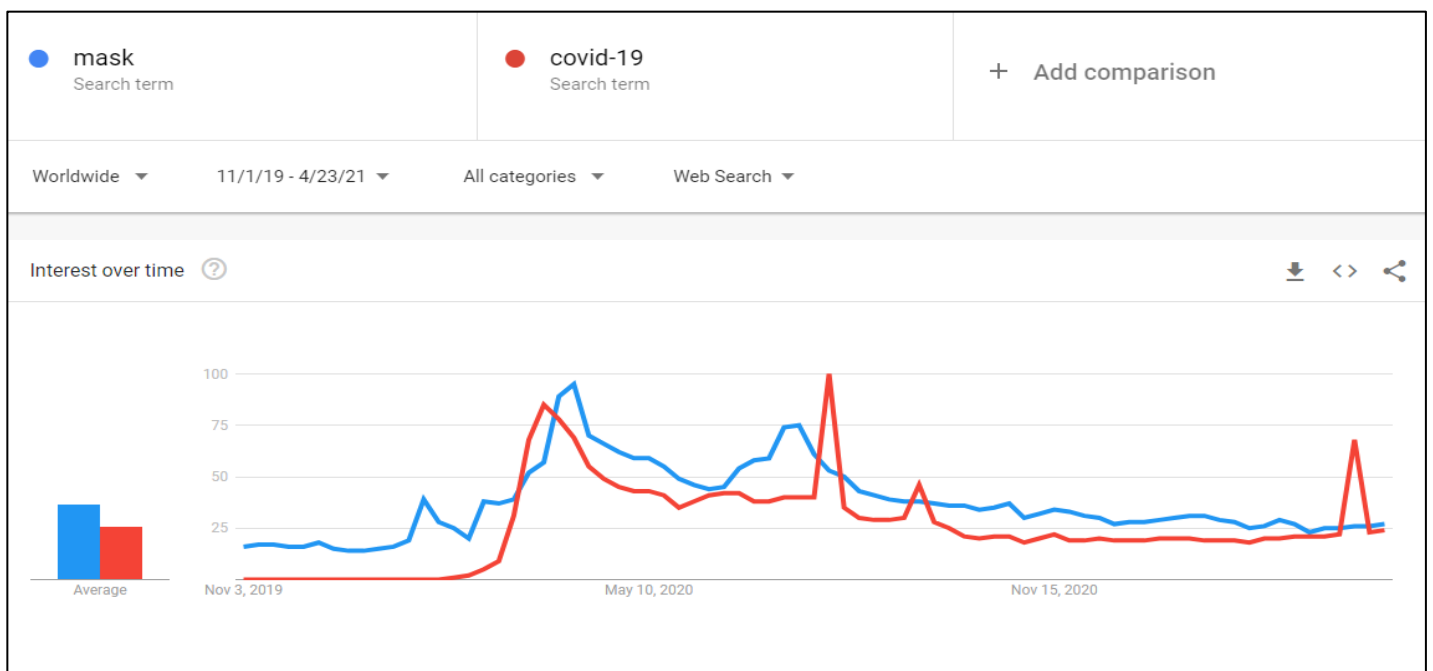
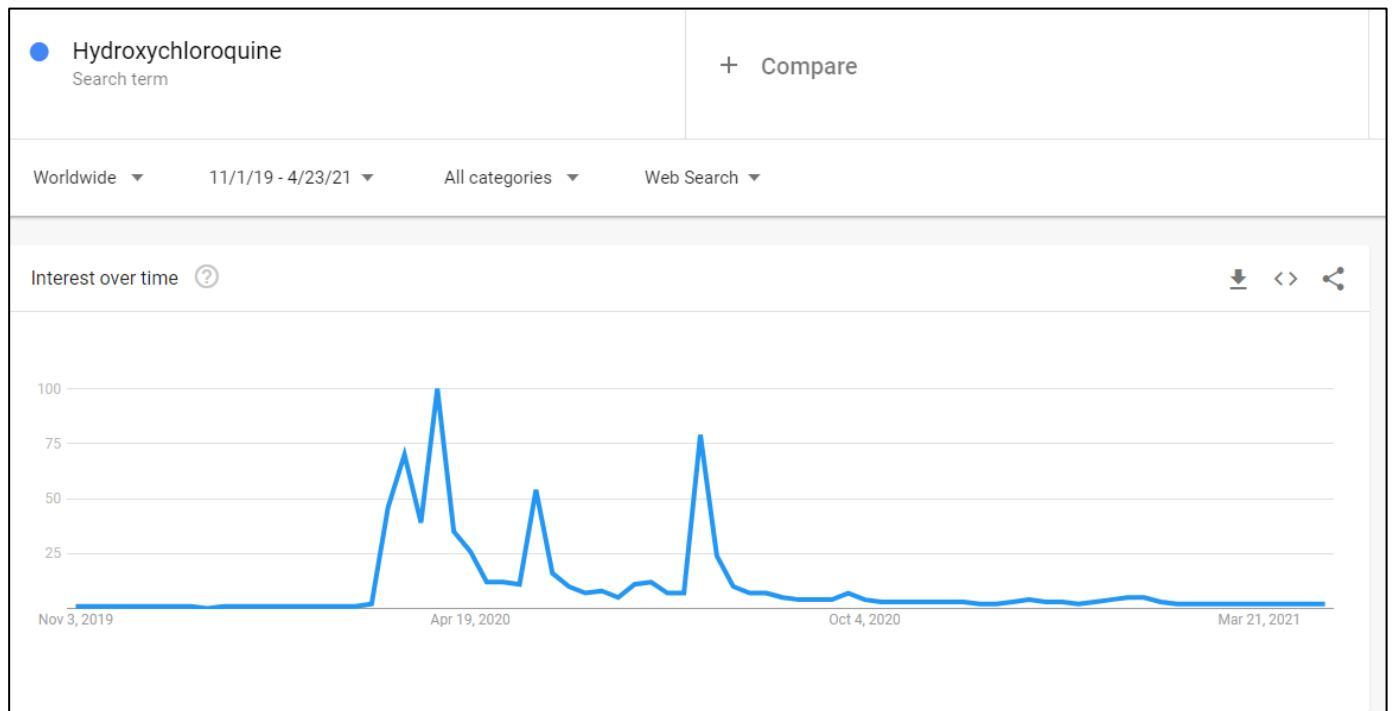
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Appendix 1



An overview of the Covid pandemic in Spain, and what Spanish health libraries have been doing to meet the challenges posed

Maurice Clementi, Wolters Kluwer
maurice.clementi@wolterskluwer.com



Maurice Clementi is based in Barcelona, Spain. He works for Wolters Kluwer Health Learning, Research & Practice as an Advanced Client Trainer.

Covid, coronavirus, facemasks, lockdown, social distancing, hand gel, support bubbles... so many words that continue to resonate around the world today. For many, 2020/2021 will remain a period of hardship, sorrow, and lost time, but for others it will have brought opportunity!

Like so many countries, Spain has been hit hard by the pandemic. In Spring of 2020, Italy and Spain were among the hardest hit countries, and featured regularly on news reels around the world. In Spain, where the number of cases and deaths have been consistently high¹, there have also been the serious knock-on effects of the virus. The Spanish economy has once again been hit hard, when it had only just turned the corner after 10 years of suffering the consequences of the world's financial crisis, one of the darkest points coming in 2013 when an unprecedented 27% unemployment rate was seen in a population of approximately 46 million².

Spain is the 5th largest economy in Europe and 14th in the world³. More than 70% of its GDP comes from the services sector. With its Mediterranean climate, coastlines and islands, cuisine, and historical and cultural interests, in 2019 tourism brought in over \$90 billion in revenue⁴, with over 83 million tourists; in Europe, only France receives more per year. With the ongoing Covid crisis, the Spanish economy once again faces uncertain times, with the latest unemployment figures for March showing estimates of 4 million unemployed, many of those coming from tourism.

Back in May 2020 the European Union (EU), of which Spain is one of the 27 members, proposed an \$814 billion recovery fund to help its member states⁵. Just like the poor vaccine roll-out across the EU, the funds have still not filtered through to European member countries. The huge delays in the administration of vaccines in the EU has been the biggest news⁶. The EU will probably be able to ride the storm of criticism, and blame pharmaceutical companies like AstraZeneca, but ultimately it must take its

¹ John Hopkins <https://coronavirus.jhu.edu/map.html>

² BBC News <https://www.bbc.com/news/business-22290422>

³ Wikipedia [https://en.wikipedia.org/wiki/List_of_countries_by_GDP_\(nominal\)](https://en.wikipedia.org/wiki/List_of_countries_by_GDP_(nominal))

⁴ El País https://english.elpais.com/economy_and_business/2021-01-04/the-spanish-tourist-sector-closes-its-worst-year-since-the-1970s.html

⁵ MSN <https://www.msn.com/en-gb/money/other/eu-crisis-panicked-vdl-begs-states-to-unlock-covid19-recovery-fund-as-delays-hit-bloc/ar-BB1dW1nF>

⁶ BBC News <https://www.bbc.com/news/explainers-56286235>

considerable share of the responsibility. Its lack of leadership has seen individual EU countries having to take control of the pandemic on their own, and the so-called harmonization which the Union was designed to provide has been seriously lacking. Many British pro-Brexit voters may feel vindicated in their decision to have left the Union.

How have Spanish residents met the challenges brought by the pandemic?

During the first lockdown, the Spanish health system (as in many countries) was almost brought to its knees by the wave of patient admissions to ICUs. During one of the most severe and complete lockdowns in Europe⁷, Spanish residents embraced the Government measures to protect themselves, others, and the most vulnerable by staying in their homes. Nothing more personifies the attempt to contain the virus than the way Spaniards have taken to wearing the face mask. Since April 2020 they have been seen everywhere and it is rare to see people walking in the street in Spain without one.

While in lockdown, many initiatives to help ease Covid circled around on social media platforms. One initiative which saw massive participation in Spain and Italy were the daily "applauses". Residents across Spain would applaud from their balconies every evening in recognition of the efforts of health professionals and essential workers. This was an impressive display of solidarity at a time of great stress for those on the front line⁸.

Even scientists from the scientific community, previously unknown to the general population prior to Covid, became celebrities on our screens. A great example of this was Fernando Simón Soria, a Spanish epidemiologist serving as the Director of the Coordination Centre for Health Alerts and Emergencies of the Spanish Ministry of Health. His legendary jumper collection, hoarse voice, informal and frank approach when detailing the government's daily road map to tackling Covid endeared him to the Spanish population. His fame spread internationally, with even the New York Times highlighting his work⁹.

As of the 25th of March 2021, the incidence of coronavirus in Spain was one of the lowest in Europe with 60.8 cases per 100,000 population, compared to rates of 57.4 in UK; 216.2 in France; and 659 in the Czech Republic. It must be said though that while most residents follow government guidelines, it has been more difficult to convince younger age groups. Throughout the pandemic but particularly in recent months, the number of younger Spaniards organising clandestine parties with little or no health safety has been disconcerting to watch. It is surely not only a Spanish phenomenon, the number of lockdowns, the economic downturn and lack of employment opportunities have been the catalyst for some. By the time you have

⁷ We forum <https://www.weforum.org/agenda/2020/04/three-of-the-worlds-hardest-hit-nations-are-preparing-to-end-their-lockdowns/>

⁸ ITV News <https://www.itv.com/news/2020-03-15/coronavirus-europeans-react-to-life-on-lockdown-with-balcony-performances-and-applause-for-medics>

⁹ Euronews <https://www.youtube.com/watch?v=XFo8Xl0xbGw>

read this, the 2021 Easter holiday break will have finished. Every time there have been bank holidays, summer holidays, Christmas and new year breaks, and now Easter, the incidence rate for Covid has spiked. Taking past experience into consideration, this is likely to repeat itself again after Easter¹⁰.

How have medical libraries in Spain coped during the pandemic?

There is an article from May 2020 which I recommend you read. It was published in a Spanish open access journal for information professionals. Written by Domínguez-Aroca and the librarian group #AyudaBiblioteca, it is titled, *"Cooperation among health science library professionals in response to the Covid-19 pandemic"*¹¹. Although it is in Spanish, it can be translated into English using any of the freely available online translator tools. In her article, the author details the fantastic collaboration between over 90 medical librarians from across Spain during the pandemic, how they rose to challenges posed by the mire of publications surrounding Covid, and how they were able to quickly disseminate the literature to health professionals on the front lines. I will say more about this librarian collaboration shortly.

In my 11 years with Wolters Kluwer as a trainer, I have worked with a great number of medical libraries across Spain and globally. In Spain, there has always been a strong collaboration between medical libraries, and a clear sign of this is the C17¹², a collective online catalogue of health science publications, which 500 participating libraries can consult and through which medical professionals request articles and manage their petitions. With the arrival of Covid and particularly in the first national lockdown, a great number of health libraries had to close, as all available space, hospital personnel and resources were directed towards fighting Covid. There was a real fear that the library space would be used for other purposes and the paper collection would be lost, meaning serious implications for the library as a physical entity. Since those uncertain times, the situation has improved, with more people adjusting to the new norms of working from a home office and accessing content online.

Medical libraries such as the Hospital Universitario La Ribera in Alzira (Valencia) and Hospital de Dénia (Alicante), saw an explosion in online courses, webinars, training and meetings on numerous conferencing platforms such as Zoom, which before the pandemic was relatively unknown. As I said at the beginning of this article, even a pandemic provides opportunities!

During the pandemic, most publishers and scientific information providers offered access to content, and information related to COVID-19 from their respective

¹⁰ Statista <https://www.statista.com/statistics/1139048/coronavirus-case-rates-in-the-past-7-days-in-europe-by-country/>

¹¹ Domínguez-Aroca, María-Isabel <https://revista.profesionaldelainformacion.com/index.php/EPI/article/view/79338>

¹² C17 Online Catalog [https://v-hribera.c17.net/sf17/index.php/revistas/materias/action/viewSubject/materia\[path\]/7-50502.cardiologia-50515/](https://v-hribera.c17.net/sf17/index.php/revistas/materias/action/viewSubject/materia[path]/7-50502.cardiologia-50515/)

platforms and webpages^{13 14 15}. The huge collection of resources and information made available provided a headache but also an opportunity and in Spain, librarians as information management specialists played an important role in ensuring the right kind of content reached their medical professionals in a concise and organized format.

So, as highlighted in the article by Domínguez-Aroca, in March 2020 more than 90 health science libraries throughout Spain (including hospitals, universities and health centers) got together to collate all the Covid information by specialist areas. Everything was done altruistically, even during hours outside of work. The aim was to provide a better response to the informational needs of health professionals and researchers related to the pandemic. The following page¹⁶ was put together in record time by the librarians. The page has around 1,500 documents including articles, systematic reviews, guides, infographics on Covid and medical protocols. All materials are classified into the different clinical specialties: cardiology, dermatology, nursing etc¹⁷. The page was open to all health professionals who wanted to consult it. Individual libraries promoted this using social media platforms like Twitter, the hashtag #AyudaBiblioteca is a great example.

This team of librarians, represented by Alicia Fatima Gómez-Sánchez, was also recognized internationally for their initiative after participating in the congress poster session organized by the Koç University Library Turkey, in June 2020^{18 19}. As of March 2021, with the de-escalation of the pandemic and the gradual return to normality, the page has stopped being updated. However, it remains to this day a testimony to the dedication, teamwork, energy, and professionalism of these librarians, who wanted to help protect lives by supporting their fellow health professionals on the front line.

The role of Spanish medical libraries also hit national TV channels. In the following video we see how the librarian and medical personnel at the "Hospital Universitario Severo Ochoa" in Madrid worked side by side to find the best evidence guidelines for the proper use of face masks and hand hygiene to prevent the spread of the virus²⁰.

In the words of the librarian at the Hospital Universitario La Ribera, "It has been a difficult time, both professionally and personally, at first we did not know what to do. But the positives have been working as a team joining with the other librarians for the common good".

¹³ Cochrane Covid19 resources <https://www.cochranelibrary.com/covid-19>

¹⁴ NIH Covid 19 resources <https://covid19.nih.gov/>

¹⁵ Wolters Kluwer Lexicomp Covid 19 resources <https://go.wolterskluwer.com/lc-covid-19.html>

¹⁶ Spanish Librarians Google Drive <https://sites.google.com/view/covid19-por-especialidades/p%C3%A1gina-principal>

¹⁷ Enteral Feeding Pump, Hospital Universitario la Paz https://www.youtube.com/watch?v=-_Elg4rsKwM

¹⁸ Poster Session Koç University, Turkey <https://librarypostersession.ku.edu.tr/poster-ve-sunumlar/ayudabiblioteca/>

¹⁹ Poster Session Top 3 posters <https://librarypostersession.ku.edu.tr/en/best-posters/>

²⁰ Medical Health Library TVE1 <https://youtu.be/20tmuF49Do> [use translate feature for English subtitles]

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Attitude of gratitude: focusing on staff health and wellbeing during Covid-19

Anne Reddacliff, State Library of Queensland

Anne.reddacliff@slq.qld.gov.au

One of State Library of Queensland's health responses to COVID-19 was to form a staff Health & Wellbeing Team. The development of the Team was informed by data from two staff surveys circulated during the COVID-19 pandemic which indicated that some staff were feeling disconnected and disengaged from the workplace. The team was formed with the aim of devising ideas and initiatives to look after staff wellbeing at a time when feelings of vulnerability were high and the effects of up to six months working from home were starting to take their toll.

The team of 12 staff members, who volunteered their time, immediately got to work implementing initiatives to increase staff wellbeing and sense of togetherness. Activities included a month of virtual morning teas in September where staff would meet over Microsoft Teams and catch up just like we used to do in the tea rooms at work. We also implemented a Wellness Buddy initiative where staff are encouraged to reach out to a team member and have a face-to-face or virtual chat about their wellbeing. The initiative continues and is designed to support staff who are feeling isolated or who may prefer one on one support rather than something like a virtual morning tea.

Happiness theorist, Sonja Lyubomirsky (2010) has stated that gratitude is linked to happiness. We also ask staff to send gratitude e-cards, Teams praise or to leave a post-it note on someone's desk with a message of appreciation. All these initiatives are designed to increase connectedness and a feeling of us being part of one State Library.

Some other initiatives we introduced during the height of the COVID-19 pandemic were virtual lunch time walks where everyone joined together and shared their walking experience on Zoom. We also created a Spotify playlist to get people in the mood for exercising as exercise is also linked to happiness (Chen et al., 2020). The playlist is filled with the Health & Wellbeing Team's favourite tunes to get moving! And we shared wellness tips from diet and exercise to meditation and mindfulness through a weekly staff newsletter.

Now that most of our staff are back onsite the Health & Wellbeing Team are still focusing on gratitude and on new initiatives like offering staff yoga and decorating our tea room noticeboards with information about wellness to keep people informed and ensure wellbeing is a priority for everyone. We have been careful not to tread

too fine a line between promoting staff wellbeing and creating a culture of toxic positivity. We want people to feel supported when they are down and not like they have to come to work with a smile plastered on their face. Toxic positivity at work affects employee morale and means employees feel like they can't be authentic about their emotions or their mental health (Wong, 2020). This is the opposite of what we are aiming to achieve.

The initiatives we use are inclusive and give everyone, whether introvert or extrovert, digital native or technophobe, an opportunity to participate in something that suits them. We had 60 people attend our virtual morning teas, 20 people attend the virtual walks and we have so far sent out over 15 wellness tips to help staff maintain a healthy lifestyle. Data from the annual Working for Queensland public service survey indicates that 80% of staff are now feeling connected to and positive about their jobs. This is compared to 63% feeling engaged with the organisation in 2019. There is a greater sense of staff morale and a feeling of us 'all being in this together'. As staff move back onsite and some also work from home, the Health and Wellbeing Team are there to support them in making this transition. We play a vital role in protecting the mental health of our colleagues and our workplace as a whole.

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Piggybacking access: providing library access to the College of Intensive Care Medicine

John Prentice, Australian and New Zealand College of Anaesthetists

jprentice@anzca.edu.au

John Prentice is the library manager at the Australian and New Zealand College of Anaesthetists. Prior to joining the college, he was an implementation specialist at OCLC.

Note: The following article is based on a presentation given to the Health Libraries Association on 26 November 2020.

Overview

In late 2019, the Australian and New Zealand College of Anaesthetists library began supplying library services to the College of Intensive Care Medicine. It did this by “piggybacking” the new service on the back of its existing library service. This model is presented as a way of providing library services to smaller institutions that would not normally be in a position to manage their own library service.

Background

The Australian and New Zealand College of Anaesthetists (ANZCA) is a medical college based in Melbourne servicing over 6000 fellows and 1500 trainees. The trainees themselves are normally based in hospitals throughout Australia and New Zealand, with the library operating predominantly as a remote access service. In addition to a large online collection of e-books, e-journals and databases, the library offers print loans, document delivery, reference, and literature search services. The College of Intensive Care Medicine (CICM) is a relatively small medical college – also based in Melbourne – servicing over 1000 fellows and 250 trainees. CICM was originally an offshoot of ANZCA, with the two colleges sharing some of the same trainee-base.

After splitting from ANZCA in 2008 – and despite an offer to retain some existing services at the time – CICM decided to forego any library service in order to establish itself in its own right. Within a few years, that had changed and CICM decided to take on several journal subscriptions (all with an intensive care medicine focus) which were managed by their IT department. The number of subscriptions eventually grew until CICM had a small stable of e-journals made accessible through EBSCO Full Text Finder.

In early 2017, following several years of informal advice and discussion, CICM and ANZCA began formally negotiating a proposal for ANZCA to take over the CICM

journal subscriptions, with a view to allowing CICM trainees and fellows access to the ANZCA library as fully-fledged users.

Opportunities

The proposal offered many advantages over the then current arrangement. It would allow for a massive expansion of CICM library resources beyond what their current staffing and expertise could manage, which at that point was limited to approximately 10 journals with no e-book access whatsoever.

It would allow CICM to take advantage of ANZCA's expert library staff, particularly with regard to their subscriptions, which at that point were spiralling out of control cost-wise with minimal negotiation taking place during renewals.

It also allowed for a further strengthening of ties between the two colleges, which had been steadily rebuilding since the split. As mentioned, the two colleges share many trainees, who often have similar library resource needs. Indeed, ANZCA was already subscribing to many of the same journals as CICM (partly as a result of their former relationship). This made building a library service for CICM a somewhat easier task, as there were already a number of established vendor relationships in place. More prosaically, the proposal opened up a brand new revenue stream for ANZCA, at a time when the college was looking to expand its revenue-generating endeavours. In particular, it demonstrated the value of the library and provided opportunity to grow the collection in a landscape where resource costs are continually increasing.

Finally, we were fortunate that the CICM library deal was being negotiated during a period when ANZCA was going through the process of selecting a new library system to replace its aging Inmagic system. This allowed prospective replacements to not only be evaluated with regard to the existing ANZCA library service, but also for the expanded library service involving CICM.

Initial challenges

As noted, whilst the selection of a new library service offered a more crafted solution – than if we had simply bolted CICM onto an existing system – it made the selection of that new system a much more complicated and convoluted process, as there were many additional factors to consider. This had the effect of stalling any concrete work on the CICM library service until such a point as the new system were up and running for ANZCA.

Fortunately, once these issues were addressed (see below) and a new system selected, ANZCA was able to implement this new system relatively quickly, which meant that we could then turn our attention to the CICM implementation shortly thereafter.

Some of the key access issues needing addressing were:

1. Authentication: ANZCA currently relies on a hosted EZproxy solution, which integrates with our college user management system for authentication. CICM operates a completely different user management system, with no integration with ANZCA's system. Moreover, due to legacy issues arising out of the fact that CICM was once a part of ANZCA, both systems had parallel, overlapping and conflicting ID numbering for users. Various mechanisms were explored for integrating CICM users into ANZCA's user system, but none proved seamless and all involved an ongoing workload. Ultimately, it was decided that a 2-tier system would need to be used for authentication purposes, so that users were authenticating against their respective user systems. The options open to us were adding a 2nd CICM-specific link alongside all links originating from our discovery interface (something we felt would be confusing and create issues for ANZCA-only users) or the implementation of a CICM-only interface for access (which meant duplicating a lot of services).
2. Contract: The creation of a mutually-agreeable legal framework for both colleges proved difficult, mainly due to the lack of in-house legal expertise on either side. This remained a critical stumbling block for many months and was only resolved when ANZCA took on a commercial manager, who was quickly able to craft an agreement (with considerable input from ANZCA library staff as regards costing).
3. Budgeting/renegotiating deals with vendors: This proved especially difficult where *both* colleges had an existing deal for the same journal. As already noted, CICM's renewals had inflated significantly – well beyond the comparative value of the ANZCA own deals. Whilst the intention was that ANZCA would simply pay a directly proportional increase based on the number of additional users, this didn't always prove possible. In some instances, vendors still wanted the colleges counted as two different institutions for revenue purposes, whilst on other occasions there was the issue of the relative value of a journal to each respective college from a society perspective. As a result, some negotiations were quite protracted and often concessions needed to be made to ensure society revenue wasn't adversely impacted. This has made calculating budgets somewhat cumbersome, and a complicated Excel spreadsheet eventually ended up being created for budgetary purposes.
4. Staff overheads: The new deal placed a lot of extra pressure on existing ANZCA library staffing levels. Many time-saving measures had to be instituted to streamline existing services, not only to free up staff time for the CICM integration, but also for the initial ANZCA systems implementation itself. Ongoing, there was also the added burden of maintaining the combined services. As a result, a decision was made early on to limit the CICM library service to an online-only one – with no access to such staff intensive services as physical loans, document delivery and literature searches.

Implementation and outcomes

Central to the eventual CICM rollout was finding a discovery solution that was both discrete (with regard to authentication) but scalable. Ultimately, this led to the adoption of OCLC's WorldShare Management Services (WMS) as a way of doing this. An initial, fully-featured instance of WMS was rolled out for ANZCA, and then a second scaled-down WMS instance was configured for CICM. It was then possible for ANZCA to simply share all of its existing (pre-configured) online collections with the CICM instance, which were enabled as required, but with CICM's own authentication service plugged in at the institution-level. This meant that any update to the ANZCA collections automatically flowed through to the CICM instance, thereby significantly reducing the amount of staff time required to maintain services.

End-user access was facilitated via a CICM-only discovery layer (utilising WorldCat Discovery Services), essentially replicating the ANZCA setup. This avoided the need to have multiple conflicting links on the one interface. This solution also allowed ANZCA and CICM to create a branded, promotable service. In addition to the above, ANZCA created a CICM library "micro-site" using LibGuides, which allowed us to quickly duplicate existing assets for CICM reuse but on a smaller, more manageable scale.

Most vendors proved very cooperative and allowed CICM to tag onto existing ANZCA deals, although there were some major exceptions. The big gain from an ANZCA perspective was that the CICM deal allowed ANZCA to institute a number of multi-year deals with our larger vendors. This had the effect of both lowering overall prices and reducing the need for all of our deals to be re-negotiated each year. Some smaller subs were excluded due lack of suitability, accessibility issues and to minimise overall costs.

As mentioned above, there was a definite impact on library staffing at ANZCA, as even with all the streamlining and "piggybacking" there is still a need to source CICM-specific content, broker CICM-inclusive deals, manage a very complicated budget and coordinate with CICM IT staff for any authentication issues that arise. This additional workload has been partly mitigated by the decision to keep CICM an online-only service, and the allocation of a portion of the CICM service fee to ANZCA library staffing costs.

The result is that CICM now has access to 900+ e-journals and 12,000+ e-books, including the majority of their recommended exam texts – which are proving to be some of their most popular e-resources.

The Future

CICM are delighted with their new library service, and there has been much favourable comment from both staff and users. On the statistics front, there has been

a slow but steady growth in usage on the CICM end, with the main barrier to growth being the limited promotional opportunities due to the advent of COVID-19. Going forward, CICM has the option of taking up additional services (such as document delivery provision and literature searches) as added-value services if they desire. Moreover, the current solution is completely scalable, and in theory, ANZCA could manage a number of libraries along the same lines, perhaps supplying services to other small medical colleges with insufficient resources to manage a library. In summary, ANZCA has been able to deliver a relatively low-cost, high-yield solution that can be easily replicated.

Supporting allied health students on clinical placements to begin to think, feel and act as a health professional – a health librarian's contribution

Linda Furness

Linda.Furness@health.qld.gov.au

Occupational Therapy Clinical Education Support Officer, Darling Downs Health
Occupational Therapy Program Clinical Education Leader, Townsville Hospital and Health Service

Lecturer, School of Medicine, Griffith University, Gold Coast Campus.

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Ethical Approval

University of Southern Queensland (H17REA228) and Darling Downs Health (HREC/17/QTDD/74)

Clinical placements provide student health professionals with critical and diverse learning opportunities. Engaging in clinical work and learning from role models and peers in the workplace are primary ways allied health students develop professional skills, behaviour and identities as a health professional. Whilst on placement students also have opportunities to become part of the workplace practice community. This study arose not as the result of a need to solve a problem, but from my curiosity and desire to continuously improve clinical placement learning experiences for allied health students. In my study, I explored the influences supporting allied health students undertaking clinical placements in a Queensland regional health service to think, feel and act like health professionals.

Professional identity is a commonly used term with a range of perceptions and definitions. The definition of Professional Identity I chose for this study was from the work of Merton, Reader and Kendall (1957) who argued that the purpose of medical education is:

'to shape the novice into the effective practitioner of medicine, to give him, the best available knowledge and skills and to provide him with a professional identity so that he comes to think, act and feel like a physician' (Merton et al, 1957, p7).

Methods

A qualitative study comprising focus group discussions and a document review was conducted. Thematic analysis was used to analyse transcripts from the focus group discussions and of clinical education placement documents. Narrative data from focus groups were thematically analysed (Braun & Clarke, 2006). A deductive framework based on Merton's definition of professional identity 'to *think, act and feel* like a health professional' (Merton, 1957, p. 5) was used to inform and frame the data analysis.

Participants

Participants of the study included allied health staff whose roles support clinical placement education in the health service (n=17), allied health students on placement (n=12) and new graduates in their first two years of practice working in the regional health service (n=11). Separate focus groups were held for each group. A total of twenty clinical education documents were reviewed: thirteen orientation documents and seven documents used for evaluating the competency of allied health students on placement.

Results

Three overall themes about the influence of clinical placements on the development of professional identity were identified. Using a framework of *think /feel /act*, the themes I identified were:

- 1) *Thinking* supported by quality learning
- 2) *Feeling* supported by socialisation into the workplace community of practice
- 3) *Acting* supported by workplace affordances and opportunities.

Project results and suggestions provided by students and new graduates to support development of professional identity during clinical placements have been reported in several publications (Furness, Tynan and Ostini, 2019; 2020a; 2020b).

Thinking supported by quality learning

The *Thinking* theme described placement learning experiences supporting knowledge and the development of competence. Key elements supporting student learning on placement included: 'hands on' experience, Clinical Educator's support for learning and opportunities to work with patients. Clinical Educators play an essential role in supporting student learning through acting as a role model, setting expectations, providing feedback, adapting to students' preferred learning style, being knowledgeable about their own profession and their ability to reflect and communicate well. Students valued supervision sessions with their Clinical Educator because they supported students to develop their reasoning and receive feedback.

Clinical placements provide an opportunity for students to take theoretical knowledge gained at university and apply this theory to patient care.

Feeling supported by socialisation and connecting in the workplace

The *feeling* theme describes socialisation and connectedness in the workplace. The connections can be both positive, supportive and welcoming or can be challenging for students where they feel like a '*burden*' in the workplace. My study identified the positive impacts of the workplace culture where clinical education is core business and underpinned by a commitment from the health service. Students and new graduates described the positive benefits of a workplace which valued clinical education, showed respect for students as '*part of the system rather than an add on*' and where they were welcomed and valued.

The active encouragement for students to be involved in case conferences and professional development sessions enabled connections. Students and new graduates explained how participating in team storytelling and discussions supported both their learning and connection to the team. Work shadowing with members of students' own profession and other professions was valued as a way to understand more about their own profession and the roles of other professions. The passion Clinical Educators have for their work was highlighted by a number of new graduates. One participant commented about their Clinical educator saying, '*when I grow up, I want to be like her*'.

Participants reported placements supported feeling like a member of the profession and relatedness through:

- Clinical Educators supporting a relationship of trust, respect and non-confrontational, reciprocal learning.
- Developing connections with their own profession, and other professions during placement
- Caring for patients and feeling affirmed by other professionals asking for the student's opinion.

Regardless of our role or profession we can all enable the socialisation and connection of students as they enter our workplace.

Acting – developing autonomy and independence in practice as health professional

The *Acting* theme described students gaining skills and independence in providing services and care as a health professional. One Clinical Education Support Officer (responsible for the coordination of clinical education for their profession in the health service) explained:

'I talk about this analogy of unzipping their student suit and at the end they step out of it. I want them to leave here feeling like a speech pathologist' Participant 2.4.

Implicit references to acting like a member of the profession came from workplace documents referencing expected dress standards, wearing a student identification badge and the expectation for students to be introduced as part of the patient's care team. Clinical Educators described supporting independence through creating opportunities for contribution to care, grading learning experiences, increasing the complexity of cases, and working to build students' confidence. One student described how they benefited by their Clinical Educator nurturing them as an emerging clinician, not a '*mini-me*'. Students and new graduates described how when patients and their families sought their advice this supported their transition from identity as a student to that of a health professional.

Having other health professionals ask for a student's input and implement student advice for patient care '*makes me feel like I'm getting there*'. Participants reported placements supported acting and autonomy as a member of the profession through:

- Opportunities to develop autonomy and independence in client care
- Developing an understanding of one's own role and contribution to patient care
- Receiving referrals and requests for input in client care by other professions
- Taking time to reflect on placement learning and experiences

How can librarians contribute to students *thinking, feeling and acting* as a health professional?

Whilst not specifically investigated as part of my research project, personal experience has shown me that health librarians can and do play a key role in supporting student health professionals to *think, feel and act* as a health professional.

The *thinking* theme links closely to the work of health librarians supporting students to access clinical learning resources to develop competence. Health librarians support the development of competence through:

- Supporting Clinical Educator preparation and upskilling for their role in student education
- Support for students and their Clinical Educators to access learning resources related to their profession such as: literature about professional theory and frameworks, evidence-based practice, and resources for reflection, and clinical reasoning
- Assisting students to access literature to support their placement learning e.g. information about different medical conditions and treatment approaches
- Assisting students who are completing quality improvement projects to access literature, critical appraisal tools, data bases, and Health Service intranet references.

The *Feeling* theme considers student connections with others in the workplace. During clinical placements a health library becomes a meeting place and provides

space for students to complete study and project work. A health library is therefore another point of connection in the workplace for students. These connections to the workplace can be enhanced by:

- Creating a supportive learning environment which encourages and facilitates student meeting
- Providing facilities to support connections eg phone charging facilities, break out spaces and relevant computer programs for client care and statistics
- Interest in a student's placement experience and locations which can help strengthen a student's professional identity
- Creating a positive workplace culture for education, acceptance by a team and other library users

The *acting* theme outlines supporting the application of knowledge in practice. Whilst health librarians are not in the clinic with students treating patients, they can encourage the recognition of students as student health professionals. This can be facilitated through how students are addressed and by noticing and valuing students' contribution to service delivery during their placement both in clinical and project/quality improvement work.

I trust these reflections affirm current practices and may provide some suggestions to assist health librarians as you continue to support clinicians and have contact with student health professionals during their clinical placement.

Conclusion

Librarians play a valuable role in the development of professional identity for allied health and other student health professionals on placement through their vital role in linking students and staff with information and helping students to develop connections in the health workplace.

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ALIA advocacy events and the conundrum presented for Health and Special Libraries

Michelle Pitman, Wimmera Health Care Group

Michelle.Pitman@whcg.org.au

As a new graduate Librarian, I was extremely fortunate to find a part-time position in a Health Library close to home in late 2019. It is proving to be a wonderful experience with just enough challenges to keep me on my toes.

As I adjust to this new career, I have sometimes found myself butting need and imagination up against the advocacy and promotional opportunities afforded through the Australian Library and Information Association [ALIA], attempting to fit these themes into a health library context. I can usually see the opportunity, but I sense that sometimes, the generalized thematic thrust of ALIA events messaging may get lost in translation for the Specialist Librarian. Unless one has time and capacity to exert some imagination, these marketing opportunities and their themes will often mean little to our unique cohorts.

The Australian Libraries and Information Association [ALIA], performs an outstanding role in Australian society by promoting and reinforcing the professionalism of Librarians and extolling the value, impact, benefits and social compact of libraries, both public and specialist (ALIA, 2019). The Health Libraries Sector in Australia [HLA] has a high profile within ALIA and much excellent work has been achieved, particularly the NSQHS 2.0 Live Literature Searches (ALIA, n.d.a).

While this work is essential and ongoing, it is behind-the-scenes. To advocate for the benefits to clinicians and allied health teams, ALIA's public-facing marketing tools, eg Library & Information Week and Library Lovers Day, could be leaving many health and other specialist librarians scratching their heads as to how to use them within their unique use contexts. Perhaps ALIA could seek input from its specialist Librarian cohorts to better understand how they must reimagine and redesign event themes to be fit for purpose? I don't know how other health librarians have reworked LIW themes in the past, but my experience so far is telling me it is not as easy as it first appears!

In January 2020, just as the first murmurs of a new virus devastating the province of Wuhan, China was in the news (Ratcliffe & Pei Lin, 2020), I was innocently thinking about the 2020 theme of "Create at the Library" for Library & Information Week. The ALIA-provided poster template didn't easily translate for health libraries per se, so I suggested to Gemma Siemensma at Ballarat Health Services Library that I wanted to run a team competition using the ALIA LIW2020 poster but in which team members

would recommend health-related terms for the blank spaces. In a heartbeat, she saw the possibilities and arranged for a health-themed poster template to be prepared for HLA members. This template replaced words that were on the ALIA version with health-specific terms. It was the same poster design but with a health library twist. Imagination: we thought outside the box - in this case, near literally! I am unsure how Law, School, Academic and other specialist Librarians managed to rework this event's messaging for their unique contexts?

The first pandemic lockdown in Australia along with the increased pressure on the hospital's clinical teams resulted in not much participation in our Library & Information Week 2020 competition; even so, the response was still good when this is considered. By taking what ALIA had made and reimagining the theme to make it "make sense" for a health/hospital and clinician context, we achieved our goal of advocating for use of this health library. Our Dental team won the \$50 prize, much to their delight.

For Library Lovers Day 2021, ALIA produced the "Make a date with your Library" promotion. This theme did not gel easily for use with health clinicians. I felt that it is irrelevant to ask extremely busy clinicians to arrange "a date" physically, with their library - and on a Sunday! Again, after consultation with Gemma, we reworked the messaging for HLA use. Imagination used the ALIA-produced theme but aligned the messaging to what we knew would "speak" to our health team. We invited them to remember that they have access to fast, virtual, up to date, evidence-based clinical resources at their fingertips. This promo went into the team newsletter and onto our private social media page (see Appendix 1).

Measuring the reach of these types of advocacy tools is difficult. I shall continue to research methodologies for our library to capture this kind of data in the future. Still, we took what ALIA provided for the general library context and reimagined its theme so it made sense for a specialist library context.

Thinking ahead to this year's Library & Information Week, 2021, ALIA has announced the theme of "Adventures in Space & Time" (ALIA, 2021). Reconfiguring this thematic opportunity for a health library context is, yet again, proving challenging. With time and imagination, we shall rework this into something that we can use for our own unique advocacy needs. In the meantime, there is more work to do in understanding how special libraries - particularly health libraries - can readily capitalize on ALIA's high profile public marketing and advocacy opportunities as they arise. We know that all librarians, regardless of their specialty and expertise, do have extraordinary imaginations; it's making the time and having the mental space to exercise it that is the concern.

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Appendix 1



Speak to your friendly Medical Librarians at the Handbury Library – Ph: 19291 or at BHS Library - Ph: 94455 if you need help with access.

Health professionals don't often have time to 'make a date' with their Health Library...we get that. Perfectly understandable. Staying up to date with the latest literature is still important though, so....

The Handbury Library at WHCG and Ballarat Health Services Library are encouraging the team to...

[Make an online date with your medical library!](#)

- Download FREE clinical apps on your mobile device (e.g. MIMS & eTG).
- Access thousands of medical eBooks.
- Explore the latest evidence in journals or use our databases to find the evidence you need.
- Ask the Librarians for help with all your study and research needs.
- Happy Medical Library Lovers Day from us.

PS – if you want to do this at home, make sure you've registered for an OpenAthens login and password. While at home, Google BHS Library. Use this login and you should be good to go.

From library to knowledge centre: evolving a responsive hospital library service for Far North Queensland health services

Juliet Marconi

Manager of Library & Knowledge Services (2012-2021)

Cairns and Hinterland Hospital and Health Services

Introduction

In 2008, my partner and I relocated to Cairns looking for a relaxed tropical lifestyle and new options for fulfilling work. That journey was fraught with challenges and mixed feelings. I left a well-paid Information & Knowledge Management principal project manager role in the South Australian (SA) public sector to relocate. Prior to being seconded to that role, I was Manager of the Department of Health Library & Information Services, with many years of experience in providing library services for the rural health workforce.

I was fortunate enough to win a permanent Library Technician position with the Cairns Hospital Library in September 2008, but this was a step backwards in my career. However, it was a chance to knuckle down and learn about the issues faced by the Cairns & Hinterland and Torres & Cape hospital and health services workforce, of which there were many.

Familiar with the challenges of providing services to rural and remote health library services from my early library career in SA, I learnt about Queensland Health systems and unique problems faced in this part of the world – surprisingly, some issues were not too different. Reliable technology was still a major barrier for rural and remote health workers despite all the technological progress I had seen in my profession. It was obvious from the beginning that I needed to improve the library's online presence on the intranet and travel around the region to provide face-to-face training in the use of online evidence-based information resources. Training had been provided previously on an ad hoc basis but did not really seem to be core business for the library.

Those early days provided me with practical everyday experience in how to deliver more responsive library services to a workforce that was geographically distributed and varying widely in their information needs and digital literacy skills. Aboriginal and Torres Strait Islander health, and tropical public health issues were main areas in which my medical and health knowledge expanded as I travelled to Weipa and Cooktown, driving and flying, and around the Cairns and Hinterland region. I remember clearly experiencing the first wet seasons and how that impacted on the

library service – work related travel ceased when the rains arrived, and flooding occurred.

In 2011, I experienced my first serious natural disaster - Tropical Cyclone Yasi. This was a massive learning opportunity for me personally in terms of managing library business continuity and risks, but also a major threat to Cairns Hospital. The Hospital was fully evacuated in preparation for the category 5 storm, a massive logistical undertaking during which the Library space was commandeered as an emergency management hub for building and engineering services staff. The [LKC Disaster management specialty guide](#) has many papers listed by staff who published their experiences following Yasi. Fortunately for Cairns, but sadly not our communities further south, we were spared a direct hit.

The Cairns Hospital Library service

The Cairns Base Hospital (CBH) Library was established in 1990 with a Federal Government "Library Enhancement Grant" to serve far north Queensland health services, including Torres & Cape. In 2003, a service agreement with James Cook University (JCU) was signed for CBH Library to provide services to JCU medical and health students on clinical placement at the hospital.

Cairns Base Hospital was renamed Cairns Hospital in 2012, with the Library renamed the "Library & Knowledge Centre" (LKC) under the sponsorship of the then Chief Executive officer, and management responsibility shifting to the Executive Director of Nursing & Midwifery. This was also the year that the then Library manager undertook long service leave with a view to retiring to New South Wales. I was fortunate enough to be appointed permanently as Manager in January 2014. In 2019, the library came full circle when line management responsibility shifted again to the Executive Director of Medical Services, similar to the earlier years of the Library. The LKC provides services to all staff across the Cairns & Hinterland (CHHHS) and Torres & Cape (TCHHS) Hospital and Health Services. In addition, Cairns Hospital is the clinical teaching hub for JCU medical students on placement from years 4 to 6. We also provide library support to other health sciences and nursing students from JCU and other universities on clinical placements within CHHHS. I had not previously been involved in providing library services to students, so this was a new experience for me.

When I took over as manager, I wanted to improve our reach and ensure that all staff across the health service were aware of the services available via the LKC while meeting our obligations under the JCU service agreement. I also desired more extensive and robust service performance data to demonstrate our value.

Strategic planning and key performance indicators

The first step in my role as Manager was to articulate how the Library would operate differently as a “knowledge centre” and following consultation with our clients across the region, I undertook a planning process to capture the new LKC’s directions for 2012-14. The key focus of my first business plan was to clearly articulate the mission and objectives for the service using a balanced scorecard approach, looking at service improvements from our client’s perspective and addressing issues raised by them during our consultation process. The key issues at that time were lack of awareness of the library service, and access to LKC via the internet and the library space, while appreciated by clients, needed substantial upgrading with additional computer access and WiFi required.

The key performance indicators (KPIs) developed in the first plan focussed on measuring service success from several perspectives – demand, relevance, client satisfaction, and value (cost effectiveness). The LKC KPIs have been refined over time to reflect more realistic targets.

Other tools used to measure service effectiveness in each planning cycle were a regular 3-5 year library client survey and regular evaluation of value-add services such as mediated literature searches and client training program. Standard questions regarding client’s purpose for request and how they intended to use the information provided by LKC were implemented. It was also important to develop and collect more detailed data to ensure the LKC was fulfilling its obligation to JCU under the service agreement terms.

I developed a framework for service data collation and service performance monitoring to ensure that the LKC team was taking a systematic approach. I opted for gathering too much data rather than less, although how the data was presented would evolve.

In 2019, I took the LKC team through a planning process to focus on our staffing levels and skill mix with the process incorporating: a review of skills and knowledge based on future library trends, a skills gap analysis, task tracking exercise and literature review including identifying existing standards or guidelines for staffing ratios. This document also identified the key strategic drivers for CHHHS in the next 5-10 years which included stronger research priorities and the development of the Cairns University Hospital model. Following this exercise, the team agreed that the existing staffing levels needed to increase, but more importantly, the LKC needs to shift the skill mix to encompass more professional level roles – to support research by providing more clinical librarian expertise.

Physical vs online and accessibility

From 2014, the LKC team and I spent considerable time improving our online presence. This was critical to ensuring that all our client groups spread out across Far North Queensland would have information about, and access to, our services. We implemented:

- LibGuides (CMS) & LibAnswers.

We used LibGuides software to develop a website in addition to creating subject (specialty guides). It was an iterative improvement process with updates to both intranet and websites shifting to graphics driven navigation. Specialty guides were developed with local champions who ensured the content we provide on the guides was authoritative and were so successful that nurse educators requested specialty guides to support their clinical learning programs.

- Koha, LKC borrowing app and self check-out.

The LKC transitioned from Voyager to Koha in 2014, and following client feedback, a self-borrowing app for Apple and Android mobile phones was developed for LKC by FE Technologies. One of the biggest challenges, although seemingly simple, was to implement a self check-out station at the reception desk to facilitate after hours borrowing (rather than a manual hand-written sheet) and during busy times.

- EBooks.

LKC clients demanded access to eBooks as well as print / physical resources, not just those titles available via the Clinical Knowledge Network (CKN) state-wide portal. After investigating several options, the LKC joined the Queensland Health Library Network purchasing arrangement with Proquest which meant we could purchase eBook titles on demand and share access across the state.

- Trialling EDS.

A universal search product by EBSCO – EDS EBSCO Discovery Service was trialled but later pulled as the integration with CKN was causing user experience confusion (ie what was available and badged as CHHHS vs CKN). Essentially, the LKC did not purchase enough unique local product to make this feasible

- Promoting CKN

CKN provides statewide access to a whole range of evidence-based practice resources, databases, ebooks & ejournals, point of care and medications resources. It was important for LKC to promote its use and support our clients (staff) in effective searching techniques.

- Tailored, packed information and evidence updates.

We know that clinicians are busy caring for patients and overloaded with information. We rebadged our current awareness services and called them "evidence updates". We produced monthly updates for several topics which are shared with our QH Library colleagues (such as Patient Safety, Stroke, Integrated care). To respond in a timely manner to issues that arose in the health service we also created quick evidence updates for topics and used these to raise awareness of LKC services. This impacted on the demand for literature search services.

In parallel with the focus on improving our online access and presence, onsite improvements were implemented in a staged approach with new ergonomic furniture and chairs, recarpeting and painting and improved professional signage implemented during a two-year period, undertaken within the limits of the existing infrastructure and budgetary constraints. This included increasing computer access for clients which has steadily grown in demand over the years.

Improving our visibility

To address the lack of service awareness that was identified through our surveys, we implemented regular marketing and promotion activities. From weekly LKC news snippets focussed on topical issues for the service or health awareness events, to special events such as Library Lovers Day and Australian Library and Information Week – we ensured that we were using all available opportunities to increase our visibility within the organisation.

Some other improvements including being invited to attend face to face at generic staff orientation programs where previously we just provided handouts; offering LKC pop-up sessions to interested work groups; attending discipline specific orientation programs (eg Intern orientation or Nurse education transition programs). We accepted any offer to present to our clients, when and where it was convenient to them.

The other important tool we used to promote our service achievements was the use of infographics – presenting our annual report data simply grabbed people's attention.

Moving outside the library walls

It was important for the team and I to look beyond our walls and ensure that we capitalised on any opportunities to participate in activities or forums to contribute our knowledge and expertise. I was invited to attend the Patient Care Committee which oversaw the Accreditation preparations for 2018 implementation of the new NSQHS 2nd edition standards.

In late 2019, Tablelands Regional Council Library Services representatives approached us to jointly provide a "words for wellbeing" website (like the service implemented in Ipswich where they worked with the West Morton health services Librarians to provide access to clinician approved consumer health information). The LKC and TRC Library Services launched the Far North Wellbeing website at the end of January 2020. It was a wonderful opportunity to work with our local public libraries to provide reliable consumer health information.

More recently, the LKC team worked with other clinical areas to progress the Therapy animal procedure which had stalled at previous attempts and the development of a

site access agreement with Delta Dogs. While I didn't lead this process, I was keen for members of my team to work on this project and it has resulted in strong ties with the clinical areas and an understanding of contract development.

During my time as Manager of LKC, I was privileged to be nominated as the Prevocational Medical Education Committee chair after having attended as a member previously.

All these opportunities were important in raising my profile and that of the library across the organisation, and also resulted in opportunities for skill development for myself and my team.

Pandemic learnings

Like all other Library staff across Australia and the world, the COVID-19 pandemic has created many challenges. I learned a lot during this time, including:

- Essential hand hygiene and infection control measures. We implemented more stringent cleaning practices because we provided access to shared resources such as computers and study areas. Enforcing compliance with social distancing measures was a key struggle.
- Retaining a presence during lockdown was important. The Team and I were keen to ensure we kept providing a service during the lockdown and not undo years of work in promoting our services. We were fortunate not to have a prolonged lockdown in Queensland, but for a period of six weeks we made major changes including restricting access to the Library spaces rather than closing completely, and implementing a working from home roster with allocated tasks to minimise exposure for LKC staff.
- Transitioning to online LKC training delivery. The pandemic was the biggest impetus to change from face to face training and provide only online training options. We had always offered online training, but adoption was low or non-existent. Now, as COVID-19 has made using MS Teams and Zoom a normal way of conducting meetings, our clients are accepting online training delivery as the norm.
- Impact of Covid-19 on the university sector. The LKC was fortunate to re-negotiate a new service agreement with JCU in early 2020 with an increase in the funding amounts based on growth of student numbers and usage, just as the pandemic lockdown was occurring. It will be interesting to see how the pandemic impacts on the university sector, eg lower student numbers and subsequent financial challenges will affect the library services we provide to the JCU students and their usage.

The future

Looking forward, the main issues I see for LKC are:

- Seamless access through a more responsive discovery service. This will need to be tackled in the future given the online world we live in and the need for our clients to access relevant information quickly.
- Changes to LKC staffing and skill mix. How the LKC can grow (in staffing levels and skill mix) to meet the new service delivery opportunities that the Research strategy and University hospital initiatives will bring.
- Long term survival of the service relies on visibility and being able to demonstrate the LKC's contribution to patient care and health service strategic objectives, particularly in times of fiscal constraint and expectation of financial efficiency.
- A real-time service data dashboard that enables accurate library service performance reporting would be ideal. Making service data visible and public in real-time would create transparency with our clients and provide LKC team with tools to support timely decision making and reporting to senior management and executive.

Conclusion

Success in my role has been as a result of several factors:

- A small and highly functional team where collaboration, respect and trust underpin all our work and relationships; and the willingness to change, even if it's scary, is strong
- Line reporting directly to executive director level has been invaluable in increasing our visibility
- High onsite usage and increased online usage shows that our clients need both physical and virtual access to the library services and library staff expertise.

Personally, the most difficult part of living and working in Cairns, despite the stunning scenery and environment, has been the distance from family in Adelaide, particularly with ageing parents. The Covid-19 pandemic has spotlighted the difficulties of this distance.

The highly specialised nature of our clinical librarian roles brings with it an opportunity to work very closely with health practitioners and clinicians. I will miss the extraordinary relationships I have built with dedicated staff across the health service, who not only valued my skills, but those of my highly professional team, and they valued how library services could effectively support them in their roles. I will miss being part of the library community, not just in FNQ but within Queensland Health and nationally. Health Librarians, all librarians, are brilliant at networking and sharing. I will miss the amazing team I worked with, and the stunning landscapes of Far North Queensland from the beautiful rainforest and mountains to the Coral Sea.

Health Library Staff Member Spotlight

Nigel Granger
Wingfield Library, Tasmanian Health Services
Nigel.Granger@ths.tas.gov.au



When did you first start working in a health library?

In 1997 the Royal Hobart Hospital Engineering Department was privatised and I retrained in the admin and clerical stream, library and corporate records. A few years on and library was split from records and moved to a new location, I went with library as a library assistant.

What was your first professional position?

When I was appointed as a library Technician.

How do you describe your current position?

Interesting. I am part of a committed team dealing with day to day running of a 3-person library. This includes dealing with a variety of clients, volunteers and return to work people and my supplying document delivery articles and electronic table of contents service.

Do you have a favourite website or blog?

Gumtree or Ebay (Sorry)

What do you find most interesting about your current position?

Due to Covid our face to face training had to be modified to produce Online training packages. This opened new fields for all of us and was an exciting time.

What has been your biggest professional challenge?

From not being a library person and understanding how they work or having any computer skills to now being a part of team that is promoting the value of libraries and their existence.

How did you join health librarianship?

When I joined the Wingfield library it inherited me, and I inherited it.

What was your previous employment background, prior to health libraries?

A plumber in private enterprise and later with the Tasmanian Health Department (Royal Hobart Hospital). When the positions were abolished at the RHH I was seconded to the Library and Records Department of The Department of Health and human Services (DHHS).

What would you do if you were not a health librarian?

Still be a plumber or any occupation to do with sailing or being on the water.

What do you consider the main issues affecting health librarianship today?

Keeping libraries relevant in today's situation of lack of funding, not enough staff, covid restrictions on libraries and our patrons.

What is your greatest achievement?

Gaining my Diploma in Library and Museum Studies, and being on the Gratis Australia wide committee.

What is your favourite non-work activity?

Restoring and sailing my yacht.

