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Editorial – Five Hugs

Daniel McDonald

Librarian, Darling Downs Health | Editor, JoHILA

HLAnewsed@alia.org.au

During the recent Olympic Games in Tokyo South African swimmer Tatjana Schoenmaker won the 200m breaststroke event in a world record time. Immediately afterwards Annie Lazor and Lilly King, Americans who finished second and third, came from their lanes to wrap Schoenmaker in a celebratory hug, as did her South African teammate Kaylene Corbett. On exiting the pool Schoenmaker and Corbett remained in an embrace while walking the length of the pool, Schoenmaker weeping into her training partner's shoulder while contemplating the enormity of her accomplishment.

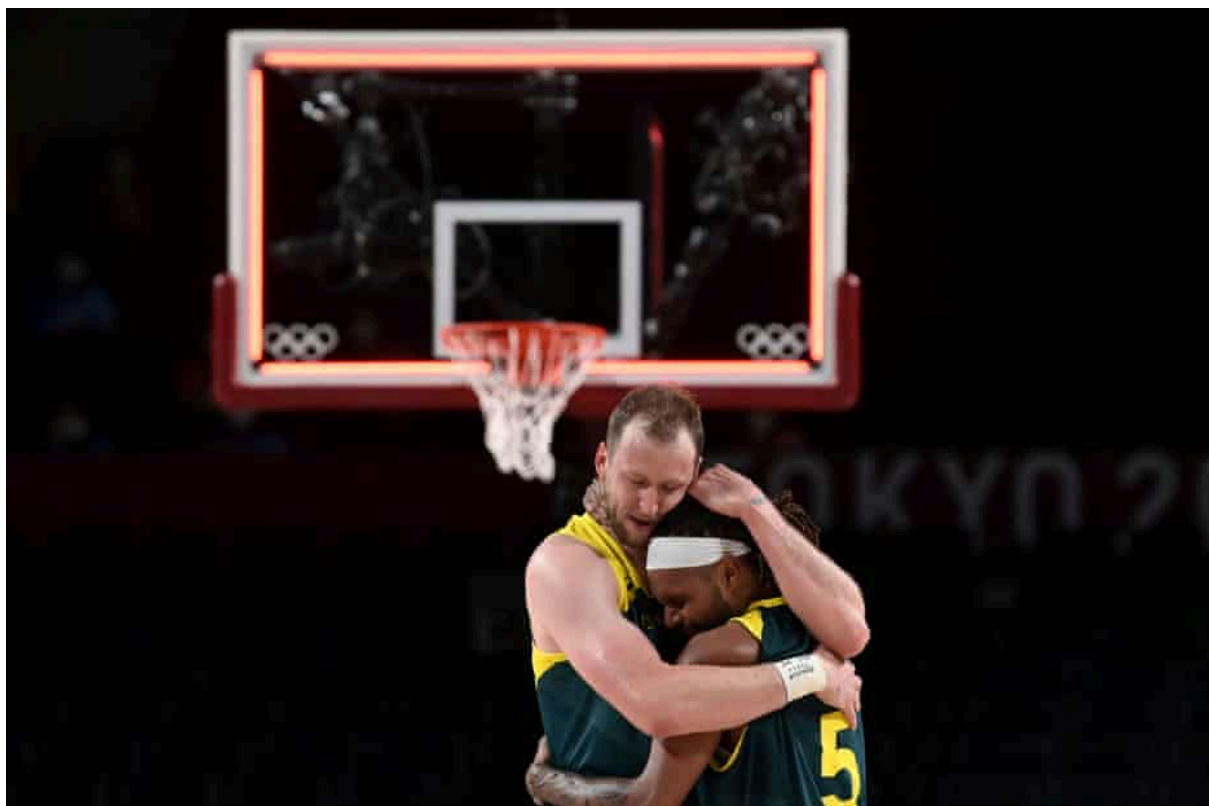
There were more hugs in the athletics. Italy's Gianmarco Tamberi and Mutaz Barshim of Qatar could not be separated in first place during the men's high jump, even after counting back previous jumps. On learning they could share the gold instead of conducting a jump-off Tamberi leapt in to his good friend Barshim's arms, both overcome with joy. Shortly afterwards Tamberi's Italian teammate Lamont Marcell Jacobs unexpectedly won the blue riband 100m sprint. Tamberi was waiting at the finish line to wrap Jacobs in another joyful hug. Several nights later two Australian athletes, Ash Moloney and Cedric Dubler, were competing in the final event of the decathlon, the 1500m. Moloney was in third place overall but needed to finish within ten seconds of his nearest rival to claim the bronze medal. Dubler had injured his hamstring in an earlier event, but ran the race anyway, pacing and encouraging a fatigued Moloney to ensure he won bronze. As Dubler limped across the finish line he celebrated every bit as much as Moloney did, the two sharing an exhausted but elated embrace on the track.

In the men's basketball Australia was competing in the bronze medal playoff. Again. At the previous Olympics they had lost the equivalent match by one point, continuing a pattern of coming close but never actually winning a medal. After defeating Slovenia and finally winning a bronze medal Australia's two best players Patty Mills and Joe Ingles, shared a momentous hug on the court. Despite earning many millions of dollars playing basketball in America, both players still greatly valued playing for Australia in international competition, and both had been a part of many of the previous difficult losses. Their embrace celebrated the immediate victory, but also served as a symbol of their shared hardship and endurance through adversity.

What does all this hugging have to do with Health Libraries in Australia? Probably nothing. Maybe the Olympic Games should not even have been held. Maybe sport is

a poor and confected prism through which to view other aspects of society. Maybe I'm just overly prone to sentiment and outbursts of emotion after my wife and I welcomed our first child into the world on 10 August. But as I held my son on the first night he was home, together watching Manchester United win a league game in a stadium full of fans for the first time since March 2020, I could only reflect on the ways in which these sporting hugs encapsulated something profound about our wider present moment. The shared humanity. The striving for excellence. The solace of colleagues. The social bonds. The simple need for a hug.

There is no denying the difficulties of the present moment. Hospitals and the health workforce are under tremendous pressure. Universities face great uncertainty. Lockdowns are wearing. Families and communities are stressed. Health misinformation and falsehoods continue to proliferate with frustrating alacrity. Maybe a hug is ill-advised in a pandemic of infectious disease, and maybe we can't all inspire by running faster and jumping higher and swimming stronger. But right now we all need support, reassurance, a sense of something shared, some striving for excellence, a little solace from colleagues. Perhaps the articles in this issue of JoHILA, laboured over by health library practitioners just like yourself, can provide some of this, a small strengthening of the social bonds we all need right now. A hug, of sorts, if you will.



Joe Ingles and Patty Mills embrace after the Boomers secured a bronze medal – Australia's first ever in a men's Olympic competition. Photograph: Aris Messinis/AFP/Getty Images

Convenor's Focus | August 2021

Gemma Siemensma
Library Manager, Ballarat Health Services | HLA Convenor
gemma.siemensma@bhs.org.au

The catch cry of "bring on 2021" for many across Australia has turned to "bring on 2022" when hopefully life might be a little more settled. The last few months have been very tough for many as lockdowns have occurred in almost every state and health libraries have once again pivoted services as staff work from home and juggle other commitments (such as homeschooling - the one I dread the most)!

HLA have continued to forge ahead behind the scenes and are excited to announce that Ann Ritchie has been appointed to a 12 month contract position as the HLA National Manager (Strategy and Co-ordination). HLA Executive ratified the need for such a position at our strategic planning day and the position was advertised soon after. We welcome Ann to the role and hope that this position will facilitate HLA in achieving the current strategic objectives. In particular the focus over the next 12 months will be on:

1. Education/Professional Pathways – HLA priorities
2. HLA Guidelines Review
3. Health Information Workforce
4. Strategic Partnerships & Collaborations

Our main focus for 2021 has been a series of online education sessions. These have continued to bring health librarians together on a range of different topics. We have been amazed that our workshops have sold out continually which has meant more have been added to fulfil demand. To stay up-to-date on what is available make sure you sign up to the aliaHEATH e-list. If you have ideas on what you would like to see featured in 2022 please email our Professional Development, Education and Training Portfolio Lead Angela: Angela.Smith@health.nsw.gov.au

Otherwise please enjoy this fantastic issue of *JoHILA*. I always find it inspiring to read about other health libraries and the amazing initiatives, events and research that occur in other organisations.

See you online soon, Gemma

National Manager Update | August 2021

Ann Ritchie
HLA National Manager
Ann.ritchie@alia.org.au

As HLA's recently appointed National Manager my role is to spearhead the priorities and projects that are set by HLA's Executive at our annual strategic planning meeting. At this meeting, the five Portfolio leaders present the critical issues and proposed actions for their portfolios – Education and Professional Development; Partnerships and Collaborations; Membership; Demonstrating Value or ARMA – Advocacy, Research, Marketing and Awards; and Publishing. The priority projects for the National Manager fall out of these discussions. These are the priorities for the next 12 months:

- The future of LIS education, health specialist continuing professional development (CPD) and ALIA's Professional Pathways Initiative
- Review of the *Guidelines for Australian Health Libraries*
- Being part of the specialist health information professional workforce
- Developing partnerships and collaborations

In this short piece I'll outline the first of these. Please feel free to get in touch if you would like to hear more about or contribute to any of the priorities.

The future of LIS education, health specialist CPD and ALIA's Professional Pathways Initiative

The future of LIS education and ongoing CPD for health librarianship as a specialty area is the most important and critical issue for our profession right now. Our recognition as one of the health information professions is at stake, and there are implications for our roles, responsibilities and scopes of practice in the digital health information workforce. The main reason for this existential threat is the weakening of the traditional tie that stipulates that accredited post-secondary education courses are a necessary pre-condition to gaining professional status. Let me explain.

The well accepted route to professional recognition as a librarian or a library technician and ALIA's responsibilities in setting educational standards are outlined in the document: *ALIA's role in the education of library and information professionals* (2019)¹. This policy states that "the phrase 'library and information professional' refers to those members of the profession who have successfully completed an

¹ *ALIA's role in the education of library and information professionals*, 2019.
<https://read.alia.org.au/alia-role-education-library-and-information-professionals>

entry-level qualification in library and information science at either Associate or Library Technician level.”

The inaugural meeting of ALIA’s Professional Pathways Board (for which I am the health libraries representative) was held on 5 July. This is from the take-home messages:

The Professional Pathways Frameworks project was considered in some detail. This project aims to develop appropriate frameworks to enable alternate [sic] options for professional-level entry into the library and information profession, and clear pathways for people to specialise within the library and information profession.

ALIA’s Professional Pathways Initiative is looking at alternative “options for professional-level entry” including different routes to becoming a “certified library and information professional” or “certified ALIA library technician”. This certified status would be achievable via pathways other than the current educational ones, which could see the control of the qualifications and criteria to becoming a professional shift from the universities/TAFEs (accredited education providers) to the professional body (which is not, itself, a registered education and training provider).

Our HLA Executive has convened a national consultation group of those who have expressed an interest in the future of general LIS education and health librarianship as a specialisation. We have made submissions to ALIA on your behalf, particularly outlining our aims:

- to strengthen the current system of LIS education and course/provider accreditation processes, especially the ties between educators, employers, our professional association and our broadly based health library workforce;
- to develop our health specialist model of requiring a baseline LIS qualification conferred by an accredited provider, leading to competency-based specialist qualifications and ongoing CPD, a model that emulates the training programs of the clinical health professions.

We have expressed our concerns about the change in focus from the original presidential theme of “the future of education” to one of “alternative pathways” as the mechanism for becoming a recognised professional librarian or library technician.

We have also outlined the risks of deprofessionalisation and the industrial repercussions in terms of professional vs administrative awards and conditions, if a route that attenuates or severs the link between post-secondary education and professional status were to be followed.

HLA has received assurances from ALIA that health libraries will be recognised as a "special case" (along with school and law libraries) which may not fit neatly when general principles are applied and detailed action plans are implemented in specific sectors.

The HLA committee is committed to pursuing our aims, as stated above - to strengthen the current LIS accreditation processes to ensure quality graduates and a firm basis on which to build health specialist qualifications, and will work within the Professional Pathways framework to achieve these goals.

As your health libraries representative on ALIA's Professional Pathways Board, I have undertaken to represent the views of our sector, champion the approach, and support its implementation. I will aim to develop and implement the projects constructively, so they lead to the best possible long-term outcomes for health libraries. Please get in touch with me if you have any thoughts. You may also contact the ALIA team "who will be conducting further consultations including with expert reference groups... ALIA Director of Policy and Education Trish Hepworth trish.hepworth@alia.org.au".

Tribute to Kathleen Gray OAM



Cecily Gilbert

Research specialist in digital health information, University of Melbourne

Cecily.Gilbert@unimelb.edu.au

When the Queen's Birthday 2021 Honours included an Order of Australia medal to Kathleen Gray, it cheered many in the Australian health libraries' community. The OAM was bestowed for "service to medicine through digital health education", but we too have benefited. Kathleen is a qualified librarian and 'one of us', having joined ALIA in 1980, and worked in Australian health libraries between 1980 and 1986. She was part of the HLA Executive for ten years, through to 2021.

HLA convenor Gemma Siemensma credits Kathleen with "bringing about partnerships and recognition for health librarians as part of the wider health information workforce. She has been invaluable – a true change maker." Current HLA National Manager Ann Ritchie cites Kathleen as a "leading light for four decades, alerting her health library colleagues to developments and trends in digital health across education, research, health services and professions".

I would like to highlight Kathleen's contributions as a hard-working collaborator, and as a critical thinker, particularly on the theme of digital health.

But first, a little background.

Kathleen's early bibliophilia was nurtured at home where her Mum was a constant reader, and through her youth as a regular patron of the Vancouver Public Library. Her first library job was at the VPL, in a "gap year" before formal studies in Arts (Linguistics) (1975) and an MLIS (1977) at the University of British Columbia.

Her work has spanned three fields:

- Public libraries – in Vancouver, and in Nassau (Bahamas 1977-1978);
- Scientific editing and health libraries – at ASLIB (England 1978-80), Bendigo Base Hospital (1980-82), Queen Victoria Medical Centre in Melbourne (1983-86);
- Higher education – at RMIT University (1986-2005), initially lecturing in environmental studies, subsequently in academic quality and educational technology; followed by positions at the University of Melbourne (2005 –) as Senior Research Fellow in Health Informatics in the Faculty of Medicine,

Dentistry and Health Sciences, jointly with the Department of Computing and Information Systems.

Kathleen is currently Professor & Director of Education and Workforce Development at the Centre for Digital Transformation of Health, University of Melbourne.

Motivated by her love of learning, Kathleen completed multiple formal courses of study after her MLIS. These include a Master of Environmental Science (Monash University, 1987) and a PhD (Science / Education) at University of Melbourne, 2001. She also holds a number of professional certifications, including: Fellow, Australasian College of Health Informatics, 2011-2020; and Founding Fellow, Australasian Institute of Digital Health, 2020. She models the core characteristics of professionalism including competence, knowledge, ethics, integrity and commitment.

For decades, Kathleen has tracked the emergence of web technologies and researched their influence specifically on health, learning and education. In a range of collaborations and projects, her work critically investigated the experiences of students and staff with online learning. A foundational publication by Kathleen and colleagues on this research topic is *First year students' experiences with technology: Are they really digital natives?* This 2008 article remains one of her top-cited items.

She translated this research into practice at RMIT by initiating and managing the development and successful implementation of a fully-online version of the subject *Living in the Environment* during 1997-1998. This was a pioneering example of converting previously-print subject content, using the early online LMS platform, devising learning objects and digital IP, licensing arrangements, and other enablers. The implementation was rolled out more widely in the Life Sciences faculty, and involved significant culture change in teaching teams. Kathleen resourced the change process for staff via a mentoring program. Analysis of the project subsequently formed the core of her doctoral thesis.

More recently, issues such as the impact of web and e-health technologies on management of health information, and how patients, consumers and the health workforce interact with these disruptive innovations have propelled her research, teaching and practice.

Work with Health Libraries Australia

Kathleen joined the HLA Executive in 2011. It was a timely match: HLA had conducted a comprehensive program in the Workforce and Education Research Project with the aim to develop a scope of practice, a competency-based structure for post-graduate qualifications, and professional development aimed at achieving certified status for health librarians. HLA Convenor Suzanne Lewis noted at the time: "Kathleen Gray is also on the working committee of the Australian Health Informatics Education

Council (AHIEC). She and HLA secretary Cheryl Hamill will be working to form closer links between HLA and AHIEC.” (Lewis, March 2011, p. 2).

Kathleen pinpointed the areas of joint interest: defining current and emerging competencies, enhancing quality specialist workforce education, and promoting recognition of the disciplines as integral to the health workforce and its e-health capability. She proposed that specific areas of health library core knowledge should be included among the basic health informatics skill domains, and that health librarians would benefit by having basic health informatics skills (Gray, March 2011, p. 16).

Since that time Kathleen has contributed to HLA in strategy and in practical issues. In 2014 she proposed action on the issue of health librarians’ identity in health policy. Subsequently, HLA joined the broader advocacy project to raise the recognition, status and future of the health information workforce. HLA was a partner in the Health Information Workforce Summits held in 2015 and 2016. The summits led to collaboration among the four Australian health informatics and health information management associations e.g. on creating a basic health information workforce dataset. HLA’s census of Australian health libraries and librarians (released in 2016) was a valuable source of data for the health library workforce. Kathleen and Kerryn Butler-Henderson developed the HIDDIN census tool to collect data for the wider health information workforce. The Census is conducted every 3 years, and HLA is part of the Census management group. Analysis of 2018 census data for specific workforce segments – including health librarians – has been published in open access sources (<https://www.utas.edu.au/health/projects/hiwcensus>).

Gemma Siemensma commented: “Kathleen brought connections and championed for us in places where we were unknown. This helped us to strategically align with HIW associations and organisations, and to give us a voice as professionals in the broader health information workforce landscape.”

Whilst an HLA executive member, Kathleen was on the awards panels for the Anne Harrison Award, and the HLA/Medical Director Digital Health Innovation Award. Ann Ritchie noted: “She brought drive and enthusiasm to this role too, by refining the focus of the health innovation award to highlight digital health innovation initiatives in health library services.”

Thinking critically about digital health

Kathleen questioned the sweeping generalisations that pervade descriptions of digital health initiatives. She observed: “Digital health may appear to have a life of its own”, in the sense that these statements omit any consideration of the human agency and work of managing and governing health information and communication technology. She pointed out the need to recognise and plan for the specialised

workforce development required to deliver on the digital health promises of streamlining and transformation in healthcare (Gray et al., 2019). To redress the invisibility of this workforce, Kathleen initiated a scoping review of the literature which described an instrumental or professional human role in health information work. This research has since broadened to include the influence of technological change across health workforce boundaries. The findings will appear in late 2021 in *The Health Information Workforce: Current and future developments*, edited by Kerryn Butler-Henderson, Karen Day and Kathleen Gray.

As an educator, Kathleen has developed multiple health informatics subjects that are taught in the Masters program, in short courses for clinicians, and as community subjects. She has knowledge of a wealth of conceptual frameworks and resources for the digital health/health informatics research field. HLA and Kathleen worked jointly to expand and deliver the masters subject *Digital Health Information Services* which ran at the University of Melbourne in 2019. Biomedical librarian and PhD candidate Lisa Kruesi was coordinator for the Knowledge Management module in the subject, and recalled: "I was impressed with Kathleen's energy, enthusiasm, and sense of fun...these helped to advance the development of the course materials".

A colleague from RMIT, Dr Alexandra Radloff, noted that Kathleen's professional work "centres on the student experience and how to enhance it through curriculum design, academic development and the use of emerging technologies." Alex also commended Kathleen's scholarship, having researched and published with her for many years. There was always a very strong focus, she noted, on ensuring that projects were documented, and results were disseminated when analysis was completed.

Personal observations

Alex Radloff offered: "On a personal level, Kathleen is a warm and empathic person, a loyal friend and a wonderful mentor to many younger and less experienced colleagues. She has a knack of enthusing and engaging people and keeping projects going when challenges arise. She will always focus on the big picture, and is a creative problem solver who persists to find the best way to achieve a successful outcome."

In a similar vein, Ann Ritchie commented on HLA's partnership with Kathleen: "[She] brought ideas and strategies to all our committee meetings, events, and projects. She could challenge the status quo, but always delivered her insights and probing thoughts with gentle consideration. A couple of her directive comments that I particularly remember serve to illustrate:

- What outcomes are we looking for?
- Does society need health librarians?

- We haven't won that battle yet – (in other words, it's tough, but this is too important to give up...)"

Finally, I'd add that Kathleen's work focus is outward; there's no personal ego or ambition. She is engaged and interested in contributing to the success of the project and the team. Kathleen was characteristically modest on the day of the OAM announcement, stating: "It's a team sport so I specially want to acknowledge all of my colleagues who've worked with me in this still unfinished project."

We congratulate Kathleen for this well-deserved recognition.

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Health library spaces and the COVID-19 pandemic: insights from the Australian healthcare sector

Alice Anderson and Tanja Ivacic-Ramljak
Monash Health Library
Alice.Anderson@monashhealth.org

In response to the COVID-19 pandemic and subsequent stay at home orders, libraries in health services across Australia moved to virtual service models with limited or unstaffed physical libraries. This article considers the impact of the pandemic on physical library space in clinical environments. To investigate, seven interviews were conducted with library leaders from the Australian health care sector at the end of the momentous year of 2020 – as the country caught its breath following the initial waves of the virus.

The numbers from the pandemic are staggering. At the time of writing there were over 200 million coronavirus cases worldwide and over 4 million deaths. MEDLINE showed just shy of 100,000 records indexed against the COVID-19 MeSH subject heading and Cochrane had more than 10,000 registered clinical trials. Yet the numbers don't tell the whole story. Anecdotes and stories from the people who went through the experience provide essential context, enabling greater understanding as well as reflections on wisdom gained and lessons learned.

The authors would like to thank our interview participants:

- Barry Nunn – Library Services Manager at Northern Sydney Local Health District
- Helen Ried – Librarian at Central Gippsland Health
- Jane Orbell-Smith – Health Libraries Manager at Redcliff & Caboolture Libraries
- Mary Peterson – Knowledge Manager, South Australian Health
- Michele Gaca and Jessica Ware – Chief Librarian and eResources Coordinator, Health Sciences Library at Austin Health
- Richard Sayers – Clinical Knowledge Resources Manager at Queensland Health
- Trudi Maly – Director, Library Services at the NT Department of Health

In their response to the COVID-19 crisis each of the above library leaders found opportunity amongst the challenge. They drew on decades of previous change such as growth in digital infrastructure and library projects that had progressed technology. Also as a result of preceding change, physical library space had evolved to provide essential education spaces and social infrastructure where there is a strong sense of sanctuary for clinicians.

Responding to the crisis

Early responses involved developing COVID safe plans for physical spaces and urgent business continuity measures to keep providing research support services while transitioning library education to virtual delivery. As described by Trudi Maly, this largely involved “hunkering down and getting on with it” with a focus on solving the most pressing issues. Jane Orbell-Smith also talked about reaching out to colleagues in strict lockdowns to offer invaluable assistance with access to resources.

Projects in the pipeline were fast-tracked, such as the implementation of a RefTracker CRM in the Northern Sydney Local Health District. Richard Sayers described expediting plans to add icons for library resources to mobile devices in ambulances for quick access by paramedics. He went on to explain that this part of the experience was actually very positive because, “It created a sense of urgency, emergency and *mission*”. This was also evident in the way libraries moved swiftly to curate content about the virus, which resulted in phenomenal spikes in usage.

Reflecting on their experiences many months later, all interview participants urged health librarians to continue to market themselves and “jump in” even in the most challenging times and even if your organisation has not yet caught up. Barry Nunn for example, moved services to free Zoom accounts in his library before Skype was adopted by the organisation some months later. There was a need to just get on with it. Michele Gaca emphasised, “Don’t wait to be asked, stick your nose in at every opportunity”.

In-demand space during the pandemic

Shrinking physical collections have not only made way for online resources but also physical library zones for informal learning, training and meetings. Trudi Maly explained that the importance of this space, “was brought to the fore during COVID” particularly with meetings and education occurring online when few health professionals have access to a private office or the option to work from home. Barry Nunn added that hospitals remained open and busy, with physical and digital library spaces both supporting clinical care and mandatory education for all employees – as they always do.

It is not surprising that access to information and evidence was on an upward trajectory during the pandemic. Statistics correspondingly indicated that usage of physical libraries remained steady. Interviewees reported that door counter traffic was similar or only marginally down through 2020. This demonstrates that visitors use the physical space for a wide range of reasons beyond consulting with librarians about research and resources. While some patrons bring their own devices and seek to work in a quiet zone, Mary Peterson explained that across South Australia Health the highest demands are for quick access to a computer or to work on research, study or education.

Moreover, physical library space has importance as a clinical breakout space. Barry Nunn observed, "Space is very important and maybe more so now". It is important to allow the patrons to decide what they are going to use the space for, as long as it is within reason. Within reason is still important as Richard Sayers noted, "There is a difference between a student doss house and an actual working space!"

Value of library space

Librarians well know that, "[Libraries] are much more than an expensive room with books" (Trudi Maly). In reality the purpose of physical library space in clinical environments shifted away from print circulation a long time ago. Nowadays, hospital libraries contain adaptable areas with a focus on learning. In addition they can be routinely unstaffed (not just during lockdowns). Mary Peterson referred to examples in regional parts of her state and advised librarians to, "get over the thought that all libraries have to be [staffed] at all times during office hours, because we are not going to be able to do that". Richard Sayers also reminded us, "librarians can operate without a library" and when difficult choices have to be made, "developing online resources and keeping staff expertise" should be the priority.

However, the notion of a library as a place and the visibility that provides should not be under-estimated. Jane Orbell-Smith explained that as soon as you lose the physical space, "you almost become invisible ... and this is how we could end up losing qualified and highly experienced health librarians". Helen Ried and Jane Orbell-Smith both spoke about delighted reactions when physical spaces reopened after lockdowns. Jane said, "When [the library] reopened people were so grateful to have access again and to be able to use the space for time out". Similarly, at Central Gippsland Health patrons commented that "it is great to see the library open" as they quickly returned to the physical space for study and stress relief. Helen reported that even more patrons than usual were making use of their indoor and outdoor library space during that time.

Physical space vs Digital space

Virtual online resources are mandatory in modern libraries, particularly in the 24/7 health care environment where clinicians need high-quality information at their fingertips. This online accessibility has countless benefits such as enabling reach to more cohorts across large geographic areas, ensuring information equity.

Nonetheless, the digital space does not encompass the whole service. Jessica Ware suggested that the digital and physical spaces are, "both equally as important... the physical space is just as important to clinicians for getting time to themselves off the ward". Other interviewees supported this view by stating, "You need both" (Trudi Maly) as, "They are completely different" (Michele Gaca).

A complementary trinity exists between physical libraries, digital resources and library staff. The three elements work together, exemplified by accessible librarians in physical libraries teaching information literacy and building users' digital skills so they can make the most of online resources. Helen Ried claimed that, "face-to-face in this is really important" particularly for engaging with shy or new users who need to feel welcomed. The ideal health library service will therefore have digital resources aplenty, with highly visible librarians who reach out to clinicians from a supportive and egalitarian physical space. While Richard Sayers manages a virtual library he noted that, "it doesn't matter how good the online collections are, it is no substitute for having shoes on ground ... faces, names, people doing that outreach work".

It is undeniable however, that only libraries with well-established digital resources were able to thrive in the pandemic and this will apply to the future. Online resources and library websites have to take priority. In South Australia, Mary Peterson explained that her library service has progressed to stop thinking about physical space because, "We are in the health library area so the priority is digital" and librarians should stop being "precious and possessive" about traditional books. Jessica Ware also encouraged librarians to think differently by, "Making spaces that can be repurposed in the future".

Expected changes in 2021 and beyond

The experience of the COVID-19 pandemic will see all employees pivot from how they have traditionally worked, testing each of us while offering the prospect of something new. This unusual moment in time was summed up by Michele Gaca: "2020 brought about change to the way we structured and attended our workplace, but it has also given rise to other opportunities that we can focus on and market".

The interview series in this investigation revealed a positive outlook for health libraries, with interviewees commenting on the potential for good to come out of their experiences. They made the following recommendations and predictions for health libraries:

- It will be important to boost WiFi and increase charging ports.
- Libraries will need to accommodate hot desking because they will be used more often for online training/meetings and as an alternative place to work.
- There will be an increased need for individual study rooms and single study corrals with soundproofing.
- As social distancing will continue, libraries need to make space for patrons to spread out.
- There will be an end to shared headsets with more BYO peripherals.
- Adjustable desks will be needed to ensure inclusivity for all users.
- Access to IT equipment will increase, accompanied by guidance from embedded librarians.

- There will be a renewed focus on outreach and initiatives such as pop-up libraries.
- Online orientations will be ongoing for new employees.
- Virtual education is here to stay.
- Digital research repositories will become an important aspect of library services in health care organisations.
- Establishment of a core set of shared resources and common tools at a national level, freeing up hospital librarians from collections work.

Another positive outcome from the 2020 pandemic year has been improved access to online professional development. Trudi Maly remarked, "It took a pandemic to get an online conference". Mary Peterson also spoke about the enjoyment of attending library events all around the world from the comfort of her dining room table. These changes will improve connections between hospital libraries, add to the sector's knowledge sharing and strengthen collegial support.

Most importantly, the library leaders interviewed for this investigation implored librarians in the health care sector to leverage the headway made during the pandemic, which was actually a great opportunity to reach out to health professionals to remind them about the library services on offer. Jane Orbell-Smith suggested that, "If libraries are able to grab the kudos that we have received over this time... we can really elevate our position".

Conclusion

Not all change feels positive in the beginning. The COVID-19 pandemic began as a disaster and forced change into all aspects of our lives. In response libraries across Australia swung into action to continue to curate, share and disseminate high-quality information by any means. Savvy librarians built on previous changes while pushing through the turmoil of their pandemic experience to discover an array of positive outcomes. Physical library spaces proved to be well utilised and appreciated in clinical environments during this challenging time, even when the focus was on providing digital access and online services.

As we interviewed library leaders about the pandemic, we learned that although each library took a unique approach to keeping their services available they each kept the same endgame in mind: excellent information services for optimal patient care. When their stories are assembled together it provides an inspiring example of resourcefulness. All health librarians should look to this example and feel proud of the sector's professional response to a most unusual set of circumstances.

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Breathing life into study designs: creating an interactive module for first year nursing students

Louisa Sher

Health Liaison Librarian, Deakin University

Louisa.sher@deakin.edu.au | <https://orcid.org/0000-0002-7397-6704>

Chrissy Freestone

Arts & Education Liaison Librarian, Deakin University

<https://orcid.org/0000-0001-7260-9825>

Abstract

The teaching of Evidence-based Practice has become increasingly common in tertiary nursing curricula. However, there is often limited focus on study designs and how they can be used to inform clinical practice. In this case study we report on the development of an interactive module which was embedded into a first-year nursing research unit. Using the interactive learning software, [H5P](#), we adopted a narrative approach using a series of scenarios combined with interactive quizzes. This was with the aim of enhancing students' understanding of study designs and their real-world application within a clinical context.

Introduction

The application of Evidence-based Practice (EBP) is a key element to the delivery of high quality and effective healthcare in a range of clinical settings, including nursing (Lehane et al., 2019; Saunders et al., 2019). In recognition of this, many university courses in medicine and nursing are now incorporating EBP into their curriculum (Gallagher-Ford et al., 2020; Kim et al., 2019; Long et al., 2016). Such interventions have been reported as being effective in enhancing students' competence in EBP (Cardoso et al., 2021; Gallagher-Ford et al., 2020; Mena-Tudela et al., 2018). Despite this, educators have also reported challenges in delivering effectively structured teaching programs, as well as barriers to students utilising and transferring these skills into clinical settings (Rholdon et al., 2021; Sin & Bliquez, 2017; Youssef et al., 2018). These challenges can include poorly developed research skills and resistant attitudes toward EBP often resulting in a lack of engagement with teaching content. (Fiset et al., 2017). Kyriakoulis et al. (2016, p.18) note, "The challenge for nursing academics is to find innovative ways to engage students in a way that facilitates the development of positive attitudes to research so that knowledge utilization and translation are skills all future nurses and health professionals actively use."

We took on this challenge in 2015 when Deakin Library's Health Liaison Librarians team, in collaboration with academics in the School of Nursing, produced a suite of six interactive modules on EBP for a first-year nursing unit (Kelly et al, 2016). The modules were: Introduction to Evidence-based Practice; Resources for Research;

Asking the Clinical Question; Qualitative Research; Quantitative Research; and Turning Research into Practice. Whilst some attention was given to the Hierarchy of Evidence, there was limited focus on the study designs themselves as they were beyond the scope of the project. In 2017, the Health Liaison Librarians team developed a guide on [Study Designs](#) (both qualitative and quantitative). However, in 2019, the Unit Chair of the same first year nursing unit approached the team with a request to create a single interactive module designed to better engage the students around the use of study designs in clinical practice. The Unit Chair noted: *"Research understanding is seen as boring by undergraduate students. Use of evidence-based practice and research understanding is essential in nurses actually using evidence in practice. Nurses should have a basic...understanding of research designs to really understand how research is conducted. This is important if the students are to understand what they are reading and provide context to what it actually means... We would like to be able to refine the information and present it in a way that is engaging and meaningful to students in order to create that in-depth understanding."*

One of the challenges for us as librarians is that we have limited access to students' time and attention. Nursing students don't often see the relevance of skills such as digital literacy to their future career. Thus, their desire to learn such skills may be quite low until they understand the benefit of acquiring the new knowledge and skills we are teaching.

Being mindful of the barriers earlier outlined to effective engagement with the concept of EBP, the module was designed to demonstrate the practical use of understanding the different study designs, by using realistic clinical scenarios where study designs can influence real-world practice with patients. The questions posed to the students throughout the module were designed to challenge them to consider what they thought might help the health worker in that scenario.

We selected four study design examples which could demonstrate the change in the use of research over time. This approach is advocated in Deakin University's evidence-based guidelines for developing online content where a "call to action" or "big question" is recommended as a hook to motivate students to participate actively in their learning (Deakin University). Furthermore, Boud and Prosser (2002) maintain that a high-quality learning activity should:

- Engage the learner
- Acknowledge the learning context
- Challenge the learner
- And involve practice

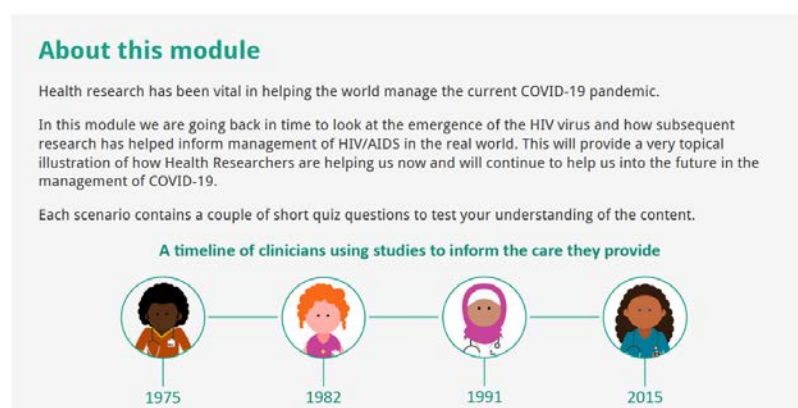


Figure 1. Introduction and timeline of scenarios depicted in the module.

The Module

The Digital Environment

The module was embedded in the unit site on our student learning management system (LMS). It was one of several modules, videos and other types of content the Unit Chair used to teach students about research evidence.

We used H5P as the learning software which is an open-source platform allowing users to create interactive online modules without the need for coding skills. This tool enables educators to create stable, accessible, interactive, and engaging content to improve the learning experience. H5P is compatible with all browsers so no additional plugins or logins are required. It creates a seamless experience for students within their online learning environment. The platform has developed many of its activities to be WCAG 2.1 AA compliant (H5P, 2020), which the library tests independently to ensure accessibility by students using technologies such as JAWS and NVDA.

The course presentation option was selected for the module design. This is a slide show format enabling the creation of a self-contained module which can be embedded into the HTML page of the student LMS in the context of the unit's topic for a particular week. Options for each page of the slide show include images, text, video, quiz questions and other interactive activities. The benefit of using this self-contained module is that it provides an integrated experience on a specific topic without utilising too much space on a web page. Students can view the extent of content from the menu at the bottom of the module which shows the number of pages or sections, indicating activity slides with dots.

The Activities

We designed the module to feature a range of different health professionals so that the content would be relatable and therefore re-usable across the different schools in the Faculty of Health.

The module is built around research development for HIV/AIDS. There are four scenarios set in different years to show development of research over time. Each focuses on a different study design. For instance, the first scenario focusses on a case study design as it relates to the earliest findings of HIV/AIDS before it was identified as an auto-immune disease.

Scenario 1

Nelson, a nurse at the fictional “Everglades Hospital”, notes that several patients who are self-identified drug users have been diagnosed with *Pneumocystis Carinii*, a rare type of pneumonia which usually only affects infants. Nelson searches the literature and finds case studies that discuss the same symptoms, except they appear in homosexual patients.

Scenario 1 of 4

It is 1975 and Nelson is a nurse working at Everglades Hospital. In the last few months, several patients, who have self-identified as drug users, have presented at A&E complaining of a severe cough that has persisted for a few months. After assessment the patients are diagnosed with *Pneumocystis Carinii*, a type of pneumonia common in premature and young infants but rarely seen in adults.

Whilst reading up on the condition, Nelson discovers some case studies published in the 1960s that discuss the very same symptoms he has witnessed in his own patients except the patients in the studies are all homosexual.

Nelson realises that in all cases the patients not only have compromised immunity but that they also have in common either homosexuality or drug use. He wonders if this is significant and if there is a possible connection between the disease and the particular patient cohort.



Tip Read more about what a [case study](#) is.

Figure 2. Scenario one focusses on Case Studies.

The scenario was designed to help students understand the earliest phases of research and to illustrate the benefits and risks of relying on case studies as the only source of information.

Multiple Choice Questions (MCQs) as a formative learning exercise

Following the principles outlined in Laurillard’s ‘Concepts and Relations Involved in Learning’ (2012, Table 4.1, p.59) we used a multiple-choice quiz as a formative exercise. This provided students with the information in a contextual scenario, tested their understanding of that information, and delivered immediate feedback tailored to their responses. This provided a self-assessment opportunity to support the student’s learning of a new topic (Lee et al., 2021; Nicol, 2007). Because of the complexity of study designs, students were permitted to select multiple answers - each one dealt with a different aspect of a study design’s weakness or strength in the context of the scenario.

Why are these case studies useful for Nelson? (Select **all** that apply)

☐ There is now a cure.

☐ He makes the connection to compromised immune systems

☐ Patients at risk can be more easily identified and warned to be aware of symptoms and quickly seek medical advice for any symptoms e.g. persistent cough, unexplained fatigue etc.

☐ He realises this is a bigger health issue than first realised

☐ He notes that being homosexual doesn't seem to be a requirement for this disease as none of his patients is gay.

 Check

 **Tip** Read more about what a [case study](#) is.

Figure 3. MCQ activity for Scenario one.

The MCQ prompted students to decide why these case studies were important for Nelson. They were encouraged to select all relevant options that applied to his situation, as there were multiple correct answers that had to be selected in order to earn full points. For example, one of the answers stated that the health issue was larger than first realized, and so patients could now be more easily identified and treated based on early symptoms. Another answer was that this disease may affect two different patient groups - drug users and homosexuals. Both of these options were correct and students got multiple tries to identify the correct answers.

Students were then prompted to think about why the research was written as a case study instead of a clinical trial. Again, they were encouraged to select all relevant answers that applied to the situation, such as that at the emergence of a little understood health issue, the only literature available at the time would be case studies, and that clinical trials investigate treatments, but there were not yet any treatments for the underlying immune deficiency. This pattern was repeated later in the module for case control studies and qualitative literature.

Our 1991 scenario differs slightly in that whilst Dr Zahira was aware there were many treatments available there were no guidelines for recommended treatments. Students had to choose the appropriate study designs that could help inform Zahira's decisions. These included RCTs which test and compare different treatments, and cohort studies, which examine patients' lived experiences with particular treatments as well as documenting any adverse side effects that might affect health outcomes and impact lifestyles.

Feedback to quiz questions was tailored for both correct and incorrect answers allowing for independent learning. Questions had more than one correct answer as a way to communicate the complexity of the research problem. We were careful to word answers consistently, rather than present an obviously wrong answer, as we wanted to encourage students to think more deeply about the study designs and what each one entailed. The answers do not assume prior knowledge of study designs as often embedded in the answer was a description of the study design's purpose. In the Dr. Zahira scenario, the task was to focus on the most appropriate study designs that would help inform treatment. Feedback was provided instantaneously after the submission of each response so students could check their answers in real time. Hattie and Timperley (2007) note: "The most effective forms of feedback provide cues or reinforcement". We thus used clear, positive language to reinforce correct responses, or indicated why an incorrect response was wrong. The main challenge in developing this task was to word the answers and our feedback succinctly enough to fit within the screen as the size, layout, font, and colours in the H5P interface could not be modified.

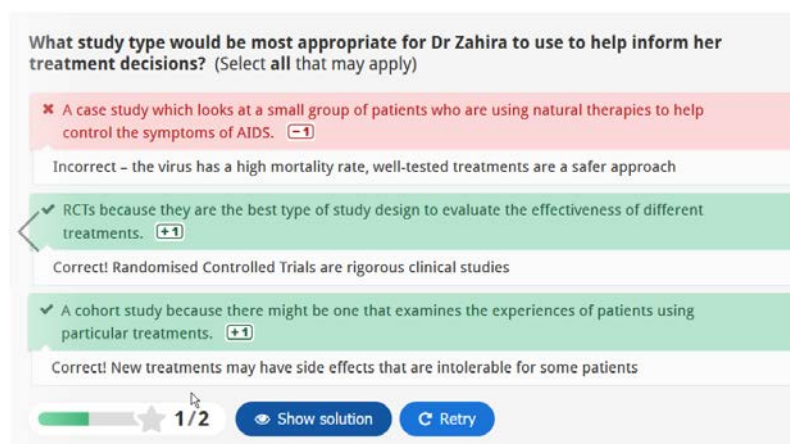


Figure 4. MCQ activity with examples of feedback to student responses.

Limitations

The module was implemented as an optional activity which meant that we would not collect detailed statistics on student engagement or require students to complete the module. This limited our ability to measure the effectiveness of the module given it was one of many in the unit site. However, understanding the application of study designs is only one aspect of the student's learning. The module was designed to introduce and consolidate learning rather than to assess the student's understanding which occurred in the formal assessments for the unit. This was in keeping with the library's role in providing learning support rather than being a part of the academic teaching staff. Marking and assessing student responses would have rendered the project unsustainable on our part.

HP5 did allow us to see how many attempts a student had made and the score they achieved the first and last time they used the module. Of the 967 students in

Trimester 2, 2020, 234 (24%) attempted the module. Over half the students (122) who attempted the module got 70% correct responses (17 questions out of 23). 55 students engaged in the quiz activities more than once, and 32 of those either repeated their high scores or improved their score, demonstrating formative learning as they worked through the module.

In order to improve engagement with the module in future iterations, it might be appropriate for us to review the first few slides of the module with the aim of reducing text and to clarify the purpose and use more engaging visuals. In particular, we think more could be done to reinforce the story of HIV/AIDS research and how it influenced clinical practice and achieved improved health outcomes over a few decades.

Conclusion

Teaching the elements of EBP in an engaging and stimulating way is not without its challenges and presenting a topic as potentially dry as that of study designs is no exception. Interactive and re-usable platforms such as H5P, with the variety of learning, self-assessment and feedback options it provides, gave us an excellent framework with which to define and illustrate the relevance and application of different study designs.

While it was possible for students to research and study the topic beforehand and therefore know the correct answers before undertaking the activity, we assumed little-to-no knowledge of the different study designs. We included information about the examples we discussed within the quiz activities which provided a formative learning experience. Students could answer a question incorrectly but they could easily try again if they were interested in the correct answer, and the reasons behind it. Every interaction was designed to reinforce students' learning through repetition, presenting new challenges with each work-life scenario, and the opportunity to reflect on their answers, and how that would affect practice in the real world. Hopefully the experience was memorable and relevant, so that students would seek out the module for further information (links are provided to more in-depth resources) when completing assessments in the unit.

Whilst we were not able to obtain specific feedback from students who engaged with the module, or collect meaningful data that might demonstrate impact of the module on students' overall academic performance in the unit, the academic staff member told us:

"... the unit overall had much better feedback for learning resources. I definitely think the module was really helpful in seeing the application of the research designs in the context of actual events and over a period of time. It fit in really nicely with some of the other resources about study designs." (Tomlinson, 2020).

We hope this module, along with the others we have developed, goes some way to meeting the challenges in motivating students to engage in learning about EBP as well as in understanding its importance in the delivery of high-quality healthcare in a clinical setting.

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An exploration of public libraries as dementia friendly places

Katie Bagnall
MIM Graduate, Curtin Open Universities
Kbagnall74@gmail.com

Katie is an early career Information Management professional, and holds a Master of Information Management degree from Curtin Open Universities. Since completing her studies in December 2020, Katie has worked towards her goal of becoming a Health Librarian, including a short period with the King Edward Memorial Hospital Library, North Metropolitan Health Service, and participation in the ALIA Mentoring Scheme.

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Abstract

Dementia can be a lonely, stigmatising and isolating illness. People living with dementia and their carers want to remain connected with their local communities and feel safe, welcome and valued. A growing community awareness of dementia has borne the concept of dementia friendliness and dementia friendly communities. Core features of dementia friendly communities are supportive, inclusive, welcoming and safe environments. Public libraries are widely valued as safe, accessible and welcoming community assets and in this sense are well placed to be part of dementia friendly communities. This study has sought to understand how public libraries contribute to Australian dementia friendly communities. A mixed methods approach with a sequential exploratory design was employed to answer two distinct questions: firstly, how are individual needs of patrons living with dementia and their carers being met; and second, is there alignment between dementia friendly public libraries and the ALIA Framework for Australian Public Libraries. From a review of international and Australian literature, features of dementia friendly public libraries were codified along two facets—services and enabling environments.

This study found that dementia friendly public libraries offered a suite of services and enabling environments that benefit people living with dementia and their carers. Collectively, they enable social capital and contribute to personal development and wellbeing, informed and connected citizens, and ultimately stronger more inclusive

communities—achieving five of the six ALIA outcome measures. Public libraries located in dementia friendly communities provided similar benefits, although some inconsistencies were evident with a shift to age-friendliness. Dementia friendliness is a reflective movement and public libraries in dementia friendly communities must continue to respond to the needs of that community. There was an absence of strategic planning by the public libraries assessed to provide for such need, and thus targeted, collaborative planning could be considered to enhance dementia friendliness and inclusivity.

Introduction

This study has emerged from a personal connection to a person living with dementia, and observing the challenges they and their partner have faced since diagnosis in continuing to live their socially active lives. While researching to understand the specific diagnosis, many dementia awareness and support initiatives from Australia and overseas were revealed, including the idea that people and places could be 'dementia friendly'. Put simply, this concept relates to supporting people living with dementia through improved attitudes and behaviours towards them, inclusive and meaningful social opportunities, and making the built environments they encounter accessible (Dementia Australia, 2019).

Public libraries are widely regarded as safe and friendly places for people to gather, socialise and access information (I & J Management Services, 2016; Public Libraries Victoria, 2020) and thus would appear to naturally fit as dementia friendly places. However, after some preliminary probing—through web browsing—of the idea that public libraries could be dementia friendly, there were surprisingly few Australian-based examples. This project explores if and how Australian public libraries are dementia friendly.

Dementia, its prevalence in Australia, and challenges for those living with it

Dementia is not one specific disease, rather a "collection of symptoms that are caused by disorders affecting the brain" (Dementia Australia, 2017, p. 1). Dementia is debilitating and leads to gradual memory loss and impairment of other cognitive functions, such as the ability to communicate and pay attention, and can also affect behaviour, mobility and personality (Australian Institute of Health and Welfare, 2019, para. 1). Dementia can interfere with a person's ability to perform everyday tasks, their visual perception and spatial awareness, and their normal social and working life (Dementia Australia, 2017, p. 1). Alzheimer's disease, Vascular dementia, Dementia with Lewy bodies, and Frontotemporal dementia are reportedly the most common forms of dementia, although it is possible to have more than one type of dementia at the same time (Australian Institute of Health and Welfare, 2012, p. 2; Dementia Australia, 2017, pp. 1-2).

Dementia Australia (2020, para. 3) estimated that in 2020, about 459,000 Australians live with one or more forms of dementia. Although most Australians diagnosed with dementia are aged over 65 years it is not an inevitable part of growing older and people younger than 65 can be affected by the illness (Australian Institute of Health and Welfare, 2019, para. 4; Dementia Australia, 2017, p. 1). The prevalence of dementia in Indigenous Australians is about three times higher than the non-Indigenous population, and people are often younger when diagnosed (Flicker & Holdsworth, 2014, p. 15).

Health, lifestyle and familial risk factors associated with dementia, the burden of the disease on the health system, and positive ageing initiatives have been focal points for dementia research and policy in Australia for the past two decades (Australian Institute of Health and Welfare, 2000, 2012; Kendig & Browning, 2016; Kendig et al., 2017; Pakulski, 2016; Piggott, 2016; Productivity Commission, 2013). The Australian Institute of Health and Welfare (2012) described national-level responses that have been the genesis of early intervention and support programs currently being implemented. These have focused on independence, community awareness, social engagement and improved quality of life for people living with dementia and their carers.

Quality of life, good physical and mental health, and connections with people and communities are intertwined, and these can be greatly affected by a progressive illness such as dementia. According to Dementia Australia (2019, p. 2), people living with dementia find the "lack of awareness of dementia in the community, and becoming socially isolated" particularly challenging to daily life. The stigma attached to dementia is a major factor in loneliness experienced by people living with dementia, their families and carers (Dementia Australia, 2014; Nay et al., 2015). This echoes the personal case reflected on earlier, where limited social contact was made while becoming comfortable with the diagnosis and the symptoms that were becoming more apparent and were sometimes confronting to others.

Older Australians want to 'age in place', living in their own homes and being a part of their community for as long as they are able to do so (Australian Institute of Health and Welfare, 2013; Roy Morgan, 2020). Aging in place and the prevalence of dementia in older Australians have in part prompted a shift in public policy and community endeavour towards 'age friendly' and 'dementia friendly' initiatives. Age friendly and dementia friendly communities, dementia awareness and dementia enabling environments have emerged over the past decade as global initiatives with grass-roots action (Alzheimer's Australia WA, n.d.; Alzheimer's Disease International, n.d.; Alzheimer's WA, n.d.-c; World Health Organization, n.d.). However, although complimentary, one initiative may overlook the specific needs of the other (Turner & Morken, 2016), particularly as not all people living with dementia are in older age groups.

Being dementia friendly is difficult to define in itself, but instead is understood in the context of a dementia friendly business, organisation or community that is aware how physical and social environments affect the ability of people living with dementia to remain engaged and active and addresses barriers to this. Dementia friendly initiatives are informed by people living with dementia, their families and carers. They contribute to positive ageing, reduce loneliness, and improve quality of life. Alzheimer's Disease International (n.d.) emphasise that a holistic approach is required to support quality of life, and this includes addressing potential physical barriers to inclusivity and welcoming community-based facilities and services.

Shifting roles of public libraries and measuring their value

Public libraries are not just about reading and free computer access (Australian Library and Information Association & National and State Libraries Australasia, 2018; Public Libraries Victoria, 2020). Whilst information sharing remains a fundamental role, they are important places for people to gather, relax and connect with each other and their community. In Australia, membership of public libraries is free, and they provide unfettered access to information and ideas, supporting “the information, education, cultural and recreational needs of local communities” (Quinn & McCallum, 2012, p. 5). Much has been written over the past two decades about the role of public libraries and in particular their intrinsic value to community wellbeing and positive contribution to social capital (Cox, 2000; Ferguson, 2012; Stenstrom et al., 2019; Williamson et al., 2010).

Ferguson (2012) found that specific targeted action to improve accessibility to new user groups, in consultation with those groups, would augment the role of public libraries as a community hub. Australian public libraries have in fact recognised the need to develop services that will meet the needs of an ageing community as well as people living with dementia and their families and carers (City of Mandurah, 2019; Harris, 2018; Joseph, 2005, 2009). However, while these and other examples of dementia friendly services are positive and welcomed, taking a holistic approach to dementia friendliness in Australian public libraries is still in its infancy.

Parallel with the shifting role of public libraries is the evolving way in which their performance is measured. While quantitative measures such as patronage and return on investment are necessary, they may fail to adequately measure the intrinsic value to communities described earlier. The Framework for Australian Public Libraries (see Figure 1) includes comprehensive guidelines and a suite of outcome measures—as distinct from measures of output—through which the impact of the potentially diverse spectrum of library activities and services can be better understood (I & J Management Services, 2016, pp. 16, 72). Inclusiveness, understanding, wellbeing and community engagement in provision of services are themes within the Framework

that are of particular relevance to this study as they are actualised in dementia friendliness.

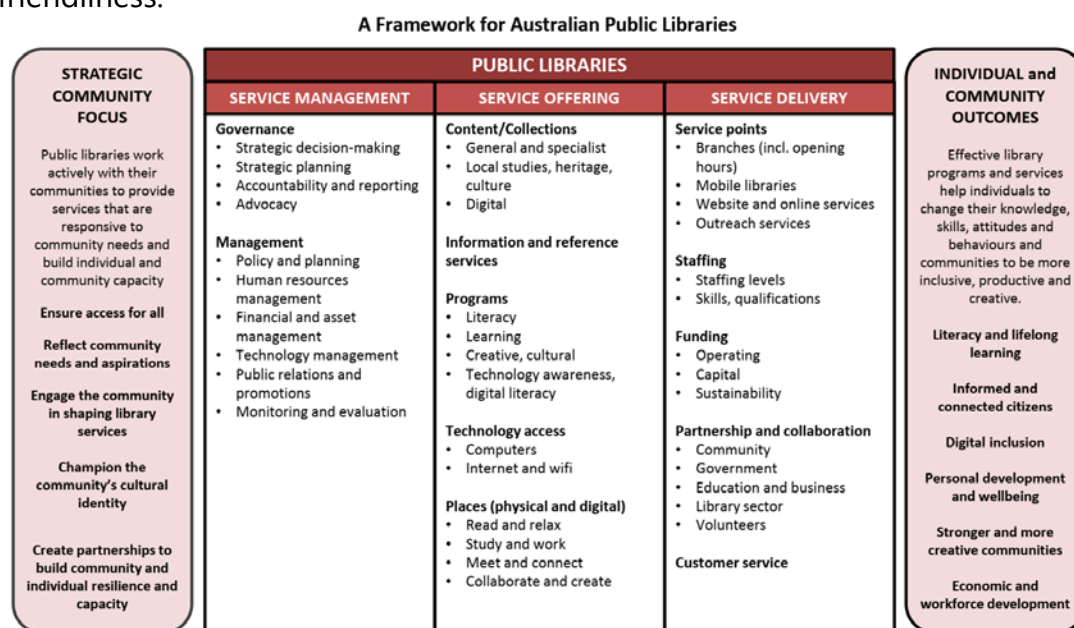


Figure 1 Framework for Australian Public Libraries

Note. From Guidelines Standards and Outcome Measures for Australian Public Libraries, (p. 16), by I & J Management Services (2016), ALIA, https://www.alia.org.au/sites/default/files/documents/advocacy/PLSG_ALIA_2012.pdf. Copyright Australia Library and Information Association.

Dementia advocacy and friendliness in Australia

There are two main organisations that represent people in Australia living with dementia: Dementia Australia and Alzheimer's WA. Dementia Australia is the national peak body representing Australian's living with dementia, their families and their carers (Dementia Australia, n.d.-a). Alzheimer's WA is the other leading voice for people living with dementia, and is particularly focused on Western Australians living with dementia, their families and their carers (Alzheimer's WA, n.d.-a).

Central to the missions of Dementia Australia and Alzheimer's WA are the concepts of being 'dementia aware' or 'dementia friendly', which are fundamental to the establishment and success of a 'dementia friendly community' (Alzheimer's WA, n.d.-a; Dementia Australia, n.d.-a). At its core, being a dementia friend (and therefore dementia aware) is understanding the stigmas and myths that may hinder a person living with dementia from leading a full life, and seeing the person rather than the disease.

A dementia friendly community is defined by Dementia Australia and Alzheimer's WA as "a place where people living with dementia are supported to live a high quality of life with meaning, purpose and value" (Alzheimer's WA, n.d.-c para. 1; Dementia Australia, n.d.-b para. 1). This is consistent with the holistic approach outlined in

international guidance (Alzheimer's Disease International, n.d.; World Health Organization, 2017). Both organisations characterise dementia friendly communities as being unique blends of one or more of the following (Alzheimer's WA, n.d.-c; Dementia Australia, n.d.-b):

- Organisations and businesses providing dementia friendly and accessible services.
- Clubs and groups that are inclusive and welcoming of people living with dementia.
- Opportunities for volunteering or paid employment for people living with dementia.

Inclusivity through community events and activities relating to dementia awareness are considered by Dementia Australia to be additional features present in a dementia friendly community. Whereas Alzheimer's WA introduces the concept of enabling environments as a defining additional feature (Alzheimer's WA, n.d.-b) and those relevant to the physical library space generally relate to accessibility and wayfinding, familiarity and human scale of spaces, risks reduction, appropriate stimulation and supporting engagement.

Objectives

Remaining connected within a safe and familiar community is important to good quality of life for older Australians, many of whom prefer to live in their own homes for as long as possible. To combat isolation and loneliness, community connection is also very important to people living with dementia and their carers, whether they be young or old. Given that public libraries are widely valued as safe and welcoming spaces and places they are in principle a natural fit for dementia friendly communities.

The purpose of this study is to understand the nature and role of public libraries in dementia friendly communities in Australia. An exploratory sequential mixed method research design was used to answer the following research questions:

- In what ways are public libraries in dementia friendly communities serving the needs of persons living with dementia and their carers?
- How does being dementia friendly align with guidelines and outcome measures of the Framework for Australian Public Libraries?

Methods

Study boundaries

For the purposes of this study, public libraries are those which provide a library service to members and are owned, controlled or managed by a single local government authority or collaboratively by a number of such authorities within a regional library corporation or consortia arrangement. This study is focused on public libraries that are:

- Recognised by Dementia Australia as a dementia friendly organisation; or
- Located within a dementia friendly community or organisation recognised by either Dementia Australia or Alzheimer's WA; or

- Connected to a recognised or developing dementia alliance acknowledged by Dementia Australia.

Research setting, design and methods

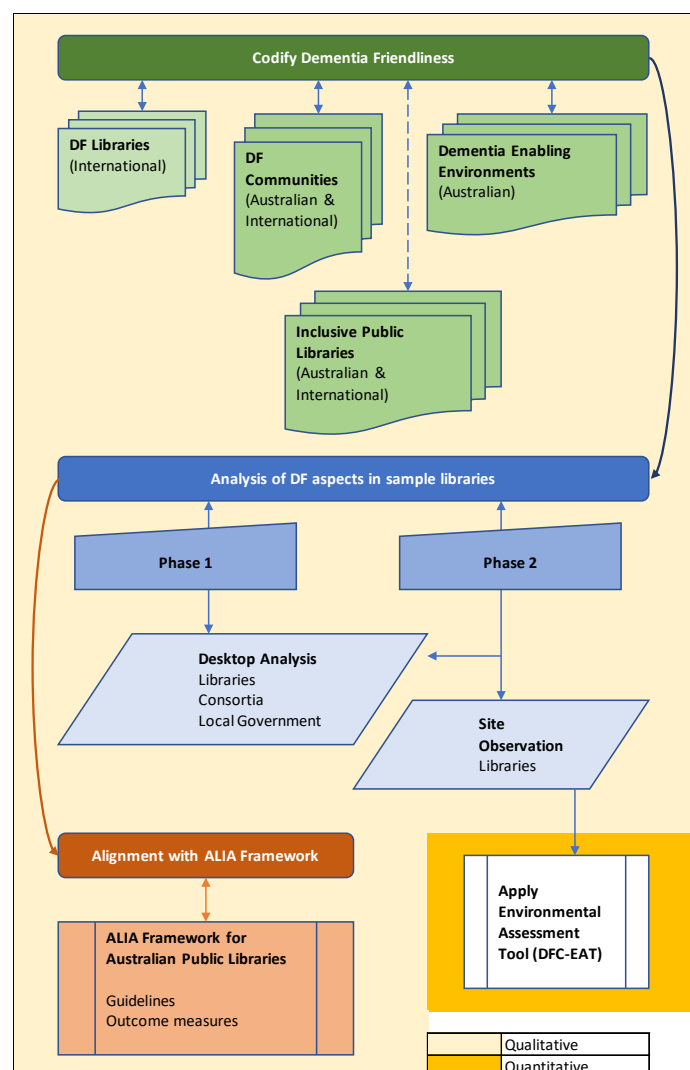
The dementia friendly concept is founded on the lived experiences of people living with dementia, first and foremost, and those persons supporting them, be they family or carers. Their experiences and views are subjective. Similarly, the experiences of people delivering dementia friendly programs, places or spaces would vary according to the circumstances in which they are developed and delivered. This study therefore attempts to capture a number of perspectives, underpinned by an interpretivist theoretical framework (Kankam, 2019).

A mixed methods approach was employed through the study, with a sequential exploratory design comprising qualitative work to inform further quantitative and qualitative research. A simplified representation of the methods used in this study is shown in Figure 2, indicating what elements were in qualitative or quantitative strands. A phased approach was taken in light of the changes to the library landscape arising from the 2020 global COVID-19 pandemic and consequent study limitations. Also, once it became apparent that inclusion of a survey would not be feasible, the content analysis became the primary mode of data capture. A secondary phase was undertaken when Western Australian public libraries began to resume regular library services about three months into this project. While this was somewhat opportunistic, the additional data captured regarding built environments was valuable to address the research question. The following points on methods are noted:

- Codifying service features and enabling environment features was based on Australian and international literature (see Table 1). In the absence of a survey instrument, content analysis of publicly available primary and secondary sources of information was fundamental to this project. An assessment checklist was developed based on codified dementia friendly features and used in both phases to complete the content analysis (see Appendix 2).
- The public libraries selected for analysis in the two primary data capture phases (see Table 2) were identified through a number of steps considering dementia friendly recognition status, library administrative arrangements and geographical location. It is noted that Phase 1 libraries did not include any age-friendly variants. Rationale is outlined in detail in the full study.
- For the quantitative assessment, the 'Dementia Friendly Community - Environmental Assessment Tool' (DFC-EAT) (Fleming & Bennett, 2017) was applied, following guidance provided by Dementia Training Australia (see Appendix 2).
- In order to gauge alignment between dementia friendly guidelines and the Framework for Australian Public Libraries, qualitative analysis was undertaken

to compare the key areas of the Framework and corresponding criteria with the codified dementia friendly features of public libraries.

Figure 2 Methods employed during study



Selected findings

Dementia friendly services and enabling environments

The percentage of libraries assessed in Phases 1 and 2 with confirmed dementia friendly services across the various service categories is shown in Figure 3. Dementia friendly services across all categories were most consistently present in libraries assessed in Phase 1 compared with Phase 2, suggesting that an age-friendly focus does not address need for dementia-friendly services (which was indicated in the literature review). A collection development policy explicitly identifying people living with dementia as a community demographic to consider in defining collection scope was noticeably absent from all libraries. The lack of other dementia related collection materials appears to reflect this. Targeted dementia friendly programs were also

absent from most Phase 2 libraries and many Phase 1 libraries and this could be viewed as an extension of the non-targeted collection services.

Table 1 Features of dementia friendly services and enabling environments in public libraries

Service features	Rationale for inclusion	Enabling environment features	Rationale for inclusion
Collections			
Inclusive collection development policy (e.g. refers to dementia)	Establishes an inclusive framework for collection development for PLWD+C*	Accessible building and amenities	Reduce barriers to inclusion of PLWD+C*
Dementia friendly collection and/or reader's advisory	Distinct education and awareness resources for PLWD	Simplified layouts, human scale	
Dementia related titles includes: • Items for children and adults • Books and materials in various genres and formats (e.g. large print, audio books) • Culturally and ethnically diverse materials	Depth and breadth of collection caters for all persons wishing to access dementia-related content	Use of traditional signage and wayfinding, considering colour contrast and brightness	PLWD can be intimidated and overwhelmed by very large spaces, too many choices and unhelpful stimulation
Dementia collection includes memory or reminiscence kits	Facilitates respectful and meaningful reminiscence for PLWD	Signage at eye level, is clear, with essential information only Collection areas have matching icons and words Collection materials include icons to label genres	Provide PLWD with simple cues and helpful stimulation
Awareness			
Dementia champions		Dementia Friendly signage or branding	Recognisable by PLWD+C as friendly and enabling
Dementia awareness training for staff	Awareness is a central to dementia friendliness, respectful engagement and reduced stigma for PLWD	Defined entrances and door frames with contrasting finishes	Provide PLWD with simple cues and helpful stimulation
Hosting community dementia awareness and educational sessions		Well-lit spaces with no shadow pools Large clock visible Reduced reflective surfaces, including mirrors Avoidance of black entrance mats Acoustic treatment of walls and/or ceilings	Limit unhelpful stimulation for PLWD
Programs			
Targeted reading groups, book clubs, and poetry readings		Avoidance of detailed patterns on rugs, flooring and chairs	Limit unhelpful stimulation for PLWD
Targeted arts programs	Inclusivity through meaningful programs targeted to PLWD+C	Use of traditional furniture styling, with contrasting colours	Provide PLWD with familiar items and helpful stimulation
Targeted music programs or lending			
Hosting intergenerational events and activities			
Hosting memory clinics or memory cafés			
Services			
Home visits and/or mobile lending	Inclusivity extended to PLWD unable to access library buildings	Quiet spaces available for reading Senior's area available, with dementia awareness display	Opportunities for PLWD+C to be alone or with others
Targeted outreach to dementia care facilities or memory cafés		Reminiscence room or display	Facilitates respectful and meaningful reminiscence for PLWD+C
Assistance			
Assistive technologies for patrons	Inclusivity extended to PLWD who need additional assistance		

* "PLWD" refers to people living with dementia and "C" refers to their carers

Table 2 Public libraries selected for analysis

Variant	State	Library branch and local government area	ID	Phase
Dementia friendly library (major cities)	NSW	Richmond Tweed Regional Library, Tweed Shire branches	L1	1
	WA	Mandurah Libraries, Mandurah	L2	1
Major city (dementia friendly)	VIC	Doncaster Library, Manningham	L3	1
	VIC	Glen Waverley Library, Monash	L4	1
	NSW	Erina Library, Central Coast	L5	1
	SA	Glenelg Library, Holdfast Bay	L6	1
	WA	Mary Davies Library & Community Centre, Rockingham	L13	2
Major city (age friendly and accessible)	WA	Cambridge Library, Cambridge	L14	2
	WA	Spearwood Library, Cockburn	L15	2
	WA	Joondalup Library, Joondalup	L16	2
	WA	AH Bracks Library, Melville	L17	2
	WA	Wanneroo Library, Wanneroo	L18	2
	WA	Vincent Library & Local History Centre, Vincent	L19	2
Inner regional (dementia friendly)	VIC	Beechworth Library, Indigo	L7	1
	NSW	Kiama Library, Kiama	L8	1
	NSW	Port Macquarie Library, Port Macquarie	L9	1
	WA	Toodyay Library, Toodyay	L20	2
	WA	York Library, York	L21	2
Outer regional (dementia friendly)	WA	Albany Library, Albany	L10	1
	WA	Manjimup Library, Manjimup	L11	1
	NSW	Narrabri Library, Narrabri	L12	1

Figure 1 Comparison of confirmed dementia friendly services at libraries

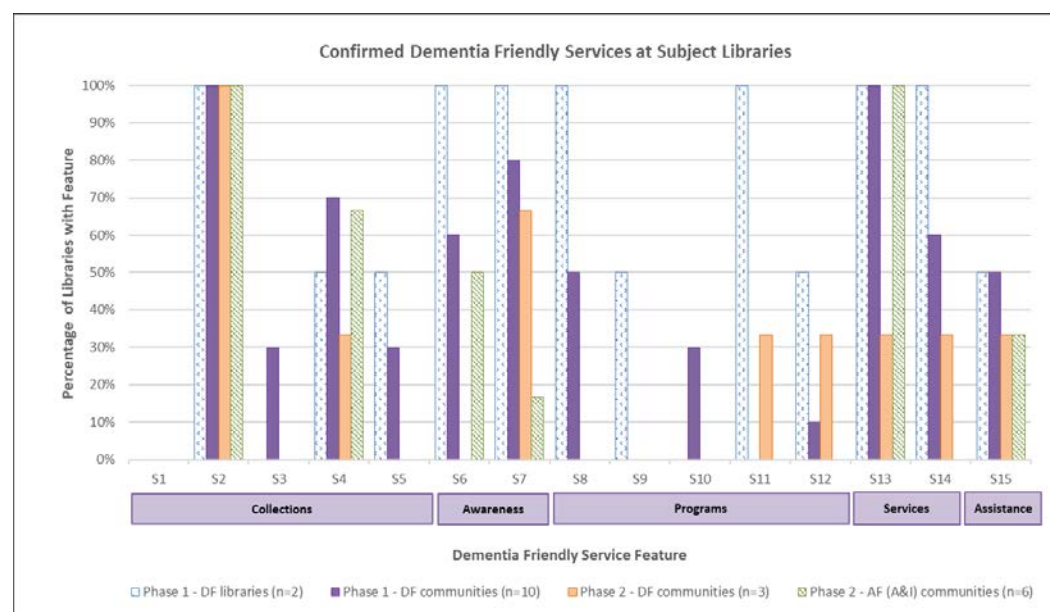
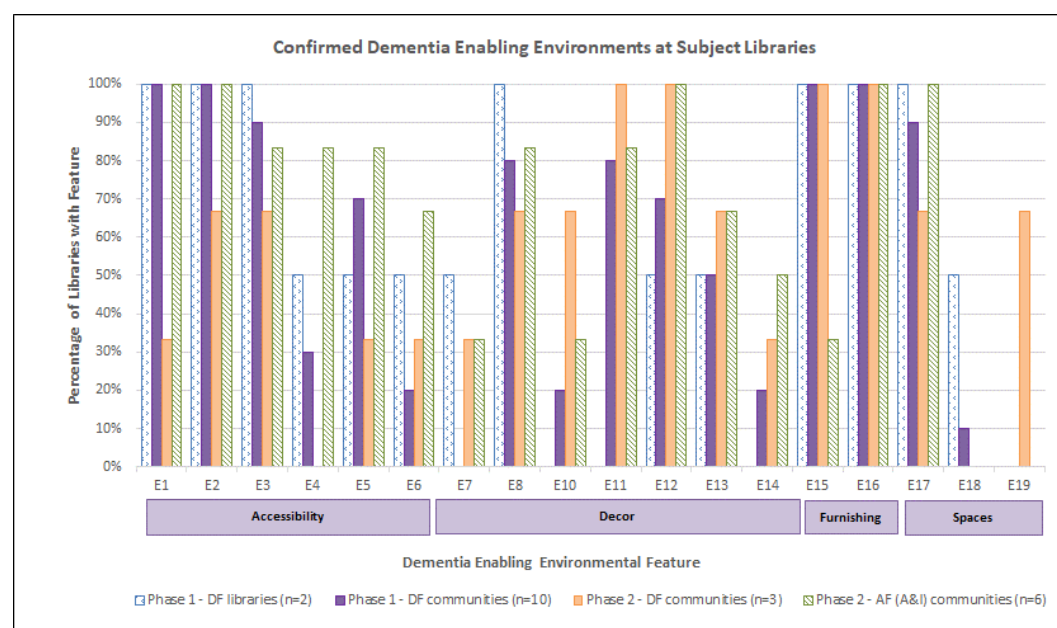


Figure 4 shows the percentage of libraries assessed in Phases 1 and 2 with confirmed dementia enabling environments. With the exception of spaces, dementia enabling environments across all categories were most consistently present at libraries in Phase 2 age friendly (and accessible) communities. The accessibility and furnishing features that would be expected at public libraries for compliance with disability regulations coincidentally contribute to a dementia enabling environment. A clear gap (and potentially evidence of no targeted dementia enabling design consideration) was the absence of dementia enabling spaces from most libraries.

Figure 2 Comparison of confirmed dementia enabling environments at libraries



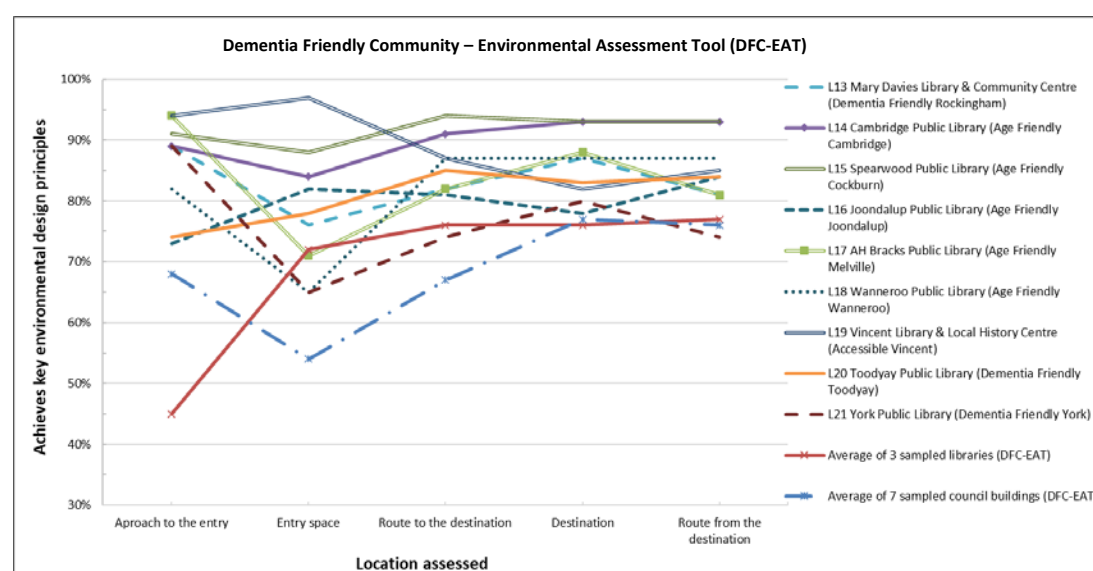
Looking at the results broadly across geographies, more dementia friendly service categories were confirmed for outer regional areas than major cities, which were

both higher than inner regional areas. Conversely, dementia enabling environmental features were least evident in outer regional areas compared with areas in major cities and outer regional areas, which were similar. Review of results for enabling environments suggests that data collection was skewed towards confirmation at Phase 2 libraries, which is to be expected given the verification that was possible during in-library observations.

Dementia Friendly Communities Environmental Assessment Tool

The DFC-EAT prompts scores for five defined journey segments (see Appendix 2) to provide an overall assessment of how dementia friendly the environment is. The result for all libraries attended in Phase 2 are shown in Figure 5 and can be compared with relevant pilot locations sampled in the development of the tool (libraries and council buildings). No single facility was assessed as achieving all key environmental design principles. Three libraries in age friendly communities consistently scored above the other locations.

Figure 5 Results of in-library observations using the DFC-EAT



Alignment with the Framework for Australian Public Libraries

Guidelines and outcomes measures from the Framework for Australian Public Libraries that correspond to the dementia friendly service categories and environmental design features developed for public libraries are present in detail in the full study. Each of the five key pillars established for the Framework—strategic community focus; service management; service offering; service delivery; and individual and community outcomes—are represented in the dementia friendly public library services and environments. However, it is the strategic community focus and service offering guidelines that most consistently match them. It is worth noting that the elements of dementia friendly public libraries codified in this study do not capture well the importance of collaboration with people living with dementia

and their carers, which underpins the dementia friendly movement. An example includes liaison with dementia stakeholders to library facility design.

Discussion

What makes a public library dementia friendly?

To understand the role of public libraries in dementia friendly communities, it was important to describe what aspects of public libraries would make them dementia friendly in and of themselves, with a view to applying this understanding to selected libraries in dementia friendly communities. Two facets were revealed through the process of codifying features of dementia friendly public libraries: services and enabling environments.

In terms of services offered by public libraries, 15 dementia friendly service features were identified within five broad categories. The categories were focused around people living with dementia and their carers and included: an inclusive policy framework supporting depth and breadth of collections; staff and community awareness programs; targeted programs; targeted outreach and mobile services; and assistive technologies.

Creating a dementia enabling environment was found to be a second, but equally important aspect of dementia friendliness. With regard to public libraries, 19 enabling environmental features were identified across four broad categories. These primarily catered to the specific needs of people living with dementia and included: accessibility to, from and throughout the building, including amenities; décor elements that would assist and not hinder; furnishings that would not cause confusion; and dedicated spaces.

When public libraries adopt the Framework for Public Libraries, they are positioning themselves to respond to the needs of their communities. The five key pillars of the Framework—strategic community focus; service management; service offering; service delivery; and individual and community outcomes—are embodied in dementia friendly public libraries. This study has shown that five of the six outcome measures from the Framework may be achieved by providing dementia friendly services and dementia enabling environments. Importantly, these can translate into individual wellbeing, personal development, and connected citizens.

Integral to dementia friendly communities is the idea that organisations themselves can become dementia friendly by striving to meet the needs of people living with dementia. Two Australian public libraries have been recognised as dementia friendly organisations: Tweed Shire library branches of the Richmond Tweed Regional Library in New South Wales and Mandurah libraries in Western Australia.

A most striking finding was that neither dementia friendly library service had a collection development policy available for public review that explicitly referred to people living with dementia. No other strategic planning documentation to aid decision making on how the needs of this demographic would be met was available. As policy documents of this nature establish the rationale for developing and maintaining collections, they are critical to efficient library governance that recognises and responds to community needs.

Another unanticipated finding was that neither Richmond Tweed Regional Library or Mandurah Library services provided dementia friendly collections (although the Tweed branches were Memorial Box partners with the Australian War Memorial). From the literature reviewed, dementia friendly collections should have items specifically for people living with dementia and also their carers. They should include a range of materials that can assist both with understanding the diagnosis and planning for the future, but also provide items that respectfully help people connect with memories (for example, books, poetry, music, videos and memory kits) and engage with others. Ideally, many of these items would be collocated to simplify access, but could also be tagged in the catalogue as being part of the dementia friendly collection and labelled on the cover for ease of recognition.

Despite not finding (publicly available) evidence of formal dementia friendly frameworks, the Richmond Tweed Regional Library and Mandurah Library services are actively responding to the needs of people living with dementia. Both offer dementia friendly services and provide dementia enabling environments across almost all of the categories identified earlier, with the majority of the features provided (based on evidence identified in this study). From the data reviewed it was not clear whether dementia champions were on staff.

Understandably, there are a few differences between the features offered by the two organisations, reflecting their administrative and funding arrangements as well as the communities they serve. With reference to the ALIA Framework, the two dementia friendly library organisations both demonstrated value to people living with dementia and their carers by providing opportunities for lifelong learning, personal development and improved wellbeing, ways to stay informed and connected, and contribute to a stronger community. A possible gap in outcomes at the Tweed branches is digital inclusion as presence or absence of assistive technologies was not confirmed via desktop means.

Role of public libraries in dementia friendly communities

The intrinsic value of public libraries and their function as safe and inclusive community hubs that enable social capital discussed earlier in this study holds true in dementia friendly communities. This study has found that public libraries in dementia friendly communities respond to the needs of people living with dementia and their

carers in a number of ways through the services they provide and the spaces they create. First and foremost, public libraries provide a welcoming space with opportunities for social engagement, whether that be talking to staff members and other patrons or quiet observation of surroundings. The contribution of these interactions to quality of life for people living with dementia and their carers cannot be understated. In practical terms, most of the libraries have removed or reduced many barriers to social interaction by creating enabling environments. For example, the accessible buildings and amenities, simplified layouts, uncluttered décor, and traditional furnishing provided by public libraries address (whether intentionally or not) changes in visual perception, spatial awareness, mobility and communication that are symptomatic of dementia.

Programs specifically targeted at people living with dementia and their carers (such as book clubs and music lending) were not typically part of the services offered at the libraries. However, broader dementia awareness and education sessions were evident at a high proportion of libraries and variants of these were provided for community members and staff. Again, whether dementia champions were on staff was unclear.

Many libraries provided outreach and mobile library services, which are important modes of connecting with people unable to attend the library, as is often the case for people living with dementia and their carers. Memory cafés provide an avenue for social engagement and are commonplace in dementia friendly communities, and while there were a few examples of pop-up libraries at memory cafés, there may be scope for their establishment as a dementia specific outreach program in more public libraries and in collaboration with dementia advocacy groups. This presents a tangible opportunity to apply ALIA guidance for community engagement in shaping library services and creating partnerships to create stronger, connected communities. The lack of an inclusive (dementia related) collection development policy has not constrained the core library collections themselves, as libraries consistently held many dementia and Alzheimer's related titles. Although, the depth and breadth of collections would most certainly be finessed with them in place, particularly if collection assessment was undertaken in consultation with in-house dementia champions or indeed advice sought from dementia advocacy groups. Practical aspects of collection development and maintenance that may assist engagement include collocating dementia related items and creating a dementia friendly collection comprising awareness, educational materials and other resources (for example, items for respectful reminiscence).

Another possible area for improvement relates to cataloguing. Alzheimer's disease is a common form of dementia, but many reviewed catalogues have used the terms as subjects interchangeably so a keyword catalogue search for 'Alzheimer's' only may not call up the full range of relevant titles. This could be redressed if cataloguing for

the broader subject of 'dementia' also included specific forms of dementia that may be relevant to the item (like Lewy body dementia or Alzheimer's disease). Further, with advice from Dementia Australia or Alzheimer's WA, titles could be tagged as 'dementia friendly' to indicate suitability for people living with dementia, noting that these may not necessarily be dementia-specific items.

One criticism that can be made relates to the often-indistinct promotion of dementia friendly initiatives of public libraries in dementia friendly communities. As this study was almost entirely desktop-based, the paucity of information is perhaps a function of the changeable nature of web content. More clarity would likely be provided through survey of library staff on how the premise of dementia friendly communities—feeling safe, welcomed and valued—is enhanced by the library.

Remoteness of communities has been found to have a more positive association with dementia friendly services category, and a more negative association with dementia enabling environments. This may be due to the age of library buildings in more remote communities, where retrofit of existing buildings beyond legislative compliance for accessibility may not be a budgetary priority for the associated council. However, it is difficult to add any further comment on this without feedback from the libraries themselves.

From dementia friendly to age friendly and back again

This study has found that work to position as a dementia friendly community in some local government areas has shifted to an age friendly focus. The concept of age friendly is intended to address inclusivity for all people regardless of their age. In practice, local governments establish their strategic intentions through age friendly plans (recognising the trend to age in place) or disability access and inclusion plans, and often the associated public libraries are nominated as facilities that support people living in the community with disability and also older people. In some instances, these strategic documents acknowledge the prevalence of people in the local community living with dementia or who may be frail and indicate support for dementia friendly initiatives. While research for this study found positive and sustained examples of this support, it is not consistently translated into practice (or perhaps not well promoted).

Clear evidence of dilution of dementia friendly services in transformation to age friendly communities was identified in this study. In one example, the library service website promoted their dementia friendly collection and home library services, but the current action plan for the library made no reference to either. Further, while an age friendly focus may align with general principles of dementia friendliness, crucial aspects can be overlooked. These particularly relate to sensory stimulation, where too much unhelpful stimulation or not enough helpful stimulation is present. The walk through with the DFC-EAT highlighted these important points, where for

example, highly contrasting patterned floors and furniture were present or entryways to potentially harmful areas were not concealed (unhelpful stimulation) and cues at decision points like toilet exits on which way to walk to return to the library were not provided (helpful stimulation).

Some local government organisations that have integrated dementia friendly aspects into age friendly access and inclusion planning include in their reference committees people living with dementia and their carers or dementia champions to guide from the dementia perspective. This is crucial to avoiding unintentionally creating barriers to accessing services and places. The DFC-EAT could be adopted by those responsible for planning future library services and facilities to support this process.

Conclusion

This study shows that dementia friendly public libraries offer a suite of services and enabling environments to benefit people living with dementia and their carers. Collectively, they enable social capital and contribute to personal development and wellbeing, informed and connected citizens, and ultimately stronger more inclusive communities—achieving five of the six ALIA outcome measures. These facts are echoed in public libraries located in dementia friendly communities, although some inconsistencies were evident with a shift to age-friendliness.

Public libraries in dementia friendly communities are welcoming and enabling spaces and provide opportunities for social engagement, with many barriers to this important social interaction removed or reduced. This includes via core public library services such as outreach and mobile services. In the absence of the 2020 global pandemic, additional information might have produced more affirmative results, but the trend for contemporary public library services towards dementia friendliness has been established.

Dementia friendliness is not measurable by a scale; it is a reflective movement and public libraries in dementia friendly communities must respond to the needs of that community. The apparent lack of strategic planning by the public libraries assessed in this study in providing for the needs of people living with dementia and their carers is somewhat surprising. Services and environments more targeted towards this demographic, facilitated by strategic documents, would enhance dementia friendliness and inclusivity, particularly in collaboration with dementia advocacy groups or other community organisations. It is perhaps then not a stretch for many of the libraries to make additional changes to meet the definition of a dementia friendly organisation.

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Appendix 1 – ALIA Framework for Public Libraries

Excerpts from the APLA Australian Public Library Guidelines Standards and Outcome Measures.

Guidelines document best practice and are intended as operational suggestions for improving library performance. Standards are quality levels for benchmarking, comparison and attainment. Outcome measures indicate the type of impact that provision and use of public library services can have on individuals and communities.

There are 16 guidelines, 15 standards and six areas of outcome measurement.

Guidelines, Standards and
Outcome Measures
for Australian Public Libraries



Australian Library and
Information Association

Report published July 2016

In 2011, the Australian Library and Information Association launched the First Edition of its Standards and Guidelines for Australian Public Libraries, authored by Libraries Alive! Pty Ltd. The Second Edition was published in January 2013, and in 2016 a revised, updated and expanded document was produced by I & J Management Services, entitled Guidelines, Standards and Outcome Measures for Australian Public Libraries. We have produced this standards and guidelines calculator on the basis of the results from the 2016 report.

The project was a collaboration between ALIA, the Australian Public Library Alliance and National and State Libraries Australasia, and this calculator has been created to be used in conjunction with the full report, which can be downloaded from the ALIA website <https://www.alia.org.au/node/184/public-libraries>.

This simple calculator is designed to enable public libraries to discover how they perform against the national standards and guidelines. The ALIA Standards (worksheet 1) give a topline appraisal, while the ALIA Guidelines (worksheet 2) provide a much more indepth analysis.

Results will provide strong evidence for advocacy - particularly useful during funding rounds - and can be used by library managers as an internal tool to monitor performance improvement in specific areas.

		Australian Library and Information Association	GUIDELINES
STRATEGIC COMMUNITY FOCUS			
Guideline 1	Ensure universal access to library services within the community		
Guideline 2	Reflect community needs and aspirations and engage the community in shaping library services <i>Guideline 2.1 Services for targeted population cohorts</i>		
Guideline 3	Champion cultural identity		
Guideline 4	Create partnerships to build community and individual resilience and capacity		
SERVICE MANAGEMENT			
Guideline 5	Governance		
Guideline 6	Management <i>Guideline 6.1 Policy and planning</i> <i>Guideline 6.2 Human resource management</i> <i>Guideline 6.3 Financial and asset management</i> <i>Guideline 6.4 Technology management</i> <i>Guideline 6.5 Public relations and promotion</i> <i>Guideline 6.6 Monitoring and evaluation</i>		
SERVICE OFFERING			
Guideline 7	Content and collections		
Guideline 8	Information and reference services		
Guideline 9	Programs		
Guideline 10	Technology access		
Guideline 11	Places (physical and digital)		
SERVICE DELIVERY			
Guideline 12	Service points <i>Guideline 12.1 Library buildings</i> <i>Guideline 12.2 Mobile libraries</i> <i>Guideline 12.3 Home library service</i> <i>Guideline 12.4 Library website</i> <i>Guideline 12.5 Opening hours</i>		
Guideline 13	Staffing		
Guideline 14	Funding		
Guideline 15	Partnership and collaboration		
Guideline 16	Customer service		

	Australian Library and Information Association	STANDARDS
SERVICE PROVISION		
Standard 1	Library expenditure per capita p.a. (exc library materials)	
Standard 2	Number of staff (FTE) per 10,000 population	
Standard 3	Number of qualified staff (FTE) per 10,000 population	
Standard 4	Library materials expenditure per capita	
Standard 5	Collection items per capita per annum	
Standard 6	Age of collection (percentage published in the last 5 yrs)	
Standard 7	Internet computers per 10,000 population	
SERVICE REACH		
Standard 8	Membership as a percentage of population	
SERVICE PARTICIPATION AND USE		
Standard 9	Visits per capita per annum	
Standard 10	Website visits per capita per annum	
Standard 11	Circulation (loans) per capita	
Standard 12	Turnover of stock (loans per volume/collection item)	
Standard 13	Program attendance per capita per annum	
Standard 14	Internet downloads per capita per annum	
CUSTOMER SATISFACTION		
Standard 15	Customer satisfaction	

 Australian Library and Information Association		OUTCOME MEASURES
Outcome 1	Literacy and lifelong learning	
Outcome 2	Informed and connected citizens	
Outcome 3	Digital inclusion	
Outcome 4	Personal development and wellbeing	
Outcome 5	Stronger and more creative communities	
Outcome 6	Economic and workforce development	

Adapted from:

I & J Management Services. (2016). Guidelines standards and outcome measures for Australian public libraries. Australian Library and Information Association and Australian Public Library Alliance.
https://www.alia.org.au/sites/default/files/documents/advocacy/PLSG_ALIA_2012.pdf

Appendix 2 – Checklists Developed for Study

Desktop Checklist

LOCATION AND DESCRIPTION				ADDITIONAL BACKGROUND INFORMATION / SOURCE LINKS	
Location					
State					
Local Government Area					
Library Branch					
Consortia (y/n, name)					
Recognised Dementia Friendly					
Services Category	Description	Present Y/N/P/?	Comment / Evidence	INFORMATION SOURCES	
Collections	S1 Inclusive collection development policy			Collections	S1
	S2 Dementia related titles includes books & materials in various genres & formats for children & adults				S2
	S3 Dementia friendly collection				S3
	S4 Dementia related titles include culturally & ethnically diverse materials				S4
	S5 Dementia collection includes memory or reminiscence kits				S5
Awareness	S6 Hosting community dementia awareness & educational sessions			Awareness	S6
	S7 Dementia awareness training for staff or dementia champions				S7
Programs	S8 Targeted reading groups, book clubs, & poetry readings			Programs	S8
	S9 Targeted arts programs				S9
	S10 Targeted music programs or lending				S10
	S11 Hosting memory clinics or memory cafés				S11
	S12 Hosting intergenerational events & activities				S12
	S13 Home visits &/or mobile lending				S13
Services	S14 Targeted outreach to dementia care facilities or memory cafés			Services	S14
	S15 Assistive technologies for patrons				Assistance

Env't Category	Description	Present	Comment / Evidence	INFORMATION SOURCES	
		Y/N/P/?			
Accessibility	E1 Accessible building & amenities			Accessibility	E1
	E2 Simplified layouts, human scale				E2
	E3 Signage is at eye level				E3
	E4 Signage is clear, with essential information only				E4
	E5 Use of traditional signage & wayfinding				E5
	E6 Collection areas have matching icons & words, collection materials include icons to label genres				E6
Décor	E7 Dementia Friendly (or Age Friendly) signage or br&ing			Décor	E7
	E8 Reduced reflective surfaces, including mirrors				E8
	E9 NOT USED		NOT USED - only one example from literature review suggested this as a key design feature.		E9
	E10 Avoidance of black entrance mats				E10
	E11 Defined entrances & door frames with contrasting finishes				E11
	E12 Well-lit spaces with no shadow pools				E12
	E13 Acoustic treatment of walls &/or ceilings				E13
	E14 Large clock visible				E14
Furnishing	E15 Avoidance of detailed patterns on rugs, flooring & chairs			Furnishing	E15
	E16 Use of traditional furniture styling, with contrasting colours				E16
Spaces	E17 Quiet spaces available for reading			Spaces	E17
	E18 Senior's area available, with dementia awareness display				E18
	E19 Reminiscence room or display				E19

In-Library Observation Checklist and DFC-EAT

LOCATION AND DESCRIPTION		
Location:		
Date and time:		
Destination and purpose of visit:		
Weather:		
Unusual circumstances, (e.g. building works; special activities):		
Assessors:		
Describe route to and from the destination; define specific travel route (attach sketch/photos for record purposes):		

Dementia Training Australia - DESCRIPTION OF COLUMNS		LIBRARY SPECIFIC EXAMPLES from Lit Review
1 Approach to the entry:	The approach commences a maximum of 20m away from the entry. It includes the car park (if it is situated in front of/ to the side of the building), the streetscape, the footpath and the outside of the entrance door as viewed from the approach.	Use of traditional signage and wayfinding Defined entrances, door frames and walls with contrasting finishes
2 Entry space:	This space starts from inside the building at the entry door threshold. It may include an airlock space and/or a foyer. In some instances there may not be a specific entry space, and the route to the destination (No.3) may commence from the entry door threshold. This column would not be completed when this occurs.	Simplified layouts Use of traditional signage and wayfinding Defined door frames and walls with contrasting finishes Avoidance of black entrance mats Large clock visible
3 Route to the destination:	The route commences at the end of the entry space (or at the entry door threshold if there is no entry space) and extends to the destination. The route may (or may not) be a specifically defined aisle/corridor/path.	Use of traditional signage and wayfinding Signage at eye level Signage clear, essential information only Simplified layouts Defined door frames and walls with contrasting finishes
4 Destination:	This is the place that is the purpose of the visit. It may be a specific room e.g. waiting room, or a specific area e.g. a counter. In this case the space immediately in front of and to the side of the counter should be considered as part of the destination.	Reduced reflective surfaces, including mirrors Avoidance of detailed patterns on rugs and chairs Use of traditional furniture styling, contrasting finishes Well-lit spaces with no shadow pools Availability of quiet spaces available Acoustic treatment of walls and/or ceilings Large clock visible Use words matching icons to label genres
5 Route from the destination:	This is the route taken from the destination (No.4) to reach the exit. It includes the inside view of the exit door and the entry space (where there is one). The route used in No 3 should be retraced in the opposite direction back to the exit, unless there is a more convenient or obligatory exit route.	Simplified layouts Signage at eye level Signage clear, essential information only Use of traditional signage and wayfinding Defined entrances, door frames and walls with contrasting finishes

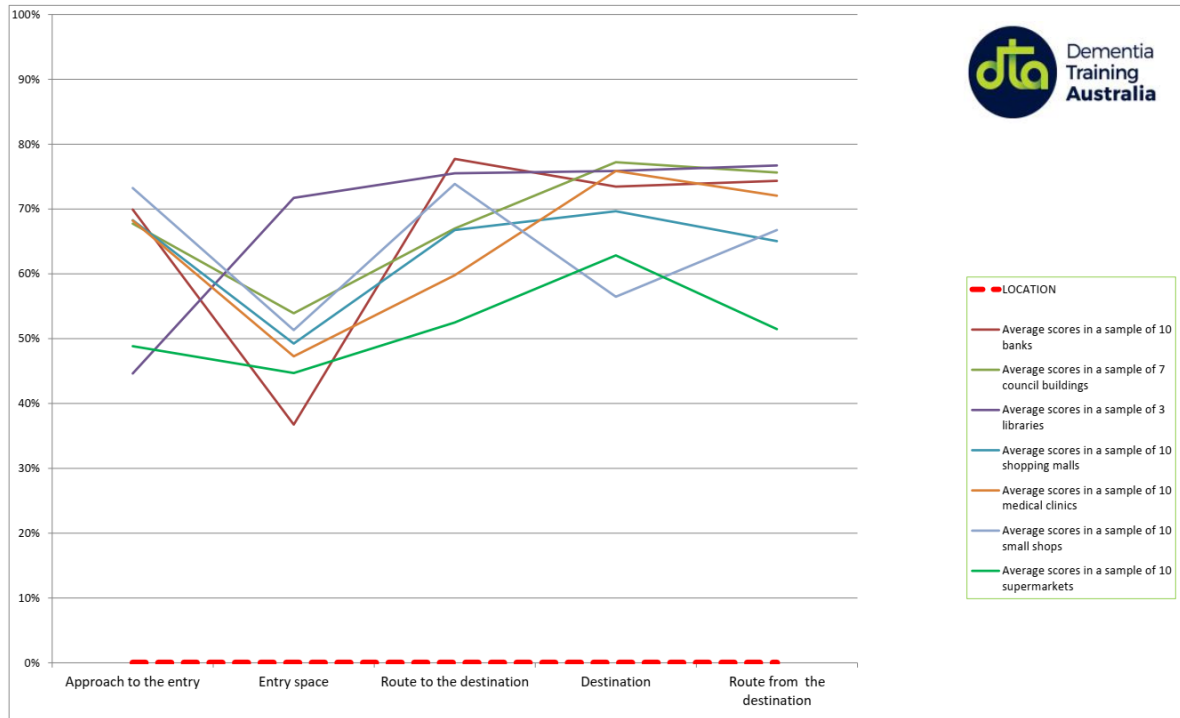
Sketch

DEMENTIA FRIENDLY COMMUNITY - ENVIRONMENTAL ASSESSMENT TOOL (DFC-EAT)

Name of location		LOCATION					
 		Approach to the entry	Entry space	Route to the destination	Destination	Route from the destination	
1. UNOBTUSIVELY REDUCE RISKS	All areas are free from dark shadows or bright glare.						
	All areas are well lit.						
	All areas can be accessed without need to negotiate steps/stairs.						
	All changes in surface levels are safe. Consider clear marking of level changes, illumination, presence of handrails and non-slip surfaces. (Score 2 if no level changes)						
	Gradients of all ramped areas are safe for people using a wheelchair or walking aid. (Score 2 if no ramps)						
	The way to the next stage of the journey is clearly visible and safely accessible. Consider ease of access to path, trip hazards at the edge of the path, slipperiness, evenness, width sufficient for 2 people to pass, absence of obstacles on the path.						
	All manually operated entry doors /gates are easily operated e.g. have lever handles/push plates. (Score 2 where gates/doors are automatic or not present)						
2. PROVIDE A HUMAN SCALE	The size and scale of the space allows a person with dementia to feel comfortable and at ease e.g. not too large or too confined.						
	The number of people present in the space allows the person living with dementia to feel comfortable and at ease						
3. ALLOW PEOPLE TO BE SEEN AND BE SEEN	The entry/exit can be easily identified						
	The way to a toilet can be easily seen						
	The next destination can be easily seen and identified e.g. enquiry desk, aisle, corridor, office, way back to exit.						
	The final destination allows the person living with dementia to see all of the areas that they may wish to use.						
4. MANAGE LEVELS OF STIMULATION - REDUCE UNHELPFUL STIMULATION	The space is free from distracting visual clutter i.e. notices, advertisements, objects, street furniture that are irrelevant.						
	Signage provides simple, essential information at decision points.						
	Entry to areas where a person living with a dementia may be exposed to danger are not easily seen or accessed, e.g. they are the same colour as the wall.						
	Background noise is of a low level.						
	Public address systems are used minimally and only when necessary (Score 2 if not present).						
	There are no alarming or disturbing noises, e.g. flapping doors, noisy automatic doors.						
	There are no confusing odours, e.g. a bakery competing with a florist.						
	Floor finishes do not have patterns with a high level of contrast						
4. MANAGE LEVELS OF STIMULATION - OPTIMISE HELPFUL STIMULATION	Cues, such as recognisable images or symbols are positioned at decision points such as junctions and turnings along the journey to the next destination.						
	Signs assist the person living with dementia to complete the journey and task.						
	Objects and/or furniture clearly show people that they are on the correct part of the journey						
	The variety of materials and finishes present create an interesting journey to and from the destination and help the person with dementia identify the stages of the journey (e.g. brick, timber, concrete, stone, grass)						
	Olfactory cues are present that provide a variety of experiences and help identify the stages of the journey (e.g. smell of perfumed plants, bakery, cafe).						
4. MANAGE LEVELS OF STIMULATION - OPTIMISE HELPFUL STIMULATION	Auditory cues are present that provide a variety of experiences and help identify the stages of the journey.						
	There are both shady and sunny areas along the journey.						
6. SUPPORT MOVEMENT AND ENGAGEMENT	The journey is pleasant.						
	Seating or nooks enable a person living with dementia to sit and rest.						
	Spaces provide opportunities to participate in or observe activities of interest						
	The space is welcoming.						
7. CREATE A FAMILIAR PLACE	The function of the space is obvious, e.g. a car park, a foyer, a thoroughfare leading to a destination.						
	Architectural design features, including landscaping and furniture, are familiar and easily understood by a person with dementia.						
	Colours and decor are familiar						
	Seating is provided to allow the person living with dementia to sit quietly by themselves or with a small number of others						
8. PROVIDE A VARIETY OF PLACES TO BE ALONE OR WITH OTHERS	The space promotes easy and comfortable interaction with people of different ages and interests						
Copyright © 2015 UOW		Total Scores	0	0	0	0	0

Scoring Key	
Disagree	0
Partially agree	1
Agree	2

SUMMARY OF RESULTS	Dementia Friendly Community - Environmental Assessment Tool (DFC-EAT)	Approach to the entry	Entry space	Route to the destination	Destination	Route from the destination
	LOCATION	0%	0%	0%	0%	0%
	Average scores in a sample of 10 banks	70%	37%	78%	73%	74%
	Average scores in a sample of 7 council buildings	68%	54%	67%	77%	76%
	Average scores in a sample of 3 libraries	45%	72%	76%	76%	77%
	Average scores in a sample of 10 shopping malls	68%	49%	67%	70%	65%
	Average scores in a sample of 10 medical clinics	68%	47%	60%	76%	72%
	Average scores in a sample of 10 small shops	73%	51%	74%	56%	67%
	Average scores in a sample of 10 supermarkets	49%	45%	53%	63%	51%



Lippincott IT: Roaming education at Albury Wodonga Health to reach ward-based staff

Anna Griffith

Library Manager, Albury Wodonga Health

<https://orcid.org/0000-0003-2488-9337>

Anna Griffith has a Master of Information Management (RMIT) and is a solo librarian at a regional health service. Having worked in law libraries, as a tutor in Information Management, and now in health libraries, Anna is passionate about special libraries and the impact a professional services library can have on research, education, and knowledge.

Introduction

Educating hospital ward-based staff about new and existing library services is a challenge faced by every hospital librarian. In February 2020 Albury Wodonga Health (AWH) trialled a “roaming education” campaign to increase awareness and usage of the Lippincott Products, titled “Lippincott It”. The initial subscription to Lippincott Procedures and Advisor platform was started in February 2018 to streamline access to nursing procedures and start the process of reducing in-house procedure documents. While the initial roll-out of the platform was successful, usage statistics gathered in late 2018 highlighted the need for a beta-phase implementation to increase the return on investment. The beta-phase needed to encompass both education and marketing, with simple messaging that could be delivered in short sessions to ward-based staff.

The message

As an early-adopter of Lippincott Procedures, AWH had access to the American-based product in February 2018 and this initially made some staff hesitant to use Lippincott since it seemed “too American”. Wolters Kluwer (the publisher) had engaged the Australian College of Nursing in early 2018 to review Lippincott procedures for an Australian context, and this included a systematic editing and endorsing of Lippincott Procedures for use in Australian healthcare facilities. These AU procedures began appearing in the Lippincott database in batches in 2018 and by the end of 2019 there had been over 400 added to the platform. This increasing Australianisation of the Lippincott content was an important message to increase staff confidence in Lippincott and its relevance for AWH.

Access to Lippincott Procedures and Advisor was initially rolled out through our intranet and ward-based computers in 2018. Limited computers on each ward meant a change of practice to Lippincott was being hampered by access issues and a lack of awareness. The mobile version of Lippincott Procedures and Advisor enables content

to be downloaded to a device, reducing the reliance on internet connection, while enhancing user ability to access the content anywhere. Staff using their own devices on the wards is still not fully endorsed at AWH, but there has been a slow shift to enabling “use-your-own-device” for evidence-based care. This concept of “access anywhere” seemed to be a key way to increase user engagement, especially among the student nursing group, who could use the Lippincott apps to look up content at home. Showing staff how to download the app and navigate the interface became another core component of the beta-phase message.

The ability to customise content within the Lippincott database was not initially used at AWH due to the concern it would negate the dynamic updating of the content by the publisher. After some further training sessions by Wolters Kluwer, the Notes feature was identified as a positive way of adding localised content, since this does not impact the background refresh of content. There was a lot of discussion about content control, but after some decisions about appropriate processes, it was decided notes should be added where appropriate to alert staff to relevant localised policies, forms or procedures. Cross-referencing AWH content with the Lippincott content in this way increased AWH staff confidence in the relevance of Lippincott for the AWH context and ensured localised AWH documents were also tied into the searchable Lippincott platform.

The core topics of the beta-phase implementation were therefore identified as: Australian content, access anywhere and AWH link-ins. With the core topics endorsed by the Clinical Education team, the next step was to develop the methodology of delivering these to ward-based staff. This methodology was focussed on branding, measurable outcomes, and face-to-face discussions, to personally endorse the product.

The planning

To create a name for our campaign, we turned to the success of Lippincott in the American market, where staff “Lippincott it” when they need to access a nursing procedure, and the brand has become synonymous with best practice in nursing. This phrase became an easy way to encompass what the beta-phase was trying to achieve at AWH: “Looking for Nursing Procedures at AWH? Lippincott it”. This shortened easily to “Lippincott it” for branding purposes, and the online graphic design tool, Canva, was used to create posters, email signatures and a flyer for the intranet. The marketing team at Wolters Kluwer were able to provide images of Lippincott branding to be used and helped with further materials we could use in a “Prize Pack”, such as showbags with branded notebooks, mouse mats, pens etc. The concept of a “Prize Pack” was linked to the idea of measurable outcomes, with the hope that we could entice more ward-based staff to engage in our campaign if they were going to win something. Mobile-based sign-ups were determined to be the easiest way to measure impact, by running a report across the Lippincott

platforms before and after the campaign to identify new users. For those staff who were already registered users, we simply added them manually to the final list. From here staff from each ward were randomly selected for a Prize Pack, which could be delivered to the ward at the conclusion of the campaign (and further generate interest in Lippincott).

Getting the education and messaging to the staff needed an innovative approach, since education sessions away from the ward are often impacted by patient needs and staff shortages. A "roaming education" approach was decided, with short five-minute interactions planned on each ward, as often as possible, but targeting at least twice a week throughout the course of a month. The personnel to deliver the education were the clinical nurse educators and library staff, and they would pair up to visit each ward and deliver the core message: Australian content, accessible anywhere, links to AWH. There was a lot of discussion about timing, but February 2019 was decided as an appropriate month (outside Christmas period and winter-surge), and in pre-COVID times, a ward-to-ward delivery method was a suitable approach. A dynamic schedule was created using Google sheets, with educators encouraged to fill in and edit their availability across the month.

To deliver the roaming education, a trolley was set up for each campus, with posters saying "Lippincott it", and containing stickers, how-to guides, lollies, and example prize packs. These trolleys functioned to draw the attention of ward-staff and offered a talking point and a gathering point. Initial train-the trainer sessions were also held by library staff, to ensure all the clinical nurse educators were aware of the messaging and how to get users to sign up for Lippincott on their devices. While there was a schedule, flexibility was also emphasised in the planning phase, with an understanding that some wards would be too busy and education staff could move on and come back.

The campaign

With such an ambitious schedule, it is perhaps predictable that most days were too busy for our ward educators to complete the roaming education, but together with library staff we carried out 12 rotations on each campus and had 200 staff engaged across the month. The responses from ward staff were always positive when the lolly jar was offered first. Staff that were busy just kept working, but we noticed that many staff gave us the five minutes needed to talk about Lippincott and show them how to sign up for mobile access. Sometimes the sessions extended into a more comprehensive training session of the platform, and sometimes staff asked for the handouts and assured us they would sign up later. The timing of the sessions varied throughout the day, but we tried to avoid hand-over, and sometimes targeted break times.

We had lots of positive feedback about the sessions and a dedicated Lippincott email was set up as a specific way for staff to contact the education and library staff about Lippincott issues and questions. The prize packs generated excitement and kept the momentum of the campaign going into the next month when education staff delivered the prizes to the wards. A follow-up campaign for Lippincott Advisor was planned, but the pandemic has redirected the focus of staff, as well as restricted movement of staff across campuses.

The outcome

While the immediate outcome of the campaign was measured in terms of mobile sign ups, usage statistics across the Lippincott Platforms since 2019 has shown noted increases. Page views for Lippincott Procedures in February 2019 was only 321 across the month, but by February 2020 there were 1996 page views for that month alone. By 2021, both Lippincott Advisor and Procedures are averaging 1500 page views each month and close to an average of 500 searches in each platform each month. The plans for increasing Lippincott usage across AWH continue, with further notes and cross-referencing to AWH content still possible. Corporate Records have also come on board to alter their approval forms to ensure Lippincott is highlighted as the first place for nursing procedures, and to reject documents that duplicate Lippincott content. There are still many localised procedures created at AWH, but the beta-phase implementation has seen a more wide-spread acceptance of Lippincott as the source of truth for nursing procedures at AWH. As for future "Lippincott it" campaigns, the roaming face-to-face education has a lot of promise for getting a simple message across to lots of staff in a short, effective way. This approach can be adopted for a digital environment through screen casting tools, like Loom, where the educator's face can be visible as they talk through a web-based session. We may not have face-to-face education under COVID restrictions but being the face of education remains a core way of reaching users and instilling trust in the library and education services across the organisation. In a post-COVID world, we hope to bring out the "Lippincott it" trolleys once again, but in the meantime, library and education staff, whether digital or face-to-face continue the key message: Looking for nursing procedures at AWH? Lippincott it!

Queensland Health's CKN celebrates 20 years of service

Richard Sayers

Manager, Clinical Knowledge Resources, Queensland Health

Richard.Sayers@health.qld.gov.au

In March 2021, Queensland Health's state-wide *Clinical Knowledge Network*, CKN, celebrated a remarkable 20 years of continuous service – supporting over 77,000 clinicians, including Queensland Ambulance Service paramedics, working in all areas of Queensland's public health system, across the entire state.

CKN's mission is to provide Queensland Health's front-line clinicians with a world-class online evidence base for direct patient care, clinical improvement and innovation, and enhanced patient safety. CKN is also used extensively by clinicians undertaking and delivering specialist medical, nursing, and allied health training programs, and medical researchers. Additionally, CKN supports the operations of crucial state-wide services such as the Queensland Poisons Information Centre (QPIC) and 13HEALTH.

The 'pandemic year' of 2020 was CKN's busiest to date, with over 12 million searches for medicines and decision support information. Unsurprisingly, this unprecedented upswing in usage incorporated a long list of pandemic and COVID-19 related search topics broadly categorised as research, diagnosis and treatment, public health responses, vaccines, and drug dosing. During the first fraught 12 months of the pandemic, CKN also delivered over one million journal articles to Queensland Health clinicians and researchers. Similar trends have been apparent in 2021 with new variants of SARS-CoV-2 such as Delta creating renewed demand from clinicians for the latest information on vaccines and treatments.

A shared evidence-base

The *Clinicians'* (later *Clinical*) *Knowledge Network* was originally launched in March 2001 as a modest state-wide collection of clinical knowledge resources intended to support evidence-based practice within Queensland Health. Through centralised procurement of strategic content, it was envisioned that CKN would ensure equity of access to the latest clinical information for all clinicians working in Queensland's public health system, regardless of their location across a geographically large state, whilst also delivering greater value for money.

A business case for CKN presented in 2000 argued that the total cost of clinical knowledge resources across Queensland Health could be reduced through strategic state-wide contracts, as had been demonstrated a few years earlier by CIAP in New South Wales. In the intervening two decades, this vision has been realised with exceptional results, both in terms of the scale and quality of content and services delivered to front-line clinicians and return on investment (value for money).

Fiona Jensen, Manager of Library and Knowledge Services at Cairns and Hinterland Hospital and Health Service was the CKN Project Officer until 2012. Now using CKN on a daily basis to deliver services to clinicians in far north Queensland, Cape York and Torres Strait, Fiona has noted a range of benefits that CKN brings to hospital clinicians and administrators. There is, she observes, the centralised portal for resources that “enables HHS [library] staff to concentrate on service delivery to their clinicians, without having to manage contracts, content providers and subscriptions.” CKN’s state-wide presence “also means that when clinical staff move between HHS’s, their access to this information remains the same.”

Over two decades, CKN’s centralised model has also ensured maximum value for money is achieved for the agency as a whole. For example, recent analysis has identified an annual return on investment to Queensland Health of \$38 saved for every \$1 spent on journal content by CKN.

Significantly, at every step in its development and growth over two decades, CKN has been scoped and configured by health librarians and procurement specialists with the advice and help of clinicians, for clinicians. Feedback from clinicians still guides the choice of content and delivery of services in 2021, particularly as CKN continues to respond to emerging and changing needs necessitated by COVID-19.

Growing and innovating

Since its launch in March 2001, CKN has extended progressively its scope and influence to become a distinct and highly valued state-wide resource. In terms of funding for collection development, CKN’s expenditure on content is significantly above the CAUL 2019 median for all Australian universities, across all subject disciplines. No data comparisons are possible at this time for expenditure on specifically health related content.

CKN’s uniquely comprehensive offering in Queensland includes multiple leading clinical decision support tools: EBSCO’s DynaMed and Isabel products, BMJ Best Practice with Comorbidities, and Elsevier’s Clinical Key and Clinical Key for Nursing solutions. CKN also delivers extensive medicines resources and research databases, and significant collections of ebooks and full-text journal content. In 2021, CKN reached a break-through agreement with Oxford University Press to deliver a new bespoke *Hospitals Collection* comprising a comprehensive online library of textbooks and handbooks in medicine and nursing – around 200 key titles.

CKN’s management always aims to be responsive to changing and emerging clinical topics and needs. The innovative *Coronavirus (COVID-19) Information Centre* developed by CKN at extremely short notice in January 2020 has been especially critical in supporting clinicians throughout the pandemic – generating over 13,000 unique views and considerable positive feedback since going live. In mid-2021, CKN

initiated and launched new targeted collections for emergency care, antimicrobial stewardship (AMS) and complementary and alternative medicines. More focussed collections of this type, built in consultation with clinicians, are planned for the near future in areas such as sepsis.

Looking to the future

For ten years, Rachel Wray was CKN's Senior Librarian and systems specialist and pivotal in helping the service to grow into a "one stop" portal for the information needs of Queensland Health's clinicians. Rachel also led the team through arguably CKN's greatest test prior to COVID-19 – the January 2011 Queensland floods, when power and internet services were cut to large areas of the state including Brisbane. Despite the widespread impacts, CKN remained available to clinicians around the state throughout the crisis – a truly remarkable achievement.

Now a Team Leader at the State Library of Queensland, Rachel was asked in early 2021 to reflect on her experience with CKN. Her response highlighted how CKN has continually adapted to the library and web technology of the time: "remote access did not exist for the first seven years. And in 2001 there were no 'search box' discovery layers that provide the integrated searching capacity of today. To see CKN continue to grow and develop with 24-hour support, regular training and CKN champions, I cannot help but be proud of being involved with, what I still believe is, a ground-breaking service."

As the current manager and custodian of CKN, it is gratifying for me to be able to recognise how far CKN has evolved from comparatively modest beginnings into Queensland's most comprehensive clinical information portal and acknowledge its many successes. Our model, informed by library and procurement best practice, has been studied by colleagues in Australia and overseas and we know that some of our innovations have been applied in other similar portals.

Without doubt, the extraordinary challenges posed by the global COVID-19 pandemic have refocussed attention on CKN within Queensland Health and highlighted its mission to inform clinicians and support patient care. Consequently, although CKN marked a necessarily subdued 20th birthday because of the pandemic, kind words from clinicians and executives including the Director-General served as timely reminders that CKN's work remains immediate, relevant, and important within the state's public health system.

Not content to rest on our laurels, we have already begun to work with our managing supplier, EBSCO, to look and plan beyond the current pandemic. While this is no easy task in the circumstances, we are proud of what has been achieved in twenty years to date and continue to be excited for the future of CKN.

A scholar and a gentleman; or, CSI Brisbane

Trish Murphy
Team Leader, Library, Forensic and Scientific Services
Trish.murphy@health.qld.gov.au

Assoc Prof Charles Naylor
Former chief forensic pathologist, Queensland Health

Dr Charles Naylor qualified as a doctor from the University of Cambridge in 1976, after which he trained in anatomical pathology at Addenbrooke's Hospital in Cambridge for six years. Fulfilling a long-standing ambition to work in Africa, he then lectured and practiced in histopathology at the University of Zimbabwe for two years, following which he returned to England to undertake intensive forensic training.

In 1987, Charles migrated to Queensland "for a year or two" to take on the role of Deputy Director of Forensic Pathology at the Laboratory of Microbiology and Pathology in George Street. He was appointed to the role of Chief Forensic Pathologist in 2001 - and retires this year after 34 years of service in Queensland Health.

Dr Naylor has always been a keen advocate of the services libraries provide, particularly the ease with which we source and retrieve information. When new staff start at Forensic and Scientific Services one of the first things he does is bring them to the library and introduce them personally to the staff. Over the years Charles has directed many a forensic pathologist struggling to search for or find supporting literature towards the library. Like many of our regular clients we have grown to anticipate his information needs, and to admire him as a person. He will be missed around campus, but with his retirement I hope that we can engender a love for the library in the next generation of clinical staff on site.

We greatly appreciate all the support we have received from Dr Naylor over the years. On the eve of his full retirement from Queensland Health I asked Charles to put together a few words about the library before he left the organisation:

Memories of Brisbane health libraries on the eve of retirement

It gives me great pleasure to share my experiences of the outstanding services I have received from health libraries over my 34 years practice as a forensic pathologist in Queensland, including the past 20 years as Chief Forensic Pathologist.

Besides engaging with many expert librarians and library technicians, I also have vivid memories the spaces they have occupied – the old Queensland Health building in

Charlotte Street, and the linked floors of Forestry House, as well as the satellite library in the George Street Laboratory, and the library at Forensic and Scientific Services (FSS), Coopers Plains.

One of my earliest literature searches concerned traumatic subarachnoid haemorrhage (TSAH), a typically fatal condition involving arterial bleeding around the base of the brain, usually caused by a blunt impact below the ear. Tragically, this injury came to prominence through the death of Phillip Hughes after he was struck by a cricket ball in 2014. In the 1980s, TSAH was not well known, hence the importance of finding case series in the literature. Thanks to these articles and our growing experience, Professor Tony Ansford and I came to recognise such cases from detectives' telephone calls. *"Doc, he went down with just one hit outside the pub and never woke up – his doctors couldn't work out why."* Those were the days without easy access to CT scans – but in the end Tony and I could guess "why" at once. The dangers of a so-called "coward's punch" are now widely recognised.

In 2014, a mother and her teenage daughter died overseas and underwent coronial investigation after repatriation to Queensland. Although not suspicious, the circumstances of death and the initial pathology findings led to a complex forensic investigation with scombroid fish poisoning and other rare possibilities under consideration, requiring repeated searches of the literature. Librarians at FSS worked with a medical student day after day to review and expand the growing body of articles, which shed valuable light on the investigation as it progressed.

Other notable searches have covered flawed evidence by a paediatrician in the UK (2004); "virtual" autopsies using post-mortem imaging, teenage male suicides, and coping mechanisms in mortuary staff (2005); challenges to forensic pathologists' evidence (2006-08); impacts of declines in suicides and accidents on tissue donation (2009); trends in coronial case-mix (2011); risks to pathologists and mortuary staff from Creutzfeldt-Jakob Disease (2013); standards for maximum case numbers for forensic pathologists (2013-15); post-mortem DNA sampling in human remains, nurses' roles in coronial investigations, and deportation of a Queensland pathologist giving evidence overseas (2016); historic Gatton climate data to gauge likelihood of hypothermia (2018); post-mortem MRI complementing neuropathology (2019); myocarditis in Covid-19, and post-mortem lung needle biopsy (2020); and mortality data, and start dates of new and amended legislation (2021).

At my suggestion, FSS librarians established a Legislation Alert Service, recognising the impact of new legislation on a government laboratory, especially with its role in forensic services and court processes.

This short account would be incomplete without paying tribute to library technicians, who have the skills to hunt down articles in obscure journals and out-of-the-way

libraries. If a speed record for finding an article and sending the PDF to a pathologist existed, then the technician at FSS would surely hold a world record of just a few minutes!

Finally, I would especially like to acknowledge the invaluable daily updates on the explosively growing scientific literature on COVID-19 and SARS-CoV-2 collated and disseminated by FSS library staff, not only to pathologists, but also of course to the dedicated FSS scientists who have played key roles in the national response to the pandemic.

On a lighter note, it has been rewarding to write a short – but not “lightning” – talk for a belated Science Week 2021 at the invitation of the Library Team Leader on *“Pathology and Piracy: the secret history of Haematoxylin and Brisbane’s mythical tree”*. Who knew that pathology, trees and piracy were linked? Well, I do now, thanks to our wonderful library staff! These are apt topics to conclude my pathology career while training as a botanic gardens guide.

A visit to the new Susan Wakil Library at the University of Sydney

Rob Thomson
ALIA NSW State Manager
Rob.Thomson@alia.org.au

Allow me to introduce myself to you. I am Rob Thomson, and I am the ALIA NSW State Manager. On 11 June 2021, just before the current Greater Sydney and then NSW-wide lockdown began, I had the opportunity to visit the new Susan Wakil Health Library Building at the University of Sydney. Located at Camperdown behind the Royal Prince Alfred Hospital and overlooking the University of Sydney oval, the new Susan Wakil Health Campus building is an impressive piece of architecture. This state-of-the-art new building brings together multiple health disciplines to work out of the same precinct. Working alongside each other in this new facility creates unique inter-professional learning programs and multi-disciplinary research opportunities. It places the students and staff at the forefront of health innovation, learning and policy.



Spread over 8 floors with views across the city, its facilities include:

- state-of-the-art clinical simulation teaching spaces
- formal and informal learning and contemporary research facilities
- a multi-service clinic serving research, teaching, industry and community outreach functions
- activity-based workspaces including a mix of open plan workstations, quiet spaces and social spaces designed to support different ways of working
- a 350-seat lecture theatre
- a rehabilitation gym.
- And, the Susan Wakil Health Library

You can read more about the building here: <https://www.sydney.edu.au/medicine-health/about/locations-and-facilities/susan-wakil-health-building.html>

I arrived early and had a look around the building and the Library space before meeting up with Elaine Tam for a guided tour of the Library and after that, the building.



The SWHB Library is spread across three levels, as well as a 24/7 zone, in the new Susan Wakil Health Building. Located on the Camperdown Campus near the Charles Perkins Centre and Royal Prince Alfred Hospital (RPAH), the building is situated in the University of Sydney's growing health precinct. The SWHB Library's physical collections support the education and research needs of the faculty of medicine and health with a focus on health sciences, nursing, and midwifery. The active print collection is further supported by the library's electronic resource collection which is available 24/7.

The Library brings together the collections previously housed in multiple library locations across the university campus together under one roof, although, in saying that, the physical collection is rather modest. As libraries have changed and adapted to providing access to online resources so the need for flexible and varied study spaces has increased and evolved how libraries respond to their community. At SWHB Library there are a number of options for students.

Training room

The training room seats 20 people and will be used to run library sessions such as systematic review and strategic publishing workshops. Designed with group work in mind, this space also allows participants to share their work by broadcasting content from their computers onto large digital screens around the room.

Reading room

Situated among the trees, the SWHB Library reading room offers a space for reflection and silent study.

Computer lab

Our computer lab has more than 30 study spaces with computers which can be used by University of Sydney students and staff.

Study rooms

The SWHB Library offers a range of bookable student meeting rooms which can be used for group study or collaborative work. All rooms are fitted with large screens and are Zoom-enabled for wireless screen sharing.

24/7 zone

The 24/7 space in SWHB is located on Level 1 and includes meeting rooms, group study spaces and vending machines.



CreateSpace

CreateSpace is a technology-rich engagement and collaborative learning space featuring future-focused technologies including VR, 3D printers, podcast studio (above) and video recording equipment with library staff to assist. Free to use for enrolled students and staff, CreateSpace is the perfect space to innovate, create and collaborate.

The physical space of the Library looks out onto trees and over the university oval and is a very pleasant place to be. The space is very inviting and while I was there, students were studying for their semester exams. The range of seating options is also very impressive.



Take a tour of the SWHB Library here:

<https://www.youtube.com/watch?v=l8K8nGJpBNc>

For library staff the library can help build even stronger partnerships by embedding research support services within Faculty of Medicine and Health (FMH) processes and programs. This integration is enabled through a shared workspace where library staff will work alongside staff from the FMH throughout the building.

Elaine took me up to Level 8 which is a staff only area with kitchen facilities and outstanding views out over the City. Talk of running a future ALIA event in the space was mooted!



Further information on the Library can be found here:

<https://www.library.sydney.edu.au/libraries/swhb.html>



Book Reviews – “Calling Bullshit” and “The Data Detective”

Lydia Dawe

The University of Notre Dame Australia

Lydia.dawe@nd.edu.au | <https://orcid.org/0000-0002-7275-0260>

Bergstrom, C. T., & West, J. D. (2020). *Calling bullshit: The art of skepticism in a data-driven world*. Random House.

Harford, T. (2021). *The data detective: Ten easy rules to make sense of statistics*. Riverhead Books.

While we as information professionals may feel confident in the world of words, it is easy to be duped by numerical nonsense. The words “Big Data” and “algorithm” are often accompanied by grandiose promises and daunting predictions. Dubious statistics and de-contextualised numbers flood social media and fast-news outlets. Two recent books offer an antidote - good old-fashioned quantitative reasoning.

In *The Data Detective*, journalist and economist Tim Harford lists the habits of mind that are essential when encountering statistics. He stresses that his book is not about “debunking” statistics, but confidently scrutinising them. Academics Carl T. Bergstrom and Jevin D. West adapted *Calling Bullshit* from their undergraduate course of the same name. The syllabus and course materials are freely available online and are well worth exploring (Bergstrom & West, 2019). For Bergstrom and West, “bullshit” is about manipulation, superfluous detail, and “statistical snake oil [...] with a blatant disregard for truth, logical coherence, or what information is actually being conveyed” (p.40). The two books have complementary approaches: *Calling Bullshit* covers statistical analysis methods in more detail, while *The Data Detective* illustrates its “rules” with fascinating detours into history, science and politics. Both books are entertaining reads that challenge our perspective on the power of numbers. Here’s some of what I learned from them.

Slow down and ask questions

Bergstrom and West lament that the internet has resulted in not only more bullshit, but bullshit spread at lightning speed, while “the truth comes limping after” (p.15). The solution? What librarians already do in a reference interview: slow down, ask questions, and gather information. The crowdfunding website *Kickstarter* boasts its success stories - someone once raised \$55,492 to fund the making of a potato salad - but how many other campaigns failed to raise a cent? A popular *TED* talk proclaims that “power posing” positively affects your hormones, but have the results been replicated in other studies? Admittedly, the answers to these questions often throw a

wet blanket on the excitement, but when the stakes are high, we must probe the headlines. Therefore, don't be embarrassed to ask simple questions such as "how do you know that?" or "what does that mean?" If the answer sounds like bullshit, keep investigating.

Beware the infographic

Both books devote an entire chapter to data visualisation. As Harford puts it, "misinformation can be beautiful, too". Infographics are not new - Florence Nightingale used them to argue the case for sanitation in the Crimean War - but they are more pervasive than ever. Data visualisation is storytelling, and by making a few adjustments in scale, shading and labelling, the story can be easily manipulated. Bergstrom and West go through diverse examples, from the bar graph with axes starting at arbitrary numbers (e.g. 35 instead of 0) to line graphs with dubious comparisons (e.g. MMR vaccination and autism rates). Both books reserve particular derision for the "duck" infographic - those that favour form over function and that are shaped like the thing they are explaining. We've all seen these - literacy rates shown by bar graphs in the form of book spines, transportation pie charts shown in the wheels of a bike. Harford suggests you check your emotional responses when reading an infographic: do you feel angry, defensive, triumphant, satisfied? Evaluate that feeling. Before you get swept away by the beauty of a graph, ask yourself: do you understand what is being measured or counted? The pause we take to understand can make all the difference.

Call bullshit on Big Data

We have never generated so much data just by living our lives. Our every transaction, search, and movement becomes a data point that is swept up and aggregated by a tech giant. Silicon Valley is guilty of falling victim to its own hubris, convinced that an abundance of data means all the answers are there to be found, and proving causation is irrelevant. Both books tell the story of Google's *Flu Trends*, a project big on promises, absent on theory. Google claimed that people's search terms (data they refused to reveal) correlated with flu outbreaks - and for a while, *Flu Trends* seemed to be on the right track. Soon after, however, the predictions fell apart. Google failed to account for the other reasons people might be searching for flu information, such as news headlines, predictive text prompts, or self-diagnosis (people often mistake a cold for the flu). If Google were more transparent in its process, and worked more collaboratively with others, it may have developed a successful tool. The bottom line is, we don't need to understand the algorithm, but we do need to question what went into it: what is the data? Where did it come from? How representative is it? The golden rule of machine learning is "garbage in, garbage out". As big tech companies have an incentive to avoid scrutiny, we should be all the more suspicious of their claims.

Put the numbers in context

Because of publication timing, Covid-19 and the subsequent explosion of misinformation are not covered by these titles. If written a year later, it is likely that case studies about Covid-19 statistics would have taken centre stage in both books. The pandemic is a complex topic at the crossroads of epidemiology, virology, statistics and sociology that poses a challenge for anyone with basic scientific literacy (Braund, 2021). Throw in an abundance of alien-sounding metrics such as mortality risk, case fatality rate, and death numbers vs. case numbers (Roser et al., 2020), and you've got a recipe for mass confusion. The result is people questioning why they should take a vaccine that is 90% effective if they have a 99% chance of surviving the virus (Reuters, 2020). Due to the 24-hour news cycle and resulting click-bait headlines, numbers are often ill-defined and falsely compared to each other. Harford stresses that journalists should not only define a measure, but put numbers in a context people will relate to. Americans may think that a 1% mortality rate sounds good, without realising it means the loss of between 700,000 and 1.5 million people - or the entire population of Hawaii (Coltrain, 2020).

Be skeptical, not cynical

Bergstrom and West assert that the chief source of bullshit to contend with is yourself: "what you see depends on where you look" (p.106). With the Internet, you will find what you are looking for eventually. We fail to fact-check sources we "feel" are true because the information confirms our existing beliefs. We can never be rid of cognitive bias but we can be mindful of it in our evaluation process. One of those biases is cynicism. Harford dislikes the notion that all statistics are smoke and mirrors, inherently misleading. Taking that view, he explains, is intellectually lazy - it gives us permission to dismiss a claim without investigating it. Nor should we become skeptics whose sole aim is to "shoot down falsehoods" (p.11). Instead, quantitative reasoning should be about curiosity: having an open mind and seeking the truth.

Information literacy is a work in progress, and quantitative literacy is part of that. These books provide an accessible starting point to the latter. I encourage all information professionals to read them and take their lessons to heart: keep asking questions, and don't be afraid to call bullshit when you see it.

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Health Library Staff Member Spotlight

Trish Murphy
Team Leader, Library, Forensic and Scientific Services
Trish.murphy@health.qld.gov.au

When did you first start working in a health library?

October 2010

How did you join health librarianship?

The position for Team Leader, Electronic Services at FSS became vacant while I was working in a similar role in the Queensland Police Service library.

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

After completing my undergrad I was still somewhat at a loss as to what to do (a BA Humanities will do that) so I enrolled in the Diploma course (library technician) at Southbank Institute of TAFE. From my work experience placement, I got a position as a library tech at Education Queensland, which led to Brisbane North TAFE, which led to QPS. While I was at the QPS library I was given the opportunity to work in the systems librarian role (on the proviso that I got my librarian qualification). I was there as the systems librarian for 5 years. When I had almost qualified, I got the job with Queensland Health.

How do you describe your current position?

I'm the library manager in a special library, with a unique mix of subject areas and some very interesting clientele. As in the clinical setting we are often responding to emergent issues, but our primary focus is supporting scientific and forensic (medicine as well as forensic science) cases. We help find our clients the evidence they need to respond as experts in their field. Everything from finding case reports for forensic pathologists, to articles outlining the effect of second-hand meth smoke on intoxication, to reference standards for water quality. And the ever-continuing COVID updates (our virology lab does the confirmation testing of positive cases and much of the sample testing when testing rates are high). My role has also evolved into the communications manager for the site (lucky it's a small site). I keep the web site updated, write briefs for Minister's visits, update LinkedIn, funnel content to the Department and generally promote the science, expertise and capability of the laboratories.

What do you find most interesting about your current position?

We are a special library in a very special, and small, business area within Queensland Health. The range of subjects we encounter, and the staff at FSS make the work the most interesting.

What has been your biggest professional challenge?

OOOH, so many. Trying to get a unix server upgraded back in the late 2000s was a particular challenge. The big Qld government changes in 2012 was tough, and my role transitioned during that time. Recent professional challenges include coordinating working from home resourcing and incorporating (or not! we are still debating) a new business area into our service agreement.

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

I'd be a government librarian somewhere.

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

Resourcing.

What is your greatest achievement?

Working with a great team that I love to work with. I had nothing much to do with the creation of the team, but finding them was a great bonus for me.

Do you have a favourite website or blog?

I love them all equally.

What is your favourite non-work activity?

Does doom scrolling count as a non-work activity? Choosing backgrounds for online meetings is another current fav.

What advice would you give to a new member of HLA or a new graduate information professional?

Take every opportunity to meet people within your network (and your workplace). Connections are vitally important in our industry - not just for career enhancement, but for personal and professional enrichment. Shortly after she started, a new arrival to my team found out that her boyfriend's mother was my first library boss. (I never thought the library world would be THAT small).



Sponsored Content: Libraries in the digital age



Editor's note: Health Libraries Australia receives sponsorship from vendors for various activities it undertakes, including JoHILA. Sponsorship helps to offset the sundry costs associated with hosting and maintaining the journal. In this and future issues opportunity will be made available for the sponsor to share with the readership information that may be of interest or relevance. As with conference presentations and the like this content is provided independently by the sponsor and Health Libraries Australia is not endorsing any particular company or product. Also, please note for this article comments from me are featured. These comments were made in response to a generic question about the balance between print and digital tools in health libraries, and were offered independent of my JoHILA role. They do not represent an endorsement of particular companies or products.

Digital resources are becoming more accessible as university students and academics are increasingly working off campus and online. Doctors and specialists who travel to multiple hospitals and clinics also require quick and easy access to these online resources.

What role do university and hospital libraries play in providing the digital tools that allow people to work and study from home, and across multiple hospitals and campuses?

Daniel McDonald, Librarian at Queensland's Darling Downs Health, says libraries are always pushing the boundaries and incorporating technology in the service of people.

"Libraries, especially in health and health science, are almost always at the forefront of technological adoptions and adaptations. It's possible that the most used healthcare tool in the world daily is not a drug or a scalpel, but PubMed."

Mr McDonald says the challenges of libraries in a digital world are the same challenges they have always sought to address:

- How can we make information work for people?
- How can we remove barriers to access for information?
- How can we describe and collate information in a coherent manner that makes it retrievable, and meaningful?
- How can we find the time and money to do all the things we know will work and make digital information better, if only we had the resources to invest?

"A colleague once described libraries as the warm-ware that sits between the hardware and software of the digital world," he said.

"We make online information make sense for people. We show them how to use Zoom and Teams. We participate in rapidly produced systematic reviews, and dynamic systematic reviews. We advocate hard for greater openness and sharing in scholarly communication.

"We privilege evidence, and filter out the spurious and speculative, and ensure high-quality scholarly communication is placed in the service of those making complex clinical decisions."

"There is often a sense that libraries are forever battling modernity, constantly having to justify their relevance and prove their worth in a world where all information is always available, everywhere. The reality is very different. Libraries don't shoosh, and they don't move into the digital world. They are already in the digital world. They have been from the beginning," Mr McDonald said.

How digital libraries extend their reach

Mr McDonald says libraries must have a nuanced and context-specific understanding of their users, and potential users, and tailor their services accordingly.

"Where the context suits, by all means invest in digital content. Just make sure that it's actually what users want, and that it's working for them."

According to Mr McDonald, the benefits of a digital library are:

- Distribution across a disparate network, eg geographically remote or dislocated workforce.
- Rapid use, reuse and re-format, eg incorporation into Endnote, learning management platforms, electronic health records and decision support, discovery engines and cross-platform retrieval.
- Attractive to administrators: large bundles of dynamic content can be purchased and deployed, with an assumption that once deployed all users can/will access it.
- Large parts of people's professional and personal lives are conducted digitally, as are organisational programs and processes. Providing content that suits this workflow is sensible and necessary.
- Scalability: Digital content can expand usage and ways of using it at levels that far exceed those of print content.
- Reportability: digital content delivery enables insights into user groups, resource needs, access and download patterns, and ultimately a better view of use and engagement with library resources.

Technology developments impacting libraries

NMC's Horizon Report: 2017 Library Edition identified the following key trends, challenges and developments in technology that would impact libraries:

Key trends	Significant challenges	Important developments in technology
Advancing cultures of innovation	Addressing societal challenges	Adaptive learning technologies
Collaborative learning approaches	Competition from alternative avenues of discovery	Information visualization
Increasing accessibility of research content	Embedding academic and research libraries in the curriculum	Makerspaces
Prioritization of mobile content and delivery	Managing knowledge obsolescence	Mixed reality
Proliferation of open educational resources	Marketing/promoting library services	Virtual assistants
Shift away from books	Rethinking the roles and skills of librarians	Wearable technology

Source: Adams Becker, S., Cummins, M., Davis, A., Freeman, A., Giesinger Hall, C., Ananthanarayanan, V., Langley, K., and Wolfson, N. (2017). *NMC Horizon Report: 2017 Library Edition*. Austin, Texas: The New Media Consortium.

The NMC report highlights these top 10 themes of organizational change that underpin the above topics:

1. Libraries remain the gatekeepers to rich tapestries of information and knowledge.
2. Libraries must keep pace with evolving formats for storing and publishing data, scholarly records, and publications to match larger societal consumption trends favouring video, visualizations, virtual reality, and more.
3. In the face of financial constraints, open access is a potential solution.
4. Spreading digital fluency is a core responsibility.
5. Enabled by digital scholarship technologies, the research landscape is evolving. GIS data, data visualization, and big data are expanding how information is collected and shared. These tools are helping libraries preserve and mine their collections while illuminating collaborative opportunities.
6. Artificial intelligence and the Internet of Things are poised to amplify the utility and reach of library services.

The future of university libraries

- The COVID-19 pandemic is expected to ["cause a rethinking of academic instruction, innovations in online learning, and a renewed appreciation for resources"](#).
- Increased use and reliance on [digital collections, self-service and online programming](#).
- Students have more [convenient access to online resources](#) at lower costs.
- Singapore Management University Libraries Strategic Plan 2021-2025 identifies [digital transformation](#) as a key priority.
- The [China Digital Library](#) is a knowledge service platform offering online reading and offline borrowing of Chinese ebooks, newspapers, images and historical publications.

Why printed resources are still relevant

Mr McDonald says most hospital-based libraries have moved to online-only or at least online-dominant collection and delivery for journal content.

"This makes sense due to the volume and rapidity of journal publishing, combined with the fluid nature of articles as they move from pre-print to online-first to formal issue allocation, table of contents alerts, indexed databases and individual Endnote libraries.

"Any users still accessing printed journals tend to be members of colleges or professional associations who receive a printed journal as part of their membership."

Mr McDonald says printed resources continue to be used because:

- Print still works as a learning object. The geography of a page works for our brain, often much more effectively than the scroll of a screen.

"Readers still like printed books, not out of nostalgia, but because they work. They are not back-lit, tiring the eyes; they do not require power; they do not require authentication; they can present complex interactions of disparate forms of information in an elegant way (eg table, figures, text, call-out box plus illustration all on the one page); they are portable in ways that online resources often are not."

- Hospitals have staff with variable digital literacy skills, access to devices, and confidence.

"Some staff never see a computer during their working day. Some see a computer, but could never hope to access it, given their scarcity and demand. Some staff don't maintain their basic usernames and passwords, while others have had difficult experiences with online payroll and human resources, medical

records and corporate learning systems, and want as little as possible to do with computers. Assuming an online information resource is preferable, or even accessible, for them is unwise, and unfair."

- E-books are often more expensive than their print counterparts.

"Usage is likely to be much lower than in a large academic cohort, and so the economics of an online-only collection don't stack up."

- Authentication in hospital settings can be a real problem.

"Often, lots of different systems are bolted on to a health service, and they all have their own slightly different methods for authentication. Staff end up with dozens of usernames and passwords, all with different requirements and resetting at different times. This can be a substantial barrier to online resource use."

"Society is transformed through the power of research, teaching and learning, all of which occur in a digital context. University libraries are instrumental in building society's capacity for digital dexterity, transforming how people experience knowledge through discovery, use and sharing." ~ Council of Australian University Librarians position statement on digital dexterity

Delivering hybrid learning environments

"Online resources, especially books, still have a role to play and are used, sometimes heavily, in hospital settings," Mr McDonald said.

"Some hospital libraries use them as a reference collection, while others have integrated them into local learning modules and education courses. Some health services are geographically disparate and online-only is the best method of delivering content.

"However, I am sure that print will still play a significant role for quite some time, and it is important to view this hybrid environment in a nuanced way. Libraries worth their salt put their users at the centre of all that they do, and tailor their services accordingly. This includes what mix of formats make up their collections and access points," he said.

Mr McDonald also believes some digital tools will likely become standard practice, such as the point-of-care tool UpToDate, which he says "is used up to 1000 times a week in our health service, to the point where I would conclude it is a standard information tool for many practitioners".

"However, the registrar who uses the UpToDate app, electronic Therapeutic Guidelines (eTG) on a website, does the literature review for their college research project using Medline and Endnote, retrieves articles from online journal content and

copy/pastes quotes into a manuscript, is the same registrar who prints those articles to highlight, annotate and scrawl over.

"That registrar also uses printed textbooks to study for their final college exams because it's so much easier to visualize the insertion of airway support, the anatomy of the trachea and physiology of the respiratory system, and show a study buddy what page 454 says."

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