

DRAFT March 2022

Title: *Guidelines for Australian Health Libraries, 5th edition*

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Date: 2022

Publisher: ALIA and HLA

Keywords: Guidelines, Standards, Health libraries, Information services, Health Libraries Australia, Accreditation

ISBN: tbc

URL: [https://www.alia.org.au/Web/Our-Members/Communities/Our-Communities/ALIA Health Libraries Australia](https://www.alia.org.au/Web/Our-Members/Communities/Our-Communities/ALIA_Health_Libraries_Australia)

URL: <https://hla.alia.org.au/>

Live searches: <https://sites.google.com/view/hlaguidelinessearches2021/home>

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Guidelines for Australian Health Libraries, 5th edition

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Introduction to the *Guidelines for Australian Health Libraries*, 5th edition

As with previous editions, the *Guidelines for Australian Health Libraries* (the *Guidelines*), provide a framework for health librarians to deliver the best possible health library and information services to their clients. The *Guidelines* are intended to cover all types of Australian health library and information services. We have followed a similar revision process to that followed in previous editions, assembling a representative Reference Group of health librarians to contribute to the content, assist in decision-making, and oversee the governance processes.

In terms of structure, the fifth edition builds on the solid base of previous versions, retaining the same four broad Guideline Areas, divided into more specific criteria against which individual libraries may be assessed.

At the outset, the Reference Group decided that above all else, the *Guidelines* should be evidence-based and practical, and that an attempt should be made to be more inclusive of all types of health libraries that deliver services to their clients wherever in the health sector they may be located – in hospitals, universities and research organisations, government departments and agencies, professional associations and colleges, community health services, and not-for-profit health organisations. Given the significant changes that have taken place in the 14 years since the 2008 fourth edition, the relative paucity of evaluative, practice-based, health library research, and the diversity in the sector, this was not an insignificant task!

This edition contains a number of important revisions and improvements.

Evidence based and practical

The main updates to the content in this edition have resulted from our aim to ensure that a solid evidence base derived from the research literature underpins the criteria (statements) in the four Guideline Areas – broadly focusing on Planning and Strategy; Organisation and Governance; Resource Management; Information Service Provision. To establish the evidence base, we engaged a research librarian who designed the literature searches to cover key topics in each Guideline Area, as well as two additional searches to align with outcomes that are critically important to health organisations (the contributions of health libraries to patient care, and standards and quality improvement).

The basic “live” literature searches are now available for others to update their knowledge base and find the current literature on the six broad topics, or to customise and refine the searches to find information on more specific topics. In the future, the search strategies will be used to update the evidence in the four Guideline Areas in ongoing reviews. This “living” guideline capability is indeed a way in which health librarians are modelling evidence-based practice.

Statement of purpose

Another improvement initiated by the Reference Group was to define a more explicit purpose. The Reference Group realised that rather than relying on a purely functional

rationale describing how the *Guidelines* may be used, a more explicit statement of purpose was needed to guide their decision making in reviewing both the structure and content of the *Guidelines*.

Recognising that high quality organisations invest in their health libraries, the Reference Group drafted the following Statement of Purpose:

The *Guidelines* provide a strategic framework for the planning, development and delivery of services, and for quality improvement of health Library and Information Services (LIS) across sectors. Depending on their sector, health LIS enable their organisations to deliver sustainable, quality, safe, evidence-based:

- patient/client-centred care;
- health system policy, planning and programs;
- health data, information and knowledge management;
- health research, innovation and development; and
- health education, teaching and learning.

The *Guidelines* were updated and revised, using the evidence from the expertly created, “live” literature searches, with this clear purpose and goals in mind. More detail about the processes followed in developing the *Guidelines* and the specific changes in content have been documented in a journal article¹.

Aspirational and prescriptive, but not minimum standards

The *Guidelines* are prescriptive in that they provide a statement of best practice that, where possible, references the evidence in the research literature. In acknowledgment of the variability of the sector, the *Guidelines* are not, however, minimum standards, which (to achieve a goal of practical applicability) would place a baseline minimum standard at the lowest common denominator.

There are currently no processes for accrediting health libraries; nor are there accompanying regulations that could be used to drive compliance. In a review of a library service, the *Guidelines* could be used to assess a library’s performance along a continuum: some criteria may be met well, some may be met partially, and some may not be met at all. In the latter two circumstances, the *Guidelines* are aspirational and could be used to guide a quality improvement strategy, or as a planning tool, for setting strategic goals and designing short term projects and actions.

My sincere thanks to the members of the Reference Group (listed below) who met regularly and tirelessly for more than two years to oversee the complex revision process, including the testing and refining of the expert literature searches and subsequent updating of the evidence on which the *Guidelines* criteria are based. In particular, I wish to acknowledge the author of the previous edition, Melanie (Kammermann) Foti whose intelligence and foresight set the strategic direction they embodied, and motivated me to follow in her footsteps and drive this project.

¹ Ritchie, A. (2021) *Guidelines for Australian Health Library and Information Services 5th edition to be launched in 2022: National Manager report December 2021*. Journal of Health Information and Libraries Australasia. 2(3), 5-11. <https://www.johila.org/index.php/Johila/issue/view/10>

In addition, we are indebted to Francesca Frati (formerly head of the Standards Task Force) and the Canadian Health Library Association's (CHLA) Board, for their permission to reproduce the recommendations for staffing numbers and levels of service (detailed in Appendix 3). We thank our Canadian colleagues sincerely, and will continue to liaise with the CHLA Standards Committee, as their CHLA Standards are updated.

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March 2022

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Guideline Area 1: Planning and Strategy

1.1 Strategic planning

1.2 Marketing, communications and client engagement

1.3 Financial management

Refer also to:

Guideline Area 3: Resource management

Appendix 1: Strategic plans, marketing plans and budget structures for examples and materials related to Guideline Area 1.

1.1 Strategic planning

Planning and development of the LIS is undertaken within a strategic planning framework and demonstrates how the LIS contributes to the parent organisation's achieving its mission, vision and strategic priorities. The LIS's strategic plan aligns with the parent organisation's strategic plan, focuses the efforts of the LIS and prioritises its use of available human, financial, technical and physical resources and service development initiatives to achieve the best possible service for users ^{1,2}.

Criteria

1.1.1 The strategic planning process is undertaken in consultation with staff, clients and stakeholders ³⁻⁵.

1.1.2 Internal and external stakeholders are identified and included in the strategic planning process ⁶.

1.1.3 Strategic analysis (e.g. SWOT analysis) is undertaken to identify and analyse the LIS's strengths, weaknesses, opportunities, and threats by considering organisational and user requirements and external trends and developments ^{7,8}.

1.1.4 The strategic plan has a specified time frame, typically 2-5 years.

1.1.5 Key goals and measurable objectives for the 2-5 year period are developed from the strategic analysis.

1.1.6 The LIS strategic plan is formatted and presented to fit the preferred style of the parent organisation, demonstrating its alignment with the parent organisation⁷.

1.1.7 The LIS has an action or operational plan to implement its vision and mission; this plan, also supports and progresses the strategic plan of the parent organisation ^{9, 10}.

1.1.8 The LIS's action or operational plan details its priority goals and objectives for the coming reporting cycle. Objectives are supported by one or more actions or tasks ^{10, 11}.

1.1.9 The LIS's action or operational plan is developed annually and linked to the LIS's budget.

1.1.10 A process for regular performance monitoring, evaluation and reporting is used to assess the progress and success of the strategic plan and subsequent improvements ⁴.

1.1.11 The strategic plan and its progress are communicated to clients and stakeholders ⁴.

1.1.12 The strategic plan includes a goal and actions that contribute to the achievement of ALIA's stretch targets to achieve the Sustainable Development Goals ^{12, 13}.

1.2 Marketing, communications and client engagement

LIS marketing aligns with the needs, core business and strategic direction of the parent organisation, ensuring that the parent organisation and key stakeholders are made aware of the work and contribution of the LIS to organisational business ^{14, 15}.

Communication and client engagement strategies identify client needs and ensure the LIS delivers benefits that will satisfy or enhance the client experience. Marketing, communication and engagement assist with retaining existing clients, identifying and attracting new clients, and identifying new products and services for emerging needs ¹⁶.

Criteria

1.2.1 The LIS develops and follows a marketing plan which is regularly reviewed and updated ³.

1.2.1.1 Where a marketing/communications unit is available in the parent organisation, the LIS utilises the services of, and coordinates with, the unit.

1.2.1.2 The marketing plan extends beyond the LIS to align with the user and other department activities, strategies and promotional channels ¹⁷⁻²⁰.

1.2.3 The marketing plan has key goals and measurable objectives which are regularly evaluated ²¹.

1.2.4 The marketing plan has a flexible framework which can facilitate new initiatives, stakeholders and platforms ²².

1.2.5 The LIS develops and implements client and stakeholder engagement strategies which are regularly reviewed and updated as required ²³⁻²⁶.

1.2.5.1 The LIS monitors and reports on client and stakeholder engagement activities and outcomes.

1.2.6 The LIS demonstrates the benefits of its services to its clients, the parent organisation and other funding bodies (where they exist) ²⁷⁻³¹.

1.3 Financial management

Financial management for the LIS considers the ongoing provision and maintenance of services, resources and staff, as well as the long-term financial needs of the LIS to support its mission.

Current and anticipated user needs, available funding, sources of revenue, costs and anticipated changes are considered in the budgetary environment or in programs of the parent organisation. In addition to organisational constraints, LIS budgets are affected by technological advances, international economic and publishing environments, placing continual pressure on an LIS's ability to manage its finances responsibly and plan for the longer term ³²⁻³⁴.

The budget typically covers one year. It is developed in consultation and collaboration with senior management from the parent organisation and appropriate library staff. Accounting and reporting methods allow careful monitoring and evaluation (such as return on investment – ROI) of expenditures, in accordance with organisational practices, policies and procedures.

Criteria

1.3.1 The LIS develops its own financial plan, as directed by, and within the guidelines of, its parent organisation, in addition to its own dedicated budget ³⁵.

1.3.1.1 The LIS develops strong relationships with finance departments in the parent organisation ³⁵.

1.3.2 The budget is actively and responsibly managed by the LIS manager ³⁶.

1.3.3 The budget is developed annually, and reviewed and reported regularly, as required by the parent organisation ³⁵.

1.3.4 The budget is linked to, and supports, achieving the LIS's strategic plan, ensuring efficiencies and effectiveness ¹¹.

1.3.5 The LIS actively pursues opportunities for adequate capital expenses, special projects or programs and other revenue raising activities ^{29, 35, 37}.

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Guideline Area 2: Organisation and Governance

2.1 Organisational structure

2.2 Organisational collaboration

2.3 Policies and procedures

2.4 Legal and professional responsibilities

2.5 Evidence-based library and information practice

2.6 Clinical, health organisation, and information governance

2.7 Service quality and scope

Refer also to:

Appendix 2: Service level agreements.

Appendix 4: Standards

2.1 Organisational structure

The LIS's ability to respond efficiently and effectively to the information needs of its users is enhanced if it is a service or department in its own right, reporting directly to senior management of the parent organisation. The sector or environment in which the LIS operates may be hospital, academic, education or health agency or a combination thereof. Clearly delineated relationships and responsibilities within the LIS, as well as between the LIS and its parent organisation, promote effectiveness and efficiency.

Criteria

2.1.1 The LIS is a distinct unit within the organisational structure and provides library and information services to staff (and other user or client groups, depending on the sector) within the organisation.

2.1.2 The LIS reports directly to a member of the organisation's senior management team within a clinical (in a health facility setting) or related portfolio.

2.1.3 There is a current organisational plan, or chart, that reflects the lines of communication and the relationships, including responsibilities and accountabilities, necessary for the effective and efficient operation of the LIS.

2.1.4 Where LIS users are based in more than one organisation, such as an academic health science library providing services and resources to hospital staff, academics and university students, or a hospital or college library providing services and resources to another jurisdiction's staff, a partnership or service level agreement or contract should be in place. The agreement outlines the lines of communication and the relationships, including responsibilities and accountabilities, of both organisations. The agreement should contain clear statements regarding governance, funding and service levels³⁸⁻⁴⁰. (For points to consider when designing inter-organisational agreements, see *Appendix 2: Service level agreements*.)

2.2 Organisational collaboration

As key knowledge-based information professionals in their organisations, the staff of the LIS are involved in the planning and development of systems to meet the knowledge and evidence-based information needs of their users and of their organisations in general. In addition, LIS staff bring their unique skills and knowledge to engage in the organisation's wider information management and technology agenda.

Criteria

2.2.1 The LIS is directly involved in the planning, decision-making and problem-solving of coordinated systems appropriate to meet the knowledge and evidence-based information needs of the organisation.

2.2.2 The LIS contributes to the organisation's wider information management and technology agenda through active membership on relevant committees/teams ⁴¹.

2.2.3 If the LIS's organisation delivers clinical services, the LIS engages with clinical units to monitor and respond to changing information needs and provide updates about LIS resources and evidence-based practice.

2.2.4 If the LIS's organisation delivers teaching, learning and/or research services, the LIS engages with faculties, departments, academic staff, researchers and students to monitor and respond to changing information needs and provide updates about LIS resources and related services.

2.3 Policies and procedures

The LIS adheres to the parent organisation's policies and procedures. The LIS also has policies and procedures specific to its operations, which clarify to staff and users the scope and limits of the resources and services provided and ensure effective operation of the LIS.

Criteria

2.3.1 The LIS has a complete set of policies and procedures which document all facets of LIS operations.

2.3.1.1 The LIS has a current collection development policy ²⁴.

2.3.1.2 The LIS has a membership policy document which clearly outlines the eligibility criteria for LIS membership and the resources and levels of access available to users.

2.3.1.3 The LIS has a current access policy and guides users on the responsible use of resources.

2.3.1.4 After-hours access to LIS space/s is made available subject to appropriate security measures being in place to safeguard LIS resources and users.

2.3.1.5 Security and safety procedures are documented for business and out-of-hours operations.

2.3.2 Policies and procedures are based on best available evidence and designed to reflect best practice in the delivery of services and resources within budgetary limits.

2.3.3 As appropriate, policies and procedures are developed in consultation with LIS users, staff and senior management.

2.3.4 Policies and procedures are communicated to LIS staff and users, as well as other relevant stakeholders, and are readily available for consultation.

2.3.5 Policies and procedures have been written and reviewed within the last 3 years, or more frequently if there have been changes in library practice, library and information services, user needs, and/or organisational policies or programs.

2.4 Legal and professional responsibilities

The work practices and conduct of LIS staff are determined and/or affected by various legislation, codes of practice, professional guidelines and organisational policies and standards. As such the LIS complies with, and staff are aware of, their legal and professional responsibilities.

Criteria

2.4.1 LIS staff abide by the ALIA member code of conduct statement and the ALIA core values policy statement ^{42, 43}.

2.4.2 All LIS staff are aware of and receive appropriate training in relevant legislation, professional guidelines and organisational policies and standards.

2.4.3 The LIS supports access to information in keeping with organisational goals, and works toward the review and revision of organisational policies so that they support the LIS's ability to meet the work-related information needs of its users.

2.4.4 The LIS manages agreements with publishers and content providers, abides by the terms and conditions of those agreements, provides advice to its community regarding licensed and copyrighted materials and ensures proper record keeping practices are followed.

2.4.5 The LIS supplies materials to its users in accordance with copyright legislation, obtains copyright declarations from users before reproducing materials and includes a copyright notice on the supplied item/s.

2.4.6 The LIS displays notices near equipment capable of reproducing content (such as multi-function devices and computers) to indicate that the LIS does not authorise copyright infringements.

2.4.7 The LIS collection is shared to users outside of its network through resource sharing systems such as Libraries Australia and GratisNet, which allows the LIS to rely on library exceptions in the Copyright Act 1968 (Cth) ⁴⁴.

2.5 Evidence-based library and information practice

LIS staff and management base their practice on the best available evidence, together with “insights derived from working experience, moderated by user needs and preferences....User-reported, practitioner-observed and research-derived evidence” integrated and used as the basis for practice and decision-making ⁴⁵. LIS management actively promotes and supports an evidence-based practice culture within the LIS ^{46, 47}.

Criteria

2.5.1 The principles of evidence-based practice are applied to all aspects of health library practice.

2.5.2 Appropriate professional development opportunities are made available to LIS staff in order to develop the knowledge and skills required to practice evidence-based library and information practice ⁴⁸.

2.5.3 LIS staff can access, search and critically appraise the professional literature to locate the best available evidence to support LIS service development and decision making ⁴⁹.

2.5.4 The Evidence-Based Library and Information Practice (EBLIP) process (formulate the question; identify and appraise the evidence; apply the evidence to practice; evaluate performance) is incorporated into decision making and project management ⁵¹. (See also 4.3.2 in 4.3 Evidence-based practice for health professionals)

2.5.5 The results of practice-based research are reported both within the organisation and to the wider library community ^{51, 52}.

2.5.6 LIS staff actively engage with published research in the field, and take up professional development opportunities when available, in order to maintain awareness of emerging trends and best practice in provision of health information resources and services.

2.6 Clinical, health organisation, and information governance

The LIS supports the quality, patient safety and clinical governance functions of its parent organisation, with clinical governance understood to mean “an organisation-wide approach to continuous improvement of healthcare quality by all the individuals who are involved in a patient’s care” ⁵³. The LIS also supports the information governance functions of its parent

organisation, with information governance defined as “an approach to managing information assets across an entire organisation to support its business outcomes [and]... meet regulatory, legal, risk and operational requirements” ⁵⁴.

Criteria

2.6.1 The LIS supports activities undertaken across its parent organisation to prepare for and demonstrate achievement of standards required to achieve accreditation as defined by a national, independent accrediting body ^{31, 53}.

2.6.2 The LIS contributes to patient quality and safety through participation in a range of activities including clinical librarianship services ^{55, 56}, Health Technology Assessment committees, development of new models of care, and updating clinical and organisational policies and procedures ⁵³.

2.6.3 The LIS participates in or leads health literacy initiatives aimed at patients, families, carers and community members. These may include selection or creation of consumer information resources, recommendations of reliable, high quality online health information sites, and delivery of health information literacy training ¹⁹.

2.6.4 The LIS selects and manages high quality information resources to support evidence-based clinical practice and evidence-based decision-making by clinical staff and managers.

2.6.5 The LIS, often in conjunction with other units within the organisation, undertakes information governance functions which aim to ensure effective, efficient, appropriate and ethical use of organisational information ⁵⁷.

2.7 Service quality and scope

Standards for service quality and scope are documented as key performance indicators (KPIs). LIS service delivery is assessed against KPIs by collection of relevant activity statistics, value and impact studies and user feedback ^{45, 58-60}.

Criteria

2.7.1 The LIS has a set of key performance indicators (KPIs) which document all facets of LIS operations. These include, but are not limited to, the following:

2.7.1.1 The LIS has a KPI to measure the LIS’s contribution to evidence informed practice (e.g. the outcomes of mediated literature searching) ^{45, 61, 62}.

2.7.1.2 The LIS has a KPI to measure the LIS contribution to clinical decision making and education (e.g. results of clinical decision-making surveys) ^{28, 55, 59, 61, 63, 64, 65}.

2.7.1.3 The LIS has a KPI to measure the LIS contribution to research and quality improvement projects (e.g librarians’ contributions to systematic reviews with acknowledgement and/or authorship) ^{66, 67, 68}.

2.7.2 The LIS regularly undertakes value and impact studies using a range of methodologies, and benchmarks against comparable LIS services ⁶⁹.

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Guideline Area 3: Resource Management

3.1 Human resources

3.2 Space, facilities and equipment

3.3 Data, information and knowledge resources

3.4 Technological resources

Refer also to:

Guideline Area 1: Planning and Strategy, 1.3 Financial management

Guideline Area 2: Organisation and Governance, 2.3 Policies and procedures

Guideline Area 4: Information Service Provision

Appendix 1: Strategic plans, marketing plans and budget structures

Appendix 2: Service level agreements

Appendix 3: Recommended staffing for health library and information services

The ability of the LIS to manage its resources is affected by the size and ongoing stability of its budget. The two largest components of an LIS's operational budget are generally human resources (staffing) and information resources (collections). Managing the budget and ensuring the LIS has the ability to deliver the services for which it is accountable is the primary responsibility of the library manager, who should be proactive and strategic in undertaking these tasks.

3.1 Human resources

Health librarianship is a dynamic and adaptable profession. In delivering health library and information services, careful consideration must be given to the qualifications and competencies of the staff, and the staffing mix in the library team. The staffing structure supports the LIS's mission, user needs and budget allocation, and is reviewed and revised whenever there is a significant change in any of these factors. Strategies for establishing and reviewing staffing numbers and levels, continuing professional development and training requirements, and performance standards, are documented and described ^{70, 71}.

Employers have an obligation to encourage and facilitate the participation of their employees in continuing professional development opportunities in order to maintain competency and currency in core skills and knowledge. In addition, employers benefit by embracing a workforce development approach that builds on core skills and knowledge to expand health librarians' scopes of practice in related disciplines, for example data and knowledge management, digital innovation, business intelligence, IT systems and platforms, and information architecture.

Criteria

3.1.1 The LIS is managed by a qualified librarian, recognised as such by the Australian Library and Information Association ⁷². The library manager has leadership qualities suited to a health professional environment ^{73, 74}.

3.1.2 Adequate numbers of qualified librarians and library technicians who possess ALIA recognised library and information qualifications and competencies appropriate for the role, plus additional support staff, are employed to meet the needs of users, the purpose of the service and the required level of service ^{72, 75-77}.

- Roles for librarians (grades 1-5), library technicians (grades 1 and 2) and library assistants are defined by ALIA in *Work Level Guidelines for Library and Information Services* ⁷⁶.
- Health librarian competencies are described in *ALIA HLA Competencies*, 2018 ⁷⁷.
- Standard Five of the *CHLA Standards for Library and Information Services in Canadian Health & Social Services Institutions 2020* ³⁴ recommends minimum staffing levels, calculated using the Van Moorsel formula, which “uses a sliding scale which allows the library staffing standards to be driven by dynamic relation to the organizational size rather than by a fixed denominator”. The CHLA have given permission to reproduce the following sections in *Appendix 3: Recommended staffing for health library and information services*:
 - “Table 2: Staffing grid for libraries providing minimum services”;
 - “Appendix 4: Staffing Within Libraries Providing An Advanced Level of Service”;
 - “Appendix 5: Additional Considerations for Libraries Providing an Advanced Level of Service”.
- The NHS Library and Knowledge Services in England recommend that in order to improve the staff ratio for the number of qualified library and knowledge specialists per member of the NHS workforce, that organisations strive to achieve a ratio of at least 1 qualified librarian or knowledge specialist per 1,250 WTE (Whole Time Equivalent) NHS staff ⁷⁸.
- Due to the specialist requirements of the health sector, if the LIS is based in an educational institution (e.g. a university) staffing should accommodate roles for health librarians with specialist skills ².

3.1.3 Where the nature of an organisation or service provides sufficient reason for the employment of less than a 0.4 FTE librarian, a dedicated professional library service may be provided via a service level agreement. Where an LIS delivers a shared service across organisations, the scope, services to be provided, deliverables, staffing and cost arrangements are clearly articulated in a formal agreement. (See *Appendix 2: Service level agreements*)

3.1.4 Where a LIS is a branch library or part of a wider group of libraries, staffing arrangements must take into account a range of factors, including the requirement for a sustainable and skilled specialist workforce. Economies of scale, flexibility, and staff support aimed at optimising services for the system as a whole may be possible if a single staffing structure for the network is established ⁵⁹.

3.1.5 Each staff member has a position description that is reviewed annually or as appropriate for the parent organisation, in consultation with the incumbent.

3.1.6 Each staff member has a formal, documented performance evaluation conducted annually by the staff member's manager, according to the policies and procedures of the parent organisation.

3.1.7 Employers have a responsibility to enable their staff to maintain competence and continue to learn in line with professional associations' standards ⁷⁰. Each staff member's professional development plan aligns with the LIS's planning processes, and outlines professional development opportunities that support the individual's learning ⁷⁹.

3.1.8 To maintain a high level of competency and currency in service management and delivery, the library manager and all eligible library staff participate in ALIA's Professional Development Scheme and the health specialisation that is based on Health Libraries Australia's Competencies ^{48, 77, 80}.

LIS staff are encouraged to participate in Health Libraries Australia's, ALIA's and their local groups' activities, training and other events for networking with professional peers and engaging in continuous professional learning.

3.1.9 There is adequate cover in times of absence so that users continue to have appropriate access to professional LIS staff.

3.1.10 Where the size of an organisation or service warrants the services of a librarian on a contractual or part-time basis only, a qualified library technician, or an employee with specific training in library duties, performs routine library operations under broad professional supervision to ensure the delivery of core library services and the control and maintenance of library resources and collections.

3.2 Space, facilities and equipment

The LIS physical space, facilities and equipment need to meet organisational requirements, comply with occupational, health and safety (OHS) legislation and regulations, and ensure the security and safety of spaces, equipment and resources for staff and LIS users.

LIS spaces typically accommodate the following zones:

- a highly visible enquiry point for access to librarian expertise;
- a secure LIS staff room or office;
- collaborative seating and meeting facilities;
- quiet work and study area;
- education and training facilities;
- hot desking facilities that offer patrons an alternative place to work;
- areas for social infrastructure and wellbeing; and
- technology such as networked PCs, wifi access to available networks, charging points for BYO devices and multi-function devices for printing/scanning.

These zones are best established in a physical space that has 24/7 access, natural light and a flexible layout that will be conducive to multi-purposing as needs evolve. As space, facilities

and equipment requirements change over time, factors that enable responsive spaces should be considered, including:

- a design that supports flexible use by creating open and adaptable areas;
- access to digital collections alongside physical materials;
- current technology including PCs, wifi network access, support for BYO devices and print/scan devices;
- access to appropriate software for research and referencing.

Standards for space, facilities and equipment cannot be prescriptive due to variations in local factors, but the concept of “library as place” should not be underestimated in creating a positive, stimulating and productive environment for library users that supports the delivery of quality resources and services by library staff ⁸⁷⁻¹⁰⁷.

Criteria

3.2.1 The LIS’s physical facilities are sufficient and appropriate to meet both current and planned future user requirements ⁸⁰⁻⁸⁴. Workstations and access points are available in numbers, locations and configurations to meet user needs effectively ⁸⁵. In addition, there needs to be sufficient flexibility in layout, allocated floor space and technical infrastructure to allow the LIS to adapt reasonably to rapid change ⁸⁶⁻⁹⁰.

3.2.2 A variety of zones accommodates a range of uses of the space, including: collaboration, quiet work and study, education and training, hot-desking and relaxing areas for time out and contemplation ⁹⁰⁻⁹³.

3.2.3 There is sufficient space to accommodate timely access to physical collections alongside digital access points.

3.2.4 Access to librarian expertise is supported by a clear and welcoming enquiry point.

3.2.5 The LIS manager has a designated separate office within a lockable work room / office space for LIS staff providing the service.

3.2.6 There is appropriate equipment, stock and supplies to support the activities of the LIS.

3.2.7 Equipment is kept in good order and maintained in accordance with organisational policies.

3.2.8 The LIS’s physical facility and equipment comply with OHS regulations and are scheduled for review as part of organisational resourcing.

3.2.9 There are documented business continuity and disaster plans for emergency response; plans cover LIS working arrangements, access to resources, 24/7 security arrangements for LIS staff, users, library stock and equipment.

3.3 Data, information and knowledge resources

Information and knowledge resources are provided by the LIS in accordance with the LIS's collection development policy, (see *Guideline Area 2: Organisation and Governance, 2.3 Policies and procedures*). They support the organisation's mission and strategic direction, and comply with sound information and data governance principles and practice.

Resources align with the needs of the organisation's primary client groups, and encompass a range of high-quality databases, electronic and print resources. Resources are organised to facilitate easy discovery, access and retrieval. When resources are not available, there are interlibrary resource sharing or pay-per view processes to acquire them. The LIS may have broader roles in harnessing organisational knowledge and research data.

Criteria

3.3.1 Whether provided in a virtual environment or from a physical site, the resources and services of the LIS are readily accessible through multiple points of contact, including digital and in person. Services operating times are adequate to meet user needs, and clients have remote 24/7 access to quality, online, evidence-based resources and are able to request services online ⁸⁸.

3.3.2 Where a physical service is provided, the location of the LIS is accessible to users, well signposted, with opening hours, staffing levels and facilities that are adequate to meet client needs. Clients may be provided with 24/7 access to the physical library and collection.

3.3.3 The LIS develops and co-ordinates cost-effective methods for the acquisition and distribution of information for the parent organisation ⁸². This includes negotiations with publishers and suppliers and collaboration with consortia and network partners. Consortial licences that cross organisational boundaries may be negotiated ³⁸.

3.3.4 Library collections are evaluated, acquired, catalogued, made accessible and kept current through evidence-based selection and de-selection processes.

3.3.5 Usage of online collections is analysed to ensure value for investment. This includes using standards-based metrics and systems (COUNTER and SUSHI ^{108, 109}) along with other relevant factors (assessment of local needs, capacity to meet occasional supply by interlibrary loans, discoverability of content in indexes etc).

3.3.6 The LIS participates in resource sharing networks observing library provisions of the Copyright Act and licencing and contractual agreements ^{44,82}.

3.3.7 Library websites are kept current, secure, and links are checked.

3.3.8 Databases and other discovery tools are available to maximise relevant retrieval. Systems that connect clients to online resources (such as OpenURL resolvers or LinkOut Tool from the US National Library of Medicine) are deployed.

3.3.9 The LIS contributes to the production, management and dissemination of organisational knowledge ^{82, 110}. This may include provision of a website for the library

services, participating in the creation, review, management, storage and dissemination of organisational knowledge, institutional history, and/or publication repositories ^{110, 112}.

3.3.10 Adequate provision is made to ensure that information resources are accessible to users with disabilities ¹¹³.

3.3.11 Data librarianship is an area of practice that aims to increase transparency and usefulness of research data so that it is FAIR – Findable Accessible Interoperable Reusable. LIS competencies may be deployed for organisational research data management services ^{114 - 119}.

3.4 Technological resources

Information and Communications Technologies (ICT) are used to support optimum service delivery. The LIS makes appropriate use of a range of technologies including authentication systems for remote access, services for mobility, and BYO devices to provide users with ready access to knowledge and evidence-based information resources and services. LIS management, administration and service operations are optimised through the efficient and appropriate use of ICT ^{120, 121}.

The LIS keeps abreast of new information technologies and assesses their application to library management and services in keeping with user needs, cost constraints, cost-benefit analyses and the LIS's mission. Emerging technologies are judged on their merits and suitability ¹²².

Criteria

3.4.1 The LIS has a Library Management System (LMS) for the management and operation of library functions. The LMS may be part of a wider cooperative such as a health district or state-wide service, allowing economies of scale relating to content, software, maintenance and cost ⁴¹.

3.4.2 The LIS facilitates access to networked knowledge and evidence-based information resources required to enable users to perform their roles effectively, and support the parent organisation in achieving its mission ^{120, 121, 123}.

3.4.3 The LIS has easily navigable web pages which enable users to find out about the full range of services. These facilitate two-way communication between the LIS and users, and provide links to resources and tools ¹²⁴.

3.4.4 The LIS participates in the planning of facility-wide information systems, services and networks. The LIS maximises networks and telecommunications to enhance service delivery through linkages and integration with other information systems and services, both within and outside the organisation, aiming to facilitate, enhance and improve access to information for LIS staff and users ^{41, 84, 87, 124}.

3.4.5 There are suitable information technology facilities available for LIS staff to train users in information management and retrieval skills ⁷⁹.

3.4.6 LIS staff receive training on any new hardware and software introduced into the LIS ⁷⁹.

3.4.7 There is provision for support of technological resources, including maintenance, repair, trouble shooting and upgrading as part of organisational resourcing.

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Guideline Area 4: Information Service Provision

4.1 Reference and research services

4.2 Induction and user education, orientation and literacy

4.3 Evidence-based practice services for health professionals

The LIS is central to the mission of the organisation. Health is an environment rich in information, research and data. Health librarians are core professionals in the delivery of knowledge and information services and resources to clients, who include clinicians, researchers, educators, students, public health practitioners, policy makers, planners, service improvement professionals, health managers, and consumers (patients, carers, families).

There is a rich literature that documents the value and impact of services and resources that support quality, safe, evidence-based, innovative and transformative services and research ^{19, 31, 53, 55, 56, 59, 61, 64, 65, 69, 125-153}. The NHS Library and Knowledge Services in England Policy notes “Our ambition is to extend this role so that healthcare knowledge services become business-critical instruments of informed decision-making and innovation” ¹⁵⁴.

The LIS may have a physical and/or virtual form but in whatever manifestation, it requires professional LIS management to evaluate, design, deploy and review resources and services. Collection, research and education services are core services. The Canadian Health Library Association Standards 2020 ³⁴ state that “the minimum level of library services must include but need not be limited to:

- Reference services, i.e. personalized assistance provided to library users either in-person or virtually, including library orientation.
- Literature searching and search alerts.
- Scholarly communications support e.g. citation support, impact factors.
- Interlibrary loans (ILL).
- Evidence-based practice/Information literacy training (e.g.: question formulation, literature searching, levels of evidence etc.).
- Provision of access to and/or maintenance of searchable catalogue/index of library resources.
- Development and maintenance of a library online presence (whether internet or intranet).
- Identification of copyright best practices.”

The types and levels of information services offered by a health LIS depend on the focus and priorities of the organisation in which the LIS is located. The scope of practice for librarians providing health information services ranges from traditional generalist roles to more specialised positions, often as “embedded librarians” such as partners, collaborators, research experts, and liaisons. Roles vary and titles include:

- embedded librarians (such as clinical librarians, clinical informationist, bioinformationist, public health informationist);
- disaster information specialist;
- clinical and translational science librarian;
- systematic review librarian;

- expert search services librarian;
- emerging technologies librarian;
- academic health sciences informationist / librarian;
- continuing medical education librarian;
- grants development librarian;
- data management librarian;
- research and instruction librarian;
- scholarly communication librarian;
- digital librarian;
- metadata librarian;
- translational research librarian;
- medical education and clinical engagement librarian;
- instruction librarian;
- collection strategist;
- reference/research librarian;
- liaison librarian;
- outreach librarian; and
- consumer health librarian ^{55, 155}.

4.1 Reference and research services

Criteria

4.1.1 Reference and research services are core to the LIS's service delivery model. They ensure the provision of evidence needed to support safe and best practice in clinical care, research, education and management of health services, and that best value is derived from resources procured by the LIS.

4.1.2 Standards for reference services that clearly state what users should expect are communicated through a client services charter (or similar statement). This could cover:

- type of service;
- level, or extent, of service;
- quality of service;
- service entry points;
- response and turnaround times;
- modes and formats of delivery;
- charges, where applicable;
- feedback mechanisms;
- standards of professionalism; and
- behaviour to be expected of staff.

4.1.3 Health librarians' competencies in the provision of reference and research services are unique amongst the health information professions ¹⁵⁶. Librarians are expert searchers in research teams. They document replicable literature search strategies required to meet quality research reporting requirements ^{31, 68, 155, 157-168}. They may have extended authorship roles as described in CRediT – Contributor Roles Taxonomy ¹⁶⁹.

4.1.4 Reference consultation services are provided on-demand and by appointment, as well as proactively in anticipation of user requirements through alerting or current awareness services.

4.1.5 Innovative methods for delivering and providing reference and research services are investigated and assessed. For example, systematic review consultations, research data management, establishment and maintenance of research repositories, other activities that support the research translation lifecycle.

4.1.6 If the LIS provides a consumer health information service, the LIS promotes activities associated with health information literacy such as provision of quality assured materials at appropriate reading levels and in accessible formats. Librarians do not provide medical or pharmaceutical advice to consumers, but may work in conjunction with other health professionals to support consumer health literacy initiatives, evidence-based decision-making and informed consent ^{25, 170}.

4.2 Induction and user education, orientation and literacy

Criteria

4.2.1 Induction sessions and materials delivered by the parent organisation or other relevant body include information about the LIS.

4.2.2 LIS specific induction sessions are available to all users, including remote users. Refresher sessions are available on request or as scheduled.

4.2.3 The objective of LIS education is capacity building for clients. The LIS develops and promotes users' digital literacy through the delivery of library and information skills training programs. If onsite training is not possible (due to the category of LIS or users located in remote locations), the LIS promotes digital literacy by providing access to learning resources, including live or recorded classes, library guides, tutorials and learning modules. These may be created by the LIS or by a third party ¹⁹.

4.2.4 The LIS works with other trainers/educators within the organisation to ensure course participants have opportunities to learn library and information handling skills relevant to their training. The LIS supports educators by advising on the integration of library and information skills into their courses, and through the development of the same in the educators themselves, so that their teaching is more effective ¹⁷¹.

4.3 Evidence-based practice for health professionals

Criteria

4.3.1 The LIS promotes evidence-based practice by providing quality services and resources that support the translation of research knowledge into practice ²².

4.3.2 Health librarians support all aspects of the 5A's model of evidence-based practice – ask, acquire, appraise, apply, and assess¹⁷²⁻¹⁷⁴. (See also 2.5.4 in 2.5 *Evidence-based library and information practice*.)

4.3.3 The LIS supports the research activity of the parent organisation through its scholarly communication services. These activities are underpinned by the first core value of the LIS profession (“Promotion of the free flow of information and ideas through open access to recorded knowledge, information, and creative works”) and may include assisting individuals or areas within the parent organisation to create, evaluate, distribute and preserve research output^{43,175}.

4.3.4 The LIS provides publishing and impact consultancy services, advising on appropriate and effective research publication and dissemination practices that may include:

- persistent identifiers for publications, data, people or institutions;
- establishment, maintenance and promotion of researcher profiles;
- open access advocacy and identification of quality (non-predatory) publication sources;
- publishing and reporting standards and guidelines;
- journal rankings and other metrics for research impact.

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References

1. Allee, N. J., Blumenthal, J., Jordan, K., Lalla, N., Lauseng, D., Rana, G., ... & Song, J. (2014). One institution's experience in transforming the health sciences library of the future. *Medical Reference Services Quarterly*, 33(1), 1-16.
<https://doi.org/10.1080/02763869.2014.866444>
2. Council of Australian University Librarians (CAUL). (2016). *Principles and guidelines for Australian higher education libraries*. Council of Australian University Librarians.
<https://www.caul.edu.au/sites/default/files/documents/best-practice/principles-guidelines2016public.pdf>
3. Wade, M. (2013). Re-inventing the library: The role of strategic planning, marketing and external relations, and shared services at the National Library of Scotland. *Library Review*, 62(1/2), 59-66. <https://doi.org/10.1108/00242531311328177>
4. Bandy, M. M. (2015). Pivoting: Leveraging opportunities in a turbulent health care environment. *Journal of the Medical Library Association*, 103(1), 3-13.
<https://dx.doi.org/10.3163%2F1536-5050.103.1.002>
5. Harland, F., Stewart, G., & Bruce, C. (2019). Leading the academic library in strategic engagement with stakeholders: A constructivist grounded theory. *College and Research Libraries*, 80(3), 319-339. <https://doi.org/10.5860/crl.80.3.319>
6. Sharma, A. K., Majumder, A., & Uraon, A. (2017, July). Branding and marketing your library and services: Case study of Rabindra Library. [Paper presentation]. In *First International Conference on Transforming Libraries: Proceedings*. First International Conference on Transforming Libraries, Guwahati, India (pp. 145-151). Central Institute of Technology, Kokrajhar Btad Assam.
https://www.researchgate.net/profile/Arun-K-Sharma/publication/318494231_Branding_and_Marketing_your_Library_and_Services_case_study_of_Rabindra_Library/links/596dd491458515d926656d50/Branding-and-Marketing-your-Library-and-Services-case-study-of-Rabindra-Library.pdf
7. Schulz, L. (1998). Strategic planning in a university library. *Marketing Library Services*, 12(5). <https://www.infotoday.com/mls/jul98/story.htm>
8. Calhoun, S. (2020, June 5). *Building strategic consensus: A grassroots planning process*. [Paper presentation]. CARL 2020 Virtual Conference, San Francisco USA.
<https://conf2020.carl-acrl.org/>
9. Coleman, D. E., & Robbins, K. (2016). Strategic planning for a single-person medical library. *Journal of Hospital Librarianship*, 16(4), 299-304.
<https://doi.org/10.1080/15323269.2016.1221274>
10. Saunders, L. (2016). Room for improvement: Priorities in academic libraries' strategic plans. *Journal of Library Administration*, 56(1), 1-16.
<https://doi.org/10.1080/01930826.2015.1105029>
11. Indira Gandhi National Open University. (2013). *Financial management*. Indira Gandhi National Open University.
<https://www.egyankosh.ac.in/bitstream/123456789/35887/5/Blie-226-B3.pdf>
12. Australian Library and Information Association (ALIA). (2021). *Sustainable Development Goals: Stretch targets for Australian Libraries 2020-2030*. Australian Library and Information Association. <https://read.alia.org.au/sustainable-development-goals-stretch-targets-australian-libraries-2020-2030>

13. Missingham, R. (2021). A new lens for evaluation - assessing academic libraries using the UN Sustainable Development Goals. *Journal of Library Administration*, 61(3), 386-401. <https://doi.org/10.1080/01930826.2021.1883376>
14. Lawton, A. (2016). *The invisible librarian: A librarian's guide to increasing visibility and impact*. Chandos Publishing.
15. Bridges, J. (2005). Marketing the hospital library. *Medical Reference Services Quarterly*, 24(3), 81-92. https://doi.org/10.1300/J115v24n03_07
16. Rossmann, D. (2019). Creating an organizationally embedded strategic communication plan for libraries. *Library Leadership & Management*, 33(2), 1-17. <http://dx.doi.org/doi.org/10.15788/201902LLM>
17. Chan, C. (2012). Marketing the academic library with online social network advertising. *Library Management*, 33(8), 479-489. <https://doi.org/10.1108/01435121211279849>
18. Cronin, K. & O'Brien, T. (2009). Practical low-cost marketing measures: The experience of Waterford Institute of Technology Libraries. *New Library World*, 110(11-12), 550-560. <https://doi.org/10.1108/03074800911007569>
19. Whitney, W., Keselman, A. & Humphreys, B. (2017). Libraries and librarians: Key partners for progress in health literacy research and practice. In R. A. Logan & E. R. Siegel (Eds.). *Studies in health technology and informatics*, IOS Press. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5724359/>
20. Marton, C. (2012). Invisible: The online presence of medical library web pages on hospital web sites. *Journal of Hospital Librarianship*, 12(1), 14-24. <https://doi.org/10.1080/15323269.2012.637859>
21. Whitney, W., Dutcher, G. A., & Keselman, A. (2013). Evaluation of health information outreach: theory, practice, and future direction. *Journal of the Medical Library Association*, 101(2), 138-146. <https://dx.doi.org/10.3163%2F1536-5050.101.2.009>
22. Epstein, B. A. (2017). Health sciences libraries in the United States: New directions. *Health Information & Libraries Journal*, 34(4), 307-311. <https://doi.org/10.1111/hir.12199>
23. Wakeham, M. (2004). Marketing and health libraries. *Health Information & Libraries Journal*, 21(4), 237-244. <https://doi.org/10.1111/j.1471-1842.2004.00540.x>
24. Fought, R. L., Gahn, P., & Mills, Y. (2014). Promoting the library through the collection development policy: A case study. *Journal of Electronic Resources in Medical Libraries*, 11(4), 169-178. <https://doi.org/10.1080/15424065.2014.969031>
25. Egeland, M. (2015). Hospital librarians: From consumer health to patient education and beyond. *Journal of Hospital Librarianship*, 15(1), 65-76. <https://doi.org/10.1080/15323269.2015.982944>
26. Kouri, S., & Sisamaki, E. (2019). User insights as a key factor for the development of a strategic plan at the Central Library of NTUA. *Qualitative and Quantitative Methods in Libraries*, 7(3), 389-397. <http://qqml-journal.net/index.php/qqml/article/view/486>
27. Holt, G. E. (2005). Getting beyond the pain: Understanding and dealing with declining library funding. *The Bottom Line*, 18(4), 185-190. <https://doi.org/10.1108/08880450510632271>
28. Bryant, S. L., & Gray, A. (2006). Demonstrating the positive impact of information support on patient care in primary care: A rapid literature review. *Health Information & Libraries Journal*, 23(2), 118-125. <https://doi.org/10.1111/j.1471-1842.2006.00652.x>

29. Kondylis, D. (2014). Greek libraries' funding: A Greek tragedy with (out) euros and "katharsis". *The Bottom Line*, 27(2), 74-84. <https://doi.org/10.1108/BL-07-2013-0021>
30. Joseph, C. B., & Epstein, H. A. B. (2014). Proving your worth/adding to your value. *Journal of Hospital Librarianship*, 14(1), 69-79. <https://doi.org/10.1080/15323269.2014.860842>
31. Ritchie, A., Gilbert, C., Gaca, M., Siemensma, G., & Taylor, J. (2020). Hospital librarians' contributions to health services' accreditation: An account of the health libraries for the national safety and quality in health services standards (HeLiNS) research project, 2016-18. *Journal of the Australian Library and Information Association*, 69(2), 215-245.
32. Bosch, S., Albee, B., & Henderson, K. (2018, April 23). Death by 1,000 cuts: Flat budgets, price increases, and a reliance on status journals for tenure and promotion keep familiar pressures on the serials marketplace. *Library Journal* <https://www.libraryjournal.com/?detailStory=death-1000-cuts-periodicals-price-survey-2018>
33. Buranyi S. (2017, June 27) Is the staggeringly profitable business of scientific publishing bad for science? *The Guardian*. <https://www.theguardian.com/science/2017/jun/27/profitable-business-scientific-publishing-bad-for-science>
34. Frati, F., Oja, L. A., & Kleinberg, J. (2021). CHLA standards for library and information services in Canadian health & social services institutions 2020. *Journal of the Canadian Health Libraries Association / Journal De l'Association Des bibliothèques De La Santé Du Canada*, 42(1), 14-44. <https://doi.org/10.29173/jchla29526>
35. Seer, G. (2000). Special library financial management: The essentials of library budgeting. *The Bottom Line*, 13(4), 186-193. <https://doi.org/10.1108/08880450010355922>
36. Kennedy, T. (2003). Budgeting basics for small libraries. *Journal of Hospital Librarianship*, 3(1), 15-25. https://doi.org/10.1300/J186v03n01_03
37. Gorman, L. (2006). Fundraising efforts in hospital libraries. *Journal of Hospital Librarianship*, 6(2), 43-50. https://doi.org/10.1300/J186v06n02_04
38. Allison, A. E., Bryan, B., Franklin, S. G., & Schick, L. C. (2020). Academic health sciences libraries and affiliated hospitals: A conversation about licensing electronic resources. *Journal of the Medical Library Association*, 108(2), 242-252. <https://dx.doi.org/10.5195%2Fjmla.2020.625>
39. Anagnostelis B. (2017). Licence extension for e-resource access at the HE-NHS crossover: A 20-year journey. *Journal of EAHIL*, 13(4):5-8. <http://ojs.eahil.eu/ojs/index.php/JEAHIL/issue/view/88>
40. Brown, H. L., & Kaste, A. M. (2009). Side-by-side, but from different worlds: Service and resource provision by academic health sciences libraries to their affiliated hospitals. *Journal of the Medical Library Association*, 97(4), 315-317. <https://dx.doi.org/10.3163%2F1536-5050.97.4.018>
41. King, S., Cataldi-Roberts, E., & Wentz, E. (2017). Meeting at the crossroads: Collaboration between information technology departments and health sciences libraries. *Journal of the Medical Library Association*, 105(1), 27-33. <https://dx.doi.org/10.5195%2Fjmla.2017.104>
42. Australian Library and Information Association (ALIA). (2020). *ALIA member code of conduct statement*. Australian Library and Information Association.

<https://read.alia.org.au/constitution-australian-library-and-information-association-limited-0>

43. Australian Library and Information Association (ALIA). (2018). ALIA core values policy statement. Australian Library and Information Association.
<https://read.alia.org.au/alia-core-values-policy-statement>
44. Copyright Act 1968 (Cth).
http://www5.austlii.edu.au/au/legis/cth/consol_act/ca1968133/
45. Booth, A. (2006). Counting what counts: Performance measurement and evidence-based practice. *Performance Measurement and Metrics*, 7(2), 63-74.
<https://doi.org/10.1108/14678040610679452>
46. Bennett, B., & Madden, A. (2011). Hospital libraries: Stand up and be counted!. *Medical Reference Services Quarterly*, 30(2), 178-188.
<https://doi.org/10.1080/02763869.2011.562801>
47. Urquhart, C. (2015). Reflections on the value and impact of library and information services. Part 1: Value identification and value creation. *Performance Measurement and Metrics*, 16(1), 86-102. <https://doi.org/10.1108/PMM-02-2015-0005>
48. Siemensma, G., Ritchie, A., & Lewis, S. (2017). Shaping the professional landscape through research, advocacy and education—an Australian perspective. *Health Information & Libraries Journal*, 34(2), 171-176. <https://doi.org/10.1111/hir.12180>
49. Sutton, A., Booth, A., & Evans, P. (2013). "Ask, acquire, appraise": A study of LIS practitioners participating in an EBLIP continuing education course. *Evidence Based Library and Information Practice*, 8(2), 200-213.
<https://eprints.whiterose.ac.uk/124899/>
50. Koufogiannakis, D., & Brett, A. (Eds.). (2016). *Being evidence based in library and information practice*. Facet.
51. Urquhart, C., & Tbaishat, D. (2016). Reflections on the value and impact of library and information services: Part 3: Towards an assessment culture. *Performance Measurement and Metrics*, 17(1), 29-44. <https://doi.org/10.1108/PMM-01-2016-0004>
52. Urquhart, C., & Turner, J. (2016). Reflections on the value and impact of library and information services: Part 2: Impact assessment. *Performance Measurement and Metrics*, 17(1), 5-28. <https://doi.org/10.1108/PMM-01-2016-0001>
53. Ibragimova, I., & Korjonen, M. H. (2019). The value of librarians for clinical and health governance (a view from Europe). *International Journal of Health Governance*, 24(1), 66-88. <https://doi.org/10.1108/IJHG-11-2018-0062>
54. Information Governance ANZ. (2017). *A practical guide to information governance*. Information Governance ANZ. <https://www.infogovanz.com/information-governance/a-practical-guide-to-information-governance/>
55. Brett, A., Maden, M., & Payne, C. (2016). The impact of clinical librarian services on patients and health care organisations. *Health Information & Libraries Journal*, 33(2), 100-120. <https://doi.org/10.1111/hir.12136>
56. Brett, A., Maden-Jenkins, M., Anderson, L., McNally, R., Pratchett, T., Tancock, J., ... & Webb, A. (2011). Evaluating clinical librarian services: A systematic review. *Health Information & Libraries Journal*, 28(1), 3-22. <https://doi.org/10.1111/j.1471-1842.2010.00925.x>

57. Gartner. (2021). *Gartner glossary: Data governance*. Gartner.
<https://www.gartner.com/en/information-technology/glossary/data-governance>
58. Appleton L. (2017). *Libraries and key performance indicators: A framework for practitioners*. Chandos Publishing.
59. Harris, L., & Peterson, M. (2017). The economic value and clinical impact of the South Australian Health Library Service 2011–2016: A case study in organizational performance and survival. *Business Information Review*, 34(1), 18-24.
<https://doi.org/10.1177/0266382117692451>
60. Sievert, M., Burhans, D., Ward, D., Jones, B. B., Bandy, M., Carlson, J., ... & Henderson, H. (2011). Value of health sciences library resources and services to health care providers in medium and large communities across two mid-continental states. *Journal of Hospital Librarianship*, 11(2), 140-157.
<https://doi.org/10.1080/15323269.2011.558882>
61. Marshall, J. G., Sollenberger, J., Easterby-Gannett, S., Morgan, L. K., Klem, M. L., Cavanaugh, S. K., ... & Hunter, S. (2013). The value of library and information services in patient care: Results of a multisite study. *Journal of the Medical Library Association*, 101(1), 38-46. <https://dx.doi.org/10.3163%2F1536-5050.101.1.007>
62. McGowan, J., Hogg, W., Campbell, C., & Rowan, M. (2008). Just-in-time information improved decision-making in primary care: A randomized controlled trial. *PloS One*, 3(11), e3785. <https://doi.org/10.1371/journal.pone.0003785>
63. Farrell, A., & Mason, J. (2014). Evaluating the impact of literature searching services on patient care through the use of a quick-assessment tool. *Journal of the Canadian Health Libraries Association/Journal de l'Association des bibliothèques de la santé du Canada*, 35(3), 116-123. <https://doi.org/10.5596/c14-030>
64. Naeem, S. B., Ahmed, S., & Rabbani, M. W. (2013). The impact of hospital libraries on patient care and clinical decision-making: A survey of teaching hospitals. *Journal of Hospital Librarianship*, 13(2), 120-130.
<https://doi.org/10.1080/15323269.2013.770381>
65. Urquhart, C. (2020). Assessing return on investment in health libraries requires lateral thinking. *Health Information & Libraries Journal*, 37(1), 1-4.
<https://doi.org/10.1111/hir.12298>
66. Wafford, E., & O'Dwyer, L. (2021). Adopting a toolkit to manage time, resources, and expectations in the systematic review process: a case report. *Journal of the Medical Library Association*, 109(4), 637-642.
<https://jmla.mlanet.org/ojs/jmla/article/view/1221/1378>
67. Arab-Rahmatipour, M., Foroutan-Rad, L., Mirhosseini, Z., Arab-Rahmatipour, M. J., & Aghaei, O. (2018). Investigating the relationship between optimal use of knowledge and intellectual capital management among library managers of public hospitals. *International Journal of Information Science and Management (IJISM)*, 16(1).
<https://ijism.ricest.ac.ir/index.php/ijism/article/view/1177>
68. Perrier, L., Farrell, A., Ayala, A. P., Lightfoot, D., Kenny, T., Aaronson, E., ... & Weiss, A. (2014). Effects of librarian-provided services in healthcare settings: A systematic review. *Journal of the American Medical Informatics Association*, 21(6), 1118-1124.
<https://doi.org/10.1136/amiajnl-2014-002825>
69. NHS - Health Education England. (n.d.). *Value and impact toolkit*. NHS.
<https://kfh.libraryservices.nhs.uk/value-and-impact-toolkit/>

70. Varlejs, J. (2016). *IFLA guidelines for continuing professional development: Principles & best practices*. IFLA. <https://repository.ifla.org/handle/123456789/1111>
71. Lee, L. A., & Wu, M. M. (2004). Personnel management in access services: A general overview of the literature, 1990-2002. *Journal of Access Services*, 1(4), 5-44. https://doi.org/10.1300/J204v01n04_02
72. Australian Library and Information Association (ALIA) (2019). *ALIA's role in the education of library and information professionals*. Australian Library and Information Association. <https://read.alia.org.au/alia-role-education-library-and-information-professionals>
73. Capdarest-Arest, N., & Gray, J. M. (2020). Health sciences library leadership skills in an interprofessional landscape: A review and textual analysis. *Journal of the Medical Library Association*, 108(4), 547-555. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7524625/>
74. Sutton, A., & Booth, A. (2014). The librarian as a leader: Development of leadership in the library and information profession. *Journal of the European Association for Health Information and Libraries*, 10(4), 15-17. http://old.eahil.eu/journal/journal_2014_vol10_n4.pdf#page=17
75. Spencer, A., Mamo, E., & Billman, B. L. (2019). Benchmarking study of hospital libraries. *Hypothesis*, 31(1). <https://doi.org/10.18060/23805>
76. Australian Library and Information Association (ALIA). (2020). *Work Level guidelines for library and information services*. Australian Library and Information Association. <https://alia.org.au/Web/Our-Members/Member-Resources/Salary-scales-and-work-level-guidelines.aspx>
77. ALIA Health Libraries Australia. (2018). *ALIA HLA competencies*. <https://read.alia.org.au/alia-hla-competencies>
78. NHS Health Education England, NHS Library and Knowledge Services in England. (2020). *Recommendations to improve the staff ratio for the number of qualified library and knowledge specialists per member of NHS workforce*. NHS. <https://library.hee.nhs.uk/binaries/content/assets/lks/about/hee-lks-staff-ratio-policy-january-2020-final.docx.pdf>
79. Appleton, L. (2018). *Training and development for librarians: Why bother*. Elsevier. <https://www.elsevier.com/connect/library-connect/training-and-development-for-librarians-why-bother>
80. Australian Library and Information Association. (2020). *Health specialisation: ALIA CPD*. Australian Library and Information Association. <https://www.alia.org.au/Web/Careers/Professional-Development/CPD-Scheme/Web/Careers/ALIA-Continuing-Professional-Development.aspx?hkey=7f415939-c7c0-429d-8c3d-f00ea9276454>
81. Gibson, D. S., Hernandez, M., & Draemel, A. (2015). Destination library: Validating the importance of physical space. *Journal of Hospital Librarianship*, 15(3), 251-261. <https://doi.org/10.1080/15323269.2015.1049057>
82. Kendall, S.K. (2018). The future of health sciences collection management. In S. K. Kendall (Eds.). *Health sciences collection management for the twenty-first century*, Rowman & Littlefield.
83. Holst, R., Funk, C. J., Adams, H. S., Bandy, M., Boss, C. M., Hill, B., ... & Lett, R. K. (2009). Vital pathways for hospital librarians: Present and future roles. *Journal of the*

- Medical Library Association*, 97(4), 285-292. <https://doi.org/10.3163/1536-5050.97.4.013>
84. Martin, H. J., & Delawska-Elliott, B. (2015). Combining resources, combining forces: Regionalizing hospital library services in a large statewide health system. *Journal of the Medical Library Association*, 103(1), 44-48. <https://doi.org/10.3163/1536-5050.103.1.009>
 85. Prentice, K. A., & Argyropoulos, E. K. (2018). Library space: Assessment and planning through a space utilization study. *Medical Reference Services Quarterly*, 37(2), 132-141. <https://doi.org/10.1080/02763869.2018.1439213>
 86. Aronoff, N. (2016). Surveying medical students to gauge library use and plan for a new medical library. *Medical Reference Services Quarterly*, 35(2), 187-203. <https://doi.org/10.1080/02763869.2016.1152144>
 87. Norton, H. F., Butson, L. C., Tennant, M. R., & Botero, C. E. (2013). Space planning: A renovation saga involving library users. *Medical Reference Services Quarterly*, 32(2), 133-150. <https://doi.org/10.1080/02763869.2013.776879>
 88. Anderson, P. F., & Hurst, E. J. (2019). From enhanced collaborations to space advancements: Technologies to bring libraries (and librarians) full circle and into the future. *Journal of the Medical Library Association*, 107(4), 595-595. <https://doi.org/10.5195/jmla.2019.788>
 89. Truax, M. L., Connolly, C., & Winther, C. (2018). Transforming a library service within a provincial healthcare organization: Forging a new path. *Journal of the Canadian Health Libraries Association/Journal de l'Association des bibliothèques de la santé du Canada*, 39(3), 146-151. <https://doi.org/10.29173/jchla29376>
 90. Saragossi, J., Stevens, G. A., Scheinfeld, L., & Koos, J. A. (2020). Leveraging survey results in support of a library renovation: A case study. *Medical Reference Services Quarterly*, 39(3), 238-253. <https://doi.org/10.1080/02763869.2020.1774254>
 91. Young, L. M., Machado, C. K., & Clark, S. B. (2015). Repurposing with purpose: Creating a collaborative learning space to support institutional interprofessional initiatives. *Medical Reference Services Quarterly*, 34(4), 441-450. <https://doi.org/10.1080/02763869.2015.1082377>
 92. Nelson, P. P. (2003). Current issues in the design of academic health sciences libraries: Findings from three recent facility projects. *Journal of the Medical Library Association*, 91(3), 347-351. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC164398/>
 93. Dexter, N., Muellenbach, J. M., Lorbeer, E. R., Rand, D., Wilcox, M. E., & Long, B. A. (2019). Building new twenty-first century medical school libraries from the ground up: Challenges, experiences, and lessons learned. *Journal of the Medical Library Association*, 107(1), 6-15. <https://dx.doi.org/10.5195%2Fjmla.2019.493>
 94. Eldermire, E. R. (2019). Data-driven space planning: Using Suma to collect data. *Journal of the Medical Library Association*, 107(4), 611-612. <https://dx.doi.org/10.5195%2Fjmla.2019.757>
 95. Steigerwalt, K., Fitterling, L., Harvey, M., McQueeney Kartsonis, S., DeGeus, M., Franco, N., ... & Thompson, J. A. (2019). Health sciences patron preference for library spaces: A multisite observational study. *Medical Reference Services Quarterly*, 38(1), 1-21. <https://doi.org/10.1080/02763869.2018.1548890>

96. Britton, R. M., & Robertson, J. (2019). Reference to stacks: Getting the most out of library resources. *Medical Reference Services Quarterly*, 38(2), 156-162.
<https://doi.org/10.1080/02763869.2019.1589864>
97. Gerberi, D., & Taylor, J. M. (2020). Popping up in unexpected places: Posing a pop-up library to healthcare staff. *Medical Reference Services Quarterly*, 39(4), 370-381.
<https://doi.org/10.1080/02763869.2020.1826227>
98. Petersen, D. W., Earl, M., Watson, C., & Grabeel, K. (2020). Influence of library relocation and marketing: Examining zip codes and health disparities to serve consumers in East Tennessee. *Journal of the Medical Library Association*, 108(4), 625-630. <https://dx.doi.org/10.5195%2Fjmla.2020.965>
99. Harrow, A., Marks, L. A., Schneider, D., Lyubchansky, A., Aaronson, E., Kysh, L., & Harrington, M. (2019). Hospital library closures and consolidations: A case series. *Journal of the Medical Library Association*, 107(2), 129-136.
<https://dx.doi.org/10.5195%2Fjmla.2019.520>
100. Mayo, A., Brown, E., & Harris, R. (2017). Opportunities and efficiencies in building a new service desk model. *Medical Reference Services Quarterly*, 36(3), 211-219. <https://doi.org/10.1080/02763869.2017.1332141>
101. Hoy, M. B. (2016). Smart buildings: An introduction to the library of the future. *Medical Reference Services Quarterly*, 35(3), 326-331.
<https://doi.org/10.1080/02763869.2016.1189787>
102. Tooley, M. J. M. (2010). Renovated, repurposed, and still “one sweet library”: A case study on loss of space from the Health Sciences and Human Services Library, University of Maryland, Baltimore. *Journal of the Medical Library Association*, 98(1), 40-43. <https://dx.doi.org/10.3163%2F1536-5050.98.1.014>
103. Thibodeau, P. L. (2010). When the library is located in prime real estate: A case study on the loss of space from the Duke University Medical Center Library and Archives. *Journal of the Medical Library Association*, 98(1), 25-28.
<https://dx.doi.org/10.3163%2F1536-5050.98.1.010>
104. Freiburger, G. (2010). A “white elephant” in the library: A case study on loss of space from the Arizona Health Sciences Library at the University of Arizona. *Journal of the Medical Library Association*, 98(1), 29-31.
<https://dx.doi.org/10.3163%2F1536-5050.98.1.011>
105. Tobia, R. C., & Feldman, J. D. (2010). Making lemonade from lemons: A case study on loss of space at the Dolph Briscoe, Jr. Library, University of Texas Health Science Center at San Antonio. *Journal of the Medical Library Association*, 98(1), 36-39. <https://dx.doi.org/10.3163%2F1536-5050.98.1.013>
106. Anderson, A., & Ivacic-Ramljak, T. (2021). Health library spaces and the COVID-19 pandemic: Insights from the Australian healthcare sector. *Journal of Health Information and Libraries Australasia*, 2(2), 13-17.
<https://www.johila.org/index.php/Johila/article/view/66>
107. Anderson, A., & Ivacic-Ramljak, T. (2021). What is the place of the library space in health care? A literature review and survey of health care library experiences during the COVID-19 pandemic. *Journal of Health Information and Libraries Australasia*, 2(3), 18-33.
<https://www.johila.org/index.php/Johila/article/view/83>
108. COUNTER. (2021). *Code of Practice*. COUNTER.
<https://www.projectcounter.org/>

109. Standardized Usage Statistics Harvesting Initiative (SUSHI). (2014). *Standardized Usage Statistics Harvesting Initiative (SUSHI) Protocol (ANSI/NISO Z39.93-2014)*. SUSHI. <https://www.niso.org/standards-committees/sushi>
110. Ayatollahi, H., & Zeraatkar, K. (2020). Factors influencing the success of knowledge management process in health care organisations: A literature review. *Health Information & Libraries Journal*, 37(2), 98-117. <https://doi.org/10.1111/hir.12285>
111. Hider, P., Mitchell, P., Galatis, H., & McDowell, K. (2017). *Developing an effective accessible and sustainable digital repository of OLT learning and teaching resources: Final report*. Australian Council for Education Research (ACER). https://research.acer.edu.au/information_management/4/
112. Dawson, P. H., & Yang, S. Q. (2016). Institutional repositories, open access and copyright: what are the practices and implications?. *Science & Technology Libraries*, 35(4), 279-294. <https://doi.org/10.1080/0194262X.2016.1224994>
113. Motte, K., Caldwell, C. B., Lamson, K. S., Ferimer, S., & Nims, J. C. (2014). Standards for vision science libraries: 2014 revision. *Journal of the Medical Library Association*, 102(4), 288-291. <https://dx.doi.org/10.3163%2F1536-5050.102.4.010>
114. Federer, L., Foster, E. D., Glusker, A., Henderson, M., Read, K., & Zhao, S. (2020). The Medical Library Association Data Services Competency: A framework for data science and open science skills development. *Journal of the Medical Library Association*, 108(2), 304-309. <https://dx.doi.org/10.5195%2Fjmla.2020.909>
115. Semeler, A. R., Pinto, A. L., & Rozados, H. B. F. (2019). Data science in data librarianship: Core competencies of a data librarian. *Journal of Librarianship and Information Science*, 51(3), 771-780. <https://doi.org/10.1177/0961000617742465>
116. Federer, L. (2018). Defining data librarianship: A survey of competencies, skills, and training. *Journal of the Medical Library Association*, 106(3), 294-303. <https://dx.doi.org/10.5195%2Fjmla.2018.306>
117. F.A.I.R. (2021). F.A.I.R access to Australia's research. F.A.I.R. <https://www.fair-access.net.au>
118. National Library of Medicine. (2021). *Data competencies*. National Library of Medicine. <https://nnlm.gov/guides/data-competencies>
119. Australian National Data Service. (n.d.). *Information specialists and data librarian skills*. Australian National Data Service. <https://www.ands.org.au/working-with-data/data-management/overview/data-management-skills/information-specialists-and-data-librarian-skills>
120. Siddiqui, J. A. (2018). Information technology application in health science libraries: A study of Delhi. *Library Philosophy and Practice*. <https://core.ac.uk/download/pdf/188141042.pdf>
121. Taylor, D. M. (2016). The impact of mobile information communication and technology (ICT) in ubiquitous health sciences libraries. *Journal of Electronic Resources in Medical Libraries*, 13(3), 105-113. <https://doi.org/10.1080/15424065.2016.1231026>
122. Rysavy, M. D., & Michalak, R. (2019). Leveraging library technology: Non-library uses of library technology. *Journal of Library Administration*, 59(1), 59-73. <https://doi.org/10.1080/01930826.2018.1549409>

123. Profera, E., Jefferson, R., & Hosburgh, N. (2015). Personalizing library service to improve scholarly communication. *The Serials Librarian*, 68(1-4), 274-281.
<https://doi.org/10.1080/0361526X.2015.1017710>
124. Kraft, M. (2018, July 16). The donut hole of library access. *Krafty Librarian*.
<https://kraftylibrarian.com/category/uncategorized/page/2/>
125. Ayre, S., Barbrook, J., Engel, C., Lacey, P., Phul, A., Stevenson, P., & Toft, S. (2015). Measuring the impact of information skills training: A survey of health libraries in England. *Health Information & Libraries Journal*, 32(1), 50-60.
<https://doi.org/10.1111/hir.12079>
126. Barnes, L., Freund, L., & Giustini, D. (2020). The information needs of Canadian midwives and their evidence informed practices: A Canada-wide survey. *Evidence Based Library and Information Practice*, 15(2), 3-23.
<https://doi.org/10.18438/ebliip29616>
127. Callaway, J. (2021). The Librarian Reserve Corps: An emergency response. *Medical Reference Services Quarterly*, 40(1), 90-102.
<https://doi.org/10.1080/02763869.2021.1873627>
128. Capdarest-Arest, N., & Navarro, C. E. (2021). Promoting health data fluency skills by expanding data and informatics work in libraries: The role of a health library informaticist. *Medical Reference Services Quarterly*, 40(1), 130-138.
<https://doi.org/10.1080/02763869.2021.1873648>
129. Carey, M. G., Trout, D. R., & Qualls, B. W. (2019). Hospital-based research internship for nurses: The value of academic librarians as cofaculty. *Journal for Nurses in Professional Development*, 35(6), 344-350.
<https://doi.org/10.1097/NND.0000000000000585>
130. Carlson, R., & Towner Wright, S. (2021). Essential services of clinical librarians in academic and health care settings: A cross-sectional study. *Medical Reference Services Quarterly*, 40(2), 168-187. <https://doi.org/10.1080/02763869.2021.1912570>
131. Carlyle, R., Goswami, L., & Robertson, S. (2022). Increasing participation by National Health Service knowledge and library services staff in patient and public information: The role of Knowledge for Healthcare, 2014–2019. *Health Information & Libraries Journal*, 39(1), 36-45. <https://doi.org/10.1111/hir.12388>
132. Divall, P., James, C., Heaton, M., & Brett, A. (in press). UK survey demonstrates a wide range of impacts attributable to clinical librarian services. *Health Information & Libraries Journal*, <https://doi.org/10.1111/hir.12389>
133. Dunn, K., Brewer, K., Marshall, J. G., & Sollenberger, J. (2009). Measuring the value and impact of health sciences libraries: Planning an update and replication of the Rochester Study. *Journal of the Medical Library Association*, 97(4), 308-312.
<https://dx.doi.org/10.3163%2F1536-5050.97.4.016>
134. King, D. N. (1987). The contribution of hospital library information services to clinical care: A study in eight hospitals. *Bulletin of the Medical Library Association*, 75(4), 291-301. <https://www.ncbi.nlm.nih.gov/pubmed/3450340>
135. Lawton, A. (2014). The value of health libraries and librarians to the Irish health system. *Irish Medical Journal*, 107(3), 90-2.
<http://archive.imj.ie/ViewArticleDetails.aspx?ArticleID=12320>
136. Marshall, J. G. (1992). The impact of the hospital library on clinical decision making: The Rochester study. *Bulletin of the Medical Library Association*, 80(2), 169-178. <https://www.ncbi.nlm.nih.gov/pubmed/1600426>

137. Marshall, J. G. (2007). Measuring the value and impact of health library and information services: Past reflections, future possibilities. *Health Information & Libraries Journal*, 24(S1), 4-17. <https://doi.org/10.1111/j.1471-1842.2007.00750.x>
138. Marshall, J. G., Morgan, J. C., Thompson, C. A., & Wells, A. L. (2014). Library and information services: Impact on patient care quality. *International Journal of Health Care Quality Assurance*, 27(8), 672-683. <https://doi.org/10.1108/IJHCQA-10-2013-0119>
139. Medernach, C., & Franko, J. (2007). Assessing the impact of information services in a regionalized health-care organization. *Health Information & Libraries Journal*, 24(S1), 46-56. <https://doi.org/10.1111/j.1471-1842.2007.00751.x>
140. Pifalo, V., Hollander, S., Henderson, C. L., DeSalvo, P., & Gill, G. P. (1997). The impact of consumer health information provided by libraries: The Delaware experience. *Bulletin of the Medical Library Association*, 85(1), 16-22. <https://www.ncbi.nlm.nih.gov/pubmed/9028567>
141. Price, C., Kudchadkar, S. R., Basyal, P. S., Nelliott, A., Smith, M., Friedman, M., & Needham, D. M. (2020). Librarian integration into health care conferences: A case report. *Journal of the Medical Library Association*, 108(2), 278-285. <https://dx.doi.org/10.5195%2Fjmla.2020.803>
142. Rudd, S., & Harding, S. (2021). Library and knowledge staff in England share similar perceptions of the roles and personal characteristics of the clinical librarian. *Health Information & Libraries Journal*, 38(4), 268-280. <https://doi.org/10.1111/hir.12365>
143. Sakai, Y., Sato, Y., Sato, M., & Watanabe, M. (2018). Clinical usefulness of library and information services in Japan: The detailed use and value of information in clinical settings. *PloS One*, 13(6), e0199944. <https://doi.org/10.1371/journal.pone.0199944>
144. Health Libraries Inc., ALIA Health Libraries Australia, & SGS economics and Planning. (2013). *Worth every cent and more: An independent assessment of the return on investment of health libraries in Australia*. Australian Library and information Association. <http://read.alia.org.au/content/worth-every-cent-and-more-independent-assessment-return-investment-health-libraries>
145. Sherwill-Navarro, P. J., & Wallace, A. L. (2004). Research on the value of medical library services: Does it make an impact in the health care literature?. *Journal of the Medical Library Association*, 92(1), 34-42. <https://www.ncbi.nlm.nih.gov/pubmed/14762461>
146. Sollenberger, J. F., & Holloway, R. G. (2013). The evolving role and value of libraries and librarians in health care. *JAMA*, 310(12), 1231-1232. <https://doi.org/10.1001/jama.2013.277050>
147. Sutton, A. (2017). Increasing impact in a time of decreasing budgets. *Health Information & Libraries Journal*, 34(4), 287-289. <https://doi.org/10.1111/j.1471-1842.2012.00994.x>
148. Taylor, M. V., & Stephenson, P. L. (2018). Demonstrating value in federal medical center libraries. *Medical Reference Services Quarterly*, 37(4), 403-412. <https://doi.org/10.1080/02763869.2018.1514914>
149. Urquhart, C., & Hepworth, J. (1995). The value of information supplied to clinicians by health libraries: Devising an outcomes-based assessment of the

- contribution of libraries to clinical decision-making. *Health Libraries Review*, 12(3), 201-213. <https://doi.org/10.1046/j.1365-2532.1995.1230201.x>
150. Urquhart, C. J., & Hepworth, J. B. (1996). Comparing and using assessments of the value of information to clinical decision-making. *Bulletin of the Medical Library Association*, 84(4), 482-489. <https://www.ncbi.nlm.nih.gov/pubmed/8913550>
 151. Weightman, A. L., & Williamson, J. (2005). The value and impact of information provided through library services for patient care: A systematic review. *Health Information & Libraries Journal*, 22(1), 4-25. <https://doi.org/10.1111/j.1471-1842.2005.00549.x>
 152. Whitney, W., Keselman, A., & Humphreys, B. (2017). Libraries and librarians: Key partners for progress in health literacy research and practice. *Information Services & Use*, 37(1), 85-100. <https://content.iospress.com/articles/information-services-and-use/isu821>
 153. Siemensma, G., & Clayworth, C. (2021). Analysis of a hospital librarian mediated literature search service at a regional health service in Australia. *Journal of Hospital Librarianship*, 21(1), 11-19. <https://doi.org/10.1080/15323269.2021.1860447>
 154. NHS Health Education England. (2016). *NHS Library and Knowledge Services in England: Policy*. NHS Health Education England. <https://library.hee.nhs.uk/binaries/content/assets/lks/about/nhs-library-and-knowledge-services-in-england-policy.pdf>
 155. Cooper, I. D., & Crum, J. A. (2013). New activities and changing roles of health sciences librarians: A systematic review, 1990–2012. *Journal of the Medical Library Association*, 101(4), 268-277. <https://dx.doi.org/10.3163%2F1536-5050.101.4.008>
 156. Ritchie, A., & ALIA HLA. (2019, June 17-20). *ALIA/HLA health librarianship competencies review* [Poster presentation]. European Association for Health Information and Libraries (EAHIL), Basel, Switzerland. <https://read.alia.org.au/aliahla-health-librarianship-competencies-review-poster>
 157. Bullers, K., Howard, A. M., Hanson, A., Kearns, W. D., Orriola, J. J., Polo, R. L., & Sakmar, K. A. (2018). It takes longer than you think: Librarian time spent on systematic review tasks. *Journal of the Medical Library Association*, 106(2), 198-207. <https://dx.doi.org/10.5195%2Fjmla.2018.323>
 158. Friesen, C., Lê, M. L., Cooke, C., & Raynard, M. (2015). Analysis of a librarian-mediated literature search service. *Medical Reference Services Quarterly*, 34(1), 29-46. <https://doi.org/10.1080/02763869.2015.986782>
 159. Greenhalgh, T., & Peacock, R. (2005). Effectiveness and efficiency of search methods in systematic reviews of complex evidence: Audit of primary sources. *BMJ*, 331(7524), 1064-1065. <https://doi.org/10.1136/bmj.38636.593461.68>
 160. Lackey, M. J., Greenberg, H., & Rethlefsen, M. L. (2019). Building the systematic review core in an academic health sciences library. *Journal of the Medical Library Association*, 107(4), 588-594. <https://dx.doi.org/10.5195%2Fjmla.2019.711>
 161. Lasserre, K. (2012). Expert searching in health librarianship: A literature review to identify international issues and Australian concerns. *Health Information & Libraries Journal*, 29(1), 3-15. <https://doi.org/10.1111/j.1471-1842.2011.00974.x>

162. McKeown, S., Konrad, S. L., McTavish, J., & Boyce, E. (2017). Evaluation of hospital staff's perceived quality of librarian-mediated literature searching services. *Journal of the Medical Library Association*, 105(2), 120-131.
<https://dx.doi.org/10.5195%2Fjmla.2017.201>
163. McKeown, S., & Ross-White, A. (2019). Building capacity for librarian support and addressing collaboration challenges by formalizing library systematic review services. *Journal of the Medical Library Association*, 107(3), 411-419.
<https://dx.doi.org/10.5195%2Fjmla.2019.443>
164. Meert, D., Torabi, N., & Costella, J. (2016). Impact of librarians on reporting of the literature searching component of pediatric systematic reviews. *Journal of the Medical Library Association*, 104(4), 267-277.
<https://dx.doi.org/10.3163%2F1536-5050.104.4.004>
165. Rethlefsen, M. L., Farrell, A. M., Trzasko, L. C. O., & Brigham, T. J. (2015). Librarian co-authors correlated with higher quality reported search strategies in general internal medicine systematic reviews. *Journal of Clinical Epidemiology*, 68(6), 617-626. <https://doi.org/10.1016/j.jclinepi.2014.11.025>
166. Ward, D., Meadows, S. E., & Nashelsky, J. E. (2005). The role of expert searching in the Family Physicians' Inquiries Network (FPIN). *Journal of the Medical Library Association*, 93(1), 88-96. <https://www.ncbi.nlm.nih.gov/pubmed/15685280>
167. Russell, F., & Muir, R. (2020). A return to librarian mediated searching in a pilot systematic search service. *Journal of the Australian Library and Information Association*, 69(2), 262-273. <https://doi.org/10.1080/24750158.2020.1749333>
168. Cooper C. (2019). *Improving literature searching in systematic reviews: The application of tailored literature searching compared to 'the conventional approach'*. [PhD thesis, University of Exeter]. Open Research Exeter.
<https://ore.exeter.ac.uk/repository/handle/10871/35637>
169. Consortia Advancing Standards in Research Administration Information (CASRAI). (n.d). *CRedit - Contributor Roles Taxonomy*. Consortia Advancing Standards in Research Administration Information (CASRAI).
<https://casrai.org/credit>
170. Schardt, C. M. (1998). Going beyond information management: Using the Comprehensive Accreditation Manual for Hospitals to promote knowledge-based information services. *Bulletin of the Medical Library Association*, 86(4), 504-507.
<https://www.ncbi.nlm.nih.gov/pubmed/9803292>
171. Roth, S. C. (2018). Transforming the systematic review service: A team-based model to support the educational needs of researchers. *Journal of the Medical Library Association*, 106(4), 514-520.
<https://dx.doi.org/10.5195%2Fjmla.2018.430>
172. Booth, A., & Brice, A. (Eds.). (2004). *Evidence-based practice for information professionals: A handbook*. Facet.
173. de Groot, M., van der Wouden, J. M., van Hell, E. A., & Nieweg, M. B. (2013). Evidence-based practice for individuals or groups: Let's make a difference. *Perspectives on Medical Education*, 2(4), 216-221. <https://doi.org/10.1007/s40037-013-0071-2>
174. Hoffmann, T., Bennett, S., & Del Mar, C. (2017). *Evidence-based practice across the health professions* (3rd ed.). Elsevier.

175. Association of College & Research Libraries. (2003). *Principles and strategies for the reform of scholarly communication 1*. Association of College & Research Libraries. <http://www.ala.org/acrl/publications/whitepapers/principlesstrategies>
176. Health Science Information Consortium of Toronto. (2020). *Library value toolkit*. Health Science Information Consortium of Toronto. <https://guides.hsict.library.utoronto.ca/c.php?g=430008&p=2932207>
177. Ducas, A., Gottschalk, T., & Cohen-Baker, A. (2021). Evolution-revolution-devolution: A short history of the provision of knowledge-based information services to Manitoba's health professionals. *Journal of the Canadian Health Libraries Association/Journal de l'Association des bibliothèques de la santé du Canada*, 42(2), 118-135. <https://doi.org/10.29173/jchla29510>
178. Harris, L., & Rockliff, S. (2003, August 24-27). *Implementing library service agreements: The experience of Australian health libraries* [Paper presentation]. 10th Asia Pacific Special, Health and Law Librarians' Conference, Adelaide, Australia. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.965.4001&rep=rep1&type=pdf>

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Appendix 1: Strategic plans, marketing plans and budget structures

This listing of resources provides clarification of some concepts, and examples of structures and formats for developing LIS strategic plans, marketing plans, and budgets.

Strategic planning is a process that delivers a clear statement of purpose, direction, priorities and measurable objectives for the LIS.

The “Strategic Plan and Mission, Vision, Values” tab of the Library Value Toolkit considers the LIS’s plan within its organisational context and provides a practical guide to the strategic planning process for all types of libraries ¹⁷⁶.

Where the parent organisation has an overarching strategic plan, the LIS will have an aligned plan that clearly describes its outcomes that support the organisation’s strategy. An overarching LIS strategic directions document may be referred to or incorporated into any of the following depending on its parent organisation’s preferred terminology:

- Business plan
- Operational plan
- Action plan
- Roadmap
- Blueprint
- Strategic plan

LIS strategic objectives may be incorporated within the parent organisation’s strategic plan and be embedded within areas such as education, research, knowledge and information management. By aligning the LIS strategic objectives with the parent organisation’s strategic plan, regular LIS reporting methods and scheduling should also be aligned, thereby providing ready and relevant outcomes.

Examples of LIS strategic plans

- Health and hospital LIS examples:
 - [Cairns & Hinterland Hospital & Health Service Library & Knowledge Centre Roadmap 2018-2020 summary | \(full version\)](#)
 - [Worcestershire Health Libraries NHS UK – Library & Knowledge Services Strategy \(Strategic Plan 2019 – 2024\)](#)
 - [Becker Medical Library Strategic Plan 2018](#)
 - [Association of Academic Health Sciences Libraries USA – AAHSL Strategic Plan 2020](#)
 - [A Platform for Biomedical Discovery and Data-Powered Health: National Library of Medicine. Strategic Plan 2017–2027 \(USA\)](#)
- Parent organisation – health example:
 - [Epworth HealthCare – Our Strategic Intent](#)
- State library example: [State Library of Victoria. Strategic Plan](#)
- Parent organisation – university examples:

- University of New South Wales Library – [UNSW Library Plan 2021](#)
- Monash University – [Focus Monash Strategic Plan 2015-2020](#)
- Deakin University – [Live the future Agenda 2020 \(2019-2020 edition\)](#)
- Curtin University Library – [Strategic Direction 2021-2025](#)

Stakeholders are key persons, groups or agencies, within or external to the parent organisation who have an interest in and may enable the implementation of the LIS plan, and its deliverables, for example:

- Executive directors and / or board members
- Funding bodies
- ICT departments
- Communications and media units
- Other library networks and partners

The LIS's marketing plan identifies processes that enable client engagement in LIS planning so that clients help to shape the delivery of library and information services at a strategic level. Marketing is broader than just promotion of LIS services ²³. It can include mechanisms for consultation, feedback, and complaints resolution and how these processes link with LIS quality or continuous improvement processes.

LIS marketing, communication and engagement strategies may be subject to the parent organisation's media and communications policies and procedures.

Examples of LIS marketing plans and resources:

- [Cairns & Hinterland Hospital & Health Service Library & Knowledge Centre Marketing and Communication Strategy 2020-2022](#)
- [NHS Kettering General Hospital, Knowledge & Library Service Marketing Plan 2017- 2020](#)
- [Library and Knowledge Services. Knowledge of Healthcare. Health Education England NHS – Marketing and Campaigns](#)

Examples of budget structures

- [Maine Library – Sample Library Budget](#) (p146)
- [University of Arizona Library Budget](#)
- [Using Google Docs for School Library Budget \(video\)](#)
- [Victoria State Government Planning, Budgeting and Financial Reporting Frameworks](#)
- [Wisconsin Library – Sample format](#)

Appendix 2: Service level agreements ^{38-40, 177, 178}

Inter-organisational service level agreements may be negotiated in a range of circumstances, including, but not limited to, the following:

1. For small, rural or isolated health-related organisations or services, service level agreements with professionally staffed health libraries can offer cost effective access (in-person, virtual or a combination of both) to a professional information service, and strengthen compliance with accreditation processes;
2. For teaching hospital libraries accessed by students of affiliated universities undertaking clinical placements, service level agreements are advantageous in clearly defining the range and level of services provided, conditions of access, remuneration (which may include staffing and/or financial contributions) and other matters, including dispute resolution;
3. For college/association or non-profit organisations, service level agreements are beneficial in providing access to resources and professional staff which open up opportunities for ongoing access to evidence-based information pertinent to areas such as education and research.

Criteria to be included as a minimum in any health library service level agreement are:

- Definition of the organisations and relevant user groups to be covered by the agreement.
- The nature and extent of the services to be provided to the contracting organisation by the supplying LIS, including any specific timelines for service delivery, and under what conditions these timelines are to be observed.
- A clearly documented agreement regarding information technology services which includes optimum network solutions and client support for network access issues.
- A clearly documented agreement regarding access to online information resources provided by external vendors under licence agreements with either organisation.
- The agreed costs and means of payment for the contracted services.
- The formal means of communication between the parties to the service level agreement on issues, developments and compliance with the agreement. This should include designated officers from all contracting parties who are responsible for the compliance of their respective organisations to the agreement.
- Statements of indemnity which include the requirement that both organisations must take all reasonable steps to avoid any negligence or omission which might cause the other organisation to be liable for damage or loss.
- A clearly documented dispute mechanism to overcome any difference in interpretation or compliance with the service level agreement.
- A specified timeframe for the life of the agreement and a specified prior revision date to enable all parties to review the efficacy of the agreement before its expiry date is reached.
- Basic performance indicators to enable assessment of the effectiveness of the agreement for all parties and to identify and correct problems or misunderstandings.

Appendix 3: Recommended staffing for health library and information services

“Table 2: Staffing grid for libraries providing minimum services” (reproduced with permission of the Canadian Health Library Association, 2021, p25) ³⁴.

Number of institution FTE*, †	Number of FTE health information professionals
400	1.24
625	1.55
900	1.85
1225	2.16
1600	2.47
2025	2.78
2500	3.09
3025	3.40
3600	3.71
4225	4.08
4900	4.33
5625	4.63
6400	4.94
*Calculated using square roots in increments of 5 from 20 to 80 (20 x 20= 400, 25 x 25= 625 etc.) † In addition to employees in all entities which the library serves, Total Institutional FTE includes all active medical staff, as well as healthcare personnel under service contracts, regardless of whether these individuals are technically considered institutional employees.	

Note that the validated golden ratio formula used to calculate the Number of FTE health information professions for delivery of the minimum library service (Bronze level) is explained in “Appendix 1: Explanation of Golden Ratio used in Staffing Formula ³⁴.”

$$\text{vtotal FTE institution} / 10 (1.60183399) = \text{FTE health information professionals}$$
 FTE = full-time equivalent
 1.60183399 = “the golden ratio”

“Appendix 4: Staffing Within Libraries Providing An Advanced Level of Service” (reproduced with permission of the Canadian Health Library Association, 2021, p35) ³⁴.

The ratio to calculate staffing levels is modified to reflect the number of users combined with the level of service required to meet the stated needs of the organisation. A library providing more complex services such as support for systematic reviews will require staffing levels greater than the minimum library service presented in the body of our report. A staffing grid that implements this sliding scale of user numbers AND level of service

provided is presented below as a guide for libraries that are providing more complex library services.

Number of institution staff*		Number of FTE health information professionals		
		Bronze	Silver	Gold
20 ⁺	400	1.24	1.55	1.85
25	625	1.55	1.93	2.32
30	900	1.85	2.32	2.78
35	1225	2.16	2.70	3.24
40	1600	2.47	3.09	3.71
45	2025	2.78	3.48	4.17
50	2500	3.09	3.86	4.63
55	3025	3.40	4.25	5.10
60	3600	3.71	4.63	5.56
65	4225	4.08	5.02	6.03
70	4900	4.33	5.41	6.49
75	5625	4.63	5.79	6.95
80	6400	4.94	6.18	7.42
*Includes all active medical staff, as well as healthcare personnel on service contract +Calculated using square roots in increments of 5 from 20 to 80 (20x20=400 25X25=525)				

Formula for number of staff delivering a Silver level of service

$$\text{Silver } \sqrt{\text{total FTE institution}} \times 1.25 / 16.1803399$$

Formula for number of staff delivering a Gold level of service

$$\text{Gold } \sqrt{\text{total FTE institution}} \times 1.5 / 16.1803399$$

“Appendix 5: Additional Considerations for Libraries Providing an Advanced Level of Service” (reproduced with permission of the Canadian Health Library Association, 2021, p36) ³⁴ (i.e. Silver and Gold) state that the advanced levels may include the following:

- Advanced research support such as systematic and scoping reviews
- Consults on research strategies and grant applications
- In depth information literacy training including customized training modules
- Customized content delivery including app development
- Research Data Management
- Organisational record management or Knowledge Management

Appendix 4: Standards

The following list of Australian and ISO Standards and Codes, while generally not specific to Library and Information Services represent the most common standards and codes libraries may have need to consult. While up to date at the time of publication, standards and codes change over time.

Australian & ISO Standards

AS/NZS 1170.0:2002	Structural design actions - General principles
AS 1428.1:2021	Design for access and mobility, Part 1. General requirements for access - New building work
AS/NZS 1680.2.2:2008	Interior and workplace lighting, Part 2.2: Specific applications - Office and screen-based tasks
AS/NZS 1680.2.5:2018	Interior and workplace lighting, Part 2.5: Hospital and medical tasks
AS 1735.1:2016	Lifts, escalators and moving walks Part 1: general requirements
AS/NZS 2107:2016	Acoustics- Recommended design sound levels and reverberation times for building interiors
AS ISO 9296:2019	Acoustics-Declared noise emission values of information technology and telecommunications equipment
ISO 10160:2015	Information and documentation - Open Systems Interconnection - Interlibrary Loan Application Service Definition
AS/NZS 10161.1:2015	Information and documentation - Open Systems Interconnection - Interlibrary Loan Application Protocol Specification, Part 1: Protocol specification
AS/NZS 10161.2:2015	Information and documentation - Open Systems Interconnection - Interlibrary Loan Application Protocol Specification, Part 2: Protocol implementation conformance statement (PICS) proforma
AS ISO 15489.1:2017	Information and documentation - Records management - Part 1: Concepts and principles
AS/NZS ISO 2789:2016	Information and documentation - International library statistics
AS 5044.1:2010	AGLS Metadata Standard, Part 1: Reference description
AS 5044.2:2010	AGLS Metadata Standard, Part 2: Usage guide
AS/NZS ISO 9001:2016	Quality management systems - Requirements
SA TS ISO 9002:2017	Quality management systems - Guidelines for the application of ISO 9001:2015
AS/ISO 15836.1:2018	Information and documentation - The Dublin Core metadata element set - Part 1: Core elements
AS/ISO 15836.2:2020	Information and documentation - The Dublin Core metadata element set - Part 2: DCMI Properties and classes

<i>AS/NZS 62368.1:2018</i>	Audio/video, information and communication technology equipment, Part 1: Safety requirements (IEC 62368-1:2014 (ED. 2.0) MOD)
<i>HB 256:2007</i>	Metadata usage in Australian and New Zealand education and training
<i>ISO 7010:2019</i>	Graphical symbols - Safety colours and safety signs - Registered safety signs
<i>ISO 11620:2014</i>	Information and Documentation: Library performance indicators
<i>ISO 11799:2015</i>	Information and documentation -Document storage requirements for archives and library materials
<i>AS/NZS ISO/IEC 20006.2:2020</i>	Information technology for learning, education and training - Information model for competency, Part 2: Proficiency level information model

British ISO Standards

PD ISO/TS 21526:2019	Health informatics. Metadata repository requirements (MetaRep)
PD ISO/TR 19815:2018	Information and documentation. Management of the environmental conditions for archive and library collections
PD ISO/TR 19814:2017	Information and documentation. Collections management for archives and libraries
BS 4971:2017	Conservation and care of archive and library collections

Other Standards

Australian Library & Information Association. Health Libraries Australia Competencies	https://read.alia.org.au/australian-library-and-information-association-aliahealth-libraries-australia-hla-competencies
Building Code of Australia	https://ncc.abcb.gov.au/ncc-online/NCC
Australian Commission on Safety and Quality in Health Care. National Safety and Quality Health Service Standards. 2nd ed., 2017	https://www.safetyandquality.gov.au/standards/nsqhs-standards
TEQSA (Tertiary Education Quality and Standards Agency). Higher Education Standards Framework 2021 [Threshold Standards]	https://www.teqsa.gov.au/higher-education-standards-framework-2021

Appendix 5: Introductions to the third (2000) and fourth (2008) editions of the *Guidelines for Australian Health Libraries*

Introduction to the *Guidelines for Australian Health Libraries* (4th edition)

It is eight years since the release of the third edition of the *ALIA Guidelines for Australian Health Libraries*¹. In that time two of the more significant issues to impact on health libraries have been advances in information technology and the advent of evidence-based librarianship. Both have brought about important changes in the approach professionals take to managing and delivering library and information services and, as such, need to be addressed in any new edition of the *Guidelines*.

The decision was made early on in the review process to maintain qualitative, prescriptive guidelines even though both the Medical Library Association^{2,3} and the Canadian Health Libraries Association⁴ have produced outcomes based standards in recent years. One reason for this is that in 2002 the Australian Council on Health Care Standards (ACHS) accorded recognition to the third edition of the *Guidelines*, a recognition hospital librarians had been seeking since 1987. At the time ACHS's Evaluation and Quality Improvement Program (EQuIP) Guidelines stated:

Libraries are one source that organisations can use to increase and manage knowledge resources for staff. There are bodies and legislation that have set direction for libraries and these include:

The Australian Library and Information Association sets standards and guidelines for types of libraries and services. Their useful website is www.alia.org.au with the guidelines being found at www.alia.org.au/sections/health/guidelines/..."⁵

Subsequent editions of EQuIP continue to reference the *Guidelines* and emphasise the crucial importance of access to, and utilisation of, information resources in supporting evidence based practice and improving the quality of health care. Given this significant achievement it seemed prudent to update the *Guidelines* to reflect changes in practice while not modifying the existing blueprint too significantly. While some may argue that outcomes based standards allow the individual library greater latitude on how best to meet the required results based on individual circumstances, prescriptive standards encourage a base level of output across all health libraries.

The fourth edition of the *Guidelines* undoubtedly builds upon the third edition's solid foundation. The structure of the document remains largely the same, with the *Guidelines* broken down into four key areas.

In the fourth edition significant emphasis is placed on the Library and Information Service (LIS) producing and operating within a strategic planning framework. As a tool strategic planning allows the LIS to align its services with that of its parent organisation and the needs of stakeholders. Executed effectively, strategic planning will assist the LIS in demonstrating how it contributes to the success of the parent organisation. Therefore Guideline Area 1, previously named Planning and Development, is now titled Planning and Strategy. Elements found in the third edition, such as mission, goals and objectives, remain but are presented entirely within a strategic planning framework.

Guideline Area 2 has been renamed Organisation and Philosophy (previously Organisation and Administration). Major differences include the addition of a guideline covering evidence-based library and information practice and a guideline which asks the LIS to recognise the contribution it makes to their organisation's wider information management and technology agenda. Marketing requirements are also specified in this section of the *Guidelines*.

Guideline Area 3 remains Resources Management. The most significant difference between the third and fourth editions, in this section, is the revision and expansion of the information technology guideline.

Guideline Area 4 remains Information Service Provision. A separate guideline has been added to this section which addresses access to library and information services.

Appendix 3, Minimum Staffing Levels for Australian Health Libraries, presents staffing levels, which are, for the first time, derived from benchmarking data. Data was collected as part of a census survey in 2003⁶ and further refined during a benchmarking exercise in 2004/05⁷. Staffing levels now encompass all types of health libraries, and not just hospitals. In another first, hospital library staffing levels have been recast in accordance with the Public Hospital Peer Group Classification⁸.

In a bid to assist librarians, as well as non-library senior management and accreditation surveyors, a basic *Guidelines* checklist has been developed as a separate document. This checklist is designed to provide a quick self assessment as to

the degree of achievement against each of the guidelines as well as provide notes on the types and location of supporting evidence.

Finally, a wiki (<http://www.aliahlaguidelines4.pbwiki.com>) will be set up to assist health librarians work toward compliance with the *Guidelines*. The wiki will offer links to resources such as templates, examples of working documents, accreditation systems (e.g. ACHS's EQuIP), suggested key performance indicators, references to the literature and alerts to professional development opportunities. It will also allow health librarians to share their knowledge and experience meeting the *Guidelines*. In this way, the *Guidelines* will continue as a living document well into the future.

The types of organisations operating under the broad heading 'health' are diverse: hospitals, research institutes, pharmaceutical companies, government departments, regional health services, professional colleges, universities, not-for-profit and community organisations, non-governmental organisations and even parts of public library services. Organisations operate in different environments, serve different customer groups and have different needs and demands. Library and Information Services must deliver to the unique needs of their organisation.

The challenge, particularly with a prescriptive document such as this, is to produce guidelines which are broad enough to encompass all health libraries but which detail an acceptable and achievable level of practice across those same libraries. To this end the *Guidelines* need to be flexible, adaptable and applicable irrespective of the size and makeup of any individual library service. It is hoped the fourth edition of the *Guidelines for Australian Health Libraries* achieves this desired outcome.

Melanie Kammermann

Project Officer and Convenor of the HLA Guidelines Revision Working Party June 2008

¹ Australian Library and Information Association (ALIA). Guidelines for Australian Health Libraries. Canberra: ALIA, 2000. www.alia.org.au/policies/health-libraries.html (accessed 11 April 2008).

² Medical Library Association. Hospital Libraries Section Standards Committee. Standards for hospital libraries 2002: with 2004 revisions. Natl Netw 2005;29(3): 11-7. www.hls.mlanet.org/otherresources/standards2004.pdf (accessed 1 April 2008).

³ Medical Library Association. Hospital Libraries Section Standards Committee. Standards for Hospital Libraries 2007. J Med Libr Assoc 2008;96: 162-9. www.pubmedcentral.nih.gov/picrender.fcgi?artid=2268237&blobtype=pdf (accessed 2 May 2008).

⁴ Canadian Health Libraries Association (CHLA). Standards for library and information services in Canadian healthcare facilities 2006. Toronto: CHLA, 2006. www.chla-absc.ca/documents/Standards_2006.pdf (accessed 1 April 2008).

⁵ Australian Council on Healthcare Standards (ACHS). Function 4: Information Management, Standard 4.1, Criterion 4.1.5. In: The ACHS EQuIP Guide, June 2002. 3rd ed. Ultimo, NSW:ACHS, 2002.

⁶ Health Libraries Australia Snapshot. HLA News 2003 Jun: 7-8. www.alia.org.au/groups/healthnat/hla/hla.news-june.2003.pdf (accessed 2 May 2008).

⁷ Results of a private follow up study involving teaching hospitals from SA, NSW and WA. Findings of this exercise supported the evidence on staffing levels produced in the health library census. Private communication from The Queen Elizabeth Hospital Library Manager, November 2007.

⁸ Australian Institute of Health and Welfare (AIHW). Appendix 4: Hospitals contributing to this report and public hospitals peer group. In Australia's Hospitals 2004. Canberra : AIHW (Health Services Series no. 23), 2005; 315-6. www.aihw.gov.au/publications/hse/ahs03-04/ahs03-04-x04.pdf (accessed 20 June 2008).

Introduction/Acknowledgements to Standards for Australian Health Libraries (3rd edition)

The third edition of the Standards for Australian Health Libraries (previously entitled National Minimum Standards for Hospital Libraries), owes a heavy debt to the second edition of the *Standards for Library and Information Services in Canadian Healthcare Facilities* produced by the Canadian Health Libraries Association. The ALIA Health Libraries Section expresses its gratitude to the Canadian Health Libraries Association for granting permission to use their standards as the basis for the Australian document.

The decision to modify the Canadian standards was a pragmatic one. Faced with the huge task of updating the Australian standards in a limited timeframe and relying upon volunteers working in their spare time the availability of a current set of health library standards, that would save much effort and reinvention of concepts, was very enticing. The ALIA Health Libraries Section was aware of the enormous energy and planning invested in their document by the Canadians and saw no advantage in replicating such work.

The numerous similarities between the Australian and Canadian health systems also proved persuasive. Essentially these lay in state/provincial administered health services supported with heavy federal funding, a core universal health insurance scheme, a mix of private and public institutions, a British influenced system of medical education at the undergraduate and

postgraduate levels, various programs of cost rationalisation for health care and largely identical accreditation processes. There are also the resemblances in the wide disparities in population, wealth and geographical size between the various regions of each nation. These factors led to the decision to modify the Canadian document to local conditions. The end result is very much a product of the Australian health environment.

The first edition of the National Standards for Hospital Libraries appeared in 1988 and represented the culmination of six years of work by various working parties. It was significant as the first set of Australian hospital library standards to achieve acceptance by all health librarians in this country, at that time no small achievement. The second edition appeared in 1995 and reflected the growing impact of automation upon hospital libraries in the preceding years. This, the third edition, was drafted during the course of 1998 and 1999 and attempts to reconcile the demands between qualitative and quantitative standards for both the practitioner and the lay administrator. Time shall tell how successful this attempt proves.

Acknowledgments must be paid to the following individuals of the Standards Working Party representing the state and territorial groups of the ALIA Health Libraries Section who contributed so much to the preparation of these standards and without whose commitment this project would never have eventuated:

Saroj Bhatia (Chair, Standards Working Party) (ACT), Stephen Due (Vic), Cecily Gilbert (WA), Lindsay Harris (SA), Helen Millar (Tas) and Kay Vincent (NSW)

Third edition prepared by ALIA Health Libraries Section Standards Working Party; edited by Lindsay Harris (North Western Adelaide Health Service Libraries) February 2000

(With acknowledgements to the Canadian Health Libraries Association for permission to use their publication "Standards for Library and Information Services in Canadian Health Care Facilities." Second edition)

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Glossary

Accreditation (health services) The evaluation of a healthcare organisation by a recognised external body. The body evaluates the organisation's degree of compliance with a set of devised standards.

Advanced Levels of Service Services that require additional staff capacity, high level skills sets, specialised competencies maintained through continuing professional development, and information resources with ongoing funding for subscriptions (e.g. systematic reviews, research data management, information literacy training, learning tool development, customised content delivery, including app development, organisational record management or knowledge management).

Australian Library and Information Association (ALIA) The national professional organisation for the Australian library and information services sector.

Benchmarking A tool that enables comparison of inputs, processes or outputs between libraries or within a single library over time, usually with a view to establishing good practice, diagnosing problems in performance and identifying areas of strength.

Budget A budget is usually developed to match revenues against planned expenditures for a defined period of time, typically twelve months.

Budget Allocation The amount of money earmarked for a department or institution to spend for a specified time period or purpose.

Cataloguing/Catalogue/Catalogued A systematic listing of resources designed to enable efficient and effective retrieval.

Client Anyone who is entitled to access, use or receive a service provided by an LIS. In the LIS context, clients may also be referred to as library users, users, customers, patrons, members, consumers. Clients are also library stakeholders.

Collection Curated materials of digital and print resources in all types of formats.

Collection Development Policy A policy setting out the principles guiding the selection, deselection and provision of library materials. The policy describes the purpose, content, format and scope of information resources to be collected and provided by the library in order to meet user needs and the stated goals and objectives of the library.

Competencies Knowledge, skills and attributes required for specialised professional practice in health librarianship. Health Libraries Australia has described the eight competency areas for Australian health librarians: The health environment; Reference and research services; Resources; Leadership and management; Digital, ehealth and technology; Health literacy and teaching; Health research; Professionalism. Health librarians, from novice to expert, need a basic understanding of each competency area. For a detailed description of each competency area, refer to Health Libraries Australia Competencies (2018),

<http://read.alia.org.au/australian-library-and-information-association-aliahealth-libraries-australia-hla-competencies>

Consortia/Consortium A cooperative arrangement among groups or organisations. A basic premise is that by working through consortial purchasing agreements, members can achieve more than could be achieved individually.

Consumer Health Information Any information a member of the general public needs to make informed decisions about their health. Access to and use of this information allows participation, choice and informed consent in health care decision making.

Continuing Professional Development (CPD) An identified programme of training and development required to maintain, improve and broaden an individual's knowledge, skills, expertise and competence, and develop the personal and professional qualities required throughout employment.

Current Awareness Service A service designed to inform library users of new developments and materials published in their field of interest including email alerts, links to saved searches, tables-of-contents, online newsfeeds and mobile apps.

Digital Repository An online archive for the storage of digital objects; these can range from digital archives, moving or still image galleries, manuscripts, research outputs and publications.

Document Delivery See Interlibrary Loans

Engagement (Engagement Strategy) Strategies or activities that create or build a relationship with LIS clients and stakeholder groups to foster awareness of LIS services and active participation in quality and continuous improvement initiatives. Engagement may include the following concepts: liaison, promotion, promoting awareness, building relationships, and collaborating. An engagement strategy or plan will outline how the LIS builds strategic relationships with clients and stakeholders. Engagement strategies may be incorporated into a Marketing and Communication plan.

Evidence-Based Practice An approach to care that encourages clinicians to use the best available research and data-derived evidence and critically apply it to the individual patient's circumstances and preferences in clinical practice.

Full-time Equivalent (FTE) Unit of measurement equivalent to one employee work day. It measures how many total full-time employees or part-time employees add up to an organisation's maximum number of authorised hours.

Goals Broad, enduring, qualitative and immeasurable statements that describe what the library hopes to achieve in the next 3-5 years. Goals expand upon the vision, specifying the accomplishments to be achieved if the vision is to become real.

GratisNet A co-operative arrangement for document delivery and interlibrary loans between Australian health libraries.

Health Information Professional Health information professionals are responsible for the development, maintenance, and governance of the systems used to manage health data, health information, and health knowledge. The health information professions comprise the following employment categories: health librarianship, health information managers, health informaticists, health technologists. Refer to Butler-Henderson K., Day K., & Gray, K. (Eds). The health information workforce: current and future developments. Springer Nature: London. <https://doi.org/10.1007/978-3-030-81850-0>

Health Librarian Health information professionals who focus on the services and systems that deliver research-derived data, information and knowledge to healthcare clinicians, managers, policy makers, educators and researchers. They contribute to the development of knowledge through research services, from reference consultations and literature searching to advanced forms of evidence synthesis. They manage the research knowledge base published in all formats, as well as grey literature. Their responsibilities extend to advancing the application of evidence-based practice through health literacy and teaching, knowledge management and translation services, facilitating the links between clinical decision-making, policy/guideline/protocol development, and health research, i.e. translating evidence into practice. See also Competencies.

Health Libraries Australia (HLA) The specialised health group of the national professional organisation, Australian Library and Information Association (ALIA).

Health Literacy/Health Information Literacy Health literacy is about how people understand information about health and health care, and how they apply that information to their lives, use and act on it to make evidence-informed decisions and provide informed consent.

Information Governance An approach to managing information assets across an entire organisation to support its business outcomes involving multi-disciplinary structures, policies, business rules, procedures and controls to meet regulatory, legal, risk and operational requirements. See <https://www.infogovanz.com/information-governance/a-practical-guide-to-information-governance>

Information Handling Skills A range of skills in using and retrieving information including planning, searching and evaluation.

Information Resources Published or non-published information in a range of formats including print and electronic.

Institution Used interchangeably to refer to facility or organisation.

Interlibrary Loans (ILL) A service by which library resources not owned by the library may be requested and obtained from other libraries. Also called document delivery.

Key Performance Indicators (KPIs) Significant measures that are used on their own or in combination with other KPIs to show the library's progress toward, and/or performance against, its objectives.

Knowledge Management (KM) The process of creating, curating, sharing, using, and managing knowledge across an organisation or industries. It harnesses the knowledge of people throughout an organisation, making the knowledge available in the most effective manner to those who need it, enabling them to exploit it creatively and add value as a normal part of their work.

Librarian A professional holding a tertiary qualification in Library and Information Science from an accredited course delivered by an ALIA-accredited education provider.

Librarian, Clinical Clinical librarians are specialist health librarians with expertise in evidence searching and summarising, delivering information skills training, and mobilising knowledge with clinicians at the point-of-care.

Librarian, Embedded Embedded librarian service models focus on providing services to user groups within that group's work setting (generally away from the physical library), so that they can work more closely with the members of those groups.

Librarian, Health See Health Librarian

Libraries Australia A resource sharing service managed by the National Library of Australia for Australian libraries and their users.

Libraries, Health A health or medical library is designed to assist clinicians, health professionals, students, patients, consumers, researchers, educators, and information specialists in finding health and scientific information for the purposes of patient care, education, research and program/policy management (or combinations of these). Health libraries are typically found in hospitals and other clinical facilities, universities, research institutes, regulatory agencies, pharmaceutical and biotechnology companies, government departments, regional health services, professional colleges, cooperative research centres, not-for-profit and community organisations. They provide access to a range of services and resources.

Libraries, Medical See Libraries, Health.

Library and Information Service (LIS) A Library and Information Service encompasses all aspects of managing and delivering data, information and knowledge resources and services for a defined population, community or organisation. See also Libraries, Health.

Library Assistant Unqualified staff who assist librarians and library technicians in a library or information service.

Library Management System (LMS) An integrated system for the administration of a library's technical functions and services to its users.

Library Technician A para-professional holding qualifications in Library and Information Science from an accredited course delivered by an ALIA-accredited education provider. They assist librarians and other information managers to organise and control library and information systems and resources, and deliver library services.

Mediated Searching Service Literature searching service undertaken by a librarian on behalf of a client.

Mission A pragmatic statement that defines the purpose and philosophy of the library i.e. what the library does and why.

Objectives Statements indicating how the library will achieve its goals and resolve the critical issues identified during the strategic analysis phase of the strategic planning process; they are statements of major approach or method. As such they are specific and measurable.

Outreach The taking and provision of library services beyond the institution and its traditional users to the broader community.

Patient Education See Health Literacy; see also Consumer Health Information.

Performance Evaluation A formal and productive process to measure an employee's work and results based on their job responsibilities.

Performance Indicators See Key Performance Indicators (KPIs)

Plan, Action Also referred to as an Operational or Business Plan, an Action Plan is a document setting out objectives, goals, specific actions, and priorities; it has measurable outcomes by which the plan may be evaluated and Key Performance Indicators to gauge progress against the objectives. It generally specifies timeframes and responsibilities, and may indicate risks and mitigation strategies. It provides an essential link between the strategic plan and the library's annual budget.

Plan, Business See Action Plan

Plan, Business Continuity A plan to identify and reduce risk, and to prepare for and continue to operate after an incident or crisis.

Plan, Communication The processes for conveying information about the LIS to clients and stakeholders - including verbal, written (print), online and social media approaches. A communication plan outlines how communication is undertaken in a strategic and coordinated way within the LIS, with its parent organisation and with clients and stakeholders. Individual communication plans may also be developed for specific LIS activities or special projects.

Plan, Marketing A plan that describes the LIS's value proposition within its parent body (the organisation in which the LIS operates) i.e. how the LIS assists in achieving the organisation's mission, vision, and strategic priorities. The marketing plan outlines the LIS's client base, products and services, and the ways that these are promoted. It is generally developed through an environmental trends analysis, competitor analysis, and SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis, in which client groups' critical issues are identified. LIS products and services are designed to address these issues. Product, Price, Place and Promotion (the "4 P's" of the marketing mix, with People, and Process sometimes added) are outlined in the plan, as well as strategies for client/stakeholder engagement, market research, and developing and communicating key messages to target audiences through traditional and social media channels. Often combined as a "Marketing and Communication Plan".

Plan, Operational See Plan, Action

Plan, Strategic The result of a systematic and proactive process of assessing the library's internal and external environment, analysing the implications of relevant trends, and identifying effective strategies for achieving a desired future state.

Position Description A document assigning work to a given position as it is expected to be performed. Position (or job) descriptions define the scope of practice and the depth of knowledge, skills and responsibilities required for different position levels. See also Competencies; Librarian, Health.

Professional Development Plan (PDP) An agreed written document used to focus, evaluate and prioritise professional development goals and activities; can be aligned with HLA Competencies (<http://read.alia.org.au/australian-library-and-information-association-aliahealth-libraries-australia-hla-competencies>) and the ALIA CPD specialisation for health librarians and health library technicians.

Quality Improvement The sum of all activities that create desired change in quality. Quality improvement involves a feedback loop that identifies patterns of service, the analysis of those patterns to identify opportunities for improvement and actions to improve quality in services.

Reference Service Library information services that involve either finding the required information on behalf of the users, or assisting users in finding information.

Remote Access Direct access to library catalogues, databases, resources and services from a point external to the library.

Repository See Digital Repository

Service Level Agreement (SLA) An agreement establishing a set of deliverables provided by one party to deliver services to another organisation. See Appendix 2.

Stakeholders Any group or individual who is interested in or can affect or who is affected by achievement of the library's objectives.

Strategic Analysis The broad-based identification and analysis of those critical issues that affect the library. It is a critical step in developing a strategic plan as the library uses the information collected to evaluate the importance of its internal strengths and weakness against user requirements and external opportunities and threats, trends and developments, in order to develop appropriate and focused objectives and action plans.

Systematic Review A clearly formulated question that uses systematic and reproducible methods to identify, select and critically appraise all relevant research, and, to collect and analyse data from the studies that are included in the review.

Vision The vision is a short, succinct, and inspiring statement of what the library aims to look like in ideal terms in the future. It provides a focus for the development of future services and programs in relation to the identified changes in needs and environment.

[END]