

## POSTERS / AFFICHES

### Less Shelves, More What? How Are Academic Health Sciences Libraries Choosing to Replace Their Shelves?

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**Introduction:** In the past decade academic health science library collections have become predominantly digital in response to advancing technology and user demand. This transition in how libraries collect materials has had a significant impact on library spaces. Many libraries have begun sweeping discontinuation of their bookshelves in response. What are they replacing their shelves with? The objective of this study will be to research what academic health sciences libraries are doing with their previously shelf consumed spaces including what impact this has had on services, utilization of space by users and post-renovation user and staff feedback. While there are many case studies on library space renovations and project management there is a gap in information on academic health sciences libraries in general and existing trends. **Methods:** The structured questionnaire was open to all libraries belonging to the Association of Academic Health Sciences Libraries (AAHSL) who have removed at least one bookshelf in the last five years. Resulting qualitative data was assessed using a framework analysis while quantitative

data was examined using SPSS. **Results:** Of the 162 AAHSL members who were sent the survey there were 14 qualifying responses. While responding libraries had removed between five to “thousands” of bookshelves all had kept some shelving. Collections stored on the removed shelves were primarily discarded or transferred to storage. The majority of libraries gained group study and individual study space. The amount of additional seating ranged from 23-340 seats. A minority of libraries lost some space or all space. Only a small fraction of libraries introduced new services such as 3-D printing and free scanning of journal articles. Most libraries experienced an increase in visitor statistics since their shelf removal and received positive feedback from library users and library staff. **Discussion:** In conclusion while the response rate was low some interesting trends in how libraries approach removing bookshelves and the outcomes of these projects were identified. One in particular is that the majority of libraries are prioritizing study space and collaborative spaces in their space modifications.

### More than Expert Searchers? A Case Study for Librarians Exploring Roles beyond Databases

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**Introduction:** At the University of Toronto (UofT), librarian involvement in a variety of reviews and grant proposals happens largely and primarily on an ad-hoc basis. The role of health sciences and medical librarians as expert searchers is well established and recognized, yet librarians can, and have, also been called upon to navigate

other components of the research process (Dudden 2011). Involvement includes but is not limited to: project manager, research coordinator, and process/protocol expert. Librarian involvement is not only recommended, but has become a requirement for grants from key funding agencies, such as the Canadian Institutes of Health

Research (CIHR), for a proposal to be considered complete and admissible (CIHR 2010). This is wonderful news, but are we prepared? The objective of this study is to develop a sustainable set of service standards in order to clarify the roles and tasks to be performed by librarians in research initiatives such as systematic reviews, but perhaps more importantly, scoping and realist reviews, as support requests for these newer, less familiar, methodologies have become increasingly common. **Methods:** We will gather and organize pre-established protocols for each type of research study and disseminate them widely. An environmental scan will be performed to learn more about how librarians at U of T are currently supporting research

teams' reviews. This knowledge can then be shared among our colleagues and incorporated into the content of our instruction portfolio. **Results:** The results of this initiative and anecdotal gathering are ongoing and will be presented at the MLA/CHLA meeting. **Discussion:** Librarians offer significant contribution and insight beyond their searching skills; they can successfully act as project managers, process experts, and disseminators of protocols (communicators). Their role continues to evolve. Above all our goal remains to have an open and honest conversation on what librarians and information specialists' experiences have been so far in these types of initiatives, what our roles are and what they should be.

## Collaborative Quality Assurance in Literature Searching

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**Introduction:** Public Health Ontario provides expert scientific and technical advice and support to government, local public health units and health practitioners. Library Services support is embedded in project plans across the organization to ensure a consistent approach to PHO research products. In turn the quality of PHO research relies on the expertise of the library team in conducting comprehensive literature searches. **Methods:** To ensure that Library Services delivers literature searches which are of a consistently high quality, a unique rapid peer review and quality assurance process for search strategies has been implemented. The team has made this process an integral part of their workflow. Team members provide feedback on all aspects of search strategies, including database selection, relevancy/sensitivity of subject headings and keywords, combination of search concepts, application of

limiters, and proofreading of search syntax. This collaborative approach to search strategy development leverages the collective expertise of the team, promotes knowledge translation and capacity building among Information Specialists and Library Technicians, and improves the quality and consistency of search strategies. This process has also facilitated the development of a shared repository of search terms for frequently searched public health concepts which has been utilized by the team to expedite search strategy development. **Results:** N/A - embedded in the methods section. **Discussion:** The rapid peer review process of search strategies demonstrates how this approach is successful in improving the overall quality of the host organization's knowledge products and evidence-based advice.

## Creation of Complementary and Alternative Medicine (CAM) Search Filters for the Cochrane Complementary Medicine Specialized Register of Trials

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**Introduction:** To identify all complementary and alternative medicine (CAM)-related trials in Cochrane CENTRAL and other relevant databases considered to be high-yield sources of CAM trials (e.g., Allied and Complementary Medicine (AMED), Index to Chiropractic Literature (ICL), PsycINFO) for inclusion in the Cochrane Complementary Medicine register of trials. Eligible trials will receive the specialized register code SR-COMP MED for incorporation into CENTRAL. **Methods:** After checking the range of filters available through the ISSG search filter resource, <https://sites.google.com/a/york.ac.uk/issg-search-filters-resource/home>, PubMed's CAM subset [http://www.nlm.nih.gov/bsd/pubmed\\_subsets/comp\\_med\\_strategy.html](http://www.nlm.nih.gov/bsd/pubmed_subsets/comp_med_strategy.html) was selected as the most comprehensive filter available. Information regarding its development and maintenance was sought via Cochrane's Information Retrieval Methods Group (IRMG) and MLA's Expert Searching listservs. Two information specialists (IS) analyzed the filter for accuracy, appropriateness, comprehensiveness, and precision. The strategy was refined and vocabulary for new CAM therapies was developed and added. To overcome problems of precision when searching PubMed (e.g., lack of proximity operators), a line-by-line version of the strategy was translated to OVID MEDLINE.

The OVID version was used as a basis for translating to other databases and platforms. The Cochrane Highly Sensitive Search Strategy for randomized controlled trials (RCTs) was adapted and applied to each database. **Results:** Our review of the current PubMed CAM filter revealed spelling errors, omissions, redundancies, inconsistencies, and difficult or questionable logic. We reviewed the underlying concepts, updated the MESH, verified journal names and developed the MEDLINE OVID strategy. Adjustment was required to correct spelling errors, word forms, redundancies, and field labels. Proximity searching was adjusted to increase specificity. We incorporated new vocabulary for emerging CAM concepts (e.g., environmental interventions such as therapeutic gardens, exposure to nature, etc.). In particular we analyzed zero-retrieval lines for errors. Once finalized, the new MEDLINE strategy was systematically translated to other databases and quality checked for accuracy. **Discussion:** We have systematically created base CAM filters for use in multiple databases. In doing so, we have reliably identified additional trials for the Cochrane Complementary Medicine register of trials. Testing the sensitivity and specificity of these filters is the next logical step.

## Evaluating Online Health Information Sources: A How-to on Mixed-Method Heuristic Design

**Blake Hawkins and Heather L. O'Brien**

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**Introduction:** Consumer health websites play a vital role in the mobilization and translation of population-based health information. In order to decide whether to engage with these websites or recommend them to others, health consumers

and librarians need a quick and effective means of evaluating them. The poster describes the development and application of a heuristic measure for men's health websites. **Methods:** We developed a heuristic evaluation tool that

built upon Jacob Nielsen's 10 Usability Heuristics for Usability Design. We augmented these established heuristics with knowledge gleaned from the men's health, health promotion and information seeking literature focused on the inclusion for different racial and sexual minority groups. The elements incorporated from the heuristic measure included the website system, visual design, and content; as they were the most pertinent for the purpose of this project. Furthermore, we incorporated theoretical aspects from health promotion, men's and queer health and health information seeking for sub-questions regarding content and our analysis. The resulting tool was applied to two British Columbia men's health websites to assess their functionality, visual design, and information content. **Results:** This mixed-method approach to creating a measure was successful at highlighting beneficial and problematic areas of the sample websites. The five measures that were taken from Jenkins (1992) model were able to evaluate the structural and functionality aspects of the websites. We were

able to evaluate if the information was free of dead links and other error glitches that might cause frustration for potential men's health information seekers. Furthermore, the measure could evaluate design and if the presentation of information was overwhelming or not for the seeker – this can have an effect on the level of engagement by the users. By incorporating qualitative and secondary questions, we were able to retrieve even richer data about the sample websites regarding men's health. It became apparent that currently, men's health is sometimes forgetting ethnic and sexual minorities. Neither of our websites had a visible Aboriginal or Gay, Bisexual, Transgender, or Queer content, which is problematic since these two groups have poorer health outcomes. **Discussion:** By creating this mixed-method heuristic measure it provides the opportunity for further research with a larger sample regarding men's health promotion online materials. Potentially, the success with these two websites was an anomaly and there are more elements that need to be considered when creating this type of evaluation for online materials.

## Social Media and Lesbian, Gay, Bisexual, Transgender (LGBT) Health: A Primer for Health Librarians

**Brooke Ballantyne Scott and Blake Hawkins**

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**Introduction:** Since the early 2000s, there has been a limited amount of scholarship by librarians concerning the LGBTQ population, their health, and their engagement or practices with health information and services. The purpose of this paper is to synthesize findings that demonstrate the complexities concerning LGBTQ health and information interactions in the context of advancements in social media. **Methods:** The research question guiding our project is "how does social media connect members of the LGBTQ community to healthcare?" We completed a scoping review using MEDLINE, Embase, CINAHL, and PsycINFO. We limited to publications from 1990–2015, and to English language. We found 93 articles across these databases, which was reduced to 77 after de-duplication, and further reduced to 28 after culling for relevance to our research question. In 2000 and 2001, two articles were written regarding why health librarians should care that LGBTQ health could differ from that of other populations. Since the early 2000s, there has been limited scholarship concerning LGBTQ people and health librarianship. It is our aim to fill this 15-year gap and argue that health librarians, who have a significant role in social media and healthcare, should also be aware of these interactions. **Results:** The literature demonstrated that

there have been advances over time concerning LGBTQ people and how social media is used to connect them to healthcare information and services. Prior to the early 2000s, the methods used were more on the microscale of information engagement. From the mid-2000s onward, however, the usage of social media has allowed for interactions on the macroscale between the LGBTQ community and healthcare. Currently, the usage of social media towards LGBTQ users is more prevalent in the USA. Other findings include the recruitment and training of peer educators (using established models and guidelines) for health outreach on social media platforms, strong partnerships between the LGBTQ community and universities and public health organizations, and the importance of understanding and respecting both online and LGBTQ culture in health interactions. Populations studied are mostly MSM (men who have sex with men), and therefore research hasn't reached other important subsets of the LGBTQ community in regards to social media connecting them to healthcare. **Discussion:** There are a variety of ways that social media is being used for LGBTQ health, and themes from the literature that should become more known amongst health librarians.

## Reflecting on the First Steps: A Structured Analysis of Medical Subject Headings (MeSH)

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**Introduction:** The University of Alaska Anchorage, is trying to facilitate needed changes regarding MeSH terms pertaining to Indigenous/Arctic Health. We will describe the process associated with doing a structured analysis of MeSH. Our goal is to build a case that MeSH needs to be expanded to better meet the needs of Arctic peoples and researchers with an Arctic focus. **Methods:** The project involves multiple stages of investigation before it is possible to make any recommendations concerning Indigenous/Arctic MeSH terms. We began by reviewing NLM policies concerning MeSH terms, and what is required to successfully make term revisions. Using existing searching hedges, we also investigated current MeSH terms to learn which can be included for future searches. Concurrently, we wanted to find which terms are most commonly used to index articles pertaining to Indigenous health. New MeSH terms with a focus on Indigenous Arctic peoples and

perhaps regions within the Arctic will be recommended. **Results:** We have now reached the point in this project that we are writing a white paper for the NLM that demonstrates why there is a need for a new search term. It is no longer just rationalized on personal biases to create a new MeSH heading. Instead, we have gone through hundreds of articles regarding Alaska Native health, and there is a gap in how they are categorized. **Discussion:** We are now waiting for a feedback on the paper and hope that it will be accepted by the NLM. We were required to meet certain standard set out by the NLM to advocate for a new MeSH term. Through the steps we completed, we are confident that it will result in needed change. Furthermore, we hope our model can be followed by other groups who believe there should be new MeSH terms to better represent their population(s).

## Searching the Literature: One Size Does Not Fit All

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**Introduction:** Library services managers, professional searchers and search instructors lack a standard to support mediated search service instruction and accountable search service delivery. A standard is needed to establish a consistent approach to executing different types of searches, provide a framework against which search service performance may be measured and support cost benefit analysis of expert, mediated search services demonstrated. **Methods:** Two approaches were used to inform this pan-Canadian work. The first was an environmental scan using several listservs to identify current search-related researchers and practice leaders. The second was an iterative

literature review of research and other literature on mediated searching. Content analysis of all documents gathered identified a variety of search types and methods. The search types, methods and related terms were defined in a search glossary, organized in a matrix and then validated through a Delphi study with search researchers, authors publishing on search topics and professional searchers. **Results:** Results included identification of essential and optional steps in recommended approaches for different types of searches. The first draft of this work will be shared as a consensus-building step in standard development. **Discussion:** The research literature on search

methods is sparse and fragmented, lacking in currency and a shared vocabulary. A standard would provide clarity in terminology, approach and methods align with the accreditation of other health care professionals and maintain the relevance and value of health services libraries within the

health care system. Standards enable us to provide a consistent service experience to our users, especially within multi-site services with both physical library and virtual environment settings.

## Lesbian, Gay, Bisexual, Transgender, Questioning (LGBTQ) People, Health Information Seeking, and the Role of Health Librarians: A Scoping Review

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**Introduction:** There are gaps in the health information literature concerning LGBTQ people and the role of health librarians in information seeking. The available scholarship is emblematic of earlier perceptions regarding interactions between LGBTQ people and their health information needs. This paper will demonstrate why it is necessary for health librarians to better understand the unique needs of LGBTQ youth, and provide recommendations to cultivate a better awareness about their needs. **Methods:** The research questions guiding our scoping review are “what are the health information needs of LGBTQ people” and “what is the role of health librarians with respect to LGBTQ information needs?” We completed a review using Embase 1974 to present, Embase 1974 to present, CINAHL and PubMed with Full Text, and Ovid MEDLINE(R) In-Process and Other Non-Indexed Citations and Ovid MEDLINE(R) 1946 to Present. We limited the results to publications after 1990–August 2015. We found 112 articles across these databases, and we

reduced to 66 after culling our research due to the relevance of the research question. After the scoping exercise, we mapped the results into the themes that have framed our discussion. **Results:** Currently, there is a limited amount of literature regarding the role of health librarians with LGBTQ people health information seeking. The current literature is associated with the challenges many younger people face when first trying to engage with the literature as fearful and/or closeted youth. Additionally, there are narratives regarding the problematic information seeking process many LGBTQ people use (i.e., online blogs or social networks) that could potentially result in unhealthy information sharing. **Discussion:** We advocate for further engagement by health librarians with LGBTQ patrons and their information needs. This is a population that has historically been stigmatized and unrecognized as having different health needs. The health librarian can have a greater role in supporting proper information seeking practices by LGBTQ people.

## Patient Education on an Inpatient Rehabilitation Unit

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**Introduction:** To provide patients and families with access to reliable health information and improve their health literacy, while also increasing the Medical Library's profile within the organization, by taking ownership of a patient education program on an inpatient rehabilitation unit. **Methods:** The Medical Library runs a patient education program on an inpatient rehabilitation unit that admits approximately 300 inpatients per year for a variety of conditions, with the most common diagnoses being Stroke, Acquired Brain Injury, and Spinal Cord Injury. A librarian attends weekly scheduling meetings on

the unit to make patient education appointments for new patients and attaches a letter explaining the purpose of the appointment to the patient's schedule. During the scheduling meeting, the librarian consults with unit staff regarding patients' abilities to participate independently in appointments. The following week, a librarian meets with patients and their families in their rooms or in the unit lounge. During the appointment, the librarian provides health literacy instruction, takes information requests, and demonstrates an online patient education guide on an iPad for patients and families who identify as internet-users.

## Innovations, Challenges, and Opportunities within Regional Health Libraries in British Columbia, Canada

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**Introduction:** Faced with continual change, regional health libraries must innovate in order to survive. To understand how these libraries are evolving to deliver innovative services to geographically spread users, this study: 1) describes and compares the libraries, 2) analyzes how they are evolving and innovating in order to deliver value, and 3) identifies gaps and opportunities in the current landscape. **Methods:** Setting/Participants: Librarians working in regional and Ministry of Health libraries in British Columbia (BC). Data Collection and Analysis: Librarians will be surveyed regarding eight themes drawn from the literature: overview of the library environment, research services, teaching role, centralized vs. distributed service delivery model, prioritization, evaluation, innovative

services, and the provincial landscape. After thematic content analysis of interview data, a focus group will be held with library staff to further explore and validate emergent themes. **Implications:** Regional health libraries in BC differ significantly in size, staffing and service model but share the challenge of delivering innovative services to geographically spread users. In a landscape of library closures and service consolidation, these findings will promote information sharing on innovative best practices and highlight collaborative opportunities to address existing gaps. They will be of interest to health librarians within BC and elsewhere. **Results:** Results are not complete yet. **Discussion:** Results are not complete yet.

## Tailored Customer Service in a Consumer Health Library Setting

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**Introduction:** To tailor an existing generic organizational customer service initiative to engage patients, families, and community members seeking consumer health information as partners in their care. In addition to evaluating customer satisfaction, this initiative aimed to evaluate the existing library volunteer training program. **Methods:** Electronic and paper surveys were used to gain feedback on the implementation by library staff and volunteers of the “Tailored 4As” framework of customer service in a small consumer health library/learning centre in a large, acute-care hospital. The original “4As”—Acknowledge, Ask, Act, Ask Again were extended to personalize library patron interactions, considering patron’s time, personality, mood, social determinants of health, past interactions, health literacy level and more. **Results:** Online and in-person surveys indicated that library patrons were extremely satisfied with the service they received in the consumer health library. In most cases, respondents reported that they were welcomed and offered assistance by library staff or volunteers (Acknowledge, Ask), their requests were acted on in a timely

and professional manner (Act), and that it was explained to them how to follow up if they needed more information (Ask Again). Informal feedback provided in-person or via email echoed these comments. Respondents also commented on their appreciation tailored aspects of the service of a private setting, welcoming staff, speed of response to health information inquiries, provision of information in other languages, and appreciation for the availability of computers in the library for self-directed research. Volunteers also expressed that the framework provided a useful guide for effective interactions with patrons, especially those who were not as experienced in a customer service role or were not confident in their English-speaking skills. These surveys, in combination with in-person real-time feedback, reinforced current volunteer and staff training techniques. **Discussion:** A generic customer service framework can be a useful tool in training library staff and volunteers if appropriately tailored to meet the diverse and often sensitive needs of patients, family caregivers and community members seeking consumer health information.

## Strategic Planning for Interagency Academic Health Libraries

**Erin L. Menzies and Kristina McDavid**

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**Introduction:** Our objective was to develop a fiscally responsible and innovation-centred five year strategic plan for our interagency library program. Librarians play a substantive role in the University of British Columbia's Undergraduate Medical Program. Medical Undergraduate Library Committee (MDULC) membership includes librarians from University of British Columbia's Vancouver and Okanagan campuses, the University of Victoria, the University of Northern British Columbia, as well as librarians from health authorities across the province. **Methods:** In June 2015 our committee was asked by the leadership of our medical program to outline our plans for the five year period of September 2015 to September 2020. This was the first opportunity for the MDULC to formally articulate long-term goals and programmatic intentions, and as such we approached the matter systematically. First, university librarians focused on gathering relevant information on library collections, services and staffing, information technologies and pedagogy, while health authorities (which receive some medical program funding to support staffing and collections) were

asked to report to the committee's executive on the challenges and opportunities at clinical sites. Second, the committee executive analyzed and condensed reports from all parties into one cohesive document, collating themes and ensuring alignment with the existing strategic plans from both UBC and the Faculty of Medicine. **Results:** Thematic analysis indicated that our undergraduate library committee should prioritize the following during the period from 2015–2020: 1) Facilitate student success 2) Facilitate research excellence 3) Enhance culture of assessment 4) Foster environment of continuous learning. **Discussion:** The five year plan was submitted for consideration to our overseeing body, the curriculum committee, and was accepted. The plan was then presented to the university medical education executive and was approved. This document has helped the MDULC to clarify goals and has assisted us in developing a project timeline for the next five years. Furthermore, it has allowed us to articulate major issues, such as budget shortfalls and the negative effect of foreign exchange on our collections budget.

## All of These Things Are Not Like the Others: A Comparison of Six Clinical Librarian Programs at the University Health Network

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**Introduction:** To compare and contrast the formats and outcomes of six clinical librarian initiatives established over the last 10 years within different clinical programs at the University Health Network (UHN), an academic teaching hospital in Toronto, Canada. **Methods:** A comparative case presentation demonstrates the range and variety of services provided through six clinical librarian

programs for family medicine, general surgery, psychiatry, bariatrics, genitourinary oncology, and chronic pain management, of which five continue to this day. Elements considered include program mandates, meeting structures and librarian's roles and responsibilities. Indirect impact on library service usage will be explored. **Results:** Over the course of 10 years, six clinical librarian programs were



created at UHN. Of the six, only one was discontinued after a few years: library attendance at weekly genitourinary tumor boards. The remaining five continue to provide meaningful service to clinicians, despite a high level of heterogeneity in the programs' scope of practice. Benefits and value of clinical library programs were demonstrated through varying means including survey data, the duration of our existing programs, interest expressed by other clinical areas, acknowledgements from program education leads, positive feedback from participants, as well as apparent correlations with increased usage of library

services. Program descriptions and evaluations will be discussed in greater depth. **Discussion:** Clinical librarian initiatives need to be flexible and fluid in their roles in order to successfully embed themselves within clinical programs. Our comparison demonstrates that even within one institution, there is no single formula for a clinical librarian's role. The needs and mandates of individual programs vary. Despite their variance, each clinical librarian program supports the institution to be a learning organization, and contributes to evidence-based patient care and safety.

## The Role of the Embedded Clinical Librarian in a Chronic Pain Management Telemedicine Learning Program

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**Introduction:** To describe the role and value of an embedded clinical librarian within an innovative interprofessional team that delivers chronic pain education to primary care providers (PCPS) in underserved urban, rural, and remote areas. **Methods:** ECHO Ontario Chronic Pain and Opioid Stewardship (ECHO Ontario) is the first replication of the ECHO model in Canada and began with a goal to help PCPS to provide better chronic pain management. Using a hub-and-spoke model, an interprofessional hub team delivers education to multiple spoke PCPS through telemedicine. The embedded clinical librarian is an important part of the interprofessional hub team, attending each weekly session. Further discussions also occur outside sessions through an online message board and via email. Questions arise from both hub and spoke members regarding didactics, patient case presentations and online message board discussions. The librarian provides evidence-based resources to the community based on these questions that arise. To determine the value of the librarian's role, questionnaires were distributed to the community and metrics were collected. The scope of the librarian's role was also assessed. **Results:** From June 2014 to November 2015, the librarian attended 61 out of the 69 ECHO Ontario sessions, conducted 29 literature searches,

and spent an average 36 minutes per week on ECHO related tasks in addition to attending weekly 2 hour sessions. Based on questionnaire results, the embedded clinical librarian role was received well by both interprofessional hub members (N = 13) and Spoke PCPS (N = 27). Ten (76.9%) hub members and 22 (81.5%) spoke members answered yes to the question "Should we continue to offer clinical librarian services during ECHO sessions?" Feedback was positive and encouraged continued use of librarian services. Questionnaire feedback, however, suggested a lack of awareness from some spoke members regarding the specific role and services provided by the librarian. When reassessing the clinical librarian role, the scope of responsibility grew from providing evidence-based resources to also include current awareness resources and addressing copyright and information dissemination issues. **Discussion:** The embedded clinical librarian role has been a valuable part of ECHO Ontario and has been well received. This new role demonstrates the value of a librarian within an interprofessional team focused on primary care education using telemedicine, with the ongoing, iterative goal in mind of how to best meet the needs of the ECHO Ontario community.

# Systematic Search and Reporting Techniques Applied to the Gray Literature: A Review of Canadian School Breakfast Program Guidelines

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**Introduction:** To describe systematic review search methods that were developed and applied to complete a case study systematic review of grey literature that examined guidelines for school-based breakfast programs in Canada. **Methods:** A grey literature search plan was developed to incorporate four different searching strategies: i) grey literature databases, ii) customized Google search engines, iii) targeted websites; and, iv) consultation with contact experts. These complementary strategies were used to minimize the risk of omitting relevant sources. Since abstracts are often unavailable in grey literature documents, items' abstracts, executive summaries, or table of contents (whichever was available) were screened. Screening of publications' full-text followed. Data were extracted on the organization, year published, who they were developed by, intended audience, goal/objectives of document, sources of evidence/resources cited, meals mentioned in the guidelines, and recommendations for program

delivery. **Results:** The search strategies for identifying and screening publications for inclusion in the case study review was found to be manageable, comprehensive, and intuitive when applied in practice. The four search strategies of the grey literature search plan yielded 302 potentially relevant items for screening. Following the screening process, 15 publications that met all eligibility criteria remained and were included in the case study systematic review. **Discussion:** This presentation demonstrates a feasible and seemingly robust method for applying systematic search strategies to identify web-based resources in the grey literature. The search strategy we developed and tested is amenable to adaptation to identify other types of grey literature from other disciplines and answering a wide range of research questions. This method should be further adapted and tested in future research syntheses.

# One Size Doesn't Fit All: Meeting the Needs of Hospital Staff through Interprofessional Collaboration and a Responsive Website Update

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**Introduction:** In order to be truly accessible, library websites must adapt to both screen size and user needs. Updating to LibGuides 2 CMS and working with hospital staff (e.g. knowledge translator, occupational therapist) on four collaborative projects allowed our library to address both factors. **Methods:** A content management strategy and basic style manual were developed to support use of the updated website. Four new projects (Elder Care in Hospital, Wound Care, Primary Health Care and the

Wheelchair Skills Training Program) were developed in collaboration with hospital staff. For two of the projects, select hospital staff were trained and given access to add and update content. Prior to the release of each project, an interprofessional editorial team of hospital and library staff carried out a final review of layout, language and functionality. Website statistics from Google Analytics were monitored both before and after the update. Statistics for the new projects were also compared to long-standing

library web page statistics. **Results:** Of the four projects, three resulted in the library hosting content entirely. One project involved the library developing web content to be hosted in a separate content management system. All projects involved working with hospital staff to edit, lay out and enhance content for the web. **Discussion:** Hospital libraries can play a vital role in web content design and

management. Usage statistics for library-supported web resources show consistent use and rank highly compared to other organizational guides and websites. This role allows the library to become embedded in the work that hospital staff do, and leads to future collaborations.

## How Is Gray Literature Used in Horizon Scanning Reports on Medical Devices?

**Kelly Farrah and Monika Mierzwinski-Urban**

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**Introduction:** Horizon scanning is a process used to identify and monitor new and emerging health technologies. Often, scant literature on these cutting-edge technologies exists in bibliographic databases. This project investigated the use of grey literature in horizon scanning reports on non-drug medical technologies, including: how often it is cited and which sources are most frequently cited. **Methods:** A retrospective review of horizon scanning reports on non-drug medical technologies, including medical devices, laboratory tests, and procedures was conducted. A random sample of 22 reports was selected from a compilation of 130 reports published in 2014 by major international horizon scanning services and health organizations. For all reports, the percentage of grey literature references cited compared to bibliographic references was calculated. For each grey literature reference cited, the source of the reference was recorded. Additionally, each grey literature reference was classified by type using pre-determined categories. The total number of times a source was cited in the bibliographies of all the reports was computed. The most frequently cited sources in each category type will be used to recommend key websites for grey literature searching on new and emerging non-drug medical technologies. **Results:** On average, 48% (299/617) of the references listed in the bibliographies of the horizon

scanning reports reviewed were grey literature. The three most frequently cited types of grey literature were information from manufacturers (29% of all grey literature references, including manufacturers' press releases), regulatory agencies (9%), and clinical trial registries (9%). The U.S. Food and Drug Administration (FDA) and Clinicaltrials.gov were the most frequently cited specific sources, comprising 7% and 9% of grey literature references respectively. There was great diversity amongst all other sources cited in the horizon scanning reports, with each appearing with a frequency of 2% or less in the bibliographies of all reports. **Discussion:** Grey literature represents a large proportion of references cited in horizon scanning reports on non-drug medical technologies. Approximately a third of grey literature references originated from the manufacturers of these technologies. Almost half of the grey literature cited came from three sources: the manufacturers, Clinicaltrials.gov, and the FDA. Due to heterogeneity in the other grey literature sources cited, it would be difficult to create one standard checklist of key websites for identifying grey literature across all types of non-drug technologies. Further research is needed to examine the context in which grey literature is used within horizon scanning reports.

## Reflections on Turning Forty: The Ottawa Valley Health Libraries Association/Association des bibliothèques de la santé de la Vallée de l'Outaouais History Project

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**Introduction:** The Ottawa Valley Health Libraries Association (OVHLA)/L'Association des bibliothèques de la santé de la Vallée de l'Outaouais, originally the Ottawa Hull Health Libraries Group, dates back to 1974. The Association was one of the first chapters of the Canadian Health Libraries Association/Association des bibliothèques de la santé du Canada. In 2015, the bulk of its history was contained in boxed paper records and the memories of various members throughout the years. The objective of the project was to collect, organize, and share our historical documents, and to create a timeline of the Association's important moments. **Methods:** A working group of chapter members was formed to gather, organize, and archive information related to the development and activities of the Association. Past and present OVHLA members were solicited to contribute historical records. Historical documents and artifacts, including meeting minutes, chapter reports, membership lists, treasurer records, and photographs were reviewed and prepared for archiving. Issues of Journal of the Canadian Health Libraries Association

(JCHLA) and Bibliotheca Medica Canadiana were also scanned to identify relevant information. Additionally, questionnaire-based interviews were conducted via email with six Past-Presidents and one long-standing OVHLA member to gather their reflections. Both the historical records and the interview responses were analyzed to develop a narrative review and timeline of the Association's significant moments. **Results:** Outcomes from the OVHLA history project include: a narrative review of the association's history published in JCHLA, a timeline of OVHLA's key achievements, submission of OVHLA's records for deposit in the Archives and Special Collections of the University of Ottawa, and a new history section on the Association's website featuring important historical documents, a list of past executive members, and the timeline of achievements. **Discussion:** This project highlights OVHLA's rich history and has made the association's records accessible to members as well as anyone interested in the heritage of health librarianship in the Ottawa Valley region.

## Training a Diverse Team on Critical Appraisal Using the AGREE II Instrument

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**Introduction:** Centre for Effective Practice works to enable appropriate health care through the development and implementation of relevant, evidence-based programs

and tools. To support these efforts, our information team developed a comprehensive training program designed to educate staff on critical appraisal and to ensure consistency

in guideline evaluation. **Methods:** Training was developed by an information manager in order to support staff learning, current work in guideline evaluation and development, and projects that require critical appraisal of evidence. Participants receive in-depth education on the AGREE II Instrument and complete practice exercises that highlight areas that are commonly difficult to appraise. A qualified librarian reviews the exercises, and team members' scores are compared to generate discussion on differences in understanding and interpretation of the AGREE II Instrument's evaluation measures. AGREE II scores are aggregated through a concordance process that flags areas of inconsistencies. **Results:** To date, 7 team members successfully completed the training and moved forward to complete over 550 appraisals of guidelines to support a project with the Canadian Partnership Against Cancer. After completing training, 100% of the guideline

evaluations reviewed met the predetermined concordance criteria. The training improved the consistency of AGREE II scores and reduced the number of third, independent reviews required to assess the guidelines. **Discussion:** Appraising guideline quality through a validated process with the AGREE II Instrument is widely accepted. However, the consistency of AGREE scores between reviewers can vary due to differing interpretations and understanding of the criteria, leading to a lack of concordance when comparing scores from different reviewers. Comprehensive training by the information specialist team increased critical appraisal skills and led to a more consistent appraisal of clinical practice guidelines. This program has wider implications for health librarianship, highlighting opportunities to develop training programs that drive greater and more consistent adoption of evidence-based practice.

## “Is Anyone out There?": Connecting Health Researchers Across the Arctic

**Laura Bartlett, Kathleen Murray, Sigrid Brudie, and Blake Hawkins**

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**Introduction:** To highlight the breadth, depth, and diversity of research, researchers, and data in the Arctic we are collecting and narrating a directory that will be available through the Arctic Health portal. This directory will connect researchers using their interdisciplinary research areas. This is a step towards creating an open, sharing environment that will lead to data sharing among researchers. **Methods:** A mixed methods approach is being used which includes an environmental scan, development of a survey interview instrument, and development and assessment of a researcher profile template. An environmental scan was conducted to explore what researcher and data sets are currently available that can be incorporated in the directory. Using commonly asked questions by researchers to University of Alaska Anchorage staff, a researcher profile was developed. 30 researchers from multiple disciplines including medical, scientific and humanities, have been recruited and profiled. These researchers are from Alaska, Canada, and other Arctic

regions, including those working with indigenous populations. The researchers are testing the profile of others to determine if the profiles provide sufficient information to assess the relevance of research and data for the inquiring researcher. Refinement of the researcher profile template will be based on feedback. The Alaska Native Tribal Health Consortium has also lent their research directory to aid in development in the template. **Results:** Through environmental scans and working with partner agencies, we have developed a researcher profile template. Our next steps are to populate the database with records from the University of Alaska, U.S. National Institutes of Health, and the Alaska Native Tribal Health Consortium. The Arctic Health team will be reaching out to other U.S. funding agencies, and international research and government organizations to contribute their information. **Discussion:** As Arctic research adopts “One Health,” a research database is much needed to create the connections between research, researchers, and data.

# Isn't MeSH Enough? Medical Subject Headings for Systematic Review Searching: A Preliminary Look

**Melanie Anderson**

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**Introduction:** Librarians performing searches for systematic reviews rely on subject headings in major databases to differing degrees, and the extent to which keywords are used has a significant impact on the time required for searching. We will perform a preliminary test of the effectiveness and reliability of Medical Subject Headings for retrieving key papers indexed in OVID Medline for systematic reviews. **Methods:** We selected six systematic reviews published between 2012 and 2015 from those identified by DARE as having performed adequate or better searches. Three strategies were tested for each review: the original Medline strategy; a second composed of only the MeSH used in the original strategy; a third composed of the MeSH a current search for the topic would use. The results for each strategy were compared on the basis of which and how many Medline indexed key papers (as selected for inclusion by the reviewers) are not retrieved, the reasons the missing papers may not have

been retrieved, the quality of the missing papers as assessed by the reviewers, and the amount of data that would be missed using each strategy on its own. **Results:** The strategies using only MeSH terms frequently, though not always, miss key articles identified by the reviewers. The missed articles are sometimes "large," relative to the studies reviewed, and have frequently been rated by the reviewers as being of good quality. Keywords that could have retrieved the missed articles are identified in each case. **Discussion:** In this preliminary test, MeSH only strategies were not reliable in returning all of the key articles identified by the original reviewers. More intensive testing into reviews in different subjects, or involving different population groups, may provide more information about the extent to which keywords must be used when doing reviews in these areas.

# Bibliometric Analysis and Funding Success to Evaluate an Organization's Research Grant Decisions

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**Introduction:** The Manitoba Medical Services Foundation (MMSF), a non-profit medical foundation that has provided nearly \$20 million to support and fund research since 1974, sought to evaluate the subsequent output of both its successful and unsuccessful operating grant applicants. The foundation, which focuses on supporting new researchers, worked with the Library to determine whether its grant review process was successful in selecting the best candidates from 2008 to the 2012 competitions. **Methods:** Using information up to 2014 for the five years of grants, which totaled \$1,912,300 in funding, an analysis was first completed for all successful and unsuccessful grant applications. The analysis focused on two areas: publication history and funding history. Scopus – one of

the largest databases in the world and a resource committed to eliminating author identification issues – was employed to determine the number of published articles and the h-index for each researcher. The funding databases of the three largest federal granting agencies in the country were searched to determine whether a researcher had subsequently obtained other grants. The bibliometric and funding data were statistically analyzed to assess the impact of a researcher's initial grant result on their future publication output and funding success, as well as the local multiplier effect for the granting organization. **Results:** Statistical analyses clearly demonstrated that those researchers who received funding from the MMSF went on to have greater academic productivity than unsuccessful

candidates. Specifically, successful candidates had a greater number of publications, a higher h-index, larger amount of funding from the major Canadian research granting organizations, and greater odds of receiving funds as either co-investigators or lead principal investigators. Analyses also showed that successful applicants were ultimately very successful in bringing future external funding back to the province, with a local multiplier effect of 10:1 (i.e., for every \$1 spent on Manitoba-based researchers, \$10 returns to the community). **Discussion:** This research demonstrated

that the current process used by MMSF is successful at selecting individuals who subsequently go on to become high-performing researchers. These researchers are ultimately more productive and obtain more funding than those individuals that are not selected. Furthermore, this project demonstrates a new way for Libraries to use metrics to assist organizations or institutions as they are called upon to demonstrate their value and impact on the community.

## Snowed Under: Geospatial Data Literacy for Health Students

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**Introduction:** To integrate geospatial literacy into graduate level public health library instruction in order to develop data and information visualization skills. **Methods:** The ability to represent large and complex data as easily understandable "infographics" contributes to the rising popularity of information visualization technology and its increasing utilization in academic research. Geographic information systems (GIS) and geospatial data are being leveraged for research in health sciences including: disease prevention, healthcare delivery, social determinants of health, epidemiology, health promotion and for multivariate analysis of health outcomes. As part of their embedded information literacy curriculum, in the 2015 Fall Term,

35 Master of Public Health students were introduced to the use of geospatial data in public health. The session included examples of health-specific information visualizations, and how to discover, access, and use open and licensed data. Students were also introduced Library GIS software and training opportunities. **Results:** Although some struggled with the identification and description of tools, students demonstrated a clear understanding of how geospatial data can be leveraged to address public health issues. **Discussion:** Instruction on geospatial data, tools and data visualizations is a good fit in public health and has broad potential in health sciences education.

## A Journal Club Tech Tool for Clinicians

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**Introduction:** Participating in a journal club is valuable for engaging in spirited discussions, refining critical appraisal techniques and assessing the applicability of the article to clinical practice. No web-based tool exists to facilitate journal club documentation. Two clinical departments within Regina Qu'Appelle Health Region expressed a need for a tool to capture the rich discussions and relevance of the article in practice. **Methods:** An extensive literature search uncovered only one relevant article on developing a web-based tool to organize journal club

materials. Library staff identified the functionality and features needed for an ideal website and developed a checklist to evaluate potential platforms to test. A prototype was built using WordPress for a librarian journal club. Multiple tests and revisions were conducted. A test Pediatricians' journal club site was implemented and feedback was sought from the physicians. An online survey was conducted to gauge the number of journal clubs in the Regina Qu'Appelle Health Region. **Results:** The Pediatricians' journal club members were very responsive to the

website created. Their executive assistant was integral in maintaining and populating the site for the physicians. The Pediatricians agreed to use the site for one year, when a further evaluation of the effectiveness of the site and any maintenance issues will be reviewed. The results of the region-wide survey indicated that there are more journal clubs in existence than originally anticipated. The majority of the respondents felt their critical appraisal skills could be improved. **Discussion:** The feedback from the Pediatricians regarding their use of the journal club website will help to determine how extensively the

template can be shared with other journal clubs in the Health Region. The Pediatricians felt that having a site where the articles reviewed by the journal club with their assessments to practice in the Pediatrics and Neonatal Intensive Care Units will be useful for new staff, visiting physicians, interns and residents. The results of the survey indicate that regular critical appraisal instruction may be a valuable support for a variety of clinicians, including physicians, pharmacists, dietitians, and nurses.

## Quantifying the Systematic Search: An Analysis of Retrieval in Published Cochrane Systematic Reviews

**Tara Landry and Alex Amar-Zifkin**

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**Introduction:** Searches in support of systematic reviews aim to be as extensive as possible in order to minimize bias. As a result, database searches for systematic reviews generally retrieve a large number of results. The primary objective of this study was to extract relevant statistical data on the retrieval of searches in support of published Cochrane systematic reviews. **Methods:** The methods sections and PRISMA flowcharts (when available) of all Cochrane reviews published since 2011 were analyzed to extract the number of records identified through database searching. Data on the number of databases searched, reported use of grey literature sources and clinical trial

registries, and citation databases such as Web of Science and Scopus was also extracted. The Cochrane Review Group responsible for each included review was noted, based on the hypothesis that retrieval is influenced by the topic of the review. Extracted data was analyzed in Excel. **Results:** My results are not complete yet. Descriptive statistics on the retrieval for literature searches in support of systematic reviews, both in general and by review group, method of citation searching and use of core and specialized databases will be presented. **Discussion:** Results are not complete yet.



# What Are the Outcomes Associated with the Use of Online Consumer Health Information in Primary Health Care? A Systematic Review with Framework Synthesis of Quantitative and Qualitative Evidence

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**Introduction:** Systematic reviews in public health and oncology suggest the use of Online Consumer Health Information (OCHI) improves knowledge, participation in health care, and health outcomes. The Introduction of this systematic review are to revise a conceptual framework and list the types of patient health outcomes associated with the use of OCHI in primary health care. **Methods:** We followed the four stages typically used in systematic reviews: identification of potentially relevant studies using a comprehensive search strategy; selection of relevant studies; quality appraisal of selected studies; and synthesis of retained studies. Eligibility criteria included: qualitative, quantitative, or mixed methods study; English or French; 1990–2014; primary health care; online consumer health information use. Four health librarians developed and peer-reviewed the search strategy. Searches were conducted in Medline, Embase, PsycINFO, CINAHL, LISA, and the grey literature. Two independent researchers selected (DistillerSR) and critically appraised (Mixed Methods Appraisal Tool) all included studies. Data extraction and synthesis consisted of a deductive-inductive qualitative thematic analysis (NVivo), followed by a disambiguation/ harmonization of themes. A framework synthesis was used, which consisted of coding evidence against an a priori framework to produce a revised framework. **Results:** Out of 4322

unique records identified in our search, 66 studies fulfilled the eligibility criteria (48 quantitative studies, 11 qualitative, 3 mixed methods and 4 using diverse designs). Study participants were either OCHI consumers (patients, caregivers, general public) or clinicians (family physicians, dentists). Nine of the included studies examined a specific OCHI intervention (e.g. information prescriptions). The majority of the studies examined general online health information seeking behaviour and use. Included studies demonstrated that using OCHI is associated with both positive and negative outcomes. Main negative outcomes were: ‘deterioration of the patient-physician relationship’, ‘increased worrying’, and ‘overuse or misuse of health services’. We identified new system-related outcomes. For example, using OCHI may increase physician’s responsibilities or lead to excessive ER visits and longer wait times. Moreover, we established factors influencing OCHI acquisition and outcomes (e.g. health literacy). All identified themes underwent a harmonization process, resulting in a terminology of 45 key terms and concepts. **Conclusion:** Based on these results, we propose a revised conceptual framework of the outcomes associated with the use of OCHI in primary health care, as well as potential factors (facilitators and barriers) influencing the acquisition, cognition, and use of information.