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# Something old, someone new: a current awareness service for community-based health care professionals in Ireland

**Linda Halton**
HSE Library, Our Lady's Hospital, Navan, County Meath, Ireland

**Abstract**
*A pilot project for a new current awareness service (CAS) aimed at community-based health care professionals in Ireland was launched in 2023. The CAS took the form of quarterly research bulletins for staff across six specialities: Diabetes Care, Nursing in the Community, Occupational Therapy, Palliative Care, Physiotherapy, and Speech and Language Therapy. The CAS was formally evaluated after 12 months to determine its usefulness to recipients and to consider it as a solution to scale nationally across all geographical areas in the Health Service Executive (HSE). Results indicate that community-based healthcare professionals are appreciative of bespoke discipline-focused research bulletins to keep them up-to-date with research and developments. The inclusion of HSE Library news and updates was also well received.*

**Key words:** *library services; community health services; evidence-based practice; library surveys; pilot projects.*

## Background

In 2017, the HSE and the Department of Health in Ireland launched Sláintecare (1), a ten-year programme to transform Irish health and social care services. The programme focuses on the development and improvement of primary and community care services. HSE Library strives to ensure that our strategic developments support the continuing implementation of Sláintecare.

HSE Library comprises almost thirty physical libraries across the Republic of Ireland. Most of these libraries are located in acute hospitals. Historically, most library services were designed for hospital-based health and social care professionals.

In alignment with Sláintecare, a key objective of the HSE Library Strategy 2024-2029 (2) is the development of library outreach services in community and primary care settings. The library strategy highlights the importance of exploring and implementing new, creative community outreach pathways.

A HSE Library review of CAS (current awareness service) in 2023 (3) concluded there was inequitable access to CAS, along with duplication of this service across HSE geographical areas. The report explored whether services offered locally might be beneficial to health care professionals nationally. Another key finding was the lack of formal evaluation of CAS across HSE Library.

A new library opened in Our Lady's Hospital Navan (OLHN) in 2022. To promote the new library to both hospital-based and community-based staff, a new CAS was developed by the librarian, in the form of subject-specific research bulletins.

Six departments across acute and community care agreed to take part in a 12-month CAS pilot project which was launched in September 2023. The intended objective was that the research bulletins would save users time by providing them with a filtered and personalised view of the most important and relevant information in their field.

The research bulletins were distributed via email on a quarterly basis to approximately 200 staff members in OLHN and to the local Primary Community and Continuing Care in County Meath (Meath PCCC). The timeframe for the pilot project was 12 months, to conclude with formal evaluation in the form of user feedback. The feedback will be shared with colleagues in the HSE Library's Community Outreach Team as a proof of concept, to encourage the sharing of resources and reduce duplication of effort.

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## Method

A proposal email was submitted to several heads of department within OLHN and Meath PCCC to scope potential interest in the pilot project. The email explained that the quarterly bulletins would be in PDF format, and contain references, abstracts and links to journal articles, evidence-based practice, research and developments in their specialty. Based on feedback and interest, the following specialties were selected (*Table 1*). A total of about 200 staff members will be receiving the quarterly research bulletins.

The librarian selected subject-related journals and created alerts for same. The content of these alerts was scanned, with key evidence-based and research articles from each issue selected for inclusion in the research bulletins. Over the course of the 12 months, different software was used to create the bulletins. These included Microsoft Word, Publisher and Canva. Once complete, the bulletins were saved in PDF format for email distribution.

| Research bulletin | Service | Sector |
|---|---|---|
| Diabetes Care | Diabetes Day Centre, OLHN | Acute |
| Nursing in the Community | Community and Public Health Nursing, Meath PCCC | Community Care |
| Occupational Therapy | Occupational Therapy, OLHN & Meath PCCC | Acute and Community Care |
| Palliative Care | North East Regional Palliative Care Services | Acute and Community Care |
| Physiotherapy | Physiotherapy, OLHN & Meath PCCC | Acute and Community Care |
| Speech & Language Therapy | Speech and Language Therapy, OLHN & Meath PCCC | Acute and Community Care |

**Table 1.** *Research bulletins by service and sector.*

## Results

A user feedback (UX) evaluation survey was designed using the SpringShare software, LibWizard. This was distributed via email to all pilot project participants (~200) in September 2024. There was a total of 64 responses (32%), the majority of which came from health and social care professionals (56.3%) and nursing/midwifery (42.2). More than 75% of responses came from staff in community care (*Figure 1*).

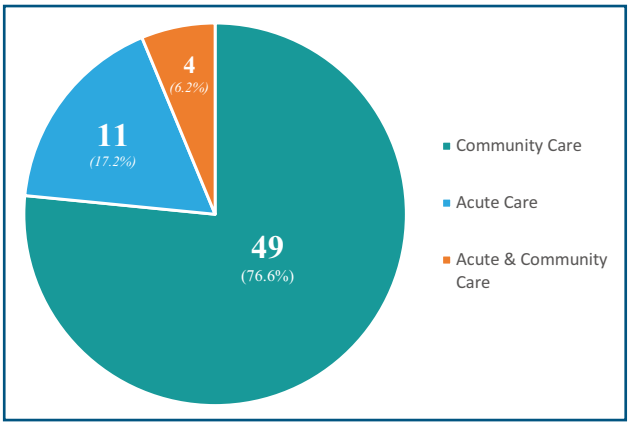


**Fig. 1.** *Responses by health sector.*

The number of responses by bulletin title were also captured (*Figure 2*). The response rate from staff in community care (Nursing in the Community, 31.3%) is significantly higher than nursing staff in an acute service (Diabetes Care, 4.7%). The other four bulletins were designed for health care professionals across both acute and community care sectors.

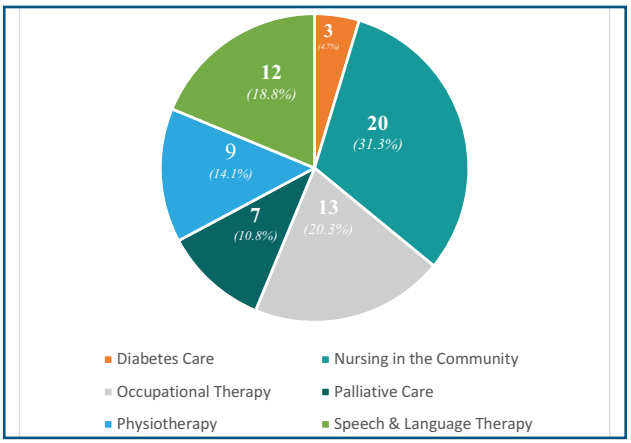


**Fig. 2.** *Responses by bulletin title.*

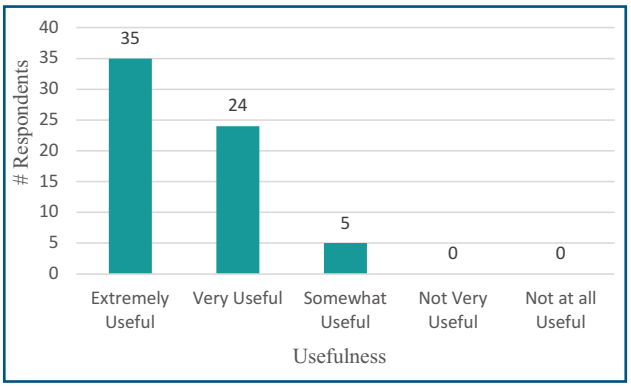


**Fig. 3.** *Usefulness of research bulletins.*

Respondents were asked to rate the usefulness of the research bulletins to them and their current practice (*Figure 3*). Feedback was very positive with over 90% rating the bulletins as either "extremely useful" or "very useful". All survey respondents would recommend the research bulletins to a colleague.

The survey provided an open-ended question for feedback, comments and suggestions. Some key feedback is highlighted in *Figure 4*.

## Discussion and conclusion

The aim of the CAS pilot project was to help health care professionals stay current with new evidence, research and guidelines, to promote evidence-informed healthcare decision-making and to save busy healthcare professionals time. Both the quantitative and qualitative open-ended feedback reflect the consensus that the research bulletins are excellent targeted publications for the busy health care professional.

The feedback from staff in Meath PCCC highlights genuine gratitude for this bespoke outreach service. This could be indicative of community care staff and services in other HSE areas. During this pilot phase, requests were received from healthcare professionals beyond Meath PCCC asking to subscribe to the research bulletins. Several of the bulletins are already being distributed beyond the original readership scope.

During the pilot phase, HSE Library colleagues also enquired about the research bulletins. Some libraries have subscribed to the research bulletins to distribute them to library patrons within their own HSE geographical areas.


**Fig. 4.** *Key feedback.*

There have also been requests from services not part of the pilot project, asking if they too can receive a subject-specific bulletin for their service.

Findings from this pilot project phase of this new CAS have been shared with the HSE Library Community Outreach Team Lead. A proposal that two of the community-based bulletins be made available to a wider geographical area for the next stage of the project has been agreed. From spring 2025, these bulletins will be shared with the HSE Library Community Outreach Team for national distribution:

1. nursing in the Community;
2. physiotherapy.

Going forward, ongoing formal evaluation of this project is critical, as is the standardisation of key performance indicators to capture the impact of this new CAS.

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*Accepted on 13 November 2024.*

## REFERENCES

1. Government of Ireland. Committee on the future of healthcare: Sláintecare report. Dublin: Houses of the Oireachtas; 2017. Available from: https://www.gov.ie/en/publication/0d2d60-slaintecare-publications/
2. Terrrés A, Lawton A, Rickard B, Leen B, Linnane T. HSE Library strategy 2024-2029. Available from: http://hdl.handle.net/10147/641320
3. HLI Knowledge Support Team. Keeping up to date: Review of current awareness services provided by Health Library Ireland: Review conducted by HLI Knowledge Support Team June 2023. Available from: http://hdl.handle.net/10147/637902

# Automation, what to do with it? Expedited Scientific Research and Reporting (ESRO) at the Belgian Health Care Knowledge Centre (KCE)

**Luc Hourlay, Elena Costa, Marie Dauvrin, Christophe de Meester, Nicolas Fairon, Muriel Levy and Patrice Chalon**
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**Abstract**
*The Belgian Health Care Knowledge Centre (KCE) has explored the options offered by automation within the framework of the Expedited Scientific Research and Reporting (ESRO) methodological report, (on automation, methods to provide practical advice on the the use of Generative AI, methods to identify tools and applications for specific research purposes, etc.) with the aim of speeding up research processes without compromising the quality of studies. This article summarises the content of chapter 7 of this report, and complements it with a brief overview of the latest developments since the report publication, and the actions put in place at the KCE to ensure follow-up.*

**Key words:** *methods; artificial intelligence; automation; storage and retrieval; operations research.*

## Introduction

The Belgian Health Care Knowledge Centre (KCE) is an independent public health research agency, established in 2003 and funded by the Belgian federal authorities. Its mission is to support evidence-based policymaking in healthcare through scientific research and analysis, without engaging in political decision-making. All KCE products are publicly accessible, catering to policymakers, professionals, researchers, and citizens (1). All KCE studies are performed according to strictly codified procedures that are fully written out in our regularly updated Process Book (2).
To carry out its missions, KCE benefits from a documentation center that offers to researchers quick and efficient access to necessary information helping to deliver high-quality studies. Researchers also receive support from the information manager (in charge of the daily management of the documentation center), the information specialist (performing information retrieval for the research projects), and the knowledge manager.
Like similar health agencies, KCE faces the challenge of delivering good quality reports in a timely manner. During the COVID-19 pandemic, the already well-established process had to be accelerated, due to the growing number of urgent requests from stakeholders (such as political decision-makers). This situation led to the development of new approaches (3), searching sustainable solutions for the future.
Therefore, a formal reflection on how to expedite research processes at KCE was required, resulting in the production of a methodological report on Expedited Scientific Research and Reporting (ESRO) (3). ESRO was defined (3) as the use of accelerated scientific methods, while ensuring validity and quality. The potential for accelerating the research process was explored in several areas, including expedited literature reviews, expedited international comparisons, rapid qualitative research, and the integration of some degree of automation, where appropriate, in the overall research process.
We report in the following sections the main messages that can be derived from the ESRO report experience at KCE (full details can be found in the KCE Reports 386C, chapter 7 on automation): we will provide an overview on how the issue has evolved since the publi-

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cation of the report in July and we will give an outline of the work currently carried out at KCE to identify, assess and implement automation in the research process.

## Exploring the potential for integration of automation in the research process

In October 2023, a dedicated working group was established, composed of three researchers with different backgrounds and specializing in different areas (health services research, health technology assessment or clinical guidelines), the information manager, the information specialist and the knowledge manager. The aim of the working group was to reflect and give practical advice on the potential for integration of automation in the research process.

The automation process as part of ESRO (*Table 1*) was explored by two approaches, identifying tools and applications that may accelerate the KCE project lifecycle (*Fig. 1*) and providing basic advice on how to use Generative AI (Gen AI).

| | |
|---|---|
| **Automation** | Use of technology to conduct a task or process with a minimum of human intervention. |
| **Artificial intelligence (AI)** | Technology that enables computers and machines to simulate human intelligence and problem-solving capabilities. |
| **Deep learning (DL)** | Subset of machine learning that uses multi-layered neural networks, called deep neural networks, to simulate the complex decision-making power of the human brain. |
| **Generative AI (Gen AI)** | Deep-learning models that can take raw data and "learn" to generate statistically probable outputs when prompted. |

**Table 1.** *Key concepts in the ESRO automation chapter.*

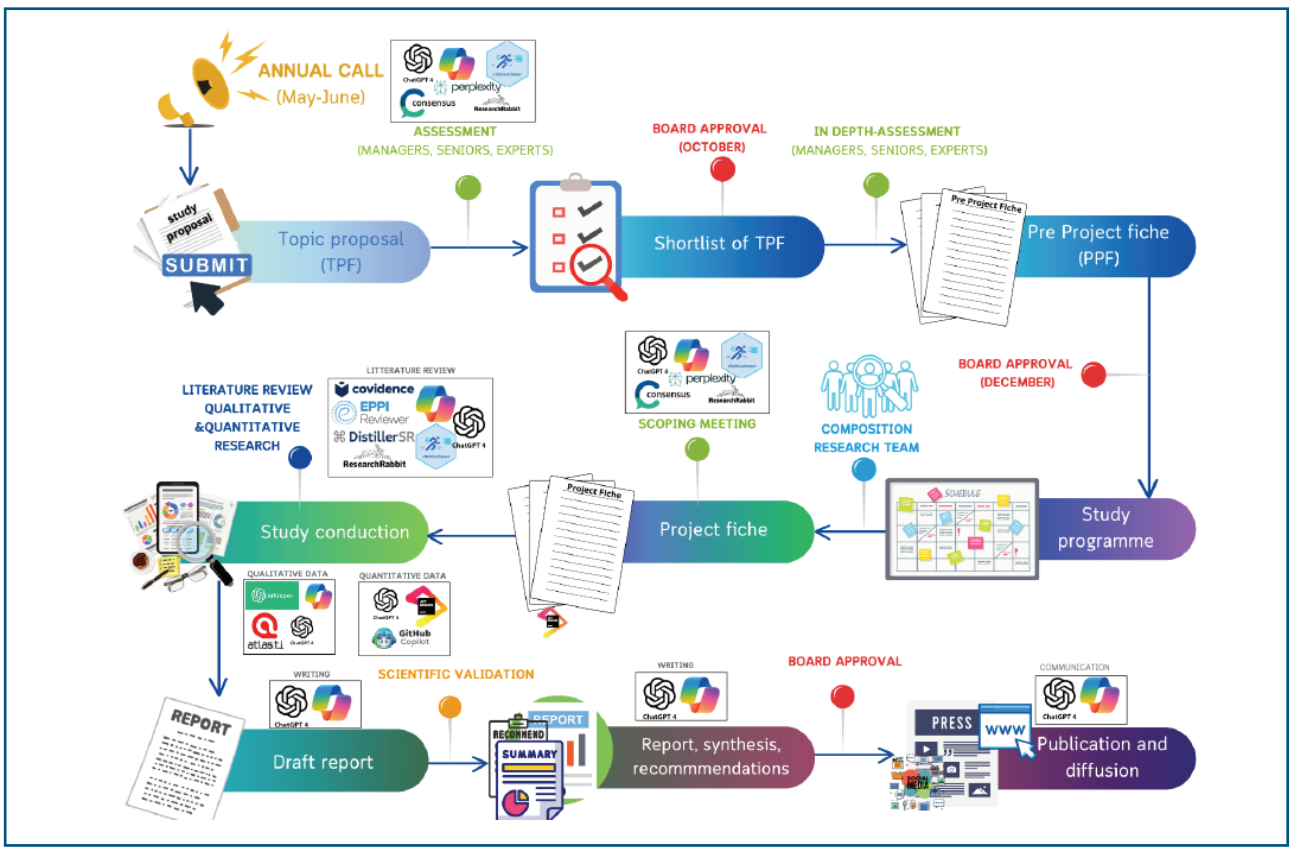


**Fig. 1.** *Automated tools of potential interest in the lifecycle of a KCE project.*

## Tools to accelerate the KCE research process

Thirty-one tools that had the potential for accelerating the research process were identified. The research group collected candidate tools by brainstorming within the working group itself, searching the scientific and grey literature, checking information delivered by networks (websites, mailing lists, etc.), surveying Belgian academics and research organizations, and attending seminars, conferences or online courses related to the use of AI in scientific research (Appendix 1).

Each identified tool was then evaluated based on a predefined evaluation grid (*Table 2*) by one of the authors using a 5-point Likert-scale, where one consistently represents the worst possible score and five represents the best possible score.

From the shortlisted tools for potential further testing, thirteen tools were related to the retrieval and analysis of pertinent literature and scientific writing and eight were related to qualitative data collection and analysis.

Tools related to the expedited retrieval and analysis of pertinent literature and scientific writing served several purposes:

- **Management and streamlining of literature review:** Covidence, DistillerSR, EPPI Reviewer, Nested Knowledge, Systematic Review Accelerator. Those tools aim at assisting researchers in efficiently organizing, conducting and analysing literature. They offer features like reference management, data extraction, annotation capabilities and collaboration functionalities. They can save time and facilitate real-time collaboration.

| Dimension | Definition | Points of attention |
|---|---|---|
| A. Resource saving | The tool/ application is likely to save (human) resources in the execution of the task compared with standard methods | |
| B. Reliability | The tool/application is likely to NOT introduce flaws in the results of the research process | |
| C. Liability | The tool/application is likely to NOT expose KCE to legal liability | Respect of GDPR<br>Server located within the EU<br>Secondary use of data<br>Data Owner(s) |
| D. Learning curve | The tool/application does not require extensive training in competencies that cannot be found in-house | |
| E. User friendliness | The tool/application is easy to use | |
| F. Cost | The cost of the tool/application is likely to be proportionate to its usefulness | Unique purchase<br>License type (annual fee/monthly fee/institutional fee/individual fee etc.)<br>Frequency of tool update (impact cost) |
| G. Frequency of use | The tool/ application is likely to be used regularly/frequently at the KCE | |

**Table. 2.** *Dimensions used to evaluate tools and applications for research automation. GDPR: General Data Protection Regulation.*

- **Automated quality appraisal:** RobotReviewer. These tools support the automation of a systematic evaluation of the quality and reliability of research study.
- **Forward and backward citation:** Citationschaser, ResearchRabbit. These tools complement article retrieval and reduce the risk of missing references using the classical key-word search. These tools can speed-up and diversify key literature retrieval during the scoping phase of a project. However an AI-assisted semantic search suffers from the lack of reproducibility.
- **Semantic search engine:** Consensus.app, Perplexity.ai. Those tools are designed to perform literature searches in a way that goes beyond keyword search, aiming to "understand" the context and intent behind a user's query.
- **PDF Data extraction:** ChatGPT4.Those tools allow to retrieve specific data from a PDF file. It can be tables, images, text or metadata.
- **Assistance in scientific writing:** Jenni.AI. Those tools provide style and content suggestions while redacting.

Tools related to the expedited data collection and analysis served two main purposes:

- **Audio transcription:** Amberscript, Happyscribe, Konch, SmartScribe, Trint, Whisper AI. Those tools convert audio or speech to text. They have the potential to reduce the time and resources required for the transcription of collected qualitative data (e.g., interviews, focus groups, meeting minutes).
- **Qualitative content analysis:** Atlas.ti, MAXQDA, Nvivo. Those tools support analysis of specific content like code generation for interview, summarizing selected passages, analysing coded segments.

## Guidance

The working group developed guidance on the responsible use of Gen AI, on the effective use of prompts and on the use of LLMs in code generation. The guidance is not intended as exhaustive and should not be viewed as a final policy as it should be updated regularly in reaction of the rapid evolution of the field.
The guidance on the responsible use of Gen AI currently touches the following points:

- **Content authenticity.** It should be kept in mind that Gen AI tools are often trained on large, unmoderated bodies of text, such as text posted on the internet. This can result in the production of biased and other unintended content. Information checking of LLM's output is therefore mandatory.
- **Copyright.** Re-using content created with AI tools exposes therefore copyright issues, so checking the latest version of the terms and conditions of the LLM of choice, both regarding the use and storage of the input data and on the rights of use of output data.
- **Cite LLM Chatbots.** The nature and limitations of LLM chatbots should be taken into account and that they should be used for exploratory purposes and text refinement rather than content creation. When submitting a manuscript to a scientific journal, we recommend checking the author guidelines of the selected journal.
- **How to cite LLM chatbots.** If you are allowed to use LLM chatbots to help you write a manuscript, then we recommend checking the style guides to obtain information on the latest recommended format to use to cite LLM chatbots in your work.
- **Data security.** Confidential or sensitive information should not be provided to AI tools until the location of storage and computation is clearly defined (within EU) (4).

University websites were consulted to create a guidance note on the responsible use of Gen AI. In addition, the opinion of an external expert was sought.
The guidance on the effective use of prompts in LLMs (prompt engineering) touched the following points:

- the necessity of designing prompts;
- essential elements of instructions (context, input data and output indicator).

We outlined the following prompting techniques: zero-shots prompting, few shots prompting, Chain of thought prompting and prompt chaining.
This guidance was developed based on the material covered during an online course on the subject, attended by one member of the working group, and a pragmatic review of the literature.
Guidance on how LLMs can help in code generation touched the following points:

- how LLMs can be used for code completion and suggestion, debugging and error correction, code documentation and explanation, and learning assistance;

- advice on how large language models (LLMs) can support code generation was derived from first-hand experience and a pragmatic literature review.

The interested reader can find the complete guidance in Appendix 4. Automation, page 114 in the KCE Report (3).

## ESRO Chapter 7: Discussion and conclusion

Within the lifecycle of a KCE research project, there are multiple opportunities for automation, which are not limited to literature reviews.

A wide range of software has been identified in the ESRO report. They all need a basic understanding of how they work to avoid part of the risks and biases, and to be sure that the response corresponds to the expectations of the researcher. Often, the key is the input that is given to the tool.

These news tools profoundly change the way KCE conduct projects and scientific researches. They require a great deal of attention to be used and integrated, to avoid losing the potential benefits they can offer.

## Recent evolutions since the publication of the report

Since the publication of the report (July 2024), KCE started two pilots: the use of Covidence app on three projects as "Tools for streamlining systematic literature reviews". An access to Microsoft copilot has also been provided to all KCE researchers. And a local implementation of Whisper AI as "Audio transcription tool"

The AI transcription experiment aims to integrate OpenAI's Whisper, a state-of-the-art automatic speech recognition (ASR) system, with PyAnnote, a toolkit specialized in speaker diarisation (i.e., speaker recognition and attribution to specific audio segments). The objective is to assess the accuracy and efficiency of these two tools for in-house transcription of sensitive audio data. By combining these software solutions, we aim to establish a streamlined workflow for rapid and reliable transcription with clear speaker attribution. This experiment will support the development of a process for managing sensitive medical recordings, such as patient interviews, as well as scientific meetings.

Outside of the KCE, in a more general way, several interesting developments have appeared as the *AI Risk Repository* (5) from the Massachusetts Institute of Technology who can serve as a common frame of reference to understand the potential risks posed by AI to academics, editors, policymakers, AI companies, and the public or some consensus on how to describe references from Gen AI tools (6).

On a technical side, products such as Google Notebook LM (7) (beta version) directly integrate the "Retrieval-Augmented Generation (RAG) (8). It is already possible to see a generalization of this approach in specialized software's (IBM Watson Assistant, Agiloft.com, kirasystems.com etc.). RAG, originally introduced around 2020, reduces a part of bias and risks from LMMs by using a specific corpus of text defined by the end user. It transforms the tool itself in a high-speed filter. It offers a similar solution to an older approach to fine-tuning which can be described as the process of taking a pre-trained model and training it on a specific set of data to improve its performance in a specific task or domain. With the RAG solution, we can directly identify impact in the limitation of the information obsolescence and in the increase of precision.

Other recent developments were identified as the integration of "Function Calling" which permits external action on dynamic database or "Oversight Evolutive" (9), an adaptive technique of supervision to guarantee the reliability of the system. Similarly, we can highlight the "Self-Taught Reasoner approach (STaR) (10)" approach actually developed by OpenAI with GPTT-o1 (previous project Strawberry). It will enable the AI model to improve progressively its "Intelligence" by autonomously generating its own training data and by opening new perspectives in tools, functionality and capability. It can resolve advanced reasoning and complex problem.

LMM based agents (11) have also emerged mid-2024. They are basically working as if the AI disposes of a toolbox (module) and can use specific tools to resolve complex task. LLM based agents can act on feedback (or loop model) to refine the plan of action until the obtention of an acceptable answer.

In 2024, development mostly focuses on improving model architectures, processing efficiency, reasoning and interaction. This also includes the multimodal approach and the improvement of long-term memory.

On a legal side, the EU AI Act: first regulation on artificial intelligence was published the 12 Jully 2024 in the *Official Journal of the European Union* with 24

months to be implemented by the Member States (12). This regulation will have a huge impact on this sort of project and can be a key milestone in the integration of specific system for public, universities and researchers' organizations. It already needs to be monitored, analyzed and explored by the institution's legal experts and librarians alike.

## Creation of the technological watch team

Given this rapid evolution, KCE decided to set up a technological watch team to identify, evaluate and integrate relevant tools in the lifecycle of its projects. This team will include researchers, information manager, information specialist and knowledge manager. It will work through multiple paths:

- organizing a monitoring system for specialized sources, blogs, and companies, complemented by a thorough web search using specialized software;
- continuous training on new tools, techniques or work approaches;
- creation of targeted documentation on the tools tested;
- creation of a shared online repository of efficient automated strategies that may be incorporated into our process such as data analysis code snippets or prompts of proven efficacy;
- working group and reflexion about responsible use of AI in research (development of guidelines for writing our report, disclosure in case of AI use etc.).

## Conclusion

LLM based models, Gen AI or just AI are not more than gigantic collections of data. Therefore, librarians and information specialists are suited people to participate in the evaluation of such tools, and deliver recommendations on them.

In this way, KCE elaborated a methodological report including the automation processes that could serve for expedited research but also for other organizations in order to benefit from our experience.

Considering the constant evolution of this domain, the plethora of tools and their unpredictable future, real situation testing is important, as well as monitoring the evolution of the field.

AI is a field that will continue to be developed with the creation of the technological watch team, and we expect to integrate the best practices exchange at a national and international level in the future. EAHIL Special interest groups, mailing list and journal will play an important role in this scenario.

## Acknowledgment

The authors acknowledge the contributions of the ESRO Chapter 7 working group, which includes several co-authors of this article: Luc Hourlay as Information Manager, Elena Costa as Researcher, Christophe de Meester as Data analyst, Nicolas Fairon as Information Specialist, Muriel Levy as researcher, and Patrice Chalon as Knowledge Manager.

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## REFERENCES

1. Health Care Knowledge Centre. About us. 2017 [cited 2024 23/07/2024]; Available from: https://kce.fgov.be/en/about-us
2. (Health Care Knowledge Centre) BHCKC. Process Book. 2012 [cited 2024 22/08/2024]; Available from: https://processbook.kce.be/
3. Roberfroid D, Castanares-Zapatero D, Chalon P, Costa E, Dauvrin M, de Meester C, et al. Expedited Scientific Research and Reporting (ESRO) at KCE. Method. Brussels: Belgian Health Care Knowledge Centre (KCE); 2024. Report No. 386C.
4. Nield D. How to use generative AI tools while still protecting your privacy. 2023 [cited 2024 23/07/2024]. Available from: https://www.wired.com/story/how-to-use-ai-tools-protect-privacy/
5. Slattery P, Saeri AK, Grundy EAC, Graham J, Noetel M, Uuk R, et al. The AI risk repository: A comprehensive meta-review, database, and taxonomy of risks from artificial intelligence. Preprint arXiv. 2024:79.
6. Waterloo Uo. ChatGPT and Generative Artificial Intelligence (AI): AI-generated content and citation. 2024 [cited 2024 23/07/2024]. Available from: https://subjectguides.uwaterloo.ca/chatgpt_generative_ai/aigeneratedcontentcitation

7. Google Notebook LM. 2024 [cited 2024 22/07/2024]; Available from: https://notebooklm.google.com/
8. Cloud G. Qu'est-ce que la génération augmentée de récupération (RAG)? 2024 [cited 2024 18/07/2024]. Available from: https://cloud.google.com/use-cases/retrieval-augmented-generation
9. McAleese N, Pokorny RM, Ceron Uribe JF, Nitishinskaya E, Trebacs M, Leike J. LLM critics help catch LLM bugs. Preprint arXiv. 2024 28/06/2024:23.
10. Zelikman E, Wu Y, Mu J, Goodman ND. STaR: Bootstrapping reasoning with reasoning. arXiv. 2022:13.
11. IBM. What are LLM AI agents? 2024 [cited 2024 23/07/2024]. Available from: https://research.ibm.com/blog/what-are-ai-agents-llm
12. European Parliament. EU AI Act: first regulation on artificial intelligence: The use of artificial intelligence in the EU will be regulated by the AI Act, the world's first comprehensive AI law. Find out how it will protect you. 2024 [cited 2024 10/01/2024]; Available from: https://www.europarl.europa.eu/topics/en/article/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence

## APPENDIX 1

*1) List of seminars, conferences and online courses attended*

- IA and machine learning avec Micropole in 2024 (seminar) (https://www.digitalwallonia.be/fr/cartographie/micropole/ )
- Strategizing AI in 2024: Copilot and what you need to know. SoftwareOne: 2024 Jan 30. (Webinar)
- Intelligence artificielle et KM. Share is in the air: 2024 Feb 02. (Seminar)
- AI en ChatGPT. EBPracticenet: 2024 Feb 15. (Seminar)
- Intelligence artificielle appliquée à la recherche documentaire. PMB Services: 2024 May 15. (Webinar)
- Intégration de l'IA dans les recherches. PMB-BUG: 2024 May 22. (Seminar)
- AI-assisted systematic literature reviews (SLRs) – Hope or hype? Perspectives from an end user on the future of AI-assisted SLRs. HTAi IRG: 2024 June 6. (Workshop)
- Automation and optimization of IR to support HTA. HTAi IRG: 2024 June 6. (Workshop)
- Revolutionizing systematic reviews? The role of ChatGPT in search strategy development. HTAi IRG: 2024 June 6. (Workshop)
- Prompt engineering, librarianship, and information literacy. Marydee Ojala. EAHIL2024 Conference. 2024 June 12 (Workshop)
- Benefits and limitation of automation and AI tools in research. Andrea Gasparini, Marydee Ojala, Simone Willis. EAHIL 2024 Conference: 2024 June 13 (Panel discussion)
- Exploring ChatGPT: Potential applications for designing systematic literature searches. Simone Willis, Mala Mann. EAHIL 2024 Conference: 2024 June 14 (Workshop)

*2) Example of how to describe references from Gen AI tools.* If the tool is used to support the redaction of text, it can be referenced as:

- A software: style: Author.(Year). Name of the software (month, day, version) [descriptor for the item]. URL
- A prompt result can be cited in two different ways:
  - when the prompt is placed in a document, we can refer to it as software name, prompt date, editor, URL;
  - if the prompt is not in the text of the document, we can refer to it as "full prompt". Name of software, version date, editor, URL.

Some recommendations include adding the full exchange with the Gen AI tool. However, Gen AI are not allowed as factual source of information due to the impossibility to reproduce the result.

# Development of a prototype tool to automatically translate literature search syntax

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**Abstract**
*This article describes the development of a prototype tool to automate the translation of bibliographic database search strategies from the Ovid platform to a range of other platforms. The development of this Bibliographic Syntax Converter (BSC) took place as a collaboration between an information specialist and a team of coders during a two-day Hackathon. This collaboration illustrates the potential benefits of this kind of cross-disciplinary working. A discussion of the difficulties inherent in automating the translation of literature search syntax is also provided, using specific examples to demonstrate these difficulties. The article concludes with a brief consideration of the limitations of the BSC tool, and plans for future development.*

**Key words:** *information storage and retrieval; library science; library automation; systematic reviews.*

## Background

The UK Health Security Agency (UKHSA) Knowledge and Library Services (KLS) provides evidence support services to UKHSA staff and Local Authority Public Health teams in England, including literature search services. Literature search requests require detailed systematic searching of bibliographic databases, usually across several different databases. UKHSA KLS receives a high volume of search requests, 400 in 2021-22. UKHSA's remit is to protect the health of the public against infectious diseases and other public health hazards. The evidence base for public health is widely distributed across different domains (1) and searching of databases covering a range of topics is necessary (2). Literature searching requires translation of search strategies to databases hosted on different platforms, which use different syntax. This variation across platforms means Information Specialists carrying out searches spend time manually re-entering search terms into each new database and platform to be searched, editing operators for each platform as they go.

Automation and machine learning tools are becoming increasingly popular for aiding the conduct of systematic reviews, as they offer time saving efficiencies. One estimate suggests that there are around 160 existing tools intended to help with one or more stages of the review process (3), and another lists 235 tools (4). Currently there are few existing tools which automate syntax translation such as replacing the proximity operator for the Ovid platform with the correct equivalent for other platforms such as Web of Science or EBSCO. Two tools that perform this function are PolyGlot Search, as part of the Systematic Review Accelerator tool (5) and Medline Transpose (6). Another method involves using macros in Word documents for translation (7). PolyGlot Search provides capability to translate searches between databases including Ovid MEDLINE, PubMed, Web of Science, Scopus and others. Medline Transpose translates strategies between Ovid MEDLINE and PubMed only. Whilst these tools can be used for automated translation of search syntax, there are limitations. PolyGlot Search is, at the time of writing, unable to carry out any translation of subject headings/thesaurus terms between databases. This is an undeniably challenging task given the differences in indexing terms available in different databases (especially where databases relate to different subject areas), the fact that thesaurus terms are regularly updated (annually for the MeSH thesaurus)

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and need for human judgment in determining the best subject heading to use in cases where an exact or very close equivalent index term is not available.

In November 2022, UKHSA held a two-day Hackathon across the organisation. This provided an opportunity for KLS staff to work with data scientists, exploring the possibility of developing a Bibliographic Syntax Converter (BSC) tool to automate conversion of search syntax. Participation in the Hackathon provided a learning opportunity for KLS staff to understand more about applications of data science to automate search tasks and to gain experience of working with coders to develop solutions. Whilst development of a tool capable of translating thesaurus terms between databases was beyond the scope of the two-day event, basic syntax translation was a necessary first step to enable thesaurus translation in the future.

The aim of this paper is to describe the development of a new tool to automate the translation of literature search syntax from the Ovid platform to other platforms, including EBSCO, Web of Science, ProQuest etc., and to illustrate the benefits of cross-disciplinary working between data scientists and information specialists.

## Methods

The BSC tool was designed and developed in November 2022 and was created to accept a search strategy written in Ovid syntax. The tool was developed through collaboration between UKHSA data scientists and an information specialist.

The tool was designed to convert syntax from the Ovid platform to EBSCO, ProQuest, Cochrane Library, Web of Science and Scopus. It is important to note that the tool translates syntax between platforms, not databases. Therefore, the tool translates a search from Ovid syntax to EBSCO syntax rather than from Medline syntax to CINAHL syntax. Syntax is determined by platform rather than database, i.e. Medline searched via EBSCO requires use of EBSCO syntax while Medline search via Ovid requires use of Ovid syntax. A platform uses the same syntax throughout for search operators, wildcards and truncation symbols, meaning that these elements of a search would be the same for any EBSCO search, whether the search was being conducted on CINAHL, Global Health or any other database via EBSCO platform. For this reason, the decision was taken to translate searches between platforms, focusing on translating elements of syntax that are common across platforms. Those platforms most frequently used by UKHSA KLS were chosen for inclusion in the tool. *Figure 1* provides an overview of the input and output of the tool.

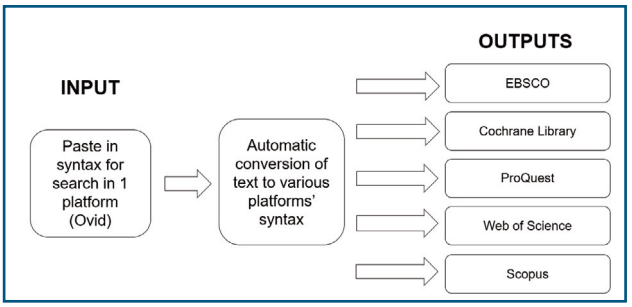


**Fig. 1.** *Overview of bibliography syntax converter.*

Elements of syntax which the prototype BSC tool could translate were:

- common two letter Ovid field codes e.g. .tw, ti, ab, kw, kf.
- proximity operators
- optional wildcards (wildcards that can stand for 1 or 0 characters in a word) and mandatory wildcards (wildcards that must replace 1 character in a word)
- truncation symbols
- Ovid command line syntax for combining multiple lines of search (i.e. or/1-5)
- AND and OR operators
- requirements for quotation marks in phrase searching for relevant database platforms.

## Technical aspects of development

Python was chosen due to experience across the organisation ensuring support for future development and deployment. To facilitate processing and human review of complex strategies it was important that the tool should accept an exported text copy of the search strategy and provide a line-by-line translation, with line-by-line warnings where the tool was unable to translate elements of the search strategy.

Specifics of mapping (e.g., which combinations of fields should be mapped) were held in text format so users could easily make improvements. The mapping process for each search strategy line broke it down as the writer might, with low level thinking for strings and wildcards in simple searchers and higher levels of interpretation for combinations with operators or com-

binations of fields. These aimed to take the search strategy into a form people could reason about and verify. This intermediate form could then be translated back into different syntax representations, made easier by separating concerns between the different levels.

## Collaboration between information specialist and data scientists

Having outlined the overall design, the information specialist was closely engaged throughout the development process to ensure that mapping details were clearly exposed and user-updatable and that functionality was prioritised to meet user needs. To provide a detailed description of the process of developing the BSC tool, examples of the factors that were considered during development are provided below. This illustrates the input provided by the information specialist and some of the decisions that had to be taken to allow data scientists to create a program that would work to the specifications of information specialists at UKHSA.

## Example 1: Correctly matching proximity operators

Most of the commonly used platforms such as Ovid, EBSCO, ProQuest and Web of Science allow the user to search several different databases. Some elements of search strategy syntax are consistent across the platform and can therefore be used in any database that is searchable through that platform. For example, the same proximity operator can be used to search any database via EBSCO platform. However, proximity operators between platforms differ. These differences affect not only the actual text used for proximity operators in each platform, they can also affect the rules by which operators are applied in a platform, and how unqualified proximity searches (searches where a number is not specified with the proximity operator) are handled.

To enable data scientists to write a program that would accurately translate proximity searches required the information specialist created a table detailing how operators should be mapped (*Table 1*).

| Ovid (Medline/Embase) | EBSCO | Cochrane | Web of Science | Scopus | Proquest |
|---|---|---|---|---|---|
| Risk adj3 assessment | Risk N2 assessment | Risk NEAR/2 assessment | Risk NEAR/2 assessment | Risk W/2 assessment | Risk NEAR/2 assessment |
| Risk adj assessment | Risk N1 assessment | Risk NEAR/1 assessment | Risk NEAR/1 assessment | Risk W/1 assessment | Risk NEAR/1 assessment |
| Risk adj16 assessment | Risk N15 assessment | Risk NEAR/15 assessment | Risk NEAR assessment | Risk W/15 assessment | Risk NEAR/15 assessment |
| Risk adj7 assessment | Risk N6 assessment | Risk NEAR/6 assessment | Risk NEAR/6 assessment | Risk W/6 assessment | Risk NEAR/6 assessment |
| Risk adj5 assessment | Risk N4 assessment | Risk NEAR/4 assessment | Risk NEAR/4 assessment | Risk N/4 assessment | Risk NEAR assessment |

**Table 1.** *Mapping of proximity operators between database platforms.*

## Example 2: Deciding the most efficient way in which to map fields from Ovid MEDLINE to other databases

Searchable fields can differ widely between the databases available through a platform, presenting a challenge in terms of coding the syntax converter. Due to time constraints of the Hackathon, the tool was developed to translate searches between platforms rather than specific databases. This meant that a full translation of all fields available in a specific database such as Ovid Medline was not attempted. Instead, the information specialist working on the project proposed focusing on translating fields that are common to all platforms required (title, abstract and keywords). These fields would be considered essential for advanced systematic searches suitable for systematic reviews (8). Preferred options for mapping these fields in Ovid were provided to data scientists, along with details of the differences in formatting of search fields across platforms (*Table 2*).

## Example 3: Truncation, wildcard and phrase searching

A third element to consider was the translation of truncation, wildcards and use of quotation marks (*Table 3*). One of the most commonly used syntax elements within this area is the right-hand truncation applied at the end of the root part of a word in order to search multiple variant endings. The asterisk symbol can be used for this purpose across all platforms which the BSC deals with.

Mapping is also relatively simple for mandatory and optional wildcards.

While symbols used differ in some platforms, the BSC tool only needs to swap the Ovid symbol for the appropriate symbol in each other platform.

| Fields searched | Ovid | EBSCO | Cochrane | Web of Science (Advanced search) | Scopus | Proquest |
|---|---|---|---|---|---|---|
| Unqualified/default field searches | No field code required | No field code required | No field code required | No direct equivalent – fields must be specified | No direct equivalent – fields must be specified | No direct equivalent – fields must be specified |
| Title and abstract | .tw<br>.ti,ab | No direct equivalent without repeating search terms – leave unqualified | No direct equivalent without repeating search terms - leave unqualified | TS=(risk assessment) | TITLE-ABS(risk assessment) | ABSTRACT,TITLE (risk assessment) |
| Title | .ti | TI xxxxx | :ti | TI=(risk assessment) | TITLE(risk assessment) | TITLE(risk assessment) |
| Title, abstract and keywords | .tw,kf | No direct equivalent without repeating search terms – leave unqualified | No direct equivalent without repeating search terms – leave unqualified | TS=(risk assessment) | TITLE-ABS-KEY(risk assessment) | ABSTRACT,TITLE ,IF(risk assessment) |

**Table 2.** *Mapping of search fields and formatting across platforms.*

| Symbol | Ovid | EBSCO | Cochrane | Web of Science | Scopus | Proquest |
|---|---|---|---|---|---|---|
| Optional wildcard – 0 or 1 characters within a word | Tumo?r | Tumo#r | Tumo?r | Tumo$r | Not available | Tumo*r |
| Mandatory wildcard – 1 character within a word | Organi#ation | Organi?ation | Not available | Organi?ation | Not available | Organi?ation |
| Right hand truncation, 0 or more characters | Risk assessment* | Risk assessment* | Risk assessment* | Risk assessment* | Risk assessment* | Risk assessment* |
| Left hand truncation, 0 or more characters | Not available | Not available | *flight | *flight | Not available | Not available |

**Table 3.** *Mapping of wildcard and truncation symbols.*

## Limitations of the BSC and future development

The syntax converter outlined in this article was created within a limited period as part of a two day Hackathon event in late 2022. The time constraints meant that the first iteration of the tool was limited to converting searches designed for Ovid MEDLINE to outputs suitable for use in a limited number of platforms. At the time of writing, the tool does not allow translation of syntax from any other platform apart from Ovid.

Another limitation is that the tool is not currently able to translate Ovid searches using multiple fields. For example, an Ovid search term such as "risk assessment".tw,kw would search title, abstract and keyword fields. However, the prototype version of the BSC tool will only read and translate the first two letter field code from this search term. The ',kw' portion of the search is not translated, and this failure is flagged in the outputted search strategies. For databases such as Web of Science and Scopus, a searcher may want to search the TS or Title-Abstract-Keyword fields. The .tw. from Ovid can be mapped directly to these more inclusive alternatives, however this would result in a loss of precision to the search due to the additional inclusion of keyword fields in TS. In addition, the tool is currently only able to translate searches between platforms rather than between databases. In order to introduce translation between specific databases such as from Ovid Medline to EBSCO CINAHL, further work would be needed to expand the number of search fields which can be translated.

The tool is currently also only able to translate text parts of search strategies by swapping field codes, truncation symbols and search operators to the closest equivalent in each platform. It would enhance the benefits of using a tool to automate translation if it could also be developed to convert subject heading terms, or at least to provide a searcher with a list of potentially relevant equivalent subject headings to choose from. This aspect of development is more complicated and may require use of database platform APIs. Plans are in place to explore whether this functionality could be added to the tool, but this will require further coding resource and support.

Minor developments planned include introduction of mapping for a greater range of fields beyond the title, abstract and keyword fields included initially. Given the range of fields available in some databases, it will be necessary to prioritise selection of fields to map first. This and other developments will be identified through testing and evaluation of the BSC tool. UKHSA KLS has set up a working group to take forward development of the tool, and one of the first tasks will be for group members to begin using the tool in daily workflows in order to identify problems with existing functions and additional functions that would be helpful to add.

## Conclusions

The development of the UKHSA's prototype BSC converter tool within a limited two day time-frame shows how much can be achieved relatively quickly in terms of automating library and information science workflows. Given the volume of literature searches which KLS carries out each year the opportunity for time-saving benefit is clear. These benefits can be further enhanced through developments to the tool, along the lines suggested above. As a first next step, an internal working group has been set up in order to carry out thorough testing of the tool. The intention is that this testing will highlight additional, as yet unidentified areas for development and may also pave the way for a more formal evaluation of the benefits of using the tool to automate this aspect of information retrieval.

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## REFERENCES

1. Heath A, Levay P, Tuvey D. Literature searching methods or guidance and their application to public health topics: A narrative review. Health Information & Libraries Journal. 2022;39(1):6-21.
2. Hanneke R, Young SK. Information sources for obesity prevention policy research: a review of systematic reviews. Systematic Reviews. 2017;6(1):156.

3. Cierco Jimenez R, Lee T, Rosillo N, Cordova R, Cree IA, Gonzalez A, Indave Ruiz BI. Machine learning computational tools to assist the performance of systematic reviews: A mapping review. BMC Medical Research Methodology. 2022;22(1):322.
4. Johnson EE, O'Keefe H, Sutton A, Marshall C. The Systematic Review Toolbox: keeping up to date with tools to support evidence synthesis. Systematic Reviews. 2022;11(1):258. doi: 10.1186/s13643-022-02122-z.
5. Clark JM, Sanders S, Carter M, Honeyman D, Cleo G, Auld Y, et al. Improving the translation of search strategies using the Polyglot Search Translator: a randomized controlled trial. J Med Libr Assoc. 2020;108(2):195-207.
6. Wanner A, Baumann N. Design and implementation of a tool for conversion of search strategies between PubMed and Ovid MEDLINE. Research Synthesis Methods. 2019;10(2):154-60.
7. Bramer WM, de Jonge GB, Rethlefsen ML, Mast F, Kleijnen J. A systematic approach to searching: an efficient and complete method to develop literature searches. J Med Libr Assoc. 2018;106(4):531-41. doi: 10.5195/jmla.2018.283.
8. Cochrane. Cochrane Handbook for Systematic Reviews of Interventions version 6.3 (updated February 2022)2022.

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# Letter from the President

**Lotta Haglund**

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Dear EAHIL member,

As I approach the end of my term as President, I find myself reflecting on an incredibly active and fulfilling year for EAHIL. This year, we held two major elections: in the spring, EAHIL members voted for both the President and Executive Board members, and more recently, Council members from 15 countries were elected to serve from 2025 to 2028. Many of us also had the pleasure of gathering in June in the beautiful city of Riga, where we enjoyed a highly successful event.

The second half of 2024 has brought new challenges for me personally. In September, my responsibilities at work changed, leading to a substantial increase in my workload. After careful consideration, I've had to make the difficult decision to step down from the EAHIL Board. Regrettably, this means I won't be able to serve as Past President during Francesca Gualtieri's presidency.

I want to express my sincere regret for not being able to fulfil the responsibilities that our members entrusted to me. However, sometimes we must make hard choices to balance our commitments.

Looking ahead, I hope to continue participating in EAHIL events and reconnect with all of you – our wonderful community of EAHIL members – somewhere in Europe.

Wishing you all a happy and fruitful 2025!

# Evidence-Based Information Special Interest Group: year report 2024

**Jane Falconer (a), Thomas Vandendriessche (b), Shona Kirtley (c), Krizia Tuand (d), Maria Björklund (e), Marshal Dozier (f), Andra Fry (g), Mark Mueller (h) and Nele S. Pauwels (i)**

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## Introduction

2024 has been another busy year for the Evidence-Based Information Special Interest Group (EBI-SIG). We had our annual meeting at the 2024 EAHIL Conference in Riga where we presented results from many of our projects. Since our last update in *JEAHIL*, we also ran two journal club meetings and two webinars. This report provides details of these activities.

## EBI-SIG meeting, 30 May 2024 at the 2024 EAHIL Conference, Riga (held online via Zoom)

Approximately 25 EBI-SIG members attended our annual meeting. After an update from the committee, each project team provided an update on their project, inviting questions from attendees. Meeting minutes and copies of the project presentations are available in the EBI-SIG Google Drive folder (1).

## Updates from EBI-SIG projects

*Project 1: Mapping journal requirements for systematic reviews*

The initial project was successfully concluded and published in the Cochrane Evidence Synthesis and Methods journal (2). The evidence and insights collected during this project will be used in a subsequent implementation project (project 8, below).

*Project 2: Reference database on articles about systematic search methods*

The Zotero reference library is regularly updated with papers related to systematic review methodology and the role of information specialists in systematic reviews. The journal club (focused on relevant papers from the Zotero library) is ongoing. Journal clubs were held in May 2024 and October 2024. Reports from each journal club are in the EBI-SIG Google Docs folder (1).

Additional suggestions for the Zotero reference library or journal club can be sent to Maria Björklund (maria.bjorklund@med.lu.se).

*Project 4: Library of search-strategy resources*

The team has made a number of changes to the Library of Search Strategy Resources (LSSR) website over the past year (3). These include reorganisation and added descriptions to the resources on the Tools and Guides pages, glossary pages of terms and definitions for Searching and Study/Review Types, and embedded instructional videos on how to use the LSSR.

Analysis of Google Analytics data show that the site has been used across the world by thousands of users within the past year (*Table 1*). The top three countries were the USA with 641 active users, Canada with 300 active users and the United Kingdom with 174 active users. The most popular pages were the LSSR Collections, LSSR Tools and the LSSR Study Types Glossary.

To continue to promote the site and increase usage the LSSR website was presented at the 2024 Creating Knowledge Conference in Helsinki, Finland and to the NHS Literature Searching Group in Wales.

| | |
|---|---|
| Total number of active users | 1732 |
| Total number of countries users come from | 66 |
| Total number of new users | 1570 |
| Total number of engaged users | 1931 |
| Total number of users visiting from a direct link | 1993 |

**Table 1.** *Usage of the LSSR website for the 12 months prior to 21 October 2024. Data from Google Analytics.*

*Project 7: Tools in R for health libraries*

Project 7 is now completed. In the last year, the bibliographic search for R-tools was extended to more multi-disciplinary databases, to see if these articles are more likely to be published in non-medical journal titles. We still found that grey literature sources were best for finding R-tools. Only 42% of relevant R-tools have an associated journal article and of these, only 56% were indexed in Medline. Therefore, a multi-database, multi-disciplinary search is required if searching the academic literature for R-tools.

As of our last update search in June 2024, 69 R-tools were found which were relevant to steps in the evidence synthesis process which information professionals commonly contribute to. There are many tools which offer direct connections to databases such as PubMed, Google Scholar or Scopus and for study registries and preprint servers. There are also a range of tools for particular search techniques such as forward and backward citation, or for constructing search strategies using textual analysis.

*Project 8: Improving journal requirements for systematic reviews*

This project is a follow-up to Project 1 where we evaluated the author guidelines of biomedical and health journals related to the conducting and reporting of systematic reviews, and we provided recommendations for improvements of author guidelines based on the findings.

In this current project, we aim to build on those findings by actively disseminating our research and implementing the recommendations from Project 1. Our ultimate goal is to help enhance the quality of systematic reviews being published. An author instruction template for systematic reviews was developed, incorporating feedback from information specialists in Spring 2024. From this template, a concise and comprehensive section was created to facilitate implementation. Over the summer, all material was distributed to the journals and publishers included in our original analysis, and the preliminary results were presented at the Global Evidence Summit in September. A final reminder email was sent in October, and the next phase will focus on monitoring journal compliance and reporting the outcomes. All documentation and results are publicly available (4).

## Journal clubs

Two journal clubs have been held in 2024, one in May and one in October. Reports of each journal club are available as soon as possible after each meeting and published on the EBI-SIG Google drive (1).

## Webinars

*PRESS: Overview and update. Webinar, 4 December 2023*

We were happy to welcome Danielle Rabb, Caitlyn Ford and Robin Featherstone from Research Information Services, CADTH, to lead a webinar on PRESS Guideline. Over 50 people joined our webinar which started with a review of PRESS and the future plans for PRESS. This was followed by a Q&A. Thank you to Danielle, Caitlyn and Robin for leading the session and sharing their knowledge, and to those who attended for their questions and comments. The slides from this webinar are available on the EBI-SIG Google Drive (1).

*AI tools and their use for systematic searching/systematic reviews. Workshop, 23 September 2024*

We were delighted to have Julie Glanville join us to facilitate a webinar on the use of AI tools in systematic searching and systematic reviews. During this webinar, Julie demonstrated a selection of AI tools such as Genspark, Consensus, SciSpace, Elicit, and others that can be used to assist with systematic searching/systematic reviews. This was followed by a discussion where participants shared tools that they also found useful. In addition, the values and changes of the use of AI for systematic searching were discussed. Julie kindly produced a webpage with links to the different tools as well as literature recommended during the workshop (5). She also raised awareness for the newly developed Responsible AI in Evidence SynthEsis (RAISE) guidelines, plus a survey to collect feedback (6). The webinar was extremely interesting and highly popular. At its peak, 253 colleagues joined from around the world. We would like to thank Julie for sharing her knowledge on this fascinating topic and to attendees for contributing to the discussion.

## Conclusion

2024 has been another fruitful year for the EBI-SIG. As well as our usual meetings, our projects are producing tangible and popular outputs. We would like to extend a large thank you to all of our project volunteers who have contributed their time and expertise to our projects. The EBI-SIG organisers are currently assessing potential new projects, to be started as existing projects are completed. We encourage EBI-SIG members to also keep a look out for updates on journal clubs and webinars taking place in 2025.

## Acknowledgements

We would like to acknowledge the EBI-SIG project volunteers for their work on the projects this year. A list of all project teams is available on the EBI-SIG website (1).

## References

1. EAHIL SIG for evidence-based information [Internet]. Shared Google Drive. [cited 2024 Nov 4]. Available from https://drive.google.com/drive/folders/1uxWrkLU0fqDkYPpIRReeFUaJ8luzGBzL.
2. Pauwels NS, Koobasi M, Fry A, Vandendriessche T, Wittevrongel A, Ødegaard, M. Guidance for systematic reviews in journal author instructions: Findings and recommendations for editorial teams. Cochrane Evid Synth Methods. 2024;2(4):e12050. doi: 10.1002/cesm.12050.
3. Fry A, Mueller M, Gulhane L, Koobasi M, Kubker R, Pauwels N, Stojanovic V. Library of search strategy resources. 2024 [cited 2024 Nov 4]. Available from https://sites.google.com/view/searchresourceslib/home.
4. Ødegaard, M, Pauwels NS, Koobasi M, Fry A, Vandendriessche T, Wittevrongel A. Mapping journals' requirements for systematic review searches. [cited 2024 Nov 4]. Available from https://osf.io/6ax4p/.
5. Glanville, J. EAHIL Workshop. [cited 2024 Nov 4]. Available from https://start.me/p/l6v6zK/eahil-workshop.
6. Work with Cochrane to help ensure that AI is monitored and used effectively. 2024 September 11 [cited 2024 November 4]. In: FutureCochrane [Internet]. Available from: https://futurecochrane.org/newnews/cochrane-and-ai-recent-developments-and-join-us-at-the-global-evidence-summit.

# Updates from The Taiwan Medical Library Association (TMLA)

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## TMLA participated in the 2023 Annual conference of the Medical Library Association

The Taiwan Medical Library Association (TMLA) holds a poster competition at its annual conference each year. The association offers a subsidy for the first author of the winning poster. If the poster is selected for the annual conference of the Medical Library Association (MLA), TMLA will reimburse the round-trip economy airfare and the conference registration fee. 2023 marks the 125th anniversary of the MLA, and TMLA organized a group to attend the annual conference from May 16 to May 19 in Detroit, United States, The Taipei Medical University Library successfully submitted a poster for the 2023 annual conference of the MLA. where they presented their poster.

## TMLA became a sister organization with the Malaysian Medical Librarian Group

TMLA has expanded its international exchanges in 2023 by establishing partnerships with esteemed organizations, including the Malaysian Medical Librarian Group (MLG).

By chance, the TMLA and the MLG engaged in discussions through multiple online meetings over nearly a year. TMLA and MLG signed a Letter of Intent for collaboration on June 27, 2023, marking the first step toward establishing a sister organization relationship between the two associations. TMLA invited MLG to participate in their annual conference at the Office of Library and Information Services at Kaohsiung Medical University. Unfortunately, due to a typhoon, the schedule had to be changed. On August 30, 2023, TMLA officially became a sister organization of the MLG.

Due to the typhoon, the TMLA annual conference was postponed, and members of the MLG were unable to attend. As a result, TMLA arranged for a delegation of 6 members, including the MLG president and various committee members, to visit several libraries in northern Taiwan. They toured the MacKay Medical College Library, Taipei Medical University Library, National Yang Ming Chiao Tung University Library, Taipei Veterans General Hospital Library, National Taiwan University Medical Library, and the National Central Library, providing MLG members with a wonderful opportunity to explore various types of libraries in northern Taiwan.

To ensure that TMLA members could connect with new international library colleagues, TMLA organized a simple online seminar on September 1, 2023, for an international exchange with the MLG. Although this was a last-minute decision, 77 TMLA members participated in the event. Mr. Mohd Shah Abu Kassim (Assistant Director of the National Library of Malaysia/ Chairman of MLG, PPM) personally introduced the development and mission of their association. In a joyful and relaxed atmosphere, both sides got to know each other better and agreed to attend each other's annual conference in 2024.

## Taiwan Medical Library Association 2023 Annual conference and the 45th Medical Library Staff Seminar

The TMLA aims to promote the development and exchange of medical libraries, as well as to advance certification and continuing education for medical library staff. Each year, TMLA holds an annual conference. In 2023, due to a typhoon, the TMLA annual conference and the 45th Medical Library Staff Seminar were rescheduled to October 12 to 13, 2023 at the Office of Library and Information Services at Kaohsiung Medical University (OLIS). After the COVID-19 pandemic, this annual conference in southern Taiwan's OLIS saw enthusiastic participation from TMLA members, creating a joyful atmosphere as colleagues reunited. Over the two days, the event featured beautiful piano and cello performances, with opening remarks from Jee-Fu Huang, Vice President for Library and Information Services, Hui-Chu Lee, Associate Vice President for Library and Information Services, and Liu Li-Chuan, President of TMLA. The 2-day agenda included four sessions on library marketing, health care topics for library professionals, seven practical shares on library management and space transformation, and 6 sessions on new information dissemination. The conference concluded with a special presentation by Dr. Tzu-Heng Chiu, Director of TMUL, who shared insights from TMLA's participation in the 2023 Annual conference of the MLA. This included experiences presenting posters and visits to various institutions, such as the Galter Health Sciences Library & Learning Center, Taubman Health Sciences Library, Shiffman Medical Library, and the School of Medicine at Wayne State University. The event wrapped up with comprehensive discussions, poster awards, and a joyful lottery draw.

## Organizing a Rotating Medical Library Symposium

To celebrate its 45th anniversary and to enhance the professional competencies in management and operations among medical librarians, the Medical Library Committee, Library Association of the Republic of China (Taiwan) (LARMLC) has partnered with the TMLA, the National Taiwan University Medical Library, and the Library Association of the Republic of China (Taiwan) (LAROC) to organize the Rotating Medical Library Symposium.

The conference began with remarks from Kuang-Hua Chen, President of LAROC, and Li-Chuan Liu, President of TMLA. The conference invited four speakers to deliver keynote presentations. Hsin-Liang Chen, Chief Library Services Officer at the Philadelphia College of Osteopathic Medicine (PCOM), spoke on "Libraries, Citizen Science, Community Engagement, and Scholarly Communication." Ming-Hsin Chiu, Associate Professor at the Graduate Institute of Library and Information Studies at National Taiwan Normal University (NTNU), presented "You are what you post! How Health and Medical Information Professionals Should View Community Health Data." Chien-Wen Yuan, Associate Professor at NTU D-School, discussed "Human-AI Interaction and Innovations in Future Library Services." Shey-Ying Chen, Director of the Center of Quality Management at National Taiwan University Hospital (NTUH), shared insights on "Turning Corners: Encountering Love/The Transformation of Medical Quality Management and Library Spaces". The medical librarians concluded the day feeling enriched by these four engaging presentations. Additionally, the TMLA launched a website titled "The Gilded Years: A Look Back, Inheritance, Outlook" for the 45th Anniversary Exhibition of the Medical Library Committee, Library Association of the Republic of China (Taiwan) (LARMLC) and the Taiwan Medical Library Association (TMLA).

## TMLA President and Board Elections

The term of office for the Board of Directors at TMLA is two years, and thus the 4th Board of Directors has concluded its term. On November 17, 2023, at the National Taiwan University Medical Library meeting room, the 5th Board of Directors, consisting of 15 directors and 5 supervisors, was elected, followed by the election of the president and executive directors. Li-Chuan Liu was re-elected the 5th President. In the future, these 20 elected directors and supervisors will continue to strive for their best in Taiwan medical libraries.

# Publications and new products

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*Dear all,*

*for this issue's "Publications and new products" column I've searched the web and selected news and articles regarding several current topics which I hope would be of your interest.*

*I would also like to take this occasion to wish you and your family all the best for the New Year.*

## JOURNAL ISSUES

*Health Information and Libraries Journal contents of December 2024 (41:4)*

### Editorial

- **Policy work as a health librarianship role.**
  Ruth Carlisle

### Review

- **Use and application of geographical restrictions in systematic reviews with the aim of including studies about Germany: An update of a methodological review.**
  Catharina Münte, Alexander Pachanov, Julian Hirt, Falk Hoffmann, Rebecca Palm, Silvan Munschek and Dawid Pieper

### Original Articles

- **Facilitating knowledge transfer to policy makers and front-line workers during a pandemic: implementation, impact and lessons learned.**
  Nicola Pearce-Smith, Emma Farrow, James Robinson, Blathnaid Mahon, Cat McGillycuddy and Kester Savage
- **Medical students and residents appreciate ebooks' convenience but prefer the print book reading experience.**
  Erin Watson
- **Perceived and performed electronic health literacy of medical sciences students.**
  Maryam Shekofteh, Rezvan Ghaedi, Saeideh Valizadeh-Haghi and Ahmadreza Baghestan
- **Medical librarians and little free libraries: Connecting rural communities to health information.**
  Kelsey Leonard Grabeel and Alexandria Quesenberry Wilson
- **Information needs and sources of health professionals in Malawi.**
  Limbani Chrispin Gama, Winner Dominic Chawinga and George Theodore Chipeta
- **Information-seeking behaviour of primary care clinicians in Singapore at the point-of-care: a qualitative study.**
  Mauricette Lee Moling, Wern Ee Tang, Helen Elizabeth Smith and Lorainne Tudor Car

## Regular Features

***International Perspectives and Initiatives***

- **End of an era.**
  Maria J Grant

***Practice Based Studies***

- **Introducing a new regular feature: Practice Based Studies.**
  Tracey Pratchett and Katy Greenfield

***Teaching and Learning in Action***

- **Developing a foundation information and academic skills programme for potential Student Nursing Associates.**
  Catherine Trinca and Chloe George

## FROM THE WEB

- **A self-assessment tool for Diamond OA**
  The DIAMAS project has designed a self-assessment tool to help Diamond OA publishers and Diamond OA service providers analyze their level of compliance with the DOAS (Diamond OA Standard) or to gain insights into their financial sustainability parameters. The tool consists of two parallel instances that can be completed sequentially, if desired.

- **Pulse of the library 2024 report**
  Clarivate has recently published a report, Pulse of the library 2024, which combines feedback from a survey and qualitative interviews with more than 1,500 respondents from across the world, covering academic, national and public libraries. This report aims to provide a pulse on the current trends, concerns and opportunities within the library community, with a particular focus on technological change, including Artificial Intelligence (AI).

- **The State of Open Data 2024: special report**
  Now in its ninth year, the survey and report series State of Open Data is the longest running longitudinal analysis of researchers' attitudes towards and experiences of open data. The 2024 special report, titled 'Bridging policy and practice in data sharing', takes an in depth look into what is driving good data sharing practices globally. The analysis of the data sharing landscape was conducted through an investigation and comparison of three different data sources (Dimensions, Springer Nature Data Availability Statements and the Chan Zuckerberg Initiative Data Citation Corpus). The Report can be downloaded here.

- **Altmetric adds Clinical Guidelines as an attention source for publications**
  Altmetric, the provider of alternative research metrics which measures and gives a visual display of the online attention of research, has added a new source "Clinical Guidelines" to track the impact of research in clinical practice. Clinical Guidelines will be reflected in the Altmetric badges as an aqua green color. According to their intentions, this new source will be useful to discover how a piece of research has gone from conception to practical application with clinical guidelines data and assess its long-term impact on the field; to see where funding has made a tangible real-world impact with clinical guidelines data; and to identify which journals contribute most to clinical guidelines.

## READING SUGGESTIONS

- Rothfritz L, Schmal WB, Herb U. Trapped in Transformative Agreements? A Multifaceted Analysis of >1,000 Contracts. arXiv:2409.20224
- Chow E, Kao T, Li X. An Experiment with the Use of ChatGPT for LCSH Subject Assignment on Electronic Theses and Dissertations. Cataloging & Classification Quarterly 2024, 62(5): 574–588
- Tóth, B., Berek, L., Gulácsi, L. et al. Automation of systematic reviews of biomedical literature: a scoping review of studies indexed in PubMed. Systematic Reviews 2024; 13, 174
- Pearson H. Can AI review the scientific literature — and figure out what it all means? Nature 2024 Nov;635(8038):276-278
- Leonard C. Is AI the Answer to Peer Review Problems, or the Problem Itself? The Scholarly Kitchen Blog, September 24, 2024
- Elliott K. Google Scholar is not broken (yet), but there are alternatives. LSE Blog, October 22, 2024
- Chtena N, Alperin JP, Fleerackers A. Preprints at a crossroads – Are we compromising openness for credibility? LSE Blog, November 13, 2024

## SOME FORTHCOMING EVENTS

**Metadata Standards Matter: Building a Sustainable Future for Information**
**March 19, National Library of Greece, Athens, Greece**
This event, organised by the IFLA Advisory Committee on Standards Symposium, is a significant opportunity for professionals, practitioners, researchers, scholars, etc. to contribute to the discourse on metadata standards and their impact on sustainability in the future of the world of information. More info here

**48th UKSG (United Kingdom Serials Group) Annual Conference 2025**
**March 31 – April 2, Brighton, UK**
More info here

**Association of College & Research Libraries (ACRL) 2025 Conference**
**April 2 – 5, Minneapolis, MN, USA and online**
The theme of the ACRL conference is "Democratizing + Knowledge + Access + Opportunities" focusing on how academic libraries can serve their communities and democratize information access in a complex, ever-changing world. More info here

**Wikidata and Research**
**June 5-6, Florence, Italy**
The conference aims to explore and promote synergies between the research community and Wikimedia projects, with a specific focus on open data and methodologies and infrastructures for open and collaborative research. More info here.

**International Clinical Librarian**
**June 18-19, Leicester, UK**
More info here.

*Please feel free to contact me (annarita.barbaro@iss.it) if you have any further suggestion about initiatives or events you would like to promote*

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