

### Introduction to Healthcare Evidence (Chatbot Technology) 28 October 2024 9.00am – 5.00pm Online (Zoom)

#### **Synopsis**

In the ever-evolving landscape of healthcare, researchers and clinicians grapple with unique questions pertinent to patient care, demanding the acquisition of expert skills for effective evidence search and evaluation. The contemporary healthcare arena necessitates advanced capabilities in information retrieval and assessment, making it imperative for both researchers and clinicians to cultivate proficiency in these areas.

This introductory workshop offers both clinicians and researchers a holistic approach, delving into expert search skills while incorporating advanced techniques in data collection, extraction, and screening to fortify the research methodology.

Proficient literature review not only enhances evidence-based care but also directly impacts positive patient outcomes. To further enrich the learning experience, an innovative smartphone delivered Al tool in the form of a chatbot is introduced; the **Rileybot**.

Developed collaboratively by the medical library and faculty from LKCMedicine, **Rileybot** serves as an unparalleled resource, complementing the workshop's objectives and providing invaluable assistance to learners on their information literacy journey.

By equipping both researchers and clinicians with essential skills in information literacy and evidencebased medicine, the workshop addresses the evolving needs of healthcare practices in today's dynamic environment.

At the end of this workshop, participants should be able to:

- Understand the role of information literacy in evidence-based medicine and comprehend the hierarchy of evidence in healthcare research.
- Apply PICO framework to structure literature searches
- Develop and implement effective Boolean search strategies with advanced search techniques.
- Apply PubMed database search and translate searches with chatbot learning
- Use Covidence to manage consolidated references and initiate a systematic screening process.
- Critically appraise Cochrane Reviews evidence using effective resources
- Report the search methodology following PRISMA guidelines.
- Demonstrate proficiency in data extraction and grading quality using Cochrane standards
- Write effective literature reviews using proper citation styles.



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#### **AGENDA (AM session)**

Note: Information is accurate at time of print. Agenda is subject to changes without prior notice.

For more information on all training courses, please visit www.research.nhg.com.sg

Time	Topic	Speaker
9.00 – 9.10 am	Welcome and introduction	Mdm Rebecca Lavanie David
9.10 – 10.00 am	<ul> <li>Mini lecture - Introduction to Information Literacy in Evidence Based Medicine</li> <li>Importance to search, assess, evaluate and apply evidence in practice</li> <li>Hierarchy of evidence: concept, study types and sources of evidence</li> <li>Use of PICO framework for well-defined clinical questions</li> <li>Develop database search proficiencies</li> <li>Evidence appraisal tools and resources</li> </ul>	Senior Medical Librarian, Lead for Information Literacy in Scientific Enquiry & Evidence Based Medicine Curriculum & Research Support Services for Students Lee Kong Chian
10.00 – 10.30 am	Group Activity – PICO framework  Formulate a structured search plan using PICO framework on a given scenario  Present findings	
10.30 – 10.45 am	Tea Break	School of Medicine.
10.45 – 11.40 am	<ul> <li>Interactive Demonstration (Database search)</li> <li>Boolean searches with Medical Subject Headings (MeSH)</li> <li>Basic and advanced search techniques</li> <li>Translate searches from PubMed to Cochrane Library database</li> <li>Introduction to multidisciplinary database: Web of Science to view highly cited papers</li> </ul>	Medicine, Nanyang Technological University
11.40 – 12.05 pm	<ul> <li>Group Activity – Chatbot Technology (Breakout Room)</li> <li>Complete 5 basic information literacy chats using Riley chatbot via Telegram App</li> <li>Submit feedback</li> </ul>	
12.05 – 12.15 pm	Summary and Q&A for AM Session	
12.15 – 1.15 pm	Lunch Break	

#### AGENDA (con't)



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### **AGENDA (PM session)**

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Time	Topic	Speaker
1.15 – 1:45 pm	Mini lecture - Evidence collection, appraisal and extraction techniques  Search methodology & scope of inquiry: Scoping, Narrative & Systematic reviews  Critical appraisal tools and resources  Extract data findings and grade quality of evidence	Mdm Rebecca Lavanie David Senior Medical Librarian, Lead for Information Literacy in Scientific Enquiry & Evidence Based Medicine Curriculum  Lee Kong Chian School of Medicine, Nanyang Technological University
1:45 – 2:15pm	<ul> <li>Interactive Demonstration (Data management tools &amp; resources)</li> <li>Covidence tool for screening</li> <li>Uinsg Excel to manage data extraction for narrative reviews using Cochrane Reviews</li> <li>Using VOSviewer tool for data visualization to explore relationships between concepts, authors, and publications.</li> </ul>	
2:15 – 2:45 pm	Group Activity - Chatbot Technology (Breakout Room)  Discuss and critically assess the methodology section of selected articles  Present findings	
2:45 – 3.00 pm	Tea Break	
3.00 – 3:45 pm	Mini lecture - Write and Cite effectively  Evidence synthesis  Tips to write a well-crafted literature review  Incorporate proper citation styles for publication requirements	
3:45 – 4:05pm	Group activity     Use the 'Ten Simple Rules' method and review the writing quality of a selected article     Present evaluations and insights of the exercise	
4.05 – 4.30 pm	Kahoot Quiz	
4.30 – 5.00 pm	Summary, Q&A and concluding remarks	