AI IN AUSTRALIAN PUBLIC ALLIED HEALTH

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QUESTION

How is Artificial Intelligence used in Australian Public Allied Healthcare?

RESULTS

ONLINE RESOURCES

ARTICLES AND CONFERENCE ABSTRACTS

Borkovic, S., et al. (2025). **Using Artificial Intelligence in clinical allied health practice: a systematic review**. Link.

- National Allied Health conference abstract

Hoffman, J., et al. (2025) **Meet Us Halfway: how to bring allied health professionals along for the AI ride**. Link.

- National Allied Health conference abstract

Hulsen, T., et al. (2025). **AI in Healthcare: Do not forget about allied healthcare**. Link to full text.

- This paper provides examples of AI solutions for seven important allied health professions. To increase the uptake of AI solutions in allied healthcare, AI companies need to connect more with professional associations and be as patient-oriented as many claim to be.

Raghunathan, K., et al. (2025). **Using artificial intelligence to improve healthcare delivery in select allied health disciplines: a scoping review protocol**. Link to full text.

- Scoping review protocol on AI in Allied Health clinical settings.

GOVERNMENT DOCUMENTS

Department of Health, Disability and Ageing. (2025). **Safe and Responsible Artificial Intelligence in Health Care – Legislation and Regulation Review: Final Report**. Link.

- Legislation for AI use in healthcare settings.

GUIDELINES AND PROFESSIONAL ASSOCIATION DOCUMENTS

Australian Alliance for Artificial Intelligence in Health Care. (2023). **A National Policy Roadmap for Artificial Intelligence in Healthcare**. Link.

- A national policy roadmap for artificial intelligence in Health care.

Australian Medical Council. (2023). **Artificial Intelligence in Healthcare**. Link.

- This position statement outlines considerations and policy parameters before AI tools are integrated into health service delivery.

PEER-REVIEWED JOURNAL ARTICLES – MOST RECENT FIRST

Articles are grouped by theme:

- Administration
- Chatbots
- Clinical – Other
- Clinical - Radiology

Contains excerpts from the abstract and an online link.

ADMINISTRATION

Nazir, M., et al. (2026). **"...it saves so much time": A qualitative exploration of the use of Generative Artificial Intelligence by the health workforce**. *Health Policy and Technology, 15*(1), 101136. Link to full text.

Generative Artificial Intelligence (Gen AI) has become an increasingly prevalent conversation in healthcare over the past few years. Though there have been research projects and articles exploring the administrative and clinical uses of such technologies, there has been little exploration of health professional perspectives, hopes and concerns. This study sought to explore perspectives and examine the barriers and enablers of Gen AI in healthcare. Health professionals see potential for using Gen AI to support their work, with enthusiasm about the potential of Gen AI to reduce workloads, particularly in offloading administrative tasks. There is also awareness that Gen AI chatbots pose risks both at the individual level such as limited capability in using these technologies and at the organisational level such as lack of training to support in upskilling, and systemic concerns around policy gaps.

Evans, K., et al. (2025). **Impact of using an AI scribe on clinical documentation and clinician-patient interactions in allied health private practice: perspectives of clinicians and patients**. *Musculoskeletal Science & Practice, 78*(101692753): 103333. Link to full text.

The burden associated with clinical documentation can negatively impact patient care and job satisfaction amongst allied health professionals (AHPs). Digital scribes based on artificial intelligence (AI) may address these issues, but this has not been evaluated in Australian allied health private practice. There was a significant reduction in time spent doing notes, letters and completing notes out of hours between baseline and 6-weeks and baseline and 3-months but no difference between 6-weeks and 3-months. Burden was significantly less at 3-months compared to baseline. Productivity increased by an average of 5.8 %. From the interviews, four themes described participants' experiences: using the scribe had a positive impact on therapeutic alliance and administrative workload, trust facilitated the use of the scribe and AHPs appreciated the scribe for different aspects of documentation. Although patients were comfortable consenting to the AI scribe being used

during their own appointments, some acknowledged that other patients might require additional information about data storage and security to make an informed decision. The use of an AI scribe had a positive impact on AHPs working, and patients seeking care, in Australian allied health private practice.

Wong, E., et al. (2025). **The Australian Injectable Drugs Handbook (AIDH): Experience of artificial intelligence translations of non-English product information**. *Journal of Pharmacy Practice and Research, 55*(1), pp 68-78. Link to full text.

This study describes the challenges faced by the AIDH editorial team in obtaining information in English for imported medicines. The purpose of this study was to determine whether machine translation is suitable for translating foreign language product information (PI) documents into English. Three sources (one machine and two human sources) were used to translate the PI provided for five imported medicines from four languages into English. We compared the quality of the translations for obtaining information suitable to inform a medicine administration guideline. Our study found machine translation and human translations to be very similar in terms of readability and adequacy. Machine translation was found to be more time-saving and cost-effective. Our results suggest that it may be appropriate for pharmacists to harness the time- and cost-saving benefits of machine translation. However, pharmacists must apply their critical evaluation skills to the information provided regardless of the source of the translation. Information translated from another language relating to the administration of an injectable medicine must be verified against an English language source.

Ceklic, E., et al. (2022). **Ambulance dispatch prioritisation for traffic crashes using machine learning: A natural language approach**. *International Journal of Medical Informatics, 168*(ct4, 9711057): 104886. Link to full text.

Demand for emergency ambulances is increasing, therefore it is important that ambulance dispatch is prioritised appropriately. This means accurately identifying which incidents require a lights and sirens (L&S) response and those that do not. For traffic crashes, it can be difficult to identify the needs of patients based on bystander reports during the emergency phone call; as traffic crashes are complex events, often with multiple patients at the same crash with varying medical needs. This study aims to determine how well the text sent to paramedics en-route to the traffic crash scene by the emergency medical dispatcher (EMD), in combination with dispatch codes, can predict the need for a L&S ambulance response to traffic crashes. Machine learning algorithms were used to predict the need for a L&S response or not. The features were the Medical Priority Dispatch System (MPDS) determinant codes and EMD text. EMD text was converted for computation using natural language processing (Bag of Words approach). Machine learning algorithms were used to predict the need for a L&S response, defined as where one or more patients (a) died before hospital admission, (b) received L&S transport to hospital, or (c) had one or more high-acuity indicators (based on an a priori list of medications, interventions or observations. We found that a combination of EMD text and MPDS determinate codes can predict which traffic crashes do and do not require a lights and sirens ambulance response to the scene with a high degree of accuracy. Emergency medical services could deploy machine learning algorithms to improve the accuracy of dispatch to traffic crashes, which has the potential to result in improved system efficiency.

CHATBOTS

Han, Q., et al. (2025). **Unleashing the potential of chatbots in mental health: bibliometric analysis**. *Frontiers in Psychiatry, 16*(Feb 4): 1494355. Link to full text.

The proliferation of chatbots in the digital mental health sector is gaining momentum, offering a promising solution to address the pressing shortage of mental health professionals. By providing accessible and convenient mental health services and support, chatbots are poised to become a primary technological intervention in bridging the gap between mental health needs and available resources. This study undertakes a thorough bibliometric analysis and discourse on the applications of chatbots in mental health, with the objective of elucidating the underlying scientific patterns that emerge at the intersection of chatbot technology and mental health care on a global scale. This study provides an in-depth analysis of the most prominent countries, institutions, publications, collaboration status, and research topics associated with utilization of chatbots in mental health over the last decade. It offers insights to mental health professionals without an AI background and individuals interested in the development of mental health chatbots. The findings suggest that chatbots hold a significant role in promoting mental health well-being and exhibit considerable potential in demonstrating empathy, curiosity, understanding, and collaborative capabilities with users.

Sharp, G., et al. (2025). **Co-design of a single session intervention chatbot for people on waitlists for eating disorder treatment: a qualitative interview and workshop study**. *Journal of Eating Disorders, 13*(1): pp 46. Link to full text.

Early treatment is critical to improve eating disorder prognosis. Single session interventions have been proposed as a strategy to provide short term support to people on waitlists for eating disorder treatment, however, it is not always possible to access this early intervention. Conversational artificial intelligence agents or "chatbots" reflect a unique opportunity to attempt to fill this gap in service provision. The aim of this research was to co-design a novel chatbot capable of delivering a single session intervention for adults on the waitlist for eating disorder treatment across the diagnostic spectrum and ascertain its preliminary acceptability and feasibility. Overall, the feedback on the single session intervention chatbot was positive throughout the Double Diamond process from both people with a lived experience of an eating disorder and psychologists. Incorporating the feedback across the four themes and four co-design phases allowed for refinement of the chatbot. Further research is required to evaluate the chatbot's efficacy in early treatment settings.

Bendotti, H., et al. (2024). **Co-Designing a Smoking Cessation Chatbot: Focus Group Study of End Users and Smoking Cessation Professional**s. *JMIR Human Factors, 11*(101666561): e56505. Link to full text.

Our prototype smoking cessation chatbot, Quin, provides evidence-based, personalized support delivered via a smartphone app to help people quit smoking. We developed Quin using a multiphase program of co-design research, part of which included focus group evaluation of Quin among stakeholders prior to clinical testing. This study aimed to gather and compare feedback on the user experience of the Quin prototype from end users and smoking cessation professionals (SCPs) via a beta testing process to inform ongoing chatbot iterations and refinements. Feedback from end users and SCPs highlighted the importance of chatbot functionality, as this underpinned Quin's conversation design and relationality. The ready accessibility of accurate cessation information and impartial support that Quin provided was recognized as a key benefit for end users, the latter of which contributed to a feeling of accountability to the chatbot. Findings will inform the ongoing development of a mature prototype for clinical testing.

Kaywan, P., et al. (2023). **Early detection of depression using a conversational AI bot: A non-clinical trial**. *PLoS ONE [Electronic Resource], 18*(2): e0279743. Link to full text.

Artificial intelligence (AI) has gained momentum in behavioural health interventions in recent years. However, a limited number of studies use or apply such methodologies in the early detection of depression. A large population needing psychological-intervention is left unidentified due to barriers such as cost, location, stigma and a global shortage of health workers. Therefore, it is essential to develop a mass screening integrative approach that can identify people with depression at its early stage to avoid a potential crisis. This study aims to understand the feasibility and efficacy of using AI-enabled chatbots in the early detection of depression. DEPRA shows promises as a feasible option for developing a mass screening integrated approach for early detection of depression. Although the chatbot is not intended to replace the functionality of mental health professionals, it does show promise as a means of assisting with automation and concealed communication with verified scoring systems.

CLINICAL – OTHER

Cross, S., et al. (2024). **Use of AI in Mental Health Care: Community and Mental Health Professionals Survey**. *JMIR Mental Health, 11*(101658926): e60589. Link to full text.

Artificial intelligence (AI) has been increasingly recognized as a potential solution to address mental health service challenges by automating tasks and providing new forms of support., Objective: This study is the first in a series which aims to estimate the current rates of AI technology use as well as perceived benefits, harms, and risks experienced by community members (CMs) and mental health professionals (MHPs). There was an equal mix of positive and negative sentiment toward the future of AI in mental health care in open feedback., Conclusions: Commercial AI tools are increasingly being used by CMs and MHPs. Respondents believe AI will offer future advantages for mental health care in terms of accessibility, cost reduction, personalization, and work efficiency. However, they were equally concerned about reducing human connection, ethics, privacy and regulation, medical errors, potential for misuse, and data security. Despite the immense potential, integration into mental health systems must be approached with caution, addressing legal and ethical concerns while developing safeguards to mitigate potential harms. Future surveys are planned to track use and acceptability of AI and associated issues over time.

Hoffman, J., et al. (2024). **Allied Health Professionals' Perceptions of Artificial Intelligence in the Clinical Setting: Cross-Sectional Survey**. *JMIR Formative Research, 8*(101726394): e57204. Link to full text.

Artificial intelligence (AI) has the potential to address growing logistical and economic pressures on the health care system by reducing risk, increasing productivity, and improving patient safety; however, implementing digital health technologies can be disruptive. Workforce perception is a powerful indicator of technology use and acceptance, however, there is little research available on the perceptions of allied health professionals (AHPs) toward AI in health care. Education and experience with AI are needed in health care to support its implementation across allied health, the second largest workforce in health. Industry and academic partnerships with clinicians should not be limited to AHPs with high AI literacy as clinicians across all knowledge levels can identify many opportunities for AI in health care.

Jan, C., et al. (2024). **Diagnosing glaucoma in primary eye care and the role of Artificial Intelligence applications for reducing the prevalence of undetected glaucoma in Australia**. *Eye, 38*(11): pp 2003-2013. Link to full text.

Glaucoma is the commonest cause of irreversible blindness worldwide, with over 70% of people affected remaining undiagnosed. Early detection is crucial for halting progressive visual impairment in glaucoma patients, as there is no cure available. This narrative review aims to: identify reasons for the significant under-diagnosis of glaucoma globally, particularly in Australia, elucidate the role of primary healthcare in glaucoma diagnosis using Australian healthcare as an example, and discuss how recent advances in artificial intelligence (AI) can be implemented to improve diagnostic outcomes. Automation with Artificial Intelligence (AI) analysis of optic nerve photos can help optometrists identify high-risk changes and mitigate the challenges of image interpretation rapidly and consistently. Despite its potential, there are significant barriers and challenges to address before AI can be deployed in primary healthcare settings, including external validation, high quality real-world implementation, protection of privacy and cybersecurity, and medico-legal implications. Overall, the incorporation of AI technology in primary healthcare has the potential to reduce the global prevalence of undiagnosed glaucoma cases by improving diagnostic accuracy and efficiency.

Li, X., et al. (2024). **Evaluating the Quality and Comparative Validity of Manual Food Logging and Artificial Intelligence-Enabled Food Image Recognition in Apps for Nutrition Care**. *Nutrients, 16*(15): 2573. Link to full text.

For artificial intelligence (AI) to support nutrition care, high quality and accuracy of its features within smartphone applications (apps) are essential. This study evaluated popular apps' features, quality, behaviour change potential, and comparative validity of dietary assessment via manual logging and AI. The top 200 free and paid nutrition-related apps from Australia's Apple App and Google Play stores were screened (n = 800). Apps were assessed using MARS (quality) and ABACUS (behaviour change potential). Nutritional outputs from manual food logging and AI-enabled food-image recognition apps were compared with food records for Western, Asian, and Recommended diets. Among 18 apps, Noom scored highest on MARS (mean = 4.44) and ABACUS (21/21). From 16 manual food-logging apps, energy was overestimated for Western (mean: 1040 kJ) but underestimated for Asian (mean: -1520 kJ) diets. MyFitnessPal and Fastic had the highest accuracy (97% and 92%, respectively) out of seven AI-enabled food image recognition apps. Apps with more AI integration demonstrated better functionality, but automatic energy estimations from AI-enabled food image recognition were inaccurate. To enhance the integration of apps into nutrition care, collaborating with dietitians is essential for improving their credibility and comparative validity by expanding food databases. Moreover, training AI models are needed to improve AI-enabled food recognition, especially for mixed dishes and culturally diverse foods.

Burnett, A., et al. (2022). **Machine learning algorithms to classify self-harm behaviours in New South Wales Ambulance electronic medical records: A retrospective study**. *International Journal of Medical Informatics, 161*(ct4, 9711057): 104734. Link to full text.

There is increasing interest in suicide surveillance solutions to identify non-fatal suicidal and self-harming behaviours in the Australian community not currently captured through national administrative datasets. The aim of the present study was to develop machine learning models to classify self-harm related behaviours using unstructured clinical note text from New South Wales (NSW) Ambulance data and compare their performance via traditional methods. This study demonstrates that machine learning models can be applied to paramedic notes within unstructured medical records to classify self-harm related behaviours. The resulting model could be used to compliment current manual abstraction of self-harm behaviours and provide more timely approximations to be used for self-harm surveillance.

Ho, S., et al. (2022). **Attitudes of optometrists towards artificial intelligence for the diagnosis of retinal disease: A cross-sectional mail-out survey**. *Ophthalmic & Physiological Optics, 42*(6): pp 1170-1179. Link to full text.

Artificial intelligence (AI)-based systems have demonstrated great potential in improving the diagnostic accuracy of retinal disease but are yet to achieve widespread acceptance in routine clinical practice. Clinician attitudes are known to influence implementation. Therefore, this study aimed to identify optometrists' attitudes towards the use of AI to assist in diagnosing retinal disease. Optometrists have positive attitudes towards the future use of AI as an aid to diagnose retinal disease. Understanding clinician attitudes and preferences for using AI may help maximise its clinical potential and ensure its successful translation into practice.

CLINICAL – RADIOLOGY

Naicker, S., et al. (2026). **Implementing an Artificial Intelligence Decision Support System in Radiology: Prospective Qualitative Evaluation Study Using the Nonadoption Abandonment Scale-Up, Spread, and Sustainability (NASSS) Framework**. *Journal of Medical Internet Research, 28*(100959882): e80342. Link to full text.

Medical imaging remains at the forefront of advancements in adopting digital health technologies in clinical practice. Regulator-approved artificial intelligence (AI) clinical decision support systems are commercially available and being embedded into routine practices for radiologists internationally. These decision support solutions show promising clinical validity compared to standard practice conditions; however, their implementation over time and implications on radiologists' practice are poorly understood. This paper aims to examine the real-world implementation of an AI clinical decision support tool in radiology through a qualitative evaluation across pre-, peri-, and postimplementation phases. Specifically, it seeks to identify the key contextual, organizational, and human factors shaping adoption and sustainability, to map these influences using the nonadoption, abandonment, scale-up, spread, and sustainability (NASSS) framework, and to generate insights that inform evidence-based strategies and policy for integrating AI safely and effectively into public hospital imaging services. The implementation of AI decision support in radiology is as much an organizational and cultural process as a technological one. Clinicians remain willing to engage, but sustainable adoption depends on consolidating early positive experiences and addressing negative ones, embedding communication and training, and maintaining iterative feedback between users, vendors, and system leaders. Applying the NASSS framework revealed how domains interact dynamically across time, offering both theoretical insight into sociotechnical complexity and practical guidance for hospitals seeking to move from pilot to routine, trustworthy AI integration.

Omori, M., et al. (2026). **Trust in AI Is a "Fluid Process": Building Trust of AI Through Clinicians' Needs in the BreastScreen Victoria Program-A Qualitative Study**. *Qualitative Health Research, 36*(2-3): 262-275. Link to full text.

Research on trust in healthcare AI has grown significantly over the last five years, underscoring its vital role in AI adoption within healthcare services. While the multi-dimensional nature of trust in AI is well-documented, the literature lacks an integrative framework to fully understanding its dynamics. This study explores clinicians' perceptions of using AI in breast screening, focusing on the evolving nature of trust in AI within a complex clinical environment. Through thematic analysis of focus groups and interviews with 27 clinicians from the population-based BreastScreen program in Victoria, Australia, we highlight that trust in healthcare AI is fluid and multi-layered. Clinicians

considered the broader care context when evaluating the potential of AI in their clinical practice. Their conflicting views coexisted-seeing "AI as an opportunity" to improve service delivery and client experiences and recognizing "uncertainties" surrounding its use. Optimism about AI, framed as opportunity, was tempered by skepticism stemming from factors, such as distrust in AI's performance, uncertainty regarding its role in their clinical practice, personal experiences with AI, and organizational barriers. Ethical, legal, and regulatory considerations also significantly influenced trust. We draw on the Trust and Acceptance of Artificial Intelligence Technology framework developed by Stevens and Stetson (2023) to interpret the paradoxical combination of optimism and skepticism observed in our participants. We argue that trust in AI is not a fixed attribute but a dynamic process, shaped by the interplay of technology-related, human-related, and context-related factors. Our findings have practical implications for AI adoption in healthcare.

Hua, D., et al. (2025). **Towards human-AI collaboration in radiology: a multidimensional evaluation of the acceptability of AI for chest radiograph analysis in supporting pulmonary tuberculosis diagnosis**. *Jamia Open, 8*(1): ooae151. Link to full text.

Artificial intelligence (AI) technology promises to be a powerful tool in addressing the global health challenges posed by tuberculosis (TB). However, evidence for its real-world impact is lacking, which may hinder safe, responsible adoption. This case study addresses this gap by assessing the technical performance, usability and workflow aspects, and health impact of implementing a commercial AI system (qXR by Qure.ai) to support Australian radiologists in diagnosing pulmonary TB. qXR displays near-human performance satisfying the World Health Organization's suggested accuracy profile. Radiologists reported high satisfaction with using qXR based on minimal workflow disruptions, respect for their professional autonomy, and limited increases in workload burden despite poor algorithm explainability. qXR delivers considerable productivity gains for normal cases and optimizes resource allocation through redistributing time from normal to abnormal cases. This study provides preliminary evidence of how an AI system with reasonable diagnostic accuracy and a human-centered user experience can meaningfully augment the TB diagnostic workflow. Future research needs to investigate the impact of AI on clinician accuracy, its relationship with efficiency, and best practices for optimizing the impact of clinician-AI collaboration.

Chau, M. (2024). **Ethical, legal, and regulatory landscape of artificial intelligence in Australian healthcare and ethical integration in radiography: A narrative review**. Journal of Medical Imaging & Radiation Sciences, 55(4): 101733. Link to full text.

This narrative review explores the ethical, legal, and regulatory landscape of AI integration in Australian healthcare, focusing on radiography. It examines the current legislative framework, assesses the trust and reliability of AI tools, and proposes future directions for ethical AI integration in radiography. AI systems significantly enhance diagnostic radiography by improving diagnostic accuracy and efficiency in stroke detection, brain imaging, and chest reporting. However, AI raises substantial ethical concerns due to its 'black-box' nature and potential biases in training data. The Therapeutic Goods Administration's reforms in Australia, though comprehensive, fall short of fully addressing issues related to the trustworthiness and legal liabilities of AI tools. Adopting a comprehensive research strategy that includes doctrinal, comparative, and public policy analyses will facilitate an understanding of international practices, particularly from countries with similar legal systems, and help guide Australia in refining its regulatory framework. For an ethical future in radiography, a robust, multi-disciplinary approach is required to prioritize patient safety, data privacy, and equitable AI use. A framework that balances technological innovation with ethical and legal integrity is essential for advancing healthcare while preserving trust and transparency.

Healthcare professionals, policymakers, and AI developers must collaborate to establish a resilient, equitable, and transparent healthcare system. Future research should focus on multi-disciplinary methodologies, combining doctrinal, comparative, and public policy research to provide comprehensive insights. This approach will guide Australia in creating a more inclusive and ethically sound legal framework for AI in healthcare, ensuring its ethical and beneficial integration into radiography.

Jones, S., et al. (2024). **Automation and artificial intelligence in radiation therapy treatment planning**. *Journal of Medical Radiation Sciences, 71*(2): pp 290-298. Link to full text.

Automation and artificial intelligence (AI) is already possible for many radiation therapy planning and treatment processes with the aim of improving workflows and increasing efficiency in radiation oncology departments. Currently, AI technology is advancing at an exponential rate, as are its applications in radiation oncology. This commentary highlights the way AI has begun to impact radiation therapy treatment planning and looks ahead to potential future developments in this space. Historically, radiation therapist's (RT's) role has evolved alongside the adoption of new technology. In Australia, RTs have key clinical roles in both planning and treatment delivery and have been integral in the implementation of automated solutions for both areas. They will need to continue to be informed, to adapt and to transform with AI technologies implemented into clinical practice in radiation oncology departments. RTs will play an important role in how AI-based automation is implemented into practice in Australia, ensuring its application can truly enable personalised and higher-quality treatment for patients. To inform and optimise utilisation of AI, research should not only focus on clinical outcomes but also AI's impact on professional roles, responsibilities and service delivery. Increased efficiencies in the radiation therapy workflow and workforce need to maintain safe improvements in practice and should not come at the cost of creativity, innovation, oversight and safety.

Trieu, P. D. Y., et al. (2024). **Familiarity, confidence and preference of artificial intelligence feedback and prompts by Australian breast cancer screening readers**. *Australian Health Review, 48*(3): pp 299-311. Link to full text.

This study explored the familiarity, perceptions and confidence of Australian radiology clinicians involved in reading screening mammograms, regarding artificial intelligence (AI) applications in breast cancer detection. The majority of screen readers expressed increased confidence in utilising AI for highlighting suspicious areas on mammograms and for automatically classifying mammograms. They considered AI as an optimal second-reader mode being the most ideal use in a screening program. The findings provide valuable insights into the familiarities and expectations of radiologists and breast clinicians for the AI products that can enhance the effectiveness of the breast cancer screening programs, benefitting both healthcare professionals and patients alike.

APPENDIX

SEARCH METHODOLOGY

A systematic search was conducted for literature. The results were screened by librarians using Covidence.

SEARCH LIMITS

- English-language
- Published within the last 5 years
- Australian context

DATABASES SEARCHED

- Medline – index of peer reviewed articles across health sciences and medicine.
- Embase – index of biomed and pharmacological peer reviewed journal articles.
- Emcare – index of nursing, allied health, critical-care medicine and more.
- CINAHL – index of nursing publications.
- UpToDate & BMJ Best Practice – synthesised evidence for patient care.
- Grey literature – Google, DuckDuckGo, Trip database.

MEDLINE SEARCH STRATEGY

This search strategy was conducted on 28/05/2026 and translated to other databases, as relevant. Searches in each database were conducted on the same day.

Database: Ovid MEDLINE(R) ALL <1946 to May 26, 2026>
Search Strategy:
1 (machine learn* or neural network* or deep learn* or support vector machine* or random forest* or random decision forest* or predictive model* or artificial intelligence* or comput* intelligence* or topic model*).mp. (543935)
2 (AI or artificial intelligence or machine learning or machine-learning or deep learning or deep-learning or artificial general intelligence or machine intelligence or machine reasoning or automated reasoning).mp. (433111)
3 ((artificial or simulation or approach or convolutional) adj3 neural network*).mp. (69589)
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