Supplementary Information for Trust Gap in Clinical Artificial Intelligence: A Meta-Systematic Review

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Supplementary 1: Comprehensive Search Strategy

1. Introduction

This document details the complete search strategies executed across four major electronic databases to identify systematic reviews and meta-analyses on clinical artificial intelligence (AI) applications, published between 2023 and 2024. The search was designed to be comprehensive and reproducible, encompassing key terms related to AI techniques and clinical domains.

2. Search Strategies by Database

2.1. Scopus

- **Date of Search:** 27 Feb 2025
- **Platform:** Elsevier Scopus
- **Search Query:**

```
TITLE-ABS-KEY ( ( "artificial intelligence" OR "machine learning" OR "deep learning" OR "predictive analytics" OR "natural language processing" OR "decision support systems" ) AND ( "clinical decision support" OR "diagnostics" OR "patient management" OR "health informatics" OR "medical AI" ) ) AND PUBYEAR > 2022
```

- **Results:** 53,278 documents identified.
- **Filters Applied:** Publication Year > 2022.

2.2. Web of Science

- **Date of Search:** 27 Feb 2025
- **Platform:** Web of Science Core Collection
- **Search Query:**

```
TS=("artificial intelligence" OR "machine learning" OR "deep learning" OR "predictive analytics" OR "natural language processing" OR "decision support systems")
AND TS=("clinical decision support" OR "diagnostics" OR "patient management" OR "health informatics" OR "medical AI") AND PY=(2023-2024)
```

- **Results:** 5,924 documents identified.

2.3. IEEE Xplore

- **Date of Search:** 27 Feb 2025
- **Platform:** IEEE Xplore Digital Library
- **Search Query:**

("Abstract":"artificial intelligence" OR "Abstract":"machine learning" OR "Abstract":"deep learning") AND ("Abstract":"clinical decision" OR "Abstract":"diagnos*" OR "Abstract":"patient manage*")*

- **Results:** 25,201 documents identified.
- **Filters Applied:** Publication Years 2023-2024.

2.4. PubMed/MEDLINE

- **Date of Search:** 27 Feb 2025
- **Platform:** National Library of Medicine
- **Search Query (Base):**

(("artificial intelligence"[Title/Abstract] OR "machine learning"[Title/Abstract] OR "deep learning"[Title/Abstract] OR "predictive analytics"[Title/Abstract] OR "natural language processing"[Title/Abstract] OR "decision support systems"[Title/Abstract]) AND ("clinical decision support"[Title/Abstract] OR "diagnostics"[Title/Abstract] OR "patient management"[Title/Abstract] OR "health informatics"[Title/Abstract] OR "medical AI"[Title/Abstract])) AND ("2023"[Date - Publication] : "2024"[Date - Publication])

- **Results:**
  - Total: 4,212 results.
  - **Free Full Text Filter:** 3,053 results.
  - **Free Full Text + Systematic Review Filter:** 131 results. This was the final dataset used for screening and inclusion in the meta-systematic review.

3. Summary of Search Results

The following table summarizes the initial yield from each database prior to the removal of duplicates and screening.

Table S1. Initial search yield across electronic databases prior to duplicate removal

Database	Search Results
Scopus	53,278
Web of Science	5,924
IEEE Xplore	25,201
PubMed/MEDLINE	4,212
Total Records Identified	**88,615**

Note: The precise number of duplicates removed is detailed in the PRISMA flow diagram (Figure 1) within the main manuscript.

Supplementary 2. PRISMA 2020 Checklist for Meta-Systematic Review

Manuscript Title: Trust gap in clinical artificial intelligence: a meta-systematic review

Study Type: Meta-Systematic Review

Checklist Type: PRISMA 2020 – Systematic Reviews

Section	Item	Checklist Item Description	Addressed in Manuscript
TITLE	1	Identify the report as a systematic review, meta-analysis, or both	✓ Yes – Identified as a "meta-systematic review"
ABSTRACT	2	Provide a structured summary including background, objectives, data sources, study eligibility, synthesis methods, results, limitations, conclusions	✓ Yes – Structured abstract included
INTRODUCTION	3	Rationale for the review	✓ Yes – Posthumanist framing and gap analysis clearly stated
	4	Explicit statement of objectives or questions	✓ Yes – Two primary research aims listed
METHODS	5	Eligibility criteria for inclusion	✓ Yes – Described in "Literature Sources and Eligibility Criteria"
	6	Information sources and search dates	✓ Yes – PubMed, 2022–2025
	7	Full search strategy	✓ Yes – Provided in Supplementary File S1
	8	Selection process (who, how)	✓ Yes – Described, 4 reviewers, PRISMA flow diagram provided
	9	Data collection process	✓ Yes – Explained under "Data Extraction and Thematic Analysis"
	10	Data items: definitions and variables	✓ Yes – Metadata, AI methods, ethical themes coded
	11	Risk of bias assessment	✓ Yes – AMSTAR-2 used
	12	Effect measures	N/A – Not relevant for narrative synthesis of systematic reviews
	13	Synthesis methods	✓ Yes – Hybrid coding + thematic synthesis explained

	14	Reporting bias assessment	✓ Yes – Reported clearly
	15	Certainty assessment	✓ Yes – Discussed explicitly
	16	Study selection (numbers, reasons)	✓ Yes – PRISMA diagram + explanation
	17	Study characteristics	✓ Yes – Table and figures categorize domains and techniques
	18	Risk of bias in studies	✓ Yes – Summary of AMSTAR-2 results included
	19	Results of individual studies	✓ Yes – Descriptive statistics + thematic maps
	20	Synthesis of results	✓ Yes – Narrative and visual synthesis in results section
	21	Reporting bias	✓ Yes – Addressed in Methods section
	22	Certainty of evidence	✓ Yes – Discussed as not applicable
	23	Summary of main findings	✓ Yes – Section 4: Discussion
	24	Limitations of evidence	✓ Yes – Discussed in Conclusion
		Limitations of review process	✓ Yes – Contributions and Limitations section
	26	Interpretation of results in context	✓ Yes – Posthumanism framing and philosophical implications discussed
	27	Funding	✓ Yes – "Funding: No specific grant…"
	28	Competing interests	✓ Yes – Declared
	29	Availability of data	✓ Yes – Included in manuscript
	30	Registration and protocol	✓ Yes – OSF repository
	31	Support (e.g. institutional)	✓ Yes – Institutional affiliation provided
	32	Role of funders	✓ Yes – "No role" stated

Supplementary 3. Characteristics of Included Systematic Reviews (n=130)

This table provides a structured overview of all included systematic reviews, categorized by clinical domain, methodological approach, and AI techniques.

Paper ID	Title	Source	Assigned Categories	Clinical Specialties	Methodology & Approach	AI Techniques Used
1	Artificial intelligence for healthcare and medical education: SR	(1)	AI in Rare Diseases & Genomics	AI in Cardiovascular Medicine, CDSS, AI in Public Health & Epidemiology	Meta-Analyses, Narrative Reviews with AI Commentary	NLP in AI
2	Artificial intelligence in emergency medicine. SR	(2)	AI in Mental Health & Neurology, Emergency & Critical Care AI, Hybrid AI-Assisted SRs, XAI & Model Transparency	AI in Rare Diseases & Genomics	Meta-Analyses	XAI & Model Transparency, ML-based Reviews, Comparative Studies of AI Models
3	Correction: Unassisted Clinicians Versus DL-Assisted Clinicians in Image-Based Cancer Diagnostics: SR With Meta-analysis	(3)	AI in Mental Health & Neurology	Ethical, Regulatory, and Bias Concerns in AI	Hybrid AI-Assisted SRs	Comparative Studies of AI Models
4	APPRAISE-AI Tool for Quantitative Evaluation of AI Studies for CDS	(4)	AI in Surgery & Procedural Assistance	Diagnostics (Imaging & Non-Imaging), Ethical, Regulatory, and Bias Concerns in AI, AI in Public Health & Epidemiology	Hybrid AI-Assisted SRs, Meta-Analyses	Comparative Studies of AI Models
5	Artificial Intelligence for CDS in Acute Ischemic Stroke: SR	(5)	AI in Public Health & Epidemiology, AI in Drug Discovery & Personalized Medicine, AI in Oncology	AI in Surgery & Procedural Assistance	Meta-Analyses, Critical Appraisals of AI Evaluation Metrics	Integration of AI with EHRs, DL-based Reviews, NLP in AI
6	ML-based CDSS for pregnancy care: SR	(6)	Critical Appraisals of AI Evaluation Metrics, AI in Rare Diseases & Genomics, Patient Management & Predictive Analytics, DL-based Reviews	AI in Public Health & Epidemiology	Hybrid AI-Assisted SRs	DL-based Reviews, XAI & Model Transparency
7	Artificial intelligence, big data and heart transplantation: Actualities	(7)	AI in Rare Diseases & Genomics, AI in Public Health & Epidemiology, Emergency & Critical Care AI	AI in Rare Diseases & Genomics	Traditional SRs, Critical Appraisals of AI Evaluation Metrics	Comparative Studies of AI Models
8	CDSS for Brain Tumour Diagnosis and Prognosis: SR	(8)	Comparative Studies of AI Models	AI in Rare Diseases & Genomics	Traditional SRs, Meta-Analyses	NLP in AI, DL-based Reviews, Comparative Studies of AI Models
9	Medical artificial intelligence ethics: SR of empirical studies	(9)	Ethical, Regulatory, and Bias Concerns in AI, Meta-Analyses, Bias & Fairness in AI Models, DL-based Reviews	Emergency & Critical Care AI, Diagnostics (Imaging & Non-Imaging)	Critical Appraisals of AI Evaluation Metrics	XAI & Model Transparency
10	DL in Diagnosis of Dental Anomalies and Diseases: SR	(10)	Bias & Fairness in AI Models	AI in Drug Discovery & Personalized Medicine, Emergency & Critical Care AI, Diagnostics (Imaging & Non-Imaging)	Hybrid AI-Assisted SRs	XAI & Model Transparency, DL-based Reviews, Integration of AI with EHRs
11	Artificial Intelligence Models in Health Information Exchange: SR of Clinical Implications	(11)	Integration of AI with EHRs	AI in Surgery & Procedural Assistance	Traditional SRs, Hybrid AI-Assisted SRs	Bias & Fairness in AI Models, DL-based Reviews
12	Ontologies Applied in CDS System Rules: SR	(12)	Ethical, Regulatory, and Bias Concerns in AI, Diagnostics	AI in Public Health & Epidemiology, Emergency &	Hybrid AI-Assisted SRs, Traditional SRs	Integration of AI with EHRs, ML-based Reviews,

			(Imaging & Non-Imaging), Traditional SRs, Hybrid AI-Assisted SRs	Critical Care AI, AI in Rare Diseases & Genomics		XAI & Model Transparency
13	Should Artificial Intelligence be used to support clinical ethical decision-making? SR of reasons	(13)	NLP in AI, Integration of AI with EHRs, AI in Surgery & Procedural Assistance, Meta-Analyses	AI in Drug Discovery & Personalized Medicine, Diagnostics (Imaging & Non-Imaging), AI in Rare Diseases & Genomics	Traditional SRs	Comparative Studies of AI Models, XAI & Model Transparency, ML-based Reviews
14	Artificial Intelligence and Its Role in the Management of Chronic Medical Conditions: SR	(14)	Traditional SRs	AI in Cardiovascular Medicine	Critical Appraisals of AI Evaluation Metrics, Hybrid AI-Assisted SRs	Comparative Studies of AI Models, XAI & Model Transparency, Integration of AI with EHRs
15	Application of Artificial Intelligence and ML in Diagnosing Scaphoid Fractures: SR	(15)	AI in Mental Health & Neurology	CDSS	Narrative Reviews with AI Commentary, Meta-Analyses	Integration of AI with EHRs, NLP in AI, DL-based Reviews
16	Artificial Intelligence on Diagnostic Aid of Leprosy: SR	(16)	AI in Public Health & Epidemiology, XAI & Model Transparency, Patient Management & Predictive Analytics	AI in Mental Health & Neurology, Ethical, Regulatory, and Bias Concerns in AI	Traditional SRs	Comparative Studies of AI Models, Integration of AI with EHRs
17	Application of artificial intelligence in medical technologies: SR of main trends	(17)	ML-based Reviews, Ethical, Regulatory, and Bias Concerns in AI	AI in Mental Health & Neurology, Patient Management & Predictive Analytics	Critical Appraisals of AI Evaluation Metrics, Traditional SRs	DL-based Reviews, Comparative Studies of AI Models, ML-based Reviews
18	Artificial Intelligence-Augmented CDSS for Pregnancy Care: SR	(18)	Ethical, Regulatory, and Bias Concerns in AI, Narrative Reviews with AI Commentary, Patient Management & Predictive Analytics, AI in Rare Diseases & Genomics	Ethical, Regulatory, and Bias Concerns in AI, AI in Surgery & Procedural Assistance, AI in Drug Discovery & Personalized Medicine	Traditional SRs, Critical Appraisals of AI Evaluation Metrics	NLP in AI
19	CDSS for chronic obstructive pulmonary disease (COPD) in hospitals: SR	(19)	ML-based Reviews, AI in Surgery & Procedural Assistance	AI in Oncology	Hybrid AI-Assisted SRs, Meta-Analyses	DL-based Reviews
20	DL in Dermatology: SR of Current Approaches, Outcomes, and Limitations	(20)	AI in Oncology, Critical Appraisals of AI Evaluation Metrics, AI in Drug Discovery & Personalized Medicine	AI in Public Health & Epidemiology, AI in Rare Diseases & Genomics	Meta-Analyses	Bias & Fairness in AI Models, XAI & Model Transparency
21	Current Status and Future of Artificial Intelligence in MM Imaging: SR	(21)	AI in Cardiovascular Medicine, AI in Public Health & Epidemiology, Emergency & Critical Care AI, AI in Drug Discovery & Personalized Medicine	AI in Mental Health & Neurology, Emergency & Critical Care AI	Narrative Reviews with AI Commentary, Hybrid AI-Assisted SRs	Integration of AI with EHRs, ML-based Reviews
22	CDS and Natural Language Processing in Medicine: SR	(22)	AI in Oncology, ML-based Reviews, Traditional SRs, Meta-Analyses	AI in Oncology, AI in Mental Health & Neurology, AI in Public Health & Epidemiology	Meta-Analyses, Narrative Reviews with AI Commentary	Comparative Studies of AI Models, Integration of AI with EHRs, ML-based Reviews
23	Pediatrics in Artificial Intelligence Era: SR on Challenges, Opportunities, and Explainability	(23)	AI in Cardiovascular Medicine	Ethical, Regulatory, and Bias Concerns in AI, CDSS	Critical Appraisals of AI Evaluation Metrics, Traditional SRs	XAI & Model Transparency
24	The effects of cancer CDSS on patient-reported outcomes: SR	(24)	Integration of AI with EHRs	CDSS	Meta-Analyses	NLP in AI, DL-based Reviews, Comparative Studies of AI Models
25	The Role of CDSS in Preventing Stroke in Primary Care: SR	(25)	Bias & Fairness in AI Models, AI in Rare Diseases & Genomics, ML-based Reviews	AI in Rare Diseases & Genomics	Narrative Reviews with AI Commentary	DL-based Reviews
26	ML Techniques, Applications, and Potential Future	(26)	Comparative Studies of AI Models	Emergency & Critical Care AI	Critical Appraisals of AI Evaluation	Integration of AI with EHRs, Comparative

	Opportunities in Pressure Injuries (Bedsores) Management: SR				Metrics, Traditional SRs	Studies of AI Models
27	Application of ML and artificial intelligence in the diagnosis and classification of polycystic ovarian syndrome: SR	(27)	Traditional SRs, Integration of AI with EHRs	AI in Surgery & Procedural Assistance	Meta-Analyses	NLP in AI, ML-based Reviews, Integration of AI with EHRs
28	Genetically guided precision medicine CDS tools: SR	(28)	Integration of AI with EHRs, AI in Mental Health & Neurology	Ethical, Regulatory, and Bias Concerns in AI, AI in Drug Discovery & Personalized Medicine, Patient Management & Predictive Analytics	Traditional SRs, Meta-Analyses	DL-based Reviews
29	Unassisted Clinicians Versus DL-Assisted Clinicians in Image-Based Cancer Diagnostics: SR With Meta-analysis	(29)	Meta-Analyses, NLP in AI, AI in Rare Diseases & Genomics, Hybrid AI-Assisted SRs	Diagnostics (Imaging & Non-Imaging)	Traditional SRs, Meta-Analyses	Bias & Fairness in AI Models
30	Predict, diagnose, and treat chronic kidney disease with ML: SR	(30)	CDSS	Patient Management & Predictive Analytics	Critical Appraisals of AI Evaluation Metrics, Traditional SRs	XAI & Model Transparency
31	Use and accuracy of decision support systems using artificial intelligence for tumor diseases: SR and meta-analysis	(31)	AI in Mental Health & Neurology	AI in Drug Discovery & Personalized Medicine, AI in Surgery & Procedural Assistance, Ethical, Regulatory, and Bias Concerns in AI	Critical Appraisals of AI Evaluation Metrics	Comparative Studies of AI Models, Integration of AI with EHRs, NLP in AI
32	Improving HIV preexposure prophylaxis uptake with artificial intelligence and automation: SR	(32)	Patient Management & Predictive Analytics, CDSS	Emergency & Critical Care AI, AI in Oncology	Narrative Reviews with AI Commentary	Integration of AI with EHRs, DL-based Reviews, Comparative Studies of AI Models
33	Artificial intelligence and myocarditis-SR of current applications	(33)	DL-based Reviews, Traditional SRs, CDSS	Patient Management & Predictive Analytics, Emergency & Critical Care AI, AI in Public Health & Epidemiology	Hybrid AI-Assisted SRs	Bias & Fairness in AI Models, DL-based Reviews, ML-based Reviews
34	Utilizing large language models in breast cancer management: SR	(34)	ML-based Reviews	Patient Management & Predictive Analytics, AI in Oncology, Emergency & Critical Care AI	Hybrid AI-Assisted SRs	Bias & Fairness in AI Models, DL-based Reviews, NLP in AI
35	SR of using CDSS in corneal diseases	(35)	Comparative Studies of AI Models, Traditional SRs, Patient Management & Predictive Analytics	Emergency & Critical Care AI	Traditional SRs	NLP in AI
36	Utilizing Artificial Intelligence Among Patients with Diabetes: SR and Meta-Analysis	(36)	Comparative Studies of AI Models, Integration of AI with EHRs	AI in Cardiovascular Medicine, AI in Mental Health & Neurology, Emergency & Critical Care AI	Narrative Reviews with AI Commentary	Bias & Fairness in AI Models
37	Harnessing Artificial Intelligence for the Diagnosis and Prevention of Hospital-Acquired Infections: SR	(37)	AI in Mental Health & Neurology	Emergency & Critical Care AI, Diagnostics (Imaging & Non-Imaging)	Hybrid AI-Assisted SRs	Integration of AI with EHRs, DL-based Reviews
38	Advancing rheumatology with natural language processing: insights and prospects from SR	(38)	Emergency & Critical Care AI, Ethical, Regulatory, and Bias Concerns in AI	Patient Management & Predictive Analytics	Narrative Reviews with AI Commentary, Hybrid AI-Assisted SRs	Integration of AI with EHRs, NLP in AI, Bias & Fairness in AI Models
39	SR of artificial intelligence algorithms for predicting acute kidney injury	(39)	Narrative Reviews with AI Commentary, NLP in AI, AI in Public Health & Epidemiology, CDSS	AI in Oncology, AI in Rare Diseases & Genomics, AI in	Narrative Reviews with AI Commentary, Critical	Integration of AI with EHRs, ML-based Reviews,

				Cardiovascular Medicine	Appraisals of AI Evaluation Metrics	XAI & Model Transparency
40	The impact of artificial intelligence in the diagnosis and management of acoustic neuroma: SR	(40)	Traditional SRs, Diagnostics (Imaging & Non-Imaging)	AI in Public Health & Epidemiology	Meta-Analyses	Integration of AI with EHRs, Bias & Fairness in AI Models
41	Quality of interaction between clinicians and artificial intelligence systems. SR	(41)	NLP in AI, AI in Mental Health & Neurology, Emergency & Critical Care AI	AI in Cardiovascular Medicine, AI in Rare Diseases & Genomics, CDSS	Hybrid AI-Assisted SRs	Integration of AI with EHRs
42	Artificial intelligence for CDS for monitoring patients in cardiovascular ICUs: SR	(42)	NLP in AI, Patient Management & Predictive Analytics	AI in Surgery & Procedural Assistance, AI in Oncology, AI in Public Health & Epidemiology	Hybrid AI-Assisted SRs, Narrative Reviews with AI Commentary	DL-based Reviews, Comparative Studies of AI Models
43	Outcomes of CDSS in real-world perioperative care: SR and meta-analysis	(43)	Comparative Studies of AI Models, Narrative Reviews with AI Commentary, ML-based Reviews, Hybrid AI-Assisted SRs	AI in Mental Health & Neurology	Narrative Reviews with AI Commentary, Hybrid AI-Assisted SRs	ML-based Reviews
44	Artificial Intelligence and ML in Predicting Intradialytic Hypotension in Hemodialysis Patients: SR	(44)	XAI & Model Transparency, Narrative Reviews with AI Commentary, Bias & Fairness in AI Models	Emergency & Critical Care AI, CDSS	Critical Appraisals of AI Evaluation Metrics	Comparative Studies of AI Models, NLP in AI, XAI & Model Transparency
45	The Role and Applications of Artificial Intelligence in Dental Implant Planning: SR	(45)	Meta-Analyses, AI in Rare Diseases & Genomics	AI in Drug Discovery & Personalized Medicine, AI in Rare Diseases & Genomics, Emergency & Critical Care AI	Traditional SRs, Narrative Reviews with AI Commentary	Integration of AI with EHRs, XAI & Model Transparency, ML-based Reviews
46	Artificial Intelligence in Ultrasound Diagnoses of Ovarian Cancer: SR and Meta-Analysis	(46)	NLP in AI, AI in Drug Discovery & Personalized Medicine	Emergency & Critical Care AI, AI in Cardiovascular Medicine, AI in Surgery & Procedural Assistance	Narrative Reviews with AI Commentary, Traditional SRs	Integration of AI with EHRs, NLP in AI, XAI & Model Transparency
47	Barriers and Facilitators to the Use of CDSS in Primary Care: A Mixed-Methods SR	(47)	AI in Rare Diseases & Genomics, Critical Appraisals of AI Evaluation Metrics, CDSS	Emergency & Critical Care AI, AI in Surgery & Procedural Assistance	Critical Appraisals of AI Evaluation Metrics	Bias & Fairness in AI Models, XAI & Model Transparency
48	Respiratory Diseases Diagnosis Using Audio Analysis and Artificial Intelligence: SR	(48)	Patient Management & Predictive Analytics, ML-based Reviews, Hybrid AI-Assisted SRs	AI in Drug Discovery & Personalized Medicine, AI in Surgery & Procedural Assistance	Hybrid AI-Assisted SRs	Bias & Fairness in AI Models
49	Artificial Intelligence Models for the Automation of Standard Diagnostics in Sleep Medicine-SR	(49)	AI in Surgery & Procedural Assistance, DL-based Reviews, NLP in AI, AI in Public Health & Epidemiology	AI in Rare Diseases & Genomics	Critical Appraisals of AI Evaluation Metrics	Integration of AI with EHRs, NLP in AI, DL-based Reviews
50	Application of Artificial Intelligence in Neuroendocrine Lung Cancer Diagnosis and Treatment: SR	(50)	Ethical, Regulatory, and Bias Concerns in AI, AI in Surgery & Procedural Assistance, Bias & Fairness in AI Models	AI in Mental Health & Neurology, AI in Surgery & Procedural Assistance, AI in Public Health & Epidemiology	Critical Appraisals of AI Evaluation Metrics	Comparative Studies of AI Models
51	ML approaches for the discovery of clinical pathways from patient data: SR	(51)	AI in Cardiovascular Medicine, AI in Oncology, AI in Drug Discovery & Personalized Medicine	CDSS, AI in Drug Discovery & Personalized Medicine	Traditional SRs	DL-based Reviews, ML-based Reviews
52	Interpretability of CDSS Based on Artificial Intelligence from Technological and Medical Perspective: SR	(52)	ML-based Reviews, Hybrid AI-Assisted SRs, Traditional SRs	AI in Mental Health & Neurology, Diagnostics (Imaging & Non-Imaging), AI in Cardiovascular Medicine	Meta-Analyses	Comparative Studies of AI Models, Bias & Fairness in AI Models

53	CDSS for maternity care: SR and meta-analysis	(53)	ML-based Reviews, Bias & Fairness in AI Models	AI in Drug Discovery & Personalized Medicine, AI in Public Health & Epidemiology	Narrative Reviews with AI Commentary, Meta-Analyses	ML-based Reviews, XAI & Model Transparency, NLP in AI
54	Application of ML approaches in predicting clinical outcomes in older adults - SR and meta-analysis	(54)	DL-based Reviews, Narrative Reviews with AI Commentary, AI in Mental Health & Neurology, Emergency & Critical Care AI	AI in Oncology, AI in Cardiovascular Medicine	Meta-Analyses, Traditional SRs	NLP in AI, DL-based Reviews, Integration of AI with EHRs
55	Integration of smartphone technology and artificial intelligence for advanced ophthalmic care: SR	(55)	XAI & Model Transparency, AI in Oncology, Critical Appraisals of AI Evaluation Metrics, Emergency & Critical Care AI	AI in Drug Discovery & Personalized Medicine, AI in Surgery & Procedural Assistance, AI in Mental Health & Neurology	Hybrid AI-Assisted SRs, Critical Appraisals of AI Evaluation Metrics	Bias & Fairness in AI Models
56	Transforming Health Care Through Chatbots for Medical History-Taking and Future Directions: Comprehensive SR	(56)	Bias & Fairness in AI Models, Hybrid AI-Assisted SRs, AI in Drug Discovery & Personalized Medicine	Ethical, Regulatory, and Bias Concerns in AI	Narrative Reviews with AI Commentary, Meta-Analyses	XAI & Model Transparency
57	Applications of the Natural Language Processing Tool ChatGPT in Clinical Practice: Comparative Study and Augmented SR	(57)	Patient Management & Predictive Analytics, Ethical, Regulatory, and Bias Concerns in AI, Critical Appraisals of AI Evaluation Metrics, NLP in AI	AI in Oncology, Emergency & Critical Care AI	Traditional SRs	XAI & Model Transparency
58	Applications of artificial intelligence in emergency and critical care diagnostics: SR and meta-analysis	(58)	Traditional SRs, Emergency & Critical Care AI, Critical Appraisals of AI Evaluation Metrics	AI in Surgery & Procedural Assistance, AI in Oncology, CDSS	Traditional SRs	Comparative Studies of AI Models
59	AI predicting recurrence in non-muscle-invasive bladder cancer: SR with study strengths and weaknesses	(59)	Hybrid AI-Assisted SRs, AI in Cardiovascular Medicine	AI in Surgery & Procedural Assistance	Narrative Reviews with AI Commentary, Meta-Analyses	ML-based Reviews, Comparative Studies of AI Models, NLP in AI
60	Exploring alternative approaches to precision medicine through genomics and artificial intelligence - SR	(60)	XAI & Model Transparency	Diagnostics (Imaging & Non-Imaging), AI in Public Health & Epidemiology, AI in Cardiovascular Medicine	Critical Appraisals of AI Evaluation Metrics	Integration of AI with EHRs, NLP in AI
61	Electroglottography in Medical Diagnostics of Vocal Tract Pathologies: SR	(61)	AI in Cardiovascular Medicine, Hybrid AI-Assisted SRs	AI in Surgery & Procedural Assistance, Ethical, Regulatory, and Bias Concerns in AI	Hybrid AI-Assisted SRs	Bias & Fairness in AI Models
62	The effect of CDSS on clinical outcomes in acute kidney injury: SR and meta-analysis of randomized controlled trials	(62)	Patient Management & Predictive Analytics, AI in Surgery & Procedural Assistance, DL-based Reviews, Integration of AI with EHRs	AI in Mental Health & Neurology, CDSS, AI in Rare Diseases & Genomics	Narrative Reviews with AI Commentary, Traditional SRs	XAI & Model Transparency, Integration of AI with EHRs, Comparative Studies of AI Models
63	Faithful AI in Medicine: SR with Large Language Models and Beyond	(63)	AI in Public Health & Epidemiology, AI in CDS, Ethical, Regulatory, and Bias Concerns in AI	General Medicine, Medical Informatics, Public Health	SR (PRISMA), Qualitative Synthesis, Evaluation of AI Factuality Metrics, Categorization of Mitigation Methods	LLMs, Knowledge-Grounded Generation, Multimodal-to-Text, Medical Fact-Checking, Prompt Engineering
64	Advancing Colorectal Cancer Screening: A Comprehensive SR of AI-Assisted Versus Routine Colonoscopy	(64)	Bias & Fairness in AI Models, AI in Public Health & Epidemiology, AI in Surgery & Procedural Assistance, Ethical, Regulatory, and Bias Concerns in AI	AI in Mental Health & Neurology, Diagnostics (Imaging & Non-Imaging), Ethical, Regulatory, and Bias Concerns in AI	Hybrid AI-Assisted SRs, Critical Appraisals of AI Evaluation Metrics	Comparative Studies of AI Models, NLP in AI
65	Hyperspectral Imaging in Brain Tumor Surgery-Evidence of ML-Based Performance	(65)	Bias & Fairness in AI Models, AI in Surgery & Procedural Assistance	CDSS, AI in Cardiovascular Medicine	Hybrid AI-Assisted SRs, Traditional SRs	XAI & Model Transparency, DL-based Reviews

66	Explainable ML for breast cancer diagnosis from mammography and ultrasound images: SR	(66)	Narrative Reviews with AI Commentary, ML-based Reviews	AI in Public Health & Epidemiology	Hybrid AI-Assisted SRs	Integration of AI with EHRs
67	SR of Automated Diuresis Measurement in Critically Ill Patients	(67)	ML-based Reviews, AI in Public Health & Epidemiology, Patient Management & Predictive Analytics, AI in Cardiovascular Medicine	AI in Public Health & Epidemiology	Traditional SRs, Critical Appraisals of AI Evaluation Metrics	Comparative Studies of AI Models, DL-based Reviews
68	Design and implementation of CDSS in mental health helpline Services: SR	(68)	ML-based Reviews, Ethical, Regulatory, and Bias Concerns in AI, DL-based Reviews, Narrative Reviews with AI Commentary	Emergency & Critical Care AI, AI in Surgery & Procedural Assistance, AI in Oncology	Narrative Reviews with AI Commentary	XAI & Model Transparency
69	Endometrial cancer diagnostic and prognostic algorithms based on proteomics, metabolomics, and clinical data: SR	(69)	Hybrid AI-Assisted SRs	AI in Surgery & Procedural Assistance, AI in Cardiovascular Medicine	Meta-Analyses, Narrative Reviews with AI Commentary	Integration of AI with EHRs
70	SR of the performance evaluation of clinicians with or without the aid of ML CDS system	(70)	Meta-Analyses, DL-based Reviews, Critical Appraisals of AI Evaluation Metrics	AI in Oncology, AI in Public Health & Epidemiology, AI in Surgery & Procedural Assistance	Narrative Reviews with AI Commentary, Traditional SRs	Bias & Fairness in AI Models, Comparative Studies of AI Models, Integration of AI with EHRs
71	Investigating ML and natural language processing techniques applied for detecting eating disorders: SR	(71)	Bias & Fairness in AI Models, CDSS, Meta-Analyses, Emergency & Critical Care AI	CDSS	Narrative Reviews with AI Commentary	Integration of AI with EHRs
72	ChatGPT in radiology: SR of performance, pitfalls, and future perspectives	(72)	Hybrid AI-Assisted SRs, AI in Oncology, Diagnostics (Imaging & Non-Imaging), NLP in AI	AI in Mental Health & Neurology	Narrative Reviews with AI Commentary	Bias & Fairness in AI Models, Integration of AI with EHRs, DL-based Reviews
73	Predicting the Progression of Chronic Kidney Disease: SR of Artificial Intelligence and ML Approaches	(73)	Traditional SRs, Emergency & Critical Care AI, ML-based Reviews, Comparative Studies of AI Models	AI in Rare Diseases & Genomics	Narrative Reviews with AI Commentary	DL-based Reviews, Integration of AI with EHRs, NLP in AI
74	Interpreting artificial intelligence models: SR on the application of LIME and SHAP in Alzheimer's disease detection	(74)	AI in Oncology	AI in Drug Discovery & Personalized Medicine, Patient Management & Predictive Analytics	Meta-Analyses	XAI & Model Transparency, DL-based Reviews, Bias & Fairness in AI Models
75	Can Electronic CDSS Improve the Diagnosis of Urinary Tract Infections? SR and Meta-Analysis	(75)	ML-based Reviews, Meta-Analyses, Traditional SRs	Emergency & Critical Care AI, AI in Oncology	Critical Appraisals of AI Evaluation Metrics	ML-based Reviews
76	The Advent of Artificial Intelligence into Cardiac Surgery: SR of Our Understanding	(76)	ML-based Reviews, CDSS, Narrative Reviews with AI Commentary, NLP in AI	AI in Surgery & Procedural Assistance, AI in Cardiovascular Medicine	Critical Appraisals of AI Evaluation Metrics	Integration of AI with EHRs, ML-based Reviews, NLP in AI
77	ML based algorithms for virtual early detection and screening of neurodegenerative and neurocognitive disorders: SR	(77)	AI in Surgery & Procedural Assistance, AI in Rare Diseases & Genomics	Emergency & Critical Care AI, AI in Mental Health & Neurology	Traditional SRs	ML-based Reviews, Integration of AI with EHRs
78	Identifying the data elements and functionalities of CDSS to administer medication for neonates and pediatrics: SR	(78)	DL-based Reviews, Critical Appraisals of AI Evaluation Metrics	AI in Cardiovascular Medicine, AI in Mental Health & Neurology, AI in Drug Discovery & Personalized Medicine	Critical Appraisals of AI Evaluation Metrics, Traditional SRs	XAI & Model Transparency
79	Economic evidence of CDSS in mental health: SR	(79)	AI in Public Health & Epidemiology, Emergency & Critical Care AI	Diagnostics (Imaging & Non-Imaging), AI in Mental Health & Neurology, Patient	Critical Appraisals of AI Evaluation Metrics	DL-based Reviews, Comparative Studies of AI Models

				Management & Predictive Analytics		
80	The Use of Artificial Intelligence in the Liver Histopathology Field: SR	(80)	Narrative Reviews with AI Commentary, Integration of AI with EHRs	Patient Management & Predictive Analytics, AI in Oncology	Critical Appraisals of AI Evaluation Metrics, Hybrid AI-Assisted SRs	XAI & Model Transparency, DL-based Reviews
81	Ocular image-based DL for predicting refractive error: SR	(81)	Traditional SRs, Patient Management & Predictive Analytics, AI in Public Health & Epidemiology	AI in Public Health & Epidemiology, AI in Surgery & Procedural Assistance	Meta-Analyses, Traditional SRs	Integration of AI with EHRs, DL-based Reviews, ML-based Reviews
82	CDSS to optimize adherence to anticoagulant guidelines in patients with atrial fibrillation: SR and meta-analysis of randomized controlled trials	(82)	AI in Cardiovascular Medicine, Traditional SRs, Diagnostics (Imaging & Non-Imaging), Meta-Analyses	AI in Surgery & Procedural Assistance	Traditional SRs	Integration of AI with EHRs, XAI & Model Transparency
83	Role of Imaging in the Management of Patients with SARS-CoV-2 Lung Involvement Admitted to the Emergency Department: SR	(83)	Patient Management & Predictive Analytics, AI in Rare Diseases & Genomics, Hybrid AI-Assisted SRs	Patient Management & Predictive Analytics	Traditional SRs	NLP in AI, DL-based Reviews, Comparative Studies of AI Models
84	Efficiency and accuracy of artificial intelligence in the radiographic detection of periodontal bone loss: SR	(84)	Integration of AI with EHRs, Patient Management & Predictive Analytics, DL-based Reviews, AI in Surgery & Procedural Assistance	AI in Drug Discovery & Personalized Medicine, AI in Cardiovascular Medicine, Diagnostics (Imaging & Non-Imaging)	Narrative Reviews with AI Commentary	Comparative Studies of AI Models
85	ChatGPT in medicine: A cross-disciplinary SR of ChatGPT's (artificial intelligence) role in research, clinical practice, education, and patient interaction	(85)	Traditional SRs, ML-based Reviews	Diagnostics (Imaging & Non-Imaging), AI in Oncology	Traditional SRs	Bias & Fairness in AI Models, ML-based Reviews, XAI & Model Transparency
86	Computed Tomography of the Head : SR on Acquisition and Reconstruction Techniques to Reduce Radiation Dose	(86)	AI in Mental Health & Neurology, CDSS	Diagnostics (Imaging & Non-Imaging), AI in Cardiovascular Medicine, CDSS	Traditional SRs	ML-based Reviews
87	Prognostic models for predicting postoperative recurrence in Crohn's disease: SR and critical appraisal	(87)	XAI & Model Transparency, Traditional SRs, Hybrid AI-Assisted SRs	AI in Oncology, AI in Surgery & Procedural Assistance, AI in Drug Discovery & Personalized Medicine	Meta-Analyses	XAI & Model Transparency, DL-based Reviews
88	Evaluating the Prevalence of Burnout Among Health Care Professionals Related to Electronic Health Record Use: SR and Meta-Analysis	(88)	AI in Oncology, CDSS, Comparative Studies of AI Models, XAI & Model Transparency	AI in Surgery & Procedural Assistance, Emergency & Critical Care AI, Ethical, Regulatory, and Bias Concerns in AI	Meta-Analyses	Bias & Fairness in AI Models, XAI & Model Transparency
89	Exploring the role of professional identity in the implementation of CDSS-a narrative review	(89)	Ethical, Regulatory, and Bias Concerns in AI, AI in Mental Health & Neurology	AI in Cardiovascular Medicine	Traditional SRs	Comparative Studies of AI Models, NLP in AI
90	Decoding the application of DL in neuroscience: a bibliometric analysis	(90)	CDSS	Emergency & Critical Care AI, AI in Mental Health & Neurology	Narrative Reviews with AI Commentary, Hybrid AI-Assisted SRs	ML-based Reviews, DL-based Reviews, Bias & Fairness in AI Models
91	Measurement of Cardiothoracic Ratio on Chest X-rays Using Artificial Intelligence-SR and Meta-Analysis	(91)	AI in Cardiovascular Medicine	Diagnostics (Imaging & Non-Imaging), Ethical, Regulatory, and Bias Concerns in AI	Traditional SRs	XAI & Model Transparency
92	The impact of electronic pathways and digital systems on neck of	(92)	Emergency & Critical Care AI	AI in Oncology	Narrative Reviews with AI Commentary	DL-based Reviews, Integration of AI with EHRs

	femur fracture outcomes globally: SR					
93	Health Care Professionals' Experience of Using AI: SR With Narrative Synthesis	(93)	XAI & Model Transparency, Ethical, Regulatory, and Bias Concerns in AI, Integration of AI with EHRs	AI in Rare Diseases & Genomics, Ethical, Regulatory, and Bias Concerns in AI, AI in Drug Discovery & Personalized Medicine	Traditional SRs	NLP in AI
94	SR on Artificial Intelligence Evaluating Metastatic Prostatic Cancer and Lymph Nodes on PSMA PET Scans	(94)	AI in Drug Discovery & Personalized Medicine, XAI & Model Transparency	AI in Mental Health & Neurology, Ethical, Regulatory, and Bias Concerns in AI, Patient Management & Predictive Analytics	Narrative Reviews with AI Commentary	DL-based Reviews, ML-based Reviews
95	Methods used to evaluate usability of mobile CDSS for healthcare emergencies: SR and qualitative synthesis	(95)	AI in Oncology	CDSS, Patient Management & Predictive Analytics, AI in Cardiovascular Medicine	Meta-Analyses	Bias & Fairness in AI Models, NLP in AI, Comparative Studies of AI Models
96	The role of information systems in emergency department decision-making-a literature review	(96)	Integration of AI with EHRs, XAI & Model Transparency, Meta-Analyses	Ethical, Regulatory, and Bias Concerns in AI, AI in Mental Health & Neurology, AI in Surgery & Procedural Assistance	Critical Appraisals of AI Evaluation Metrics	Comparative Studies of AI Models, XAI & Model Transparency
97	Question answering systems for health professionals at the point of care-SR	(97)	XAI & Model Transparency, AI in Mental Health & Neurology	Emergency & Critical Care AI, AI in Public Health & Epidemiology, Diagnostics (Imaging & Non-Imaging)	Narrative Reviews with AI Commentary, Traditional SRs	DL-based Reviews, XAI & Model Transparency, Bias & Fairness in AI Models
98	SR of Real-Time DL Methods for Image-Based Cancer Diagnostics	(98)	XAI & Model Transparency, Emergency & Critical Care AI	AI in Oncology	Hybrid AI-Assisted SRs	Bias & Fairness in AI Models
99	The ethical requirement of explainability for AI-DSS in healthcare: SR of reasons	(99)	Integration of AI with EHRs, CDSS, Emergency & Critical Care AI, AI in Rare Diseases & Genomics	AI in Public Health & Epidemiology	Critical Appraisals of AI Evaluation Metrics, Meta-Analyses	Integration of AI with EHRs, DL-based Reviews, ML-based Reviews
100	Integrating whole genome sequencing and ML for predicting antimicrobial resistance in critical pathogens: SR of antimicrobial susceptibility tests	(100)	Emergency & Critical Care AI, Diagnostics (Imaging & Non-Imaging)	Emergency & Critical Care AI	Critical Appraisals of AI Evaluation Metrics	XAI & Model Transparency
101	Override rate of drug-drug interaction alerts in CDSS: A brief SR and meta-analysis	(101)	AI in Oncology	AI in Cardiovascular Medicine	Traditional SRs, Critical Appraisals of AI Evaluation Metrics	Integration of AI with EHRs, NLP in AI
102	Assessing the efficacy of ML algorithms for syncope classification: SR	(102)	Meta-Analyses	AI in Surgery & Procedural Assistance, AI in Cardiovascular Medicine	Hybrid AI-Assisted SRs, Traditional SRs	DL-based Reviews
103	Advancements in Computer-Aided Diagnosis of Celiac Disease: SR	(103)	Narrative Reviews with AI Commentary	CDSS	Traditional SRs	Integration of AI with EHRs
104	DL in magnetic resonance enterography for Crohn's disease assessment: SR	(104)	Diagnostics (Imaging & Non-Imaging), Patient Management & Predictive Analytics, Meta-Analyses, Narrative Reviews with AI Commentary	Emergency & Critical Care AI, AI in Public Health & Epidemiology	Critical Appraisals of AI Evaluation Metrics, Meta-Analyses	XAI & Model Transparency, Integration of AI with EHRs
105	SR and longitudinal analysis of implementing Artificial Intelligence to predict clinical deterioration in adult hospitals: what is	(105)	Critical Appraisals of AI Evaluation Metrics, Emergency & Critical Care AI, AI in Mental Health & Neurology, NLP in AI	AI in Drug Discovery & Personalized Medicine, AI in Mental Health & Neurology	Meta-Analyses, Hybrid AI-Assisted SRs	DL-based Reviews

	known and what remains uncertain					
106	The application of ML methods for predicting the progression of adolescent idiopathic scoliosis: SR	(106)	Diagnostics (Imaging & Non-Imaging), Integration of AI with EHRs, Ethical, Regulatory, and Bias Concerns in AI	CDSS	Hybrid AI-Assisted SRs, Critical Appraisals of AI Evaluation Metrics	XAI & Model Transparency, DL-based Reviews
107	Factors associated with interobserver variation amongst pathologists in the diagnosis of endometrial hyperplasia: SR	(107)	Bias & Fairness in AI Models, AI in Cardiovascular Medicine	Diagnostics (Imaging & Non-Imaging)	Hybrid AI-Assisted SRs, Meta-Analyses	XAI & Model Transparency
108	The Use of Artificial Intelligence for Skin Disease Diagnosis in Primary Care Settings: SR	(108)	Narrative Reviews with AI Commentary, Bias & Fairness in AI Models	AI in Cardiovascular Medicine, Emergency & Critical Care AI	Critical Appraisals of AI Evaluation Metrics, Hybrid AI-Assisted SRs	Integration of AI with EHRs, Bias & Fairness in AI Models
109	Artificial intelligence in diagnosing upper limb musculoskeletal disorders: SR and meta-analysis of diagnostic tests	(109)	XAI & Model Transparency, Patient Management & Predictive Analytics, Meta-Analyses, AI in Oncology	CDSS	Hybrid AI-Assisted SRs	Bias & Fairness in AI Models, XAI & Model Transparency, NLP in AI
110	Challenges and Opportunities for Professional Medical Publications Writers to Contribute to Plain Language Summaries (PLS) in an AI/ML Environment - A Consumer Health Informatics SR	(110)	Meta-Analyses, AI in Oncology, XAI & Model Transparency, ML-based Reviews	Emergency & Critical Care AI	Narrative Reviews with AI Commentary, Meta-Analyses	XAI & Model Transparency, Integration of AI with EHRs, DL-based Reviews
111	AI Algorithms for Modeling the Risk, Progression, and Treatment of Sepsis, Including Early-Onset Sepsis-SR	(111)	AI in Surgery & Procedural Assistance	Diagnostics (Imaging & Non-Imaging)	Meta-Analyses	DL-based Reviews, NLP in AI
112	Use of ML Algorithms Based on Text, Audio, and Video Data in the Prediction of Anxiety and Posttraumatic Stress in General and Clinical Populations: SR	(112)	XAI & Model Transparency, NLP in AI	AI in Mental Health & Neurology, AI in Surgery & Procedural Assistance, AI in Cardiovascular Medicine	Critical Appraisals of AI Evaluation Metrics	Bias & Fairness in AI Models
113	Technology-supported shared decision-making in chronic conditions: SR of randomized controlled trials	(113)	Bias & Fairness in AI Models, AI in Surgery & Procedural Assistance	Ethical, Regulatory, and Bias Concerns in AI	Meta-Analyses	ML-based Reviews, NLP in AI
114	Perceptions of primary care patients on the use of electronic CDS tools to facilitate health care: SR	(114)	DL-based Reviews, NLP in AI	AI in Rare Diseases & Genomics	Narrative Reviews with AI Commentary, Critical Appraisals of AI Evaluation Metrics	ML-based Reviews
115	Computed Tomography of the Spine : SR on Acquisition and Reconstruction Techniques to Reduce Radiation Dose	(115)	AI in Cardiovascular Medicine, AI in Surgery & Procedural Assistance, CDSS, DL-based Reviews	AI in Rare Diseases & Genomics, Diagnostics (Imaging & Non-Imaging), AI in Oncology	Hybrid AI-Assisted SRs	DL-based Reviews, Integration of AI with EHRs
116	Innovative technologies to address neglected tropical diseases in African settings with persistent sociopolitical instability	(116)	Traditional SRs, AI in Surgery & Procedural Assistance, AI in Drug Discovery & Personalized Medicine	Emergency & Critical Care AI, AI in Cardiovascular Medicine, Patient Management & Predictive Analytics	Meta-Analyses	Integration of AI with EHRs, XAI & Model Transparency, ML-based Reviews
117	SR of the Diagnostic Accuracy of DL Models for the Automatic Detection, Localization, and Characterization of Clinically Significant Prostate Cancer on Magnetic Resonance Imaging	(117)	Hybrid AI-Assisted SRs, Comparative Studies of AI Models, AI in Rare Diseases & Genomics, Narrative Reviews with AI Commentary	CDSS, AI in Surgery & Procedural Assistance	Narrative Reviews with AI Commentary	Comparative Studies of AI Models

118	Analysis of computer-aided diagnostics in the preoperative diagnosis of ovarian cancer: SR	(118)	Emergency & Critical Care AI, Meta-Analyses	Ethical, Regulatory, and Bias Concerns in AI, Diagnostics (Imaging & Non-Imaging)	Traditional SRs	Bias & Fairness in AI Models, XAI & Model Transparency
119	Standalone DL versus experts for diagnosis lung cancer on chest computed tomography: SR	(119)	Traditional SRs, Critical Appraisals of AI Evaluation Metrics, Narrative Reviews with AI Commentary, Bias & Fairness in AI Models	Diagnostics (Imaging & Non-Imaging), AI in Mental Health & Neurology	Meta-Analyses	Integration of AI with EHRs
120	Evaluating the Efficacy and Accuracy of AI-Assisted Diagnostic Techniques in Endometrial Carcinoma: SR	(120)	Patient Management & Predictive Analytics, DL-based Reviews	AI in Oncology	Critical Appraisals of AI Evaluation Metrics	Comparative Studies of AI Models, Integration of AI with EHRs, XAI & Model Transparency
121	How intervention studies measure the effectiveness of medication safety-related CDSS in primary and long-term care: SR	(121)	AI in Cardiovascular Medicine, Meta-Analyses, Patient Management & Predictive Analytics, Comparative Studies of AI Models	AI in Drug Discovery & Personalized Medicine, AI in Rare Diseases & Genomics	Hybrid AI-Assisted SRs, Traditional SRs	XAI & Model Transparency, Bias & Fairness in AI Models
122	Impact and effect of imaging referral guidelines on patients and radiology services: SR	(122)	AI in Oncology, Critical Appraisals of AI Evaluation Metrics	AI in Oncology, Patient Management & Predictive Analytics, Emergency & Critical Care AI	Critical Appraisals of AI Evaluation Metrics	DL-based Reviews, Bias & Fairness in AI Models
123	Exploring Components, Sensors, and Techniques for Cancer Detection via eNose Technology: SR	(123)	CDSS, Meta-Analyses, AI in Rare Diseases & Genomics, NLP in AI	AI in Rare Diseases & Genomics	Critical Appraisals of AI Evaluation Metrics	ML-based Reviews
124	Exploring the Applications of Explainability in Wearable Data Analytics: SR	(124)	Emergency & Critical Care AI	AI in Oncology, AI in Cardiovascular Medicine, Patient Management & Predictive Analytics	Traditional SRs, Meta-Analyses	Bias & Fairness in AI Models, Integration of AI with EHRs
125	Radiomics of the Paranasal Sinuses: SR of Computer-Assisted Techniques to Assess Computed Tomography Radiological Data	(125)	AI in Surgery & Procedural Assistance, CDSS, NLP in AI, DL-based Reviews	AI in Rare Diseases & Genomics, CDSS, AI in Cardiovascular Medicine	Hybrid AI-Assisted SRs, Narrative Reviews with AI Commentary	ML-based Reviews, Comparative Studies of AI Models
126	Towards secure and trusted AI in healthcare: SR of emerging innovations and ethical challenges	(126)	AI in Drug Discovery & Personalized Medicine, NLP in AI, Meta-Analyses, AI in Cardiovascular Medicine	AI in Rare Diseases & Genomics, Ethical, Regulatory, and Bias Concerns in AI	Hybrid AI-Assisted SRs, Meta-Analyses	DL-based Reviews, XAI & Model Transparency, NLP in AI
127	Primary Care Asthma Attack Prediction Models for Adults: SR of Reported Methodologies and Outcomes	(127)	AI in Rare Diseases & Genomics	AI in Drug Discovery & Personalized Medicine, Patient Management & Predictive Analytics	Narrative Reviews with AI Commentary	Comparative Studies of AI Models, NLP in AI
128	Noninvasive Technologies for the Diagnosis of Squamous Cell Carcinoma: SR and Meta-Analysis	(128)	Ethical, Regulatory, and Bias Concerns in AI, DL-based Reviews, AI in Drug Discovery & Personalized Medicine, Diagnostics (Imaging & Non-Imaging)	AI in Public Health & Epidemiology, Ethical, Regulatory, and Bias Concerns in AI	Traditional SRs	Comparative Studies of AI Models, NLP in AI
129	Precision Emergency Medicine: SR	(129)	AI in Rare Diseases & Genomics, AI in Mental Health & Neurology	AI in Public Health & Epidemiology	Critical Appraisals of AI Evaluation Metrics, Hybrid AI-Assisted SRs	DL-based Reviews, Integration of AI with EHRs, Comparative Studies of AI Models
130	Navigating the wild west: a review of guidance on clinical communications using personal BYOD, IM and third-party apps in the UK and Ireland	(130)	AI in Surgery & Procedural Assistance, AI in Rare Diseases & Genomics	AI in Rare Diseases & Genomics, AI in Drug Discovery & Personalized Medicine	Narrative Reviews with AI Commentary, Meta-Analyses	XAI & Model Transparency

References

1. Sun L, Yin C, Xu Q, Zhao W. Artificial intelligence for healthcare and medical education: a systematic review. Am J Transl Res. 2023;15(7):4820–8.

2. Piliuk K, Tomforde S. Artificial intelligence in emergency medicine. A systematic literature review. Int J Med Inform. 2023 Dec;180:105274.

3. Xue P, Si M, Qin D, Wei B, Seery S, Ye Z, et al. Correction: Unassisted Clinicians Versus Deep Learning-Assisted Clinicians in Image-Based Cancer Diagnostics: Systematic Review With Meta-analysis. J Med Internet Res. 2023 Jun 2;25:e49146.

4. Kwong JCC, Khondker A, Lajkosz K, McDermott MBA, Frigola XB, McCradden MD, et al. APPRAISE-AI Tool for Quantitative Evaluation of AI Studies for Clinical Decision Support. JAMA Netw Open. 2023 Sep 5;6(9):e2335377.

5. Akay EMZ, Hilbert A, Carlisle BG, Madai VI, Mutke MA, Frey D. Artificial Intelligence for Clinical Decision Support in Acute Ischemic Stroke: A Systematic Review. Stroke. 2023 Jun;54(6):1505–16.

6. Du Y, McNestry C, Wei L, Antoniadi AM, McAuliffe FM, Mooney C. Machine learning-based clinical decision support systems for pregnancy care: A systematic review. Int J Med Inform. 2023 May;173:105040.

7. Palmieri V, Montisci A, Vietri MT, Colombo PC, Sala S, Maiello C, et al. Artificial intelligence, big data and heart transplantation: Actualities. Int J Med Inform. 2023 Aug;176:105110.

8. Mukherjee T, Pournik O, Lim Choi Keung SN, Arvanitis TN. Clinical Decision Support Systems for Brain Tumour Diagnosis and Prognosis: A Systematic Review. Cancers (Basel). 2023 Jul 6;15(13).

9. Tang L, Li J, Fantus S. Medical artificial intelligence ethics: A systematic review of empirical studies. Digit Health. 2023 Dec;9:20552076231186064.

10. Sivari E, Senirkentli GB, Bostanci E, Guzel MS, Acici K, Asuroglu T. Deep Learning in Diagnosis of Dental Anomalies and Diseases: A Systematic Review. Diagnostics (Basel). 2023 Jul 27;13(15).

11. Borna S, Maniaci MJ, Haider CR, Maita KC, Torres-Guzman RA, Avila FR, et al. Artificial Intelligence Models in Health Information Exchange: A Systematic Review of Clinical Implications. Healthcare (Basel). 2023 Sep 19;11(18).

12. Jing X, Min H, Gong Y, Biondich P, Robinson D, Law T, et al. Ontologies Applied in Clinical Decision Support System Rules: Systematic Review. JMIR Med Inform. 2023 Jan 19;11:e43053.

13. Benzinger L, Ursin F, Balke WT, Kacprowski T, Salloch S. Should Artificial Intelligence be used to support clinical ethical decision-making? A systematic review of reasons. BMC Med Ethics. 2023 Jul 6;24(1):48.

14. Singareddy S, Sn VP, Jaramillo AP, Yasir M, Iyer N, Hussein S, et al. Artificial Intelligence and Its Role in the Management of Chronic Medical Conditions: A Systematic Review. Cureus. 2023 Sep;15(9):e46066.

15. Orji C, Reghefaoui M, Saavedra Palacios MS, Thota P, Peresuodei TS, Gill A, et al. Application of Artificial Intelligence and Machine Learning in Diagnosing Scaphoid Fractures: A Systematic Review. Cureus. 2023 Oct;15(10):e47732.

16. Fernandes JRN, Teles AS, Fernandes TRS, Lima LDB, Balhara S, Gupta N, et al. Artificial Intelligence on Diagnostic Aid of Leprosy: A Systematic Literature Review. J Clin Med. 2023 Dec 28;13(1).

17. Bitkina OV, Park J, Kim HK. Application of artificial intelligence in medical technologies: A systematic review of main trends. Digit Health. 2023 Dec;9:20552076231189332.

18. Lin X, Liang C, Liu J, Lyu T, Ghumman N, Campbell B. Artificial Intelligence-Augmented Clinical Decision Support Systems for Pregnancy Care: Systematic Review. J Med Internet Res. 2024 Sep 16;26:e54737.

19. Bamgboje-Ayodele A, Borg DN, McPhail SM, Baysari MT. Clinical decision support systems for chronic obstructive pulmonary disease (COPD) in hospitals: A systematic review. Digit Health. 2023 Dec;9:20552076231219108.

20. Jeong HK, Park C, Henao R, Kheterpal M. Deep Learning in Dermatology: A Systematic Review of Current Approaches, Outcomes, and Limitations. JID Innov. 2023 Jan;3(1):100150.

21. Alipour E, Pooyan A, Shomal Zadeh F, Darbandi AD, Bonaffini PA, Chalian M. Current Status and Future of Artificial Intelligence in MM Imaging: A Systematic Review. Diagnostics (Basel). 2023 Nov 2;13(21).

22. Eguia H, Sánchez-Bocanegra CL, Vinciarelli F, Alvarez-Lopez F, Saigí-Rubió F. Clinical Decision Support and Natural Language Processing in Medicine: Systematic Literature Review. J Med Internet Res. 2024 Sep 30;26:e55315.

23. Balla Y, Tirunagari S, Windridge D. Pediatrics in Artificial Intelligence Era: A Systematic Review on Challenges, Opportunities, and Explainability. Indian Pediatr. 2023 Jul 15;60(7):561–9.

24. Pitt E, Bradford N, Robertson E, Sansom-Daly UM, Alexander K. The effects of cancer clinical decision support systems on patient-reported outcomes: A systematic review. Eur J Oncol Nurs. 2023 Oct;66:102398.

25. Alasiri SF, Douiri A, Altukistani S, Porat T, Mousa O. The Role of Clinical Decision Support Systems in Preventing Stroke in Primary Care: A Systematic Review. Perspect Health Inf Manag. 2023 Spring;20(2):1d.

26. Dweekat OY, Lam SS, McGrath L. Machine Learning Techniques, Applications, and Potential Future Opportunities in Pressure Injuries (Bedsores) Management: A Systematic Review. Int J Environ Res Public Health. 2023 Jan 1;20(1).

27. Barrera FJ, Brown EDL, Rojo A, Obeso J, Plata H, Lincango EP, et al. Application of machine learning and artificial intelligence in the diagnosis and classification of polycystic ovarian syndrome: a systematic review. Front Endocrinol (Lausanne). 2023;14:1106625.

28. Johnson D, Del Fiol G, Kawamoto K, Romagnoli KM, Sanders N, Isaacson G, et al. Genetically guided precision medicine clinical decision support tools: a systematic review. J Am Med Inform Assoc. 2024 Apr 19;31(5):1183–94.

29. Xue P, Si M, Qin D, Wei B, Seery S, Ye Z, et al. Unassisted Clinicians Versus Deep Learning-Assisted Clinicians in Image-Based Cancer Diagnostics: Systematic Review With Meta-analysis. J Med Internet Res. 2023 Mar 2;25:e43832.

30. Sanmarchi F, Fanconi C, Golinelli D, Gori D, Hernandez-Boussard T, Capodici A. Predict, diagnose, and treat chronic kidney disease with machine learning: a systematic literature review. J Nephrol. 2023 May;36(4):1101–17.

31. Oehring R, Ramasetti N, Ng S, Roller R, Thomas P, Winter A, et al. Use and accuracy of decision support systems using artificial intelligence for tumor diseases: a systematic review and meta-analysis. Front Oncol. 2023;13:1224347.

32. Kamitani E, Mizuno Y, Khalil GM, Viguerie A, DeLuca JB, Mishra N. Improving HIV preexposure prophylaxis uptake with artificial intelligence and automation: a systematic review. AIDS. 2024 Aug 1;38(10):1560–9.

33. Łajczak PM, Jóźwik K. Artificial intelligence and myocarditis-a systematic review of current applications. Heart Fail Rev. 2024 Nov;29(6):1217–34.

34. Sorin V, Glicksberg BS, Artsi Y, Barash Y, Konen E, Nadkarni GN, et al. Utilizing large language models in breast cancer management: systematic review. J Cancer Res Clin Oncol. 2024 Mar 19;150(3):140.

35. Ebrahimi F, Ayatollahi H, Zeraatkar K. A systematic review of using clinical decision support systems in corneal diseases. Digit Health. 2024 Dec;10:20552076241303804.

36. Alhalafi A, Alqahtani SM, Alqarni NA, Aljuaid AT, Aljaber GT, Alshahrani LM, et al. Utilizing Artificial Intelligence Among Patients With Diabetes: A Systematic Review and Meta-Analysis. Cureus. 2024 Apr;16(4):e58713.

37. Baddal B, Taner F, Uzun Ozsahin D. Harnessing of Artificial Intelligence for the Diagnosis and Prevention of Hospital-Acquired Infections: A Systematic Review. Diagnostics (Basel). 2024 Feb 23;14(5).

38. Omar M, Naffaa ME, Glicksberg BS, Reuveni H, Nadkarni GN, Klang E. Advancing rheumatology with natural language processing: insights and prospects from a systematic review. Rheumatol Adv Pract. 2024;8(4):rkae120.

39. Bacci MR, Minczuk CVB, Fonseca FLA. A systematic review of artificial intelligence algorithms for predicting acute kidney injury. Eur Rev Med Pharmacol Sci. 2023 Oct;27(20):9872–9.

40. Alsaleh H. The impact of artificial intelligence in the diagnosis and management of acoustic neuroma: A systematic review. Technol Health Care. 2024;32(6):3801–13.

41. Perivolaris A, Adams-McGavin C, Madan Y, Kishibe T, Antoniou T, Mamdani M, et al. Quality of interaction between clinicians and artificial intelligence systems. A systematic review. Future Healthc J. 2024 Sep;11(3):100172.

42. Moazemi S, Vahdati S, Li J, Kalkhoff S, Castano LJV, Dewitz B, et al. Artificial intelligence for clinical decision support for monitoring patients in cardiovascular ICUs: A systematic review. Front Med (Lausanne). 2023;10:1109411.

43. Cai J, Li P, Li W, Zhu T. Outcomes of clinical decision support systems in real-world perioperative care: a systematic review and meta-analysis. Int J Surg. 2024 Dec 1;110(12):8057–72.

44. Chaudhry TZ, Yadav M, Bokhari SFH, Fatimah SR, Rehman A, Kamran M, et al. Artificial Intelligence and Machine Learning in Predicting Intradialytic Hypotension in Hemodialysis Patients: A Systematic Review. Cureus. 2024 Jul;16(7):e65334.

45. Macrì M, D'Albis V, D'Albis G, Forte M, Capodiferro S, Favia G, et al. The Role and Applications of Artificial Intelligence in Dental Implant Planning: A Systematic Review. Bioengineering (Basel). 2024 Jul 31;11(8).

46. Mitchell S, Nikolopoulos M, El-Zarka A, Al-Karawi D, Al-Zaidi S, Ghai A, et al. Artificial Intelligence in Ultrasound Diagnoses of Ovarian Cancer: A Systematic Review and Meta-Analysis. Cancers (Basel). 2024 Jan 19;16(2).

47. Meunier PY, Raynaud C, Guimaraes E, Gueyffier F, Letrilliart L. Barriers and Facilitators to the Use of Clinical Decision Support Systems in Primary Care: A Mixed-Methods Systematic Review. Ann Fam Med. 2023 Feb;21(1):57–69.

48. Kapetanidis P, Kalioras F, Tsakonas C, Tzamalis P, Kontogiannis G, Karamanidou T, et al. Respiratory Diseases Diagnosis Using Audio Analysis and Artificial Intelligence: A Systematic Review. Sensors (Basel). 2024 Feb 10;24(4).

49. Alattar M, Govind A, Mainali S. Artificial Intelligence Models for the Automation of Standard Diagnostics in Sleep Medicine-A Systematic Review. Bioengineering (Basel). 2024 Feb 22;11(3).

50. Pokhriyal SC, Shukla A, Gupta U, Al-Ghuraibawi MMH, Yadav R, Panigrahi K. Application of Artificial Intelligence in Neuroendocrine Lung Cancer Diagnosis and Treatment: A Systematic Review. Cureus. 2024 May;16(5):e61012.

51. Muyama L, Neuraz A, Coulet A. Machine learning approaches for the discovery of clinical pathways from patient data: A systematic review. J Biomed Inform. 2024 Dec;160:104746.

52. Xu Q, Xie W, Liao B, Hu C, Qin L, Yang Z, et al. Interpretability of Clinical Decision Support Systems Based on Artificial Intelligence from Technological and Medical Perspective: A Systematic Review. J Healthc Eng. 2023;2023:9919269.

53. Cockburn N, Osborne C, Withana S, Elsmore A, Nanjappa R, South M, et al. Clinical decision support systems for maternity care: a systematic review and meta-analysis. EClinicalMedicine. 2024 Oct;76:102822.

54. Olender RT, Roy S, Nishtala PS. Application of machine learning approaches in predicting clinical outcomes in older adults- a systematic review and meta-analysis. BMC Geriatr. 2023 Sep 14;23(1):561.

55. Jin K, Li Y, Wu H, Tham YC, Koh V, Zhao Y, et al. Integration of smartphone technology and artificial intelligence for advanced ophthalmic care: A systematic review. Adv Ophthalmol Pract Res. 2024 Sep;4(3):120–7.

56. Hindelang M, Sitaru S, Zink A. Transforming Health Care Through Chatbots for Medical History-Taking and Future Directions: Comprehensive Systematic Review. JMIR Med Inform. 2024 Aug 29;12:e56628.

57. Schopow N, Osterhoff G, Baur D. Applications of the Natural Language Processing Tool ChatGPT in Clinical Practice: Comparative Study and Augmented Systematic Review. JMIR Med Inform. 2023 Nov 28;11:e48933.

58. Sreedharan JK, Saleh F, Alqahtani A, Albalawi IA, Gopalakrishnan GK, Alahmed HA, et al. Applications of artificial intelligence in emergency and critical care diagnostics: a systematic review and meta-analysis. Front Artif Intell. 2024;7:1422551.

59. Abbas S, Shafik R, Soomro N, Heer R, Adhikari K. AI predicting recurrence in non-muscle-invasive bladder cancer: systematic review with study strengths and weaknesses. Front Oncol. 2024;14:1509362.

60. Mumtaz H, Saqib M, Jabeen S, Muneeb M, Mughal W, Sohail H, et al. Exploring alternative approaches to precision medicine through genomics and artificial intelligence- a systematic review. Front Med (Lausanne). 2023;10:1227168.

61. Tomaszewska JZ, Georgakis A. Electroglottography in Medical Diagnostics of Vocal Tract Pathologies: A Systematic Review. J Voice. 2023 Dec 23;S0892-1997(23)00388-0.

62. Altobaishat O, Abouzid M, Amin AM, Bani-Salameh A, Tanashat M, Abdullah Bataineh O, et al. The effect of clinical decision support systems on clinical outcomes in acute kidney injury: a systematic review and meta-analysis of randomized controlled trials. Ren Fail. 2024 Dec;46(2):2400552.

63. Xie Q, Schenck EJ, Yang HS, Chen Y, Peng Y, Wang F. Faithful AI in Medicine: A Systematic Review with Large Language Models and Beyond. medRxiv : the preprint server for health sciences. United States; 2023. p. 2023.04.18.23288752.

64. Thomas J, Ravichandran R, Nag A, Gupta L, Singh M, Panjiyar BK. Advancing Colorectal Cancer Screening: A Comprehensive Systematic Review of Artificial Intelligence (AI)-Assisted Versus Routine Colonoscopy. Cureus. 2023 Sep;15(9):e45278.

65. Puustinen S, Vrzáková H, Hyttinen J, Rauramaa T, Fält P, Hauta-Kasari M, et al. Hyperspectral Imaging in Brain Tumor Surgery-Evidence of Machine Learning-Based Performance. World Neurosurg. 2023 Jul;175:e614–35.

66. Gurmessa DK, Jimma W. Explainable machine learning for breast cancer diagnosis from mammography and ultrasound images: a systematic review. BMJ Health Care Inform. 2024 Feb 2;31(1).

67. Lafuente JL, González S, Gómez-Tello V, Puertas E, Avilés E, Beunza JJ. Systematic Review of Automated Diuresis Measurement in Critically Ill Patients. Med Devices (Auckl). 2023;16:251–9.

68. Gu Y, Andargoli AE, Mackelprang JL, Meyer D. Design and implementation of clinical decision support systems in mental health helpline Services: A systematic review. Int J Med Inform. 2024 Jun;186:105416.

69. Romano A, Rižner TL, Werner HMJ, Semczuk A, Lowy C, Schröder C, et al. Endometrial cancer diagnostic and prognostic algorithms based on proteomics, metabolomics, and clinical data: a systematic review. Front Oncol. 2023;13:1120178.

70. Nuutinen M, Leskelä RL. Systematic review of the performance evaluation of clinicians with or without the aid of machine learning clinical decision support system. Health Technol (Berl). 2023 Jun 13;1–14.

71. Merhbene G, Puttick A, Kurpicz-Briki M. Investigating machine learning and natural language processing techniques applied for detecting eating disorders: a systematic literature review. Front Psychiatry. 2024;15:1319522.

72. Keshavarz P, Bagherieh S, Nabipoorashrafi SA, Chalian H, Rahsepar AA, Kim GHJ, et al. ChatGPT in radiology: A systematic review of performance, pitfalls, and future perspectives. Diagn Interv Imaging. 2024 Aug;105(7–8):251–65.

73. Khalid F, Alsadoun L, Khilji F, Mushtaq M, Eze-Odurukwe A, Mushtaq MM, et al. Predicting the Progression of Chronic Kidney Disease: A Systematic Review of Artificial Intelligence and Machine Learning Approaches. Cureus. 2024 May;16(5):e60145.

74. Vimbi V, Shaffi N, Mahmud M. Interpreting artificial intelligence models: a systematic review on the application of LIME and SHAP in Alzheimer's disease detection. Brain Inform. 2024 Apr 5;11(1):10.

75. Hojat LS, Saade EA, Hernandez AV, Donskey CJ, Deshpande A. Can Electronic Clinical Decision Support Systems Improve the Diagnosis of Urinary Tract Infections? A Systematic Review and Meta-Analysis. Open Forum Infect Dis. 2023 Jan;10(1):ofac691.

76. Bhushan R, Grover V. The Advent of Artificial Intelligence into Cardiac Surgery: A Systematic Review of Our Understanding. Braz J Cardiovasc Surg. 2024 Jul 22;39(5):e20230308.

77. Yousefi M, Akhbari M, Mohamadi Z, Karami S, Dasoomi H, Atabi A, et al. Machine learning based algorithms for virtual early detection and screening of neurodegenerative and neurocognitive disorders: a systematic-review. Front Neurol. 2024;15:1413071.

78. Norouzi S, Galavi Z, Ahmadian L. Identifying the data elements and functionalities of clinical decision support systems to administer medication for neonates and pediatrics: a systematic literature review. BMC Med Inform Decis Mak. 2023 Nov 16;23(1):263.

79. Stien L, Clausen C, Feldman I, Leventhal B, Koposov R, Koochakpour K, et al. Economic evidence of clinical decision support systems in mental health: A systematic literature review. Digit Health. 2024 Dec;10:20552076241256510.

80. Grignaffini F, Barbuto F, Troiano M, Piazzo L, Simeoni P, Mangini F, et al. The Use of Artificial Intelligence in the Liver Histopathology Field: A Systematic Review. Diagnostics (Basel). 2024 Feb 10;14(4).

81. Yew SME, Chen Y, Goh JHL, Chen DZ, Chun Jin Tan M, Cheng CY, et al. Ocular image-based deep learning for predicting refractive error: A systematic review. Adv Ophthalmol Pract Res. 2024 Sep;4(3):164–72.

82. Amin AM, Ghaly R, Abuelazm MT, Ibrahim AA, Tanashat M, Arnaout M, et al. Clinical decision support systems to optimize adherence to anticoagulant guidelines in patients with atrial fibrillation: a systematic review and meta-analysis of randomized controlled trials. Thromb J. 2024 May 28;22(1):45.

83. Maino C, Franco PN, Talei Franzesi C, Giandola T, Ragusi M, Corso R, et al. Role of Imaging in the Management of Patients with SARS-CoV-2 Lung Involvement Admitted to the Emergency Department: A Systematic Review. Diagnostics (Basel). 2023 May 26;13(11).

84. Tariq A, Nakhi FB, Salah F, Eltayeb G, Abdulla GJ, Najim N, et al. Efficiency and accuracy of artificial intelligence in the radiographic detection of periodontal bone loss: A systematic review. Imaging Sci Dent. 2023 Sep;53(3):193–8.

85. Fatima A, Shafique MA, Alam K, Fadlalla Ahmed TK, Mustafa MS. ChatGPT in medicine: A cross-disciplinary systematic review of ChatGPT's (artificial intelligence) role in research, clinical practice, education, and patient interaction. Medicine (Baltimore). 2024 Aug 9;103(32):e39250.

86. Dieckmeyer M, Sollmann N, Kupfer K, Löffler MT, Paprottka KJ, Kirschke JS, et al. Computed Tomography of the Head : A Systematic Review on Acquisition and Reconstruction Techniques to Reduce Radiation Dose. Clin Neuroradiol. 2023 Sep;33(3):591–610.

87. Chen R, Zheng J, Li C, Chen Q, Zeng Z, Li L, et al. Prognostic models for predicting postoperative recurrence in Crohn's disease: a systematic review and critical appraisal. Front Immunol. 2023;14:1215116.

88. Wu Y, Wu M, Wang C, Lin J, Liu J, Liu S. Evaluating the Prevalence of Burnout Among Health Care Professionals Related to Electronic Health Record Use: Systematic Review and Meta-Analysis. JMIR Med Inform. 2024 Jun 12;12:e54811.

89. Ackerhans S, Huynh T, Kaiser C, Schultz C. Exploring the role of professional identity in the implementation of clinical decision support systems-a narrative review. Implement Sci. 2024 Feb 12;19(1):11.

90. Li Y, Zhong Z. Decoding the application of deep learning in neuroscience: a bibliometric analysis. Front Comput Neurosci. 2024;18:1402689.

91. Kufel J, Czogalik Ł, Bielówka M, Magiera M, Mitręga A, Dudek P, et al. Measurement of Cardiothoracic Ratio on Chest X-rays Using Artificial Intelligence-A Systematic Review and Meta-Analysis. J Clin Med. 2024 Aug 8;13(16).

92. Tandon D, Curlewis K, Vusirikala A, Subramanian P, Patel A. The impact of electronic pathways and digital systems on neck of femur fracture outcomes globally: a systematic review. Ann R Coll Surg Engl. 2023 Nov;105(8):685–91.

93. Ayorinde A, Mensah DO, Walsh J, Ghosh I, Ibrahim SA, Hogg J, et al. Health Care Professionals' Experience of Using AI: Systematic Review With Narrative Synthesis. J Med Internet Res. 2024 Oct 30;26:e55766.

94. Liu J, Cundy TP, Woon DTS, Lawrentschuk N. A Systematic Review on Artificial Intelligence Evaluating Metastatic Prostatic Cancer and Lymph Nodes on PSMA PET Scans. Cancers (Basel). 2024 Jan 23;16(3).

95. Wohlgemut JM, Pisirir E, Kyrimi E, Stoner RS, Marsh W, Perkins ZB, et al. Methods used to evaluate usability of mobile clinical decision support systems for healthcare emergencies: a systematic review and qualitative synthesis. JAMIA Open. 2023 Oct;6(3):ooad051.

96. Born C, Schwarz R, Böttcher TP, Hein A, Krcmar H. The role of information systems in emergency department decision-making-a literature review. J Am Med Inform Assoc. 2024 Jun 20;31(7):1608–21.

97. Kell G, Roberts A, Umansky S, Qian L, Ferrari D, Soboczenski F, et al. Question answering systems for health professionals at the point of care-a systematic review. J Am Med Inform Assoc. 2024 Apr 3;31(4):1009–24.

98. Sriraman H, Badarudeen S, Vats S, Balasubramanian P. A Systematic Review of Real-Time Deep Learning Methods for Image-Based Cancer Diagnostics. J Multidiscip Healthc. 2024;17:4411–25.

99. Freyer N, Groß D, Lipprandt M. The ethical requirement of explainability for AI-DSS in healthcare: a systematic review of reasons. BMC Med Ethics. 2024 Oct 1;25(1):104.

100. Ardila CM, Yadalam PK, González-Arroyave D. Integrating whole genome sequencing and machine learning for predicting antimicrobial resistance in critical pathogens: a systematic review of antimicrobial susceptibility tests. PeerJ. 2024;12:e18213.

101. Felisberto M, Lima GDS, Celuppi IC, Fantonelli MDS, Zanotto WL, Dias de Oliveira JM, et al. Override rate of drug-drug interaction alerts in clinical decision support systems: A brief systematic review and meta-analysis. Health Informatics J. 2024 Jun;30(2):14604582241263242.

102. Goh CH, Ferdowsi M, Gan MH, Kwan BH, Lim WY, Tee YK, et al. Assessing the efficacy of machine learning algorithms for syncope classification: A systematic review. MethodsX. 2024 Jun;12:102508.

103. Hartmann Tolić I, Habijan M, Galić I, Nyarko EK. Advancements in Computer-Aided Diagnosis of Celiac Disease: A Systematic Review. Biomimetics (Basel). 2024 Aug 14;9(8).

104. Brem O, Elisha D, Konen E, Amitai M, Klang E. Deep learning in magnetic resonance enterography for Crohn's disease assessment: a systematic review. Abdom Radiol (NY). 2024 Sep;49(9):3183–9.

105. van der Vegt AH, Campbell V, Mitchell I, Malycha J, Simpson J, Flenady T, et al. Systematic review and longitudinal analysis of implementing Artificial Intelligence to predict clinical deterioration in adult hospitals: what is known and what remains uncertain. J Am Med Inform Assoc. 2024 Jan 18;31(2):509–24.

106. Li L, Wong MS. The application of machine learning methods for predicting the progression of adolescent idiopathic scoliosis: a systematic review. Biomed Eng Online. 2024 Aug 8;23(1):80.

107. McCoy CA, Coleman HG, McShane CM, McCluggage WG, Wylie J, Quinn D, et al. Factors associated with interobserver variation amongst pathologists in the diagnosis of endometrial hyperplasia: A systematic review. PLoS One. 2024;19(4):e0302252.

108. Escalé-Besa A, Vidal-Alaball J, Miró Catalina Q, Gracia VHG, Marin-Gomez FX, Fuster-Casanovas A. The Use of Artificial Intelligence for Skin Disease Diagnosis in Primary Care Settings: A Systematic Review. Healthcare (Basel). 2024 Jun 13;12(12).

109. Droppelmann G, Rodríguez C, Jorquera C, Feijoo F. Artificial intelligence in diagnosing upper limb musculoskeletal disorders: a systematic review and meta-analysis of diagnostic tests. EFORT Open Rev. 2024 Apr 4;9(4):241–51.

110. Tomlin HR, Wissing M, Tanikella S, Kaur P, Tabas L. Challenges and Opportunities for Professional Medical Publications Writers to Contribute to Plain Language Summaries (PLS) in an AI/ML Environment - A Consumer Health Informatics Systematic Review. AMIA Annu Symp Proc. 2023;2023:709–17.

111. Tądel K, Dudek A, Bil-Lula I. AI Algorithms for Modeling the Risk, Progression, and Treatment of Sepsis, Including Early-Onset Sepsis-A Systematic Review. J Clin Med. 2024 Oct 7;13(19).

112. Ciharova M, Amarti K, van Breda W, Peng X, Lorente-Català R, Funk B, et al. Use of Machine Learning Algorithms Based on Text, Audio, and Video Data in the Prediction of Anxiety and Posttraumatic Stress in General and Clinical Populations: A Systematic Review. Biol Psychiatry. 2024 Oct 1;96(7):519–31.

113. Vaseur RME, Te Braake E, Beinema T, d'Hollosy WON, Tabak M. Technology-supported shared decision-making in chronic conditions: A systematic review of randomized controlled trials. Patient Educ Couns. 2024 Jul;124:108267.

114. He W, Chima S, Emery J, Manski-Nankervis JA, Williams I, Hunter B, et al. Perceptions of primary care patients on the use of electronic clinical decision support tools to facilitate health care: A systematic review. Patient Educ Couns. 2024 Aug;125:108290.

115. Dieckmeyer M, Sollmann N, Kupfer K, Löffler MT, Paprottka KJ, Kirschke JS, et al. Computed Tomography of the Spine : Systematic Review on Acquisition and Reconstruction Techniques to Reduce Radiation Dose. Clin Neuroradiol. 2023 Jun;33(2):271–91.

116. Manyazewal T, Davey G, Hanlon C, Newport MJ, Hopkins M, Wilburn J, et al. Innovative technologies to address neglected tropical diseases in African settings with persistent sociopolitical instability. Nat Commun. 2024 Nov 27;15(1):10274.

117. Molière S, Hamzaoui D, Ploussard G, Mathieu R, Fiard G, Baboudjian M, et al. A Systematic Review of the Diagnostic Accuracy of Deep Learning Models for the Automatic Detection, Localization, and Characterization of Clinically Significant Prostate Cancer on Magnetic Resonance Imaging. Eur Urol Oncol. 2024 Nov 14;S2588-9311(24)00248-7.

118. Koch AH, Jeelof LS, Muntinga CLP, Gootzen TA, van de Kruis NMA, Nederend J, et al. Analysis of computer-aided diagnostics in the preoperative diagnosis of ovarian cancer: a systematic review. Insights Imaging. 2023 Feb 15;14(1):34.

119. Wang TW, Hong JS, Chiu HY, Chao HS, Chen YM, Wu YT. Standalone deep learning versus experts for diagnosis lung cancer on chest computed tomography: a systematic review. Eur Radiol. 2024 Nov;34(11):7397–407.

120. Changhez J, James S, Jamala F, Khan S, Khan MZ, Gul S, et al. Evaluating the Efficacy and Accuracy of AI-Assisted Diagnostic Techniques in Endometrial Carcinoma: A Systematic Review. Cureus. 2024 May;16(5):e60973.

121. Lampe D, Grosser J, Grothe D, Aufenberg B, Gensorowsky D, Witte J, et al. How intervention studies measure the effectiveness of medication safety-related clinical decision support systems in primary and long-term care: a systematic review. BMC Med Inform Decis Mak. 2024 Jul 4;24(1):188.

122. Tay YX, Foley S, Killeen R, Ong MEH, Chen RC, Chan LP, et al. Impact and effect of imaging referral guidelines on patients and radiology services: a systematic review. Eur Radiol. 2025 Jan;35(1):532–41.

123. Ramírez W, Pillajo V, Ramírez E, Manzano I, Meza D. Exploring Components, Sensors, and Techniques for Cancer Detection via eNose Technology: A Systematic Review. Sensors (Basel). 2024 Dec 9;24(23).

124. Abdelaal Y, Aupetit M, Baggag A, Al-Thani D. Exploring the Applications of Explainability in Wearable Data Analytics: Systematic Literature Review. J Med Internet Res. 2024 Dec 24;26:e53863.

125. Darbari Kaul R, Sacks PL, Thiel C, Rimmer J, Kalish L, Campbell RG, et al. Radiomics of the Paranasal Sinuses: A Systematic Review of Computer-Assisted Techniques to Assess Computed Tomography Radiological Data. Am J Rhinol Allergy. 2024 Dec 16;19458924241304080.

126. Mohsin Khan M, Shah N, Shaikh N, Thabet A, Alrabayah T, Belkhair S. Towards secure and trusted AI in healthcare: A systematic review of emerging innovations and ethical challenges. Int J Med Inform. 2024 Dec 30;195:105780.

127. Ma L, Tibble H. Primary Care Asthma Attack Prediction Models for Adults: A Systematic Review of Reported Methodologies and Outcomes. J Asthma Allergy. 2024;17:181–94.

128. Garcia CN, Wies C, Hauser K, Brinker TJ. Noninvasive Technologies for the Diagnosis of Squamous Cell Carcinoma: A Systematic Review and Meta-Analysis. JID Innov. 2024 Nov;4(6):100303.

129. Ahmed A, Mustafa M. Precision Emergency Medicine: A Systematic Review. Cureus. 2024 Dec;16(12):e75068.

130. John B, Heavin C, Roberts A. Navigating the wild west: a review of guidance on clinical communications using personal BYOD, IM and third-party apps in the UK and Ireland. Front Digit Health. 2024;6:1457848.

Supplementary 4. Screening Protocol: Meta-Systematic Review on Trust Gap in Clinical AI

1. Overview

This document outlines the screening protocol used in the meta-systematic review "Trust Gap in Clinical Artificial Intelligence: A Meta-Systematic Review." The screening process followed PRISMA 2020 guidelines and employed a rigorous multi-stage approach to identify relevant systematic reviews from multiple databases.

2. Screening Workflow

Stage 1: Identification & Deduplication

- **Input**: 88,615 records from 4 databases (PubMed/MEDLINE, Scopus, Web of Science, IEEE Xplore)
- **Tools**: Covidence systematic review software
- **Process**:
  - Automated duplicate detection using Covidence algorithms
  - Manual verification of duplicate flags
  - Removal of exact duplicates while preserving unique records
- **Output**: Deduplicated dataset for title/abstract screening

Stage 2: Title/Abstract Screening

- **Reviewers**: Dual independent screening by trained researchers
- **Blinding**: Author names, journal affiliations, and publication dates hidden
- **Criteria Application**:
  - Apply predefined inclusion/exclusion criteria systematically
  - Include studies mentioning "systematic review" or "meta-analysis" in title/abstract
  - Focus on human clinical AI applications
- **Conflict Resolution**:
  - Initial independent scoring
  - Discussion between paired reviewers for discrepancies
  - Escalation to third reviewer for unresolved conflicts
- **Output**: Studies proceeding to full-text review

Stage 3: Full-Text Assessment

- **Process**: Dual independent full-text review
- **Documentation**: Record reasons for exclusion in standardized format
- **Quality Check**: Verify systematic review methodology description
- **Final Decision**: Consensus-based inclusion determination

3. Exclusion Criteria Application

Immediate Exclusions (Title/Abstract Stage):

- Non-systematic review designs (narrative reviews, scoping reviews)
- Non-clinical focus (technical algorithms only, animal studies)
- Conference abstracts without full methodology
- Non-English publications

Detailed Exclusions (Full-Text Stage):

- Insufficient systematic methodology description
- No human clinical application focus
- Duplicate publications
- Inaccessible full text after exhaustive retrieval attempts

4. Screener Training & Calibration

Training Components:

- Protocol review session (2 hours)
- Practice screening exercise (50 sample records)
- Inter-rater reliability assessment (target $\kappa > 0.80$)
- Criteria application workshop

Calibration Process:

- Initial independent screening of 100 records
- Comparison and discussion of discrepancies
- Criteria refinement based on calibration results
- Final protocol confirmation

5. Quality Assurance Measures

Blinding Protocol:

- Hidden fields: Authors, journals, institutions, publication dates
- Visible fields: Title, abstract, keywords, publication type
- Rationale: Minimize bias from prestigious authors/journals

Documentation Standards:

- All exclusion reasons recorded in Covidence
- Audit trail maintained for all screening decisions

- Regular screening progress reviews

Conflict Resolution Protocol:

1. Primary discussion between paired reviewers
2. Unresolved cases escalated to senior reviewer
3. Team consultation for complex cases
4. Final decision documented with rationale

6. Outcome Documentation

PRISMA Flow Documentation:

- Number of records identified per database
- Duplicates removed
- Titles/abstracts screened
- Full-text articles assessed
- Studies included in qualitative synthesis
- Reasons for exclusion at full-text stage

Final Output: 130 systematic reviews meeting all inclusion criteria for meta-systematic analysis.

7. Tools & References

Software Used:

- Covidence (screening management)
- PRISMA 2020 flowchart generator
- Custom Excel tracking sheets

Reference Documents:

- PRISMA 2020 Checklist
- Study Protocol (Protocol registered in Open Science Framework (OSF): https://doi.org/10.17605/OSF.IO/AFWSY)
- Data Extraction Codebook

This protocol ensured systematic, transparent, and reproducible screening throughout the meta-systematic review process.