

# **Sistema de Extracción y Clasificación de Artículos en Salud**

=== ■ TAXONOMÍA CLÍNICA CFMS ===

## **■ DOMINIOS CLÍNICOS**

- cardiology: 1 artículos
- healthcare: 2 artículos
- health care: 2 artículos
- health care delivery and biomedical discovery: 1 artículos
- clinical text and/or structured data from electronic medical records (emrs): 1 artículos
- medical field: 1 artículos
- various medical specialties: 1 artículos
- medical research, medical education, and clinical tasks: 1 artículos
- medical education: 1 artículos
- diagnosis dialogue systems and the automatic scribe of electronic medical records (emrs): 1 artículos
- emergency department: 1 artículos
- internal medicine: 1 artículos
- preventive medicine: 1 artículos
- clinical documentation: 1 artículos
- medical research and clinical trials: 1 artículos
- medicine: 1 artículos

## **■ TAREAS DE IA**

- cardiovascular disease prediction: 1 artículos
- biomedical named entity recognition (bner) for treatment prediction in clinical records: 1 artículos
- design, monitor, and deploy ambient ai within routine care: 1 artículos
- generate robust real-world evidence (rwe): 1 artículos
- not explicitly defined in the abstract: 1 artículos

- clinical diagnosis and treatment, medical question answering, medical research, health management: 1 artículos
- assessing the safety and effectiveness of large language models (llms) in healthcare through human evaluations: 1 artículos
- clinical note generation and summarization: 1 artículos
- promoting the responsible use of large language models (llms) in medicine: 1 artículos
- integrating ai in medical education: 1 artículos
- term-status pair extraction from medical dialogues (md-tspe): 1 artículos
- evaluation of medical document generation: 1 artículos
- assessment of clinical reasoning (cr) documentation in the electronic health record: 1 artículos
- automate the assessment criteria and risk factors extraction from preventive guidelines: 1 artículos
- assess the agent capabilities of llms in medical records contexts: 1 artículos
- automate the creation of soap (subjective, objective, assessment, plan) notes: 1 artículos
- clinical trial recruitment optimization: 1 artículos
- clinical context evaluation: 1 artículos

## ■ ARQUITECTURAS DE MODELO

- federated learning (fl): 1 artículos
- deep learning (dl): 1 artículos
- bidirectional governance model linked operations and research through multidisciplinary workgroups incorporating seips framework: 1 artículos
- biomedical language models: 1 artículos
- no specific architecture details provided: 1 artículos
- m-kat framework: 1 artículos
- large language models (llms): 6 artículos
- a framework grounded in four bioethical principles: 1 artículos
- generative artificial intelligence (ai), including large language models (llms): 1 artículos
- knowledge-enhanced two-stage generative framework (ktgf): 1 artículos
- large language model (llm), logic-based model, named entity recognition (ner): 1 artículos
- large language models (llms), retrieval-augmented generation (rag), automatic speech recognition (asr): 1 artículos

- knowledge graphs and large language models (llms): 1 artículos

## ■ TIPOS DE DATOS

- biosignals, electronic health records (ehrs): 1 artículos
- textual: 1 artículos
- clinical notes, icd-10 codes, provider well-being data: 1 artículos
- unstructured clinical notes in electronic medical records (emrs): 1 artículos
- non-imaging emr data: 1 artículos
- diverse data types: 1 artículos
- literature reviews: 1 artículos
- clinician-annotated sentences: 1 artículos
- not explicitly mentioned, but likely includes textual data from medical literature, patient records, etc.: 1 artículos
- text-based data from abstract: 1 artículos
- medical dialogues: 1 artículos
- medical records: 1 artículos
- textual data from admission notes: 1 artículos
- textual guidelines: 1 artículos
- patient-specific clinically derived tasks from 10 categories, realistic patient profiles, fast healthcare interoperability resources-compliant environment: 1 artículos
- text and voice: 1 artículos
- structured and unstructured data: 1 artículos
- instruction-tuning dataset: 1 artículos

## ■ LIMITACIONES REPORTADAS

- lack of systematic comparison between data modalities: 1 artículos
- limited handling of biomedical text complexity by early bner systems: 1 artículos
- manual configuration of domain-specific features and rules: 1 artículos
- challenges in ehr integration: 1 artículos
- coding compliance issues: 1 artículos
- real-world evaluation limitations: 1 artículos

- confounders in clinical notes: 1 artículos
- challenging to generate robust real-world evidence: 1 artículos
- most models are trained on small, narrowly-scoped clinical datasets: 1 artículos
- most models are trained on broad, public biomedical corpora: 1 artículos
- tasks evaluated do not provide meaningful insights on their usefulness to health systems: 1 artículos
- enhancing the medical professionalism of llms remains a major challenge: 1 artículos
- gaps in reliability: 1 artículos
- gaps in generalizability: 1 artículos
- gaps in applicability: 1 artículos
- hallucination rate of 1.47%: 1 artículos
- omission rate of 3.45%: 1 artículos
- balancing ethical boundaries and innovation in llm technology: 1 artículos
- mitigating risks associated with llms in medicine: 1 artículos
- learners' clinical reasoning development and professional growth may be undermined by unguided adoption of ai tools: 1 artículos
- potential exacerbation of inequities between institutions: 1 artículos
- compromising physician development: 1 artículos
- failing to improve patient care: 1 artículos
- the generative methods output a whole sequence consisting of term-status pairs in one stage and ignore integrating prior knowledge: 1 artículos
- extensive expert involvement required to ensure reliability, limiting clinical applications: 1 artículos
- limited performance of some models in certain domains (e.g., d1 classification and ea models): 1 artículos
- need for further validation and refinement of models at uc: 1 artículos
- constraints related to the maximum length of input tokens: 1 artículos
- tendency to generate content rather than adhering strictly to the original input: 1 artículos
- ethical considerations in real-world clinical settings: 1 artículos
- lack of a standardized dataset to benchmark the agent capabilities of llms in medical applications: 1 artículos
- significant variation in performance across task categories: 1 artículos

- resource-constrained environments: 1 artículos
- limited applicability to complex clinical scenarios: 1 artículos
- limited applicability to certain types of clinical trials: 1 artículos
- requirement for continuous updates and maintenance of knowledge graphs and llms: 1 artículos
- most models struggle with complex clinical tasks: 1 artículos

#### ■ CLUSTERS SEMÁNTICOS

- Cluster -1: 18 artículos

=== FIN DEL REPORTE ===