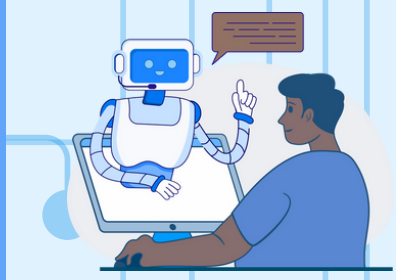
USES OF ARTIFICIAL INTELLIGENCE IN RHEUMATOLOGY CARE



AI uses in non-pharmacological rheumatology care that show early promise

Rules-based systems to personalise education and exercise with digital applications are **acceptable** to patients and **may be effective**.

Large language models provide **somewhat accurate** treatment **recommendations**, but they have issues with reliability, and performance varies across conditions.

Future research should assess **whether large language models** (e.g., ChatGPT, Gemini) can **effectively** and **safely** provide healthcare advice (e.g., impacts on health behaviours).

Key limitations and challenges of AI in rheumatology care

Concerns include potential **breaches of patient privacy**, risks of AI perpetuating systemic biases in training data, and providing non-evidence-based information.

The **'black box' problem** is also significant—AI decision-making is often unclear, complicating intervention replication and informed patient consent.

Future outlook for integrating AI into rheumatology care

Facilitating personalised care—diagnosis, prognosis, treatment planning/delivery, and patient follow-up—by integrating clinical data, wearables data, and omics data (e.g., radiomics and genomics).

Streamlining continuity—automating referrals to interdisciplinary health professionals and services.