



Taking action to  
improve health for all



# Integration of Artificial Intelligence into Saudi Arabian Primary Healthcare Centres

## A Scoping Review of Applications, Barriers, and Opportunities

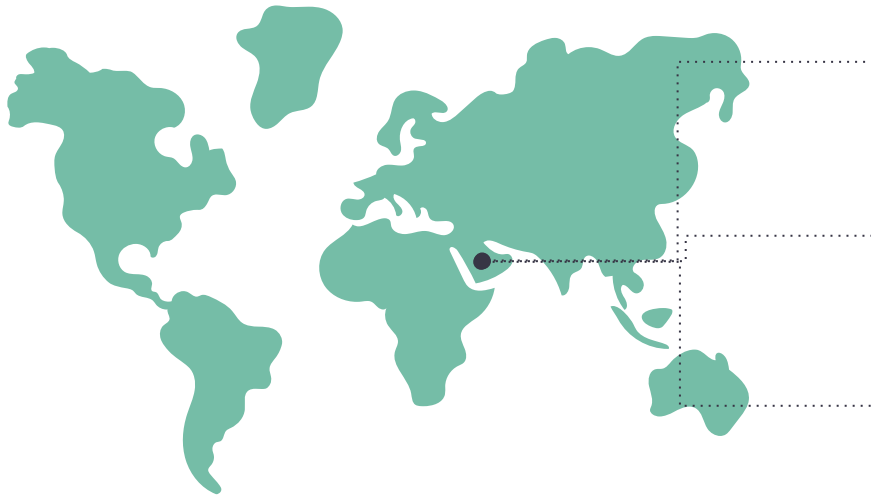
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**Date:** 4 June 2025

# Introduction & Background

## The Saudi Healthcare Landscape



**Population Served:** ~35 million



**PHCs:** 2,300+ nationwide – **backbone** of the health system



**Vision 2030 & Technology in Healthcare**

- Driving **quality, efficiency, access & sustainability**
- Innovation & AI as key enablers

# Objective and Identified Gaps

## BUT... What's Missing?

- Limited research on AI integration specifically in primary healthcare.
- Particularly significant gap for Saudi Arabia's unique context (cultural, organisational, regulatory) & Vision 2030 goals.

## Study Aim& objectives:

To comprehensively examine the integration of artificial intelligence in Saudi Arabian primary healthcare centres, identify applications, barriers, and alignment with Vision 2030 objectives, and provide evidence-based recommendations to enhance effective AI integration.



### Identify and Categorize

Identify and categorize current AI applications



### Examine Barriers

Examine barriers to AI implementation



### Assess Alignment

Assess alignment with Vision 2030 goals

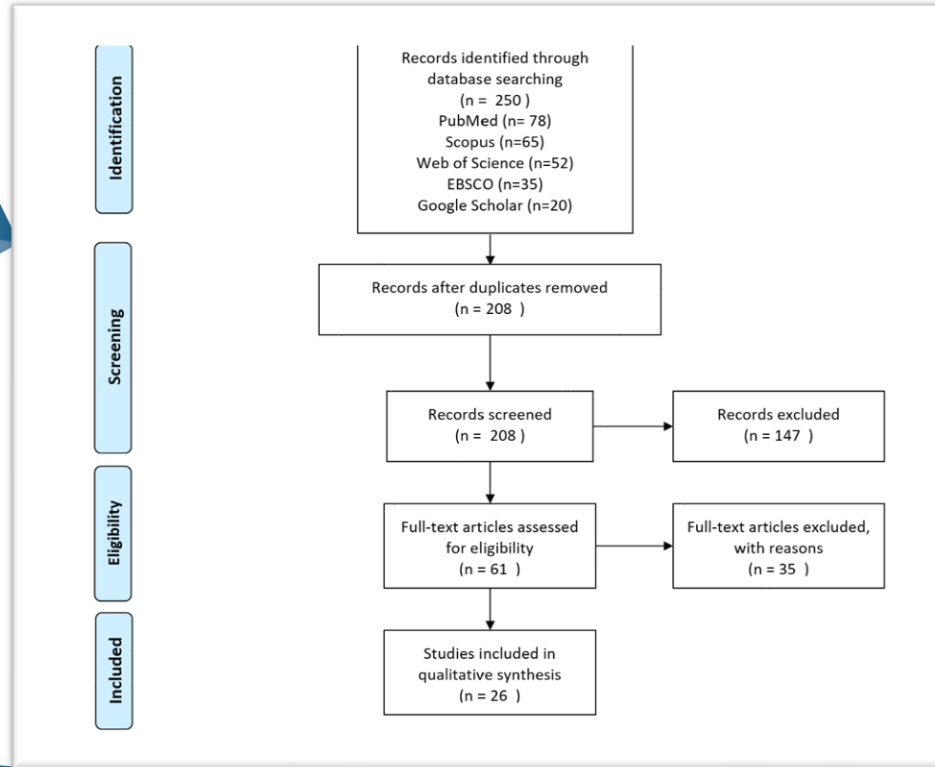


### Provide Recommendations

Provide recommendations for enhancing AI integration

# Methods

## Study Design & Search:



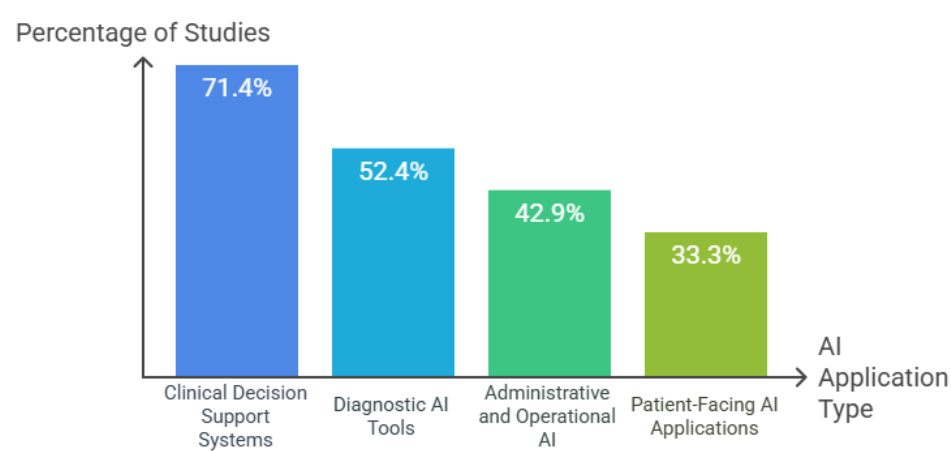
**Design:** Scoping Review (following PRISMA–ScR guidelines).

**Databases Searched:** PubMed, Web of Science, Scopus, EBSCO, Google Scholar.

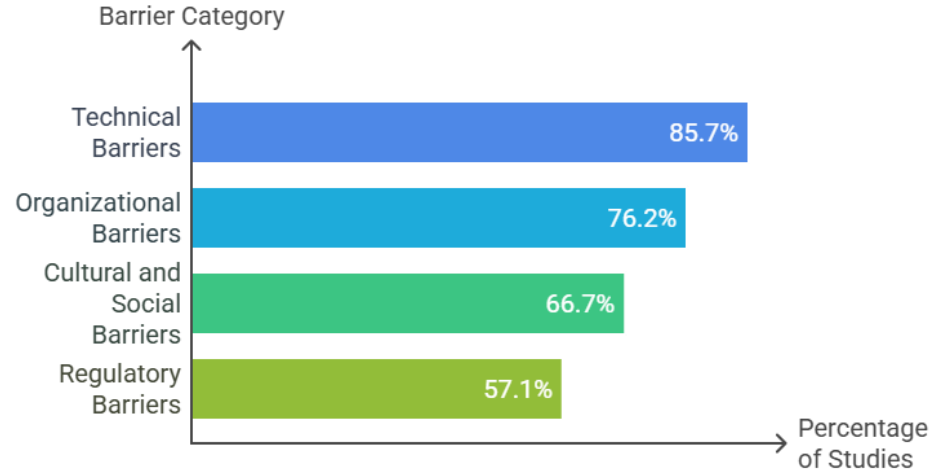
**Search Period:** Jan 2019 – Apr 2025 (Post-Healthcare Transformation Strategy).

**Keywords:** “artificial intelligence,” “primary healthcare,” “Saudi Arabia,” etc.

# Results



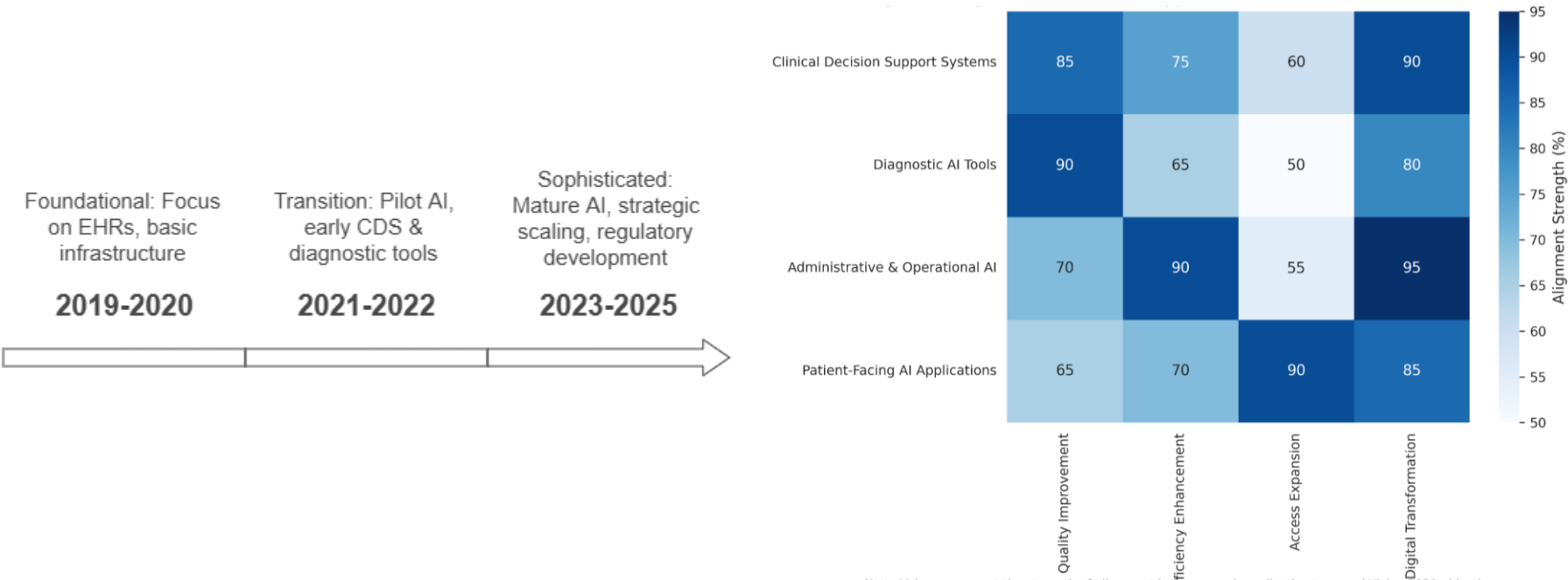
**AI Application Categories in Saudi Primary Healthcare**



**Implementation Barriers to AI in Saudi Primary Healthcare**

# Results

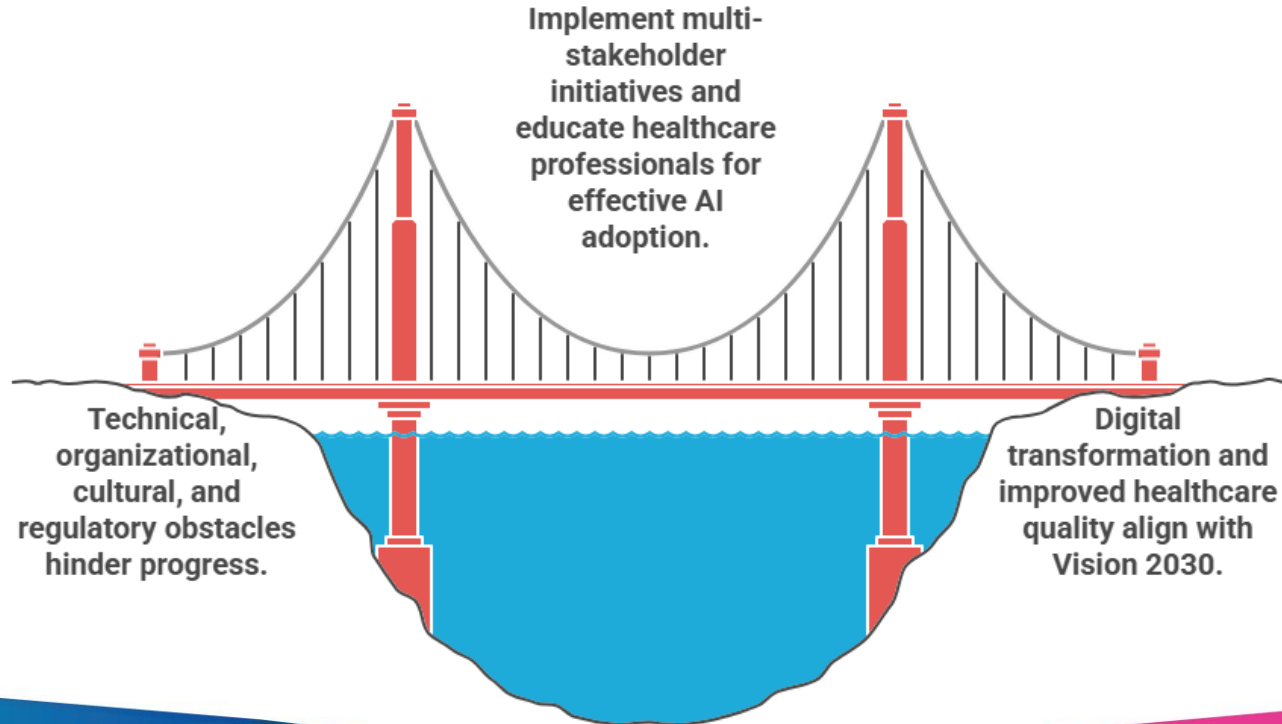
## AI Alignment with Saudi Vision 2030 & Evolution:



Note: Values represent the strength of alignment between each application type and Vision 2030 objective based on analysis of included studies. Higher percentages indicate stronger alignment.

# Let's Dive In

## Overcoming Hurdles to Achieve AI Integration in Saudi Primary Healthcare



# Take-away Message..

- **Build a Supportive Ecosystem:** Foster collaboration between policymakers, healthcare providers, and tech developers to create tailored, ethical AI solutions.
- **Empower Professionals:** Prioritize AI literacy and continuous education for all healthcare staff.







# THANK YOU



**Get in Touch**

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