



Identifying Barriers and Enablers to the Adoption of AI-Based Triage Tools in Emergency Departments

Seyed Milad. Saadati^{1*}, Armin. Khadem Fini¹

¹ Faculty of Education and Health Sciences, University of Limerick, Castletroy, Ireland

* Corresponding author email address: 24361836@studentmail.ul.ie

Editor	Reviewers
Gholamreza Zourmand ¹ Department of Physical Education and Sport Science, Huanggang Normal University, Huanggang, China gh.zourmand@hgnu.edu.cn	Reviewer 1: Azade Abooei ¹ Department of Counseling, Faculty of Humanities, University of Science and Art, Yazd, Iran. Email: a.abooei@tea.sau.ac.ir Reviewer 2: Yaghob Badriazarin ¹ Associate Professor of Sport Sciences, Tabriz University, Tabriz, Iran. Email: badriazarin@tbzmed.ac.ir

1. Round 1

1.1 Reviewer 1

Reviewer:

Despite their potential, the integration of AI-based triage tools into clinical practice remains uneven...” — This paragraph introduces challenges too broadly. It would benefit from a clearer transition sentence summarizing what was covered before and introducing what will follow.

“In the column “Related Open Codes,” some items (e.g., “concern about data privacy”) appear in multiple axial codes. Clarify whether and how codes were allowed to contribute to multiple themes.

The linkage between axial and selective codes is informative, but consider including brief illustrative quotes from participants to support each core category and enhance qualitative depth.

“This aligns with prior findings emphasizing clinician discomfort with ‘black box’ models...” — It would be beneficial to briefly define the term “black box” for multidisciplinary readers who may not be familiar with AI terminology.

Authors revised the manuscript and uploaded the updated document.

1.2 Reviewer 2

Reviewer:

Much of the existing literature focuses on technical performance metrics...” — Consider citing a specific gap in implementation science literature to solidify the claim about the underrepresentation of qualitative end-user research.

“Participants were selected from various emergency departments across Canada...” — Clarify whether participants were from all provinces or a subset, and provide geographic distribution details to help assess diversity and generalizability.

Consider grouping the open codes visually into preliminary thematic clusters (e.g., technical, organizational, human), or presenting as a heatmap to enhance interpretability.

“Many hospitals still operate in silos...” — Expand briefly on what types of silos (technical, administrative, or departmental) were observed, and whether this came from participant data or prior literature.

“This issue is particularly acute in emergency care...” — Consider referencing specific statements or themes from participants that illustrate this urgency, adding depth to the argument.

“Clinical champions and peer learning structures play a critical role...” — The paper could be strengthened by suggesting how institutions can formally recognize or support clinical champions (e.g., mentorship programs or incentives).

Authors revised the manuscript and uploaded the updated document.

2. Revised

Editor’s decision after revisions: Accepted.

Editor in Chief’s decision: Accepted.