

Cover Letter for JMIR Medical Informatics Submission

Date: January 2026

To: Editor-in-Chief, JMIR Medical Informatics

Re: Manuscript Submission - Review Article

Dear Editor,

I am pleased to submit the manuscript titled “**Healthcare Analytics Challenges: A Three-Pillar Framework Connecting Analytics Maturity, Workforce Agility, and Technical Enablement**” for consideration as a Review article in JMIR Medical Informatics.

Background and Significance

Healthcare organizations face three interconnected challenges that create a compounding cycle threatening data-driven transformation: low analytics maturity (only 39 organizations globally have achieved HIMSS AMAM Stage 6-7), systemic workforce instability, and technical barriers in natural language to SQL generation. This review identifies a critical gap in the literature: while single-domain studies exist for each challenge, few analyze how they interconnect to create institutional memory loss.

Methodology

This narrative review synthesizes peer-reviewed studies and industry reports from Crossref, PubMed, arXiv, and Semantic Scholar. Grey literature sources were assessed using the AACODS checklist. Evidence was integrated through an original three-pillar analytical framework examining how these challenges interconnect and compound each other.

Principal Findings

The review contributes an original three-pillar analytical framework revealing a self-reinforcing cycle: (1) **Analytics Maturity**: Low maturity leaves clinical decisions unsupported, correlating with higher turnover; (2) **Workforce Impact**: Turnover (~34% implied annual rate) causes institutional memory loss that further degrades capabilities; and (3) **Technical Enablement**: Technical barriers prevent the capture of this knowledge, blocking recovery. The review also identifies **Governance Necessity** as a critical finding, arguing that democratization through NL2SQL requires stricter governance (“Golden Queries”) to move from ad-hoc reporting to trusted AI deployment.

Conflicts of Interest

The author declares competing interests: Samuel T Harrold is a contract product advisor at Yuimedi, Inc., which develops healthcare analytics software, and is employed as a Data Scientist at Indiana University Health. This paper presents an analytical framework derived from published literature and does not evaluate or recommend specific commercial products.

Generative AI Disclosure

Gemini CLI (Gemini 3, Google) assisted with manuscript editing and refinement. The author takes full responsibility for the final content.

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Article Processing Fee

I acknowledge the applicable article processing fee (APF) if this manuscript is accepted after peer review.

Transfer Preference

If this manuscript is not suitable for JMIR Medical Informatics, I would welcome consideration for transfer to JMIR AI or JMIR Formative Research.

Thank you for considering this manuscript. I believe it will be of significant interest to JMIR Medical Informatics readers working in healthcare informatics, clinical decision support, and healthcare analytics.

Sincerely,

Samuel T Harrold

Yuimedi, Inc.