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A systematic review protocol for Biometrics in healthcare: strategies for improving safety and privacy of patients' records in sub-Saharan Countriestitled protocol

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ABSTRACT

Background: The healthcare system is increasingly adopting biometric services to deliver safe, efficient, and cost-effective care. However, security concerns arise when users forget their passwords, share them, jot them down, or store them in close proximity to their computers. Further, some passwords are easily guessable, which allows unauthorized access to entire systems. The aim of this systematic review is to appraise evidence on biometric identification strategies for improving safety and privacy of patient's records in sub-Saharan African Countries

Methods: A systematic review will be conducted on studies that report on medical record security improvement techniques in African countries. Using relevant search terms, a systematic search for suitable peer-reviewed literature will be done in the following electronic bibliographic databases: PubMed, Theses Global and African Journals Online (AJOL), Cochrane Database of Systematic Reviews, and Google Scholar. An electronic search will be carried out for papers describing biometrics in healthcare: improved patient safety and privacy in African countries. The search strategy will encompass biometric terms such as fingerprint, facial, or iris recognition for authentication, along with keywords related to patient safety, Africa, healthcare, and patient privacy.

Discussion: This systematic review will provide a thorough assessment of the existing literature, evidence synthesis, identification of best practices, strategies for overcoming barriers and challenges, consideration of ethical and legal issues, cost-effectiveness assessment, identification of research gaps, and serving as educational resources. The findings will contribute to understanding how biometric play a significant role not only in ensuring the privacy and security of healthcare in sub-Saharan Africa. This review will provide guidance and support evidence-based decision-making in a region with specific healthcare opportunities and challenges by synthesizing current knowledge. A systematic review will direct future efforts and where resources should be allocated in the region by identifying areas that need more research. Overall, the findings of this systematic review