



# The Role of Biometrics in Improving Patient Identification and Safety in Healthcare

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## Introduction

Accurate patient identification is critical in healthcare to maintain patient safety and prevent medical mistakes. The application of biometric technology, which involves the measurement and analysis of distinct physical or behavioral features, can give a dependable and effective solution to this problem [1]. Biometric identification systems, such as fingerprint scanning, face recognition, and iris scanning, are becoming more common in healthcare settings because they provide more accuracy and security than traditional methods such as patient ID cards and manual data entry.

Several studies have shown that biometric technologies can help improve patient identification and healthcare results. For example, the use of biometric patient identification has been shown to minimize the occurrence of medical mistakes, improve patient happiness, and improve overall treatment quality [2]. Furthermore, biometric solutions can assist healthcare businesses in meeting regulatory criteria and safeguarding patient data privacy.

Despite the obvious advantages of biometric technology, several considerations should be made before using biometric systems in healthcare, such as cost, infrastructure needs, and patient acceptability [3]. The potential benefits of biometrics in improving patient identification and safety in healthcare, on the other hand, make it a reasonable investment for healthcare providers. As technology progresses, biometric identification is projected to play an increas-

ingly important role in enhancing patient identification and safety in healthcare [4].

## Conclusion

Biometric identification technologies provide a viable answer to the problem of incorrect patient identification in healthcare. As technology advances and becomes more secure, it has the potential to greatly increase patient safety while also lowering healthcare expenses associated with medical mistakes. However, further study is required to assess the usefulness and long-term viability of biometric identification in healthcare settings.

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