

“DIGITAL HEALTH AND E-PRESCRIPTION”

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Abstract; Digital health and e-prescription are transforming the healthcare system by integrating technology into medical services. Digital health refers to the use of digital technologies such as mobile applications, electronic health records (EHRs), telemedicine, and wearable devices to improve healthcare delivery, monitoring, and management. It enhances accessibility, efficiency, and quality of care while reducing costs and errors.

E-prescription, a key component of digital health, enables healthcare providers to generate and send prescriptions electronically to pharmacies. This system minimizes medication errors caused by illegible handwriting, ensures accurate dosage, and improves patient safety. It also allows better tracking of patient history and promotes coordinated care among healthcare professionals.

Overall, digital health and e-prescription play a vital role in modernizing healthcare by making it more efficient, reliable, and patient-centered. These advancements contribute to better health outcomes and support the future of smart healthcare systems.

IndexTerms - Component,formatting,style,styling,insert.

INTRODUCTION

An e-Prescription (electronic prescription) is a digital version of a traditional paper prescription, created and transmitted electronically by healthcare providers. It is an important component of digital health systems, designed to improve the safety, efficiency, and quality of healthcare delivery. In digital health, e-prescriptions enable better record keeping, seamless coordination between healthcare providers and pharmacies, and improved patient convenience. They play a key role in telemedicine, allowing patients to receive prescriptions after online consultations. Overall, e prescriptions contribute to safer, faster, and more efficient healthcare service With the introduction of e-prescriptions, doctors can prescribe medicines using secure digital platforms, which are directly shared with patients and pharmacies. This reduces errors caused by handwritten prescriptions and ensures accurate medication management. E-prescription systems also support clinical decision-making by automatically checking drug dosages, allergies, and potential drug interactions.

purpose of work.

(1)Reduce errors caused by illegible handwriting. (2)Improve patient safety by checking drug dosage, allergies, and interactions (3)Save time and increase convenience for doctors and patients. (4)Enable better record management with secure digital storage (5)Direct connectivity with pharmacies for faster medicine dispensing (6)upport telemedicine by allowing prescriptions after online consultation

Scope of e-prescription

The scope of e-prescription in digital health is wide and continuously expanding as healthcare systems adopt digital technologies.

- 1.E-prescription plays an important role in improving healthcare accessibility, safety, and efficiency.
- 2.Improved Patient SafetyReduces medication errors through automatic checks for allergies, drug interactions, and correct dosage.
- 3.Integration with Digital Health RecordsCan be linked with Electronic Health Records (EHRs), allowing complete and accurate patient medical history. .Efficient Pharmacy ServicesAllows direct transmission of prescriptions to pharmacies, reducing waiting time and ensuring accurate dispensing of medicines. .Better Healthcare ManagementHelps in monitoring prescription patterns, controlling drug misuse, and improving treatment outcomes. .Cost and Time EfficiencyReduces paperwork, administrative workload, and healthcare costs for hospitals and clinics. .Future ExpansionScope includes integration with mobile health apps, AI-based decision support systems, national digital health platforms, and smart drug monitoring

Application of e-prescription

- 1 Digital health e-prescription systems are widely used across healthcare settings to improve safety, efficiency, and accessibility.
- 2 The main applications include: Hospitals and Clinics Used by doctors to generate accurate, paperless prescriptions and maintain complete patient medication records.
- 3 Telemedicine Services Enables doctors to issue prescriptions after online consultations, supporting remote and rural healthcare delivery
4. Clinical Decision Support Check The system automatically checks for drug allergies, drug–drug interactions, duplicate therapies, and dosage errors to ensure patient safety.
5. Digital Authentication The doctor verifies and digitally signs the e-prescription using a secure digital signature or authorized login credentials.
6. Electronic Transmission The e-prescription is sent electronically to the patient and/or directly to the selected pharmacy through a secure network

Method of preparation of e-prescription

1. Patient Registration The patient's details such as name, age, gender, and unique health ID are entered or retrieved from the digital health system.
2. Clinical Assessment The doctor examines the patient (in person or via telemedicine) and records the diagnosis, medical history, allergies, and current medications in the system.
3. Selection of Medicines The doctor selects medicines from a standardized digital drug database, including drug name, dosage, frequency, route of administration, and duration of treatment.
4. Pharmacy Management Pharmacies receive prescriptions electronically, reducing dispensing errors and improving workflow efficiency.
5. Electronic Health Records (EHRs) E-prescriptions are integrated into patient health records for better continuity of care and follow-up treatment.
6. Chronic Disease Management Helps in long-term treatment of conditions like diabetes, hypertension, and asthma by tracking medication history.
7. Emergency Care Allows quick access to patient prescription history, enabling faster and safer treatment decisions

conclusion

- 1 E-prescription is a key component of digital health that has transformed the way medicines are prescribed and managed. By replacing handwritten prescriptions with secure electronic systems, e-prescriptions reduce medication errors, improve patient safety, and enhance the overall efficiency of healthcare services.
- 2 They enable accurate record keeping, easy access to prescription history, and better coordination between healthcare providers and pharmacies.
- 3 In addition, e-prescriptions support telemedicine and remote healthcare, making medical services more accessible and convenient for patients.
- 4 patient safety, and enhance the overall efficiency of As digital health technologies continue to advance, e-prescription systems will play an increasingly important role in delivering safe, reliable, and patient-centered healthcare. Overall, e-prescription represents a significant step toward a more efficient, transparent, and modern healthcare system

Result of Digital Health E-Prescription

1. The adoption of digital health e-prescription systems has produced positive and measurable results in healthcare delivery. The most important result is a significant reduction in prescription and medication errors, as electronic systems eliminate problems caused by unclear handwriting and manual entry.
2. E-prescriptions have also resulted in faster treatment processes, saving time for doctors, patients, and pharmacists. Digital transmission of prescriptions improves coordination between healthcare providers and pharmacies, ensuring accurate and timely dispensing of medicines. Secure digital storage allows easy access to prescription history, supporting better follow-up care and continuity of treatment.
3. Overall, the result of digital health e-prescription is improved patient safety, increased efficiency, better record management, enhanced patient satisfaction, and a more reliable and modern healthcare system

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