An Integrated Healthcare Management System: Enhancing Patient Care and Empowering Individuals through a Comprehensive Digital Platform

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Abstract - This research paper presents an innovative healthcare management system that leverages technology to cater to various aspects of patients' well-being, encompassing medication management, nutrition planning, exercise guidance, and emergency response.

The proposed system is a web-based platform that provides users with personalized medical notifications, reminding them to take prescribed medications, stay hydrated, and adhere to a balanced diet. It also offers a feature for tracking medication inventory, ensuring a timely reminder to repurchase, and maintaining a record of medication expiration dates.

Moreover, the system offers tailored dietary plans based on an individual's body type, suggesting suitable meals. It incorporates warm-up exercises and meditation routines to promote physical and mental wellness. Additionally, the platform monitors vital signs such as heart rate, notifying both healthcare professionals and designated family members in case of abnormalities, with immediate access to the patient's medical history.

The emergency response functionality includes life-saving techniques like CPR, ensuring users are equipped to act swiftly in critical situations, there will be emergency notification to patient himself considering a situation where a passerby can help. Furthermore, the system enables doctors to upload custom dietary plans, exercise routine and access a detailed history of tests performed along with their results.

References:

[1] I. Tomar and B. Tomar, "A Smart Expiry Date Reminder System For Medicines," 2021 International Conference on Industrial Electronics Research and Applications (ICIERA), New Delhi, India, 2021, pp. 1-6, doi: 10.1109/ICIERA53202.2021.9726728.