INNOVATION PARTNERSHIPS
UNIVERSITY OF MICHIGAN

Patient-Centered Web Application to Facilitate Medication Optimization in Heart Failure

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OVERVIEW

Web application for patient-centered medication optimization

- Empowers patients with actionable medication analysis from EMR data
- Medication management, patient-provider communication, personalized healthcare

BACKGROUND

Effective medication management is a critical component of patient care, yet it often suffers from a lack of streamlined communication between patients and healthcare providers. Historically, patients have relied on periodic consultations to optimize their medication regimens, a process that can be inefficient and prone to errors. The increasing complexity of electronic medical records (EMR) poses additional challenges in utilizing this data effectively. Traditional methods don't adequately provide patients with actionable insights about their medications, nor do they facilitate seamless sharing of this information with providers. A need exists for an improved, patient-centric method to analyze and optimize medication regimens based on comprehensive EMR data.

INNOVATION

Researchers have developed a patient-centered web application that allows patients to share their electronic medical records with the application. The web application structures this data to use a specialized medication optimization algorithm. This algorithm analyzes medication data, identifying potential issues and optimizations, which are then formatted and presented to the patient in an easily understandable manner. Patients can share these insights with their healthcare providers through their patient portal, enabling more informed discussions about their medication regimens. This innovation enhances patient engagement, improves medication management, and promotes more efficient patient-provider communication. Real-world applications include personalized medication management, enhanced patient-provider interactions, and improved healthcare outcomes.