

TECH OFFER

Clinical Decision Support Tool for Team-Care Deprescribing and Polypharmacy Management



KEY INFORMATION

TECHNOLOGY CATEGORY:

Healthcare - Telehealth, Medical Software & Imaging

TECHNOLOGY READINESS LEVEL (TRL): **TRL7**

COUNTRY: **SINGAPORE**

ID NUMBER: **TO175363**

OVERVIEW

The technology is an advanced Clinical Decision Support System (CDSS) designed to streamline and enhance the process of medication review, with a strong focus on safe deprescribing practices. Built on evidence-based guidelines and best clinical practices, the application provides healthcare professionals (doctors, pharmacists, and nurses) with reliable recommendations to optimize medication regimens, particularly for older adults who are at higher risk of polypharmacy and adverse drug events.

This team-care deprescribing application can be seamlessly launched across various points of care: hospitals, clinics, nursing homes, or community health settings. This enables clinicians to work collaboratively in reducing medication burden while safeguarding patient safety. By integrating into existing workflows, it not only improves efficiency and decision-making but also supports higher standards of clinical care, leading to better health outcomes and quality of life for patients.

TECHNOLOGY FEATURES & SPECIFICATIONS

App Features

- Highlights drugs that should be discontinued, supported by clear clinical explanations.
- Provides guideline-based recommendations on drugs requiring special monitoring.
- Identifies and alerts clinicians to potential harmful interactions across the patient's medication list.
- Offers context-specific guidance, such as patient comorbidities, age-related risks, or monitoring needs.
- Optional Patient Management System module for managing individual patient profiles, history, and follow-up care.
- Optional Gen-AI Chatbot module for conversational assistant to support quick queries, medication guidance, and clinician education.

System Capabilities:

- **Cross-Platform Availability:** Accessible as a secure web application and mobile apps on both Android and iOS, ensuring usability across care settings.
- **Two-Factor Authentication (2FA):** Provides robust data protection and compliance with healthcare security standards.
- **API Integration:** Enables seamless interoperability with existing EHRs, pharmacy systems, and clinical workflows.

Advantages:

- **Proven Accuracy and Efficiency:** In pilot testing, the application doubled the accuracy to conventional manual lookup, while also significantly reducing decision-making time.
- **Sustainable Healthcare Impact:** By digitizing guidelines and optimizing workflows, the app reduces reliance on printed materials and manual processes, helping to lower carbon footprints in healthcare environments.
- **Improved Clinical Care:** Supports evidence-based, safer, and faster medication review, empowering healthcare teams to deliver higher-quality patient outcomes.

POTENTIAL APPLICATIONS

This technology has wide-ranging applications across multiple healthcare settings, particularly in addressing the challenges of polypharmacy and medication optimization for the growing ageing population. Potential use cases include:

- **Healthcare Institutions, Hospitals & Clinics**

Seamlessly integrate the application with existing Electronic Health Records (EHR) or patient management systems via secure API connectivity. For organizations without a current platform, a fully compatible patient management add-on is available, enabling streamlined workflows and coordinated team-based care.

- **Medical Information & Health IT Solution Provider**

Incorporate the deprescribing application into your existing digital health or clinical information platforms to strengthen your product portfolio and deliver added value to healthcare professionals.

- **Extended Clinical Applications**

Beyond deprescribing, the application can be adapted to support other evidence-based clinical guidelines (e.g., chronic disease management, geriatric care pathways) and extended to long-term care facilities, community healthcare providers, and telemedicine platforms.

UNIQUE VALUE PROPOSITION

This pioneering deprescribing application is one of the most comprehensive digital solutions designed to support healthcare professionals in reducing inappropriate medications for older patients. Available as a web app and on both Android and iOS platforms, it offers greater flexibility and accessibility compared to many existing tools. Built on the latest evidence-based clinical guidelines, the solution delivers accurate, guideline-driven recommendations that enable doctors, pharmacists, and nurses to make better-informed decisions. By streamlining medication reviews and supporting safe deprescribing, it empowers healthcare providers to reduce medication burden and enhance patient safety and outcomes.