



Northern Australian Regional Digital
Health Collaborative

Seed Funded Project

A mobile app (CKDFree) and dashboard for effective management of early-stage chronic kidney disease

The CKDFree project is a groundbreaking initiative aimed at transforming the management of early-stage chronic kidney disease (CKD) in Australia, with a particular emphasis on rural and regional communities.

This project brings together a multidisciplinary team of healthcare professionals, IT specialists, and community stakeholders to address a critical healthcare need through innovative digital solutions.

The primary objectives of the CKDFree project is to identify specific user requirements, design an intuitive and user-friendly mobile application, and conduct a pilot testing to ensure the app's effectiveness and usability.

We identified the user requirements by conducting a comprehensive literature review, systematic analysis of existing digital health tools, and extensive consultations with stakeholders. This process ensured that the app not only addresses clinical needs but also resonates with users' preferences.

Key milestones achieved include the successful identification of user requirements, the completion of an accessible user interface design, and the initiation of pilot testing. The design phase utilised agile development methodologies, allowing for iterative improvements based on user feedback. This approach has led to the creation of a mobile app that is both easy to navigate and rich in features, facilitating better disease management for patients (<https://github.com/CKDFree>).

Preliminary feedback from the initial pilot testing from 10 participants has been positive, highlighting the app's potential to enhance patient engagement and improve health literacy.

The CKDFree app includes features such as personalized health dashboards, educational resources, and tools for tracking health metrics, all designed to empower users in managing their condition.



The anticipated impacts of the CKDFree project are substantial. Scientifically, the project contributes to the growing body of knowledge on digital health interventions for chronic disease management. In terms of capacity building, it enhances the skills and knowledge of healthcare providers and patients, equipping them with the tools necessary for effective CKD management. Socially and economically, we expect that the app will improve health outcomes, reduce healthcare costs, and enhance the quality of life for individuals living with CKD in rural and regional areas.

The CKDFree project represents an advancement in the application of technology to healthcare. The continued development and broader implementation of the CKDFree app will undoubtedly amplify its impact, offering a scalable and sustainable solution to CKD management across diverse populations.

Project Lead: Dr Euijoon Ahn

Key Messages

The CKDFree project developed a mobile app to improve early-stage CKD management in rural and regional Australia, incorporating personalised health dashboards, educational resources, and health-tracking tools.

A multidisciplinary team used agile methods to create an app tailored to clinical needs and user preferences, achieving milestones in user requirement identification, design, and pilot testing, with positive initial feedback.

The project aims to advance digital health research, build capacity among providers and patients, and improve health outcomes, while reducing costs and enhancing quality of life for people with CKD in rural areas.

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NARDHC

