

Project name: “e-Ruhuka: An e-Mental Healthcare Architecture as an Innovative Solution to Promote an Alternative and Conventional Support in Rwanda”

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Specific Aims:

Mental health burden is a global health issue that requires easy access to affordable services. In Rwanda, only few will access and utilize the existing services. Rwanda has made significant progress at deploying ICT infrastructures across the country, which increased the use of technology-based services. Tele-mental health is an opportunity to mitigate existing challenges and to meet the mental health needs in Rwanda.

The University of Rwanda (UR)- Centre for Mental Health/College of Medicine and Health Sciences (CMHS), the UR-Center of Excellence for Biomedical Engineering and eHealth (CEBE), The UR-African Centre of Excellence in Internet of Things (ACEIoT), Ministry of Health-Rwanda Biomedical Centre (RBC), industry and the community partners Allm Inc, Rwanda Psychological Society, UYISENGA NI IMANZI (UNM), as well as consultant from Brigham and Women Hospital and Harvard Medical School are collaborating to develop an e-mental health platform that will facilitate access to mental health services.

This project is set out to develop and examine the effectiveness of tele-mental health for both patients and professionals. The expected outcomes include improving universal access to quality health services and fight stigmatization of mental diseases. **The overall project aim** is to design an innovative and cost-effective e-mental health platform (e-Ruhuka), that will support mental health service delivery, and promote mental health literacy through online psychoeducation in Rwanda. The platform is hypothesized to respond to the underlying evidence data gap and limited access to mental health service by developing an online community mental health support program and to avail a monitoring and evaluation framework working alongside national mental health system with structures to address limitations encountered during provision of mental health services.

The specific objectives are:

- i. To design and implement a user-friendly web-based application to facilitate mental health literacy, awareness, service provision, accessibility, and usability.
- ii. To test the acceptability and usability of the developed e-Ruhuka in comparison with conventional mental health care.
- iii. To measure the effectiveness of e-Ruhuka in local communities and establish a strong evidence-based approach concerning the effectiveness of online approaches for mental health services provision and reduction of stigma to inform national policies and practices related to the provision of mental health services.

The approach of this study will employ prospective and cross-sectional collections of qualitative and quantitative data. Prior to data collection, a systematic desk review of existing findings related to e-mental health use in Rwanda will be conducted. A baseline survey will be conducted using a friendly short quiz to engage participants before starting the process of using the platform. The baseline will inform researchers about the level of participants' knowledge and mental health status prior to being enrolled in the program. This first phase of the project will develop the architecture of the e-Ruhuka platform that is intended to be tested, implemented, and scaled up during subsequent phases of the project. The expected **outcomes** of this project are in line with the government program specifically the “Rwanda National Strategy for Transformation (NST-1), in their sections of **improving universal access to quality health services and disease prevention by fighting mental health diseases, drug abuse and trafficking**. **The expected impacts** of this project will result in an **online approach to providing health services for patients with mental health disorders**. This will increase and improve the efficacy and efficiency of clinical care on behalf of the users as well as the mental health care practitioners. This will also increase the utilization of mental health services and access to health care professionals, with help in educating the health practitioners regarding the usage of technology in solving the challenges of services inaccessibility. Total Project Budget is 90,000,000 RwF including in-kind contribution of partner industry for a **duration of 18 months**.

Additional information

Investigators/Institutions

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Collaborations

