

# WORLD CONGRESS ON RHEUMATIC HEART DISEASE

2-4 November 2023 • Abu Dhabi



**Submission Id:** 192

**Title:** DEVELOPMENT OF THE ACTIVE COMMUNITY CASE MANAGEMENT TOOL (ACT) - A DYNAMIC APPLICATION FOR RHEUMATIC HEART DISEASE MANAGEMENT

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**Background & Aims:** The World Health Organization promotes rheumatic heart disease (RHD) registries as a mainstay for RHD management, but the majority of registries are static and centralized, gathering epidemiological and clinical data without tools to improve care. We designed The Active Community Case Management Tool (ACT) to improve community-based case management for chronic disease, with RHD in Uganda as the first test case.

**Methods:** Global and local partners (Global Expert Network, Ugandan RHD Steering Committee, and end-users) collaborated through three phases of development: conceptual design, refinement, and user-testing. Fundamental concepts which drove application development included: (1) creating a minimal viable product to limit complexity and provider burden, (2) ensuring a user-friendly interface to reduce barriers to technology adoption, (3) addressing unreliable connectivity, and (4) providing real-time quality metrics. Development culminated in user testing at both the Uganda Heart Institute (UHI) and at community health centers.

**Results:** CT was well-received by global and local partners, who suggested additional considerations such as a minimum data entry form and performing a situation assessment to tailor ACT to the health system set up for each new country. Test users from UHI reported ease of use, a desire to use the application in regular practice, and that the application could improve RHD care in Uganda. Concerns were raised about having appropriate technical support and potential disruption of workflow. Users at community health centers, with limited technology experience, struggled with data entry and navigating the application. A simplified interface specific to their role was created to address this need. Work is ongoing to adopt ACT as the National Platform in Uganda and to continue user testing in the public health system.

**Conclusions:** Developing the ACT application was a dynamic and collaborative process, culminating in an end-user informed application currently in the early phases of integration into existing care models in Uganda.