

Conference Abstracts

Saratani Journey App: AI Powered, Patient-Centered Mobile Platform to Improve Cancer Navigation and Support

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Background

Cancer patients in low-resource settings experience significant barriers across the care continuum, including limited access to accurate information, poor treatment adherence, inadequate psychosocial support, fragmented communication with healthcare providers, and a lack of culturally and linguistically tailored educational materials. These constraints contribute to delays in care-seeking, preventable complications, and poor quality of life. While digital health tools are growing globally, few solutions are designed specifically for African contexts or address patient, caregiver, healthcare worker, and research needs simultaneously.

Methods

We are developing *Saratani Journey App*, a multilingual, patient-centered mobile application aimed at improving cancer navigation and support. Key features include appointment reminders, treatment adherence alerts, symptom and side-effect tracking, psychosocial support modules, patient-survivor community connections, caregiver guidance, and a healthcare worker dashboard enabling improved monitoring and communication. The platform also incorporates an AI conversational assistant that provides localized cancer information in Swahili and English, and an anonymized data engine that

supports research, public health planning, and ethical outreach by pharmaceutical partners for clinical trials and therapy innovations. Development followed a human-centered design approach, engaging patients, caregivers, oncology nurses, and psychosocial experts to ensure cultural relevance, usability, and trust.

Results

Based on user needs assessments and preliminary system modeling, the app is expected to improve cancer knowledge, enhance treatment adherence, strengthen caregiver engagement, and reduce patient anxiety and isolation. For healthcare workers, the dashboard is anticipated to streamline follow-up, support earlier identification of complications, and improve continuity of care. The anonymized data module is expected to generate actionable insights for researchers and policymakers, enhancing planning for cancer services. Pharmaceutical partners may also benefit through ethically compliant outreach for trials and therapies.

Conclusion

Saratani Journey has strong potential to address critical gaps in cancer care in East Africa by providing culturally grounded digital support, integrated data capabilities, and improved communication pathways. Next steps include feasibility testing, partnership development, and large-scale implementation studies.