

**Title of Abstract:** Evaluating the Implementation of ‘mHealth’ Supported Patient Navigation Strategies to Improve Cervical Cancer Screening and Linkages to Care

**Background/Purpose:** Cervical cancer is the leading cause of female cancer in Tanzania. The Smartphone-enhanced Visual Inspection with/through Acetic Acid (SEVIA) application evaluates the validity and quality of visual inspection with/through acetic acid (prevention strategy), and allows for secure, real-time sharing of cervical images. **However, it is critical to incorporate a ‘package’ of healthcare provider and patient-directed mHealth supported strategies to provide women with linkages to care and explore the implementation of these strategies.**

**Methods:** We will recruit 1500 women between the ages of 30 and 49 years (ages 25-49 if HIV+). A facility-based cluster-randomized trial will be implemented to evaluate three patient navigation (PN) delivery strategies and their potential to be incorporated as added features to the SEVIA application: (A) Community Health Worker assisted navigation, (B) Nurse delivered navigation, and (C) SMS assisted navigation. Thirty health facilities in the Kilimanjaro region will be cluster-randomized to deliver a specific package of PN delivery strategies. Each woman will be randomized into one of the four experimental conditions.

**Results:** We developed effective qualitative tools using three implementation science frameworks to investigate the implementation of PN strategies to the SEVIA application. These tools were piloted in focus group discussions. Patients and providers indicated their preference to incorporate all three strategies to reduce loss to follow-up and maximize retention to care.

**Discussion:** There is a critical need to generate further evidence for implementation of effective and sustainable mHealth supported PN tools to optimize cervical cancer screening in African countries and reduce the number of women lost due to follow-up.