INTEGRATE
Catalyzing Integrated Sustainable Subnational Biomedical Prevention in Zimbabwe

Lessons learned from large scale Shang Ring device VMMC implementation research in Zimbabwe: Operational considerations to address supply chain challenges

Authors
Brian Maponga, Owen Mugurungi, Sinokuthemba Xaba, Noah Taruberekera, Nehemiah Nhando, Tungamirai Mhuka, Hendrick Chigiji , Staci Leuschner, Karin Hatzold

Background

The INTEGRATE program assesses the safety, acceptability, efficiency and cost-effectiveness of the Shang Ring (SR) for VMMC among adolescent males aged 13-16 years Zimbabwe. Supply chain challenges due to the wide range of different device sizes have been reported as a major limiting factor for larger SR scale up.

Materials and Methods:

In the absence of SR sizing data, we used data from the SR active surveillance study conducted in Kenya for the procurement of the first batch of devices for implementation across six study districts, including 16 different device sizes. Two rounds of procurement secured 7,250 kits distributed across 65 implementation sites. In the initial phase of implementation clinicians gained proficiency during SR procedure training for circumcising males aged 15 year and older requiring the full range of device sizes with size distribution being widely scattered with variable patterns across geographies.

Results:

The need to continuously stock all adult and adolescent device sizes poses procurement challenges as relative consumption rates of different devices sizes depends on daily service uptake by different age bands which is unpredictable. Device utilization variations forced movement of devices across sites and caused stock-outs which halted recruitment of participants into the study, especially among younger age groups. This will have implications on unit costs and limit rapid scale up of SR VMMC implementation.

Conclusions:

Complex sizing across age groups and regions and distribution challenges warrants a hub and spoke approach to service delivery, which could be applied in school-based mop up campaigns targeting younger age bands, as opposed to a permanently decentralized service offer across multiple sites.

BILL & MELINDA GATES foundation

psi

Population Solutions for Health

PRIMARY HEALTH CARE · HEALTHY NATION · ZIMBABWE