

# USAID Boresha Afya Southern Zone

## Mobile Health Technology, a Revolution Towards Improving Adherence to Clinic Appointment among PLHIV on Antiretroviral Therapy in Njombe and Morogoro Regions in Tanzania.

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### Background

Adherence to Antiretroviral Therapy (ART) is critical in achieving HIV viral suppression among HIV/AIDS clients. This requires adherence to clinic appointments for Antiretroviral (ARV) medication refills. There many reasons including ‘forgetfulness’. MHealth initiatives have been deployed to support clients on ART for improved adherence. As of December 2018, about 42M people in Tanzania were using mobile phones. In this study, the project assessed effect of use of mobile phone reminders system on missed clinic appointment among PLHA in Njombe and Morogoro regions, Tanzania.

### Methods

Ten health facilities in Njombe (7) and Morogoro (3) regions with 21,550 HIV-infected individuals who receives antiretroviral therapy and currently exist on databases for the period of twelve months were selected. In FY 18 (Jan-March 2018), SMS reminder system were deployed in facilities, followed by deployment.

The consent of HIV clients on ART registered in the CTC2 database were sought and their mobile numbers were registered on SMS reminder system. All clients enrolled receive one-way two types of adherence SMS reminders on their mobile phones; one SMS three days in advance and the second on the day of appointment. Visits were captured and stored inside project database. To protect confidentiality, this system only extracts patient ID and telephone numbers. Trend analysis data were analyzed using Excel.

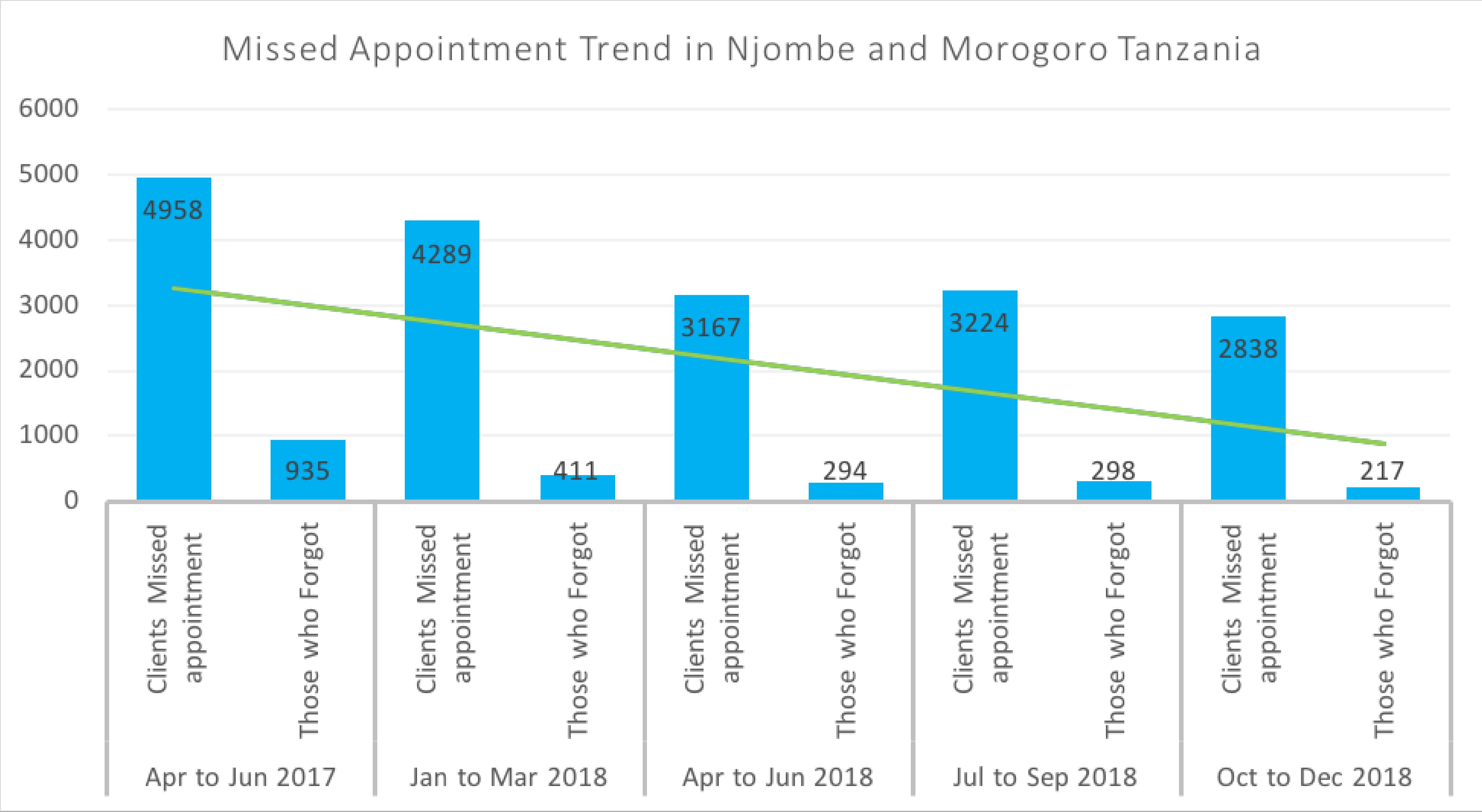
### Results

Prior to the deployment of the SMS reminder in FY18, (April- June 2017), there were 935 (19%) missed appointments due to ‘forgetfulness’. Following the system deployment in FY 18 quarter 2, the number of missed appointments due to forgetfulness declined by 127% (411) which is 10% lower. In FY 18 (April – June 2018), number of clients that missed appointments due to ‘forgetfulness’ decreased by 40% (294) which is 9% from missed appointment rate. In FY 18 (July- Sept 2018) rate due to “forgetfulness” remained at 9%, but in FY 19 (Oct – Dec 2018) number of clients missed due to forgetfulness further declined by 37% (217) which was 8% missed appointment rate.

### Conclusion

Personalized SMS reminders were effective and reduced the number of clients that missed appointments. System will be scaled up to HVL sample collection and EAC for clients with high HVL.

Trend Analysis, ‘Before and After’ SMS Reminder System Deployment



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