

Leveraging the fresh start effect in text messaging to promote re-engagement in HIV care in South Africa

Interruptions in HIV treatment are a barrier to viral suppression in South Africa.

South Africa has the largest antiretroviral therapy (ART) program in the world, but only about 76% of people living with HIV (PLWH) who know their status are receiving ART. Treatment interruptions are a contributing factor and are associated with a risk of treatment resistance, HIV transmission, opportunistic infections, and mortality.

Current outreach efforts to re-engage PLWH are inconsistent and often resource intensive. Novel approaches employing behavioural insights to more efficiently support PLWH to return to care, can supplement current tracing activities.

To prompt care recipients to return to the clinic we designed text messages leveraging the “fresh start effect”, a behavioural principle that uses temporal landmarks, such as the start of the year, a holiday, or a birthday, to motivate aspirational behaviours. The temporal landmark signifies a new time period and a clean slate going forward. Messages were designed to align to the National Department of Health (NDoH) chronic disease re-initiation “Welcome Back” campaign that seeks to support re-engagement and retention in care.

STUDY DESIGN & INTERVENTION

Objective: To test whether leveraging temporal landmarks in text messaging will increase the number of patients returning to antiretroviral treatment after a treatment interruption. This study used Youth Day and Mandela Day as the temporal landmarks.

Study location: Care recipients from approximately 100 clinics supported by Anova Health Institute within Capricorn District, Limpopo Province were included in the study. This included 24 clinics classified as priority clinics by the Limpopo Department of Health due to high volumes of PLWH on ART.

Study population: Care recipients with a missed appointment of >28 days.

Study design: Care recipients were randomized into three study groups:

- Standard of Care: routine tracing, with no text messages
- **Framed** fresh start: two text messages sent near the temporal landmarks, calling out the holiday and opportunity for a fresh start
- **Unframed** fresh start: two general text messages sent near the temporal landmarks

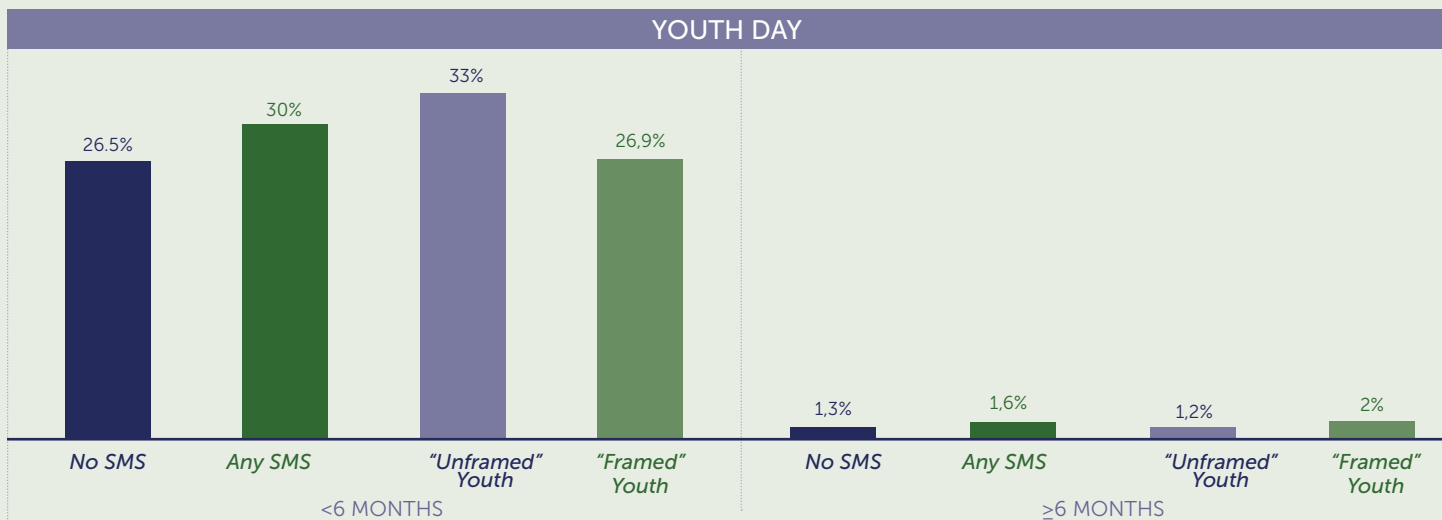
Primary outcome: ART-related clinic visit within 45 days of the first message.

RESULTS





- For Youth Day and Mandela Day, any text message was associated with increased odds of return to care.
- Among care recipients on ART for less than 6 months, 33% who received unframed messages around Youth Day returned to care, compared to 27% who received a framed message.
- Among care recipients on ART for less than 6 months, 30% who received messages around Youth Day returned to care, compared to 26.5% who did not receive a message.
- Among people with treatment interruptions longer than 6 months, only 1-2% returned to care regardless of receiving a text message.






ART visit outcomes for “unframed” and “framed” text messages compared to the standard of care by treatment interruption stratification



A similar pattern was observed for the Mandela Day temporal landmark, however, the absolute percent returning was lower because there was a longer time between when the data was drawn and when the first SMS was sent.

KEY FINDING 1	KEY FINDING 2	KEY FINDING 3	KEY FINDING 4
<p>A higher proportion of participants who were sent any text message (<i>framed and unframed</i>) returned to care compared to no text message for both Youth Day and Mandela Day.</p> 	<p><i>Framed</i> messages highlighting the temporal landmarks did not improve return to care compared to <i>unframed</i> messages.</p> 	<p>Care recipients on ART for less than 6 months who received any text message had increased odds of an ART visit.</p> 	<p>The findings showed reduced odds of an ART visit among those enrolled in priority clinics. This may be because priority clinics conduct more intensive tracing of care recipients, and so those that remain eligible to receive a message are harder to reach and less likely to take action.</p> 

POLICY RECOMMENDATIONS

	<p>Automated text messages could help relieve the healthcare workforce burden and offer a more efficient, low cost alternative to traditional tracing.</p>
	<p>Leveraging the fresh start effect may hold promise in motivating return to care, but more work is needed to understand the significance of particular dates to use as temporal landmarks.</p> <ul style="list-style-type: none"> • Rapid testing with healthcare workers and care recipients in the Indlela Behavioural-Hub (view animation) could inform future interventions and identify appropriate temporal landmarks and message framing.
	<p>Individuals earlier in treatment interruption are more responsive to such follow-up interventions and should be a focus population for this outreach.</p>