Background To reach the UNAIDS goal of 90–90–90, young people worldwide must experience improved linkage to care, retention in care and viral load suppression (VLS). This goal highlights needs for accessible mHealth approaches. The Evolution intervention is one such approach with automated and live text-messaging and a triggered alert system for timely support. Our goals included: 1) address concerns in young people's lives (housing, utilities, and mood); 2) increase appointments kept; 3) improve VLS rates.

Methods HIV positive youth at clinic sites with access to a mobile texting device, and at least one additional criterion: newly diagnosed; not linked to care; out of care for at least 6 months. Alerts and timely two-way text messaging with case management. Results were examined over 6-months.

Results 102 youth enrolled. 89 participated in the program for ≥ 6 months. Most participants were young, average age 22.33 (SD = 2.08), male (91%), Black (93%) and men who have sex with men (MSM) (82%). Eighty-one percent of youth responded to at least one text in 89,120 total exchanges. Texts triggered 395 alerts, most often for missed medication, housing issues and missed appointments. Seventy-nine youth kept at least one appointment for HIV medical care. Twenty-five participants newly achieved VLS and 35 maintained VLS during the 6 months. A significantly greater proportion of participants were virally suppressed at 6 months versus baseline (p = 0.18).

Conclusion This text messaging intervention, which could be replicated in diverse settings, led to improved health and communication in a sample of young people at-risk or experiencing poor HIV outcomes. This presentation introduces an innovative streamlined communication approach with HIV positive youth, which addresses important health and social needs.

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