



## 1. BACKGROUND

- Gaps still exist in reducing new HIV infections among adolescent girls and young women (AGYW) aged 10-24 years.
- Wider internet coverage and use of mobile phones present opportunities for use of mobile health (mhealth) to facilitate referral and linkage of AGYW to HIV testing services (HTS) and reproductive health (RH) services.
- FHI360/ZHI implemented mhealth solutions for RH and HTS among AGYW under the DREAMS programme from October 2018 to September 2020.
- This study assessed the effectiveness of mHealth in improving service linkages among AGYW.

## 2. MATERIALS AND METHODS

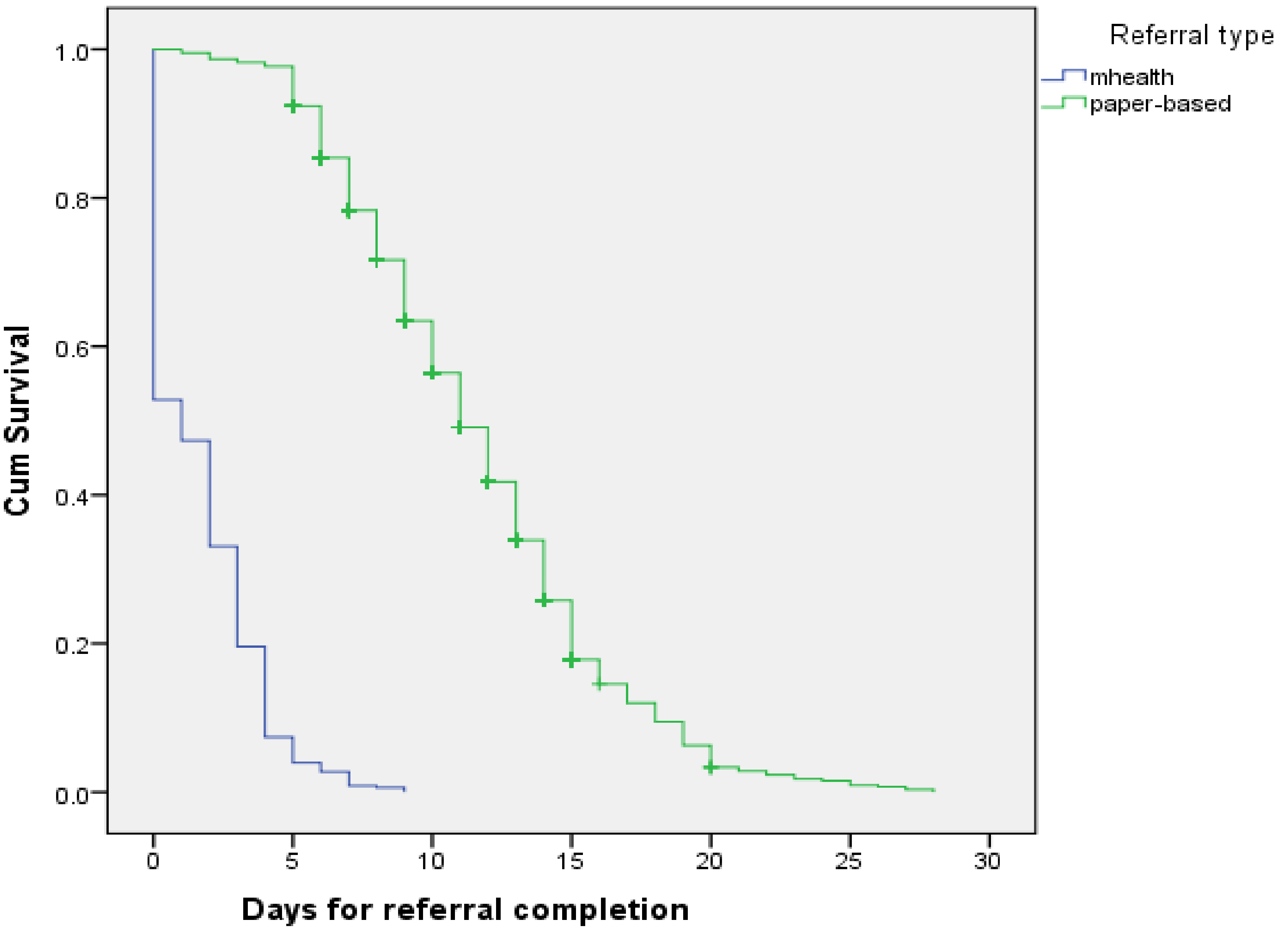
- This was a cross sectional study comparing AGYW referred through mHealth and paper-based system.
- AGYW referred for RH and HTS under the DREAMS program had automatic reminders sent in their phones to facilitate access to services through short message services (SMS) and also using the paper-based system.
- These data were captured in a web-based DHIS database which generated lists of AGYW who failed to present for services within stipulated period; physical follow-ups or reminder SMSs were auto-generated and send to them.
- Data for AGYW referred for RH and HTS for the period October 2018 to September 2019 for paper-based system and October 2019 to September 2020 for mhealth were extracted from DHIS2 database and analysed using SPSS generating frequencies and measures of central tendency.
- Ethics approval was obtained from Medical Research Council of Zimbabwe (MRCZ/E/254).

## 3. RESULTS

- A total of 8,800 AGYW referred for RH and HTS, and their median age was 17 years (IQR, 2).
- About 95.2% (4,148/4,355) and 87.8% (3,903/4,445) AGYW referred through mhealth and the paper-based system respectively completed referrals and the difference was statistically significant. (p<0.001).
- The median time for referral completion was one day for mhealth whilst it was 14 days, (IQR, 14) for paper-based system.
- AGYW referred through mhealth were 17.995 times more likely to complete referral system than those referred through the paper-based system (OR =17.995; p<0.001).
- Referrals through mHealth were completed within 10 days whilst it was 28 days for the paper-based system.

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Figure 1: Time to referral completion for mHealth and paper-based system



## 4. CONCLUSIONS

- Compared to the paper-based referral system, mHealth resulted in a higher service referral completion rates and shorter turnaround time.
- We recommend expansion of the mHealth solution to all DREAMS supported districts to increase uptake of RH and HTS amongst AGYW aged 10-19 years.

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