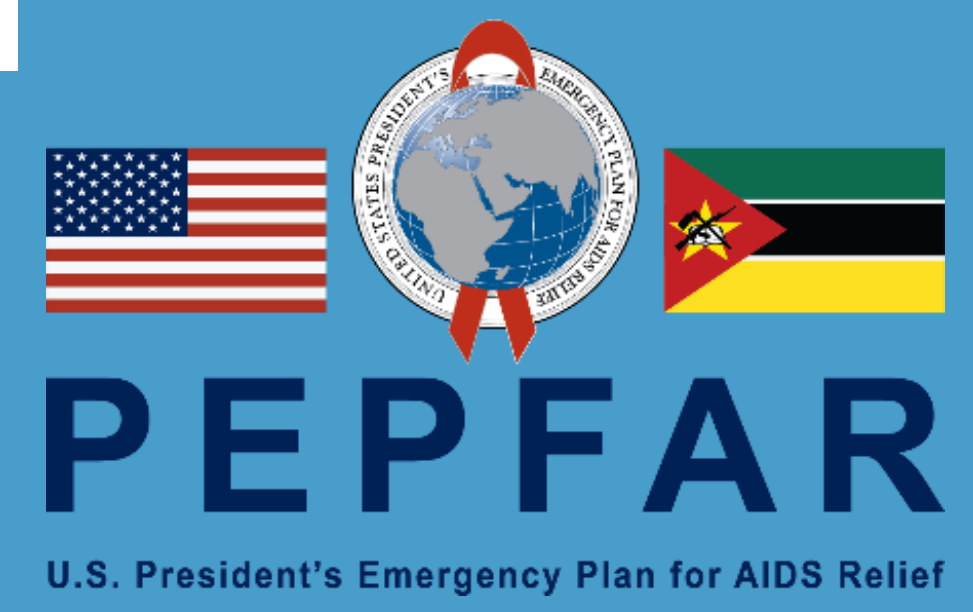




Feasibility of an mHealth Initiative to Improve the Entry of Civil Birth Registration Data into the Electronic Patient Tracking System in Zambézia Province, Mozambique



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Background

- Civil registration and vital statistics (CRVS) are critical to the 2030 sustainable development goals. In December 2018, Mozambique passed legislation (law no. 12/2018) allowing for electronic civil birth registration, where currently more than 4.9 million births have been captured nationwide through this system.
- In September 2021, Friends in Global Health (FGH), in collaboration with MOH, MOJ, and UNICEF piloted birth registration in four health facilities using a mobile health (mHealth) initiative in Zambézia Province (e-CRVS), aiming to improve the entry of civil birth registration data, a potential means to identify HIV care registration entered in duplicate.

Description

- In each of the four pilot health facilities, caregivers of children were referred from Maternal and Child Health and Pediatric HIV Service entry points to trained health facility staff.
- The staff completed the child's birth record notification via a mobile phone-based registration system, when a unique civil registration number (NUIC) was generated, and immediately given to the caregiver (**Figure 1**).
- For children living with HIV (CLWH), this unique identifier was transcribed in the child's clinical file and entered into the electronic patient tracking system.

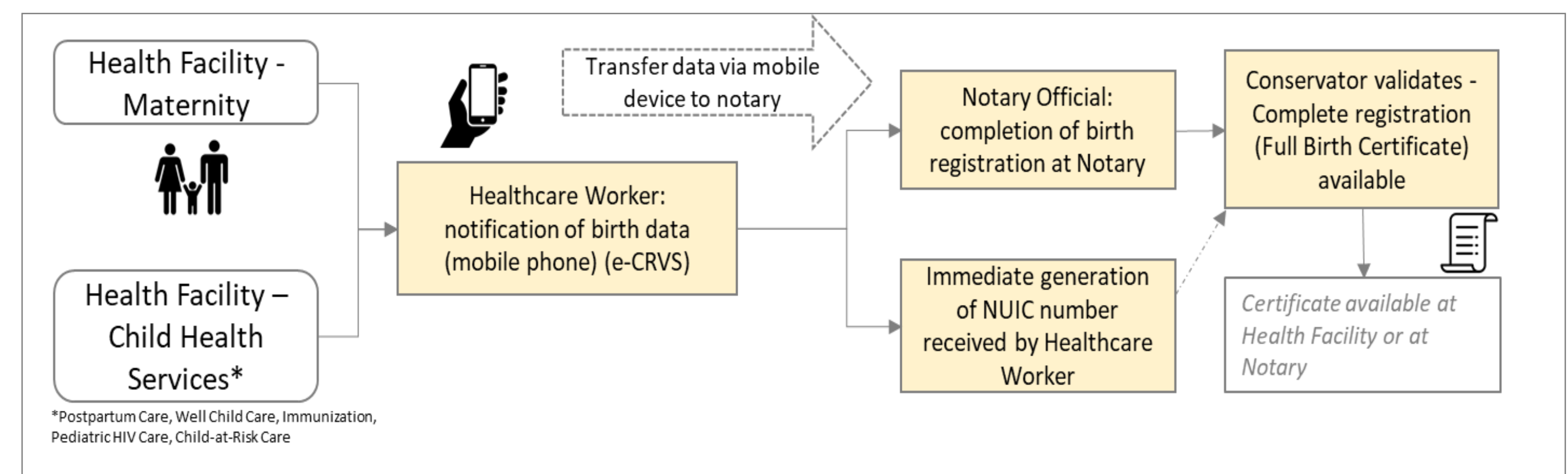


Figure 1: Flowchart of the e-CRVS pilot at health facility.

Lessons Learnt

- Between September 2021 and November 2022, 8131 children (0-13 years of age) arrived at the notification points.
- The proportion of children registered was 75% (6095/8131), with variation over time (**Figure 2**). Among CLWH, 41% (348/852) had their NUIC registered (**Figure 3**). Delays in registration were seen as health staff struggled to manage registrations when multi-tasking for other clinical care duties, as well as reporting technical difficulties with the phone-based system.
- During the pilot, 64% (224/348) of the CLWH who received their registration number were entered into the electronic medical record database. The remaining CLWH (124) were not entered due to challenges in the data flow, or because they were receiving care in other (non-pilot) health facilities.

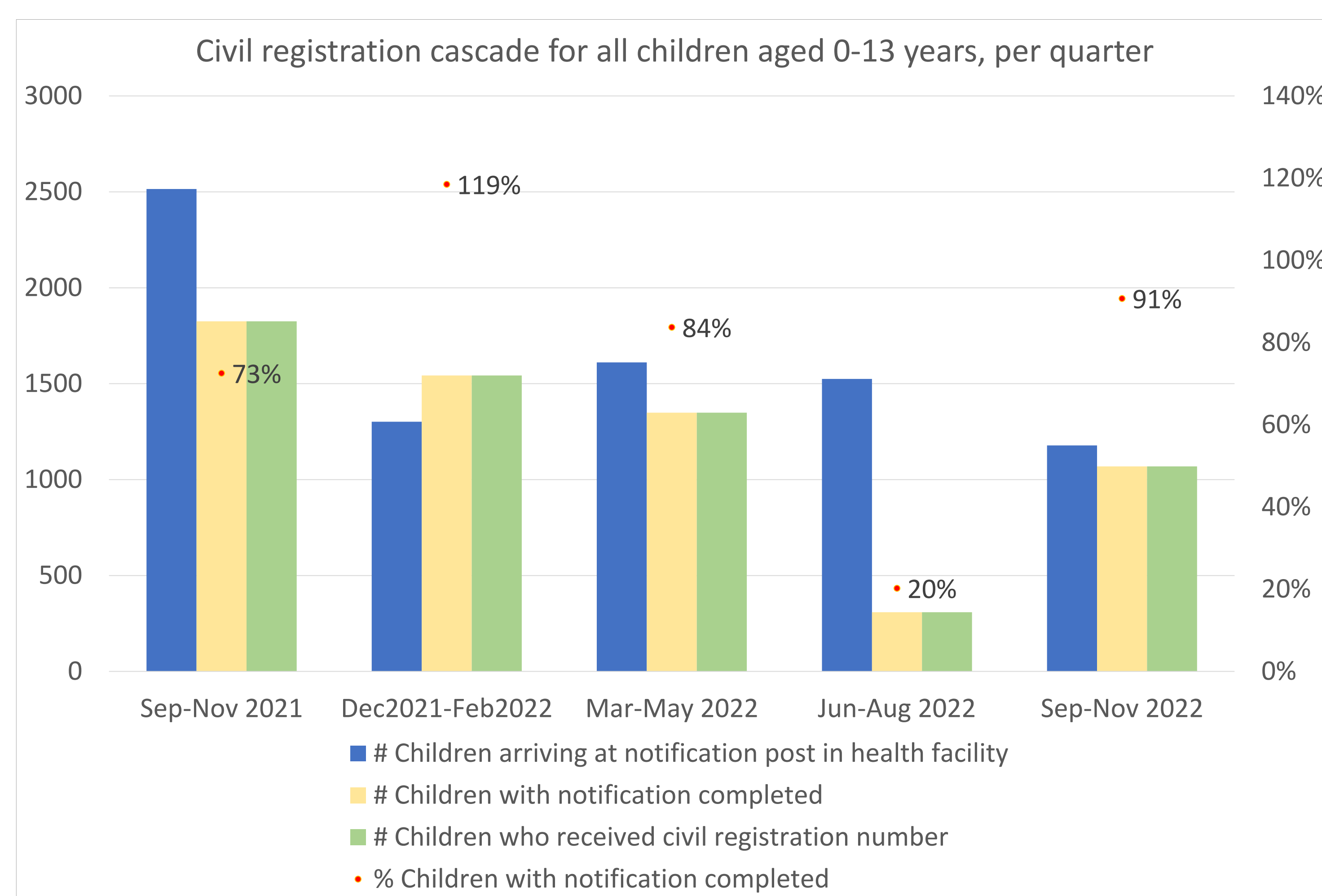


Figure 2: Cascade of civil registration among children (0-13 years of age) from 4 pilot health facilities in Mozambique between September 2021 and November 2022.

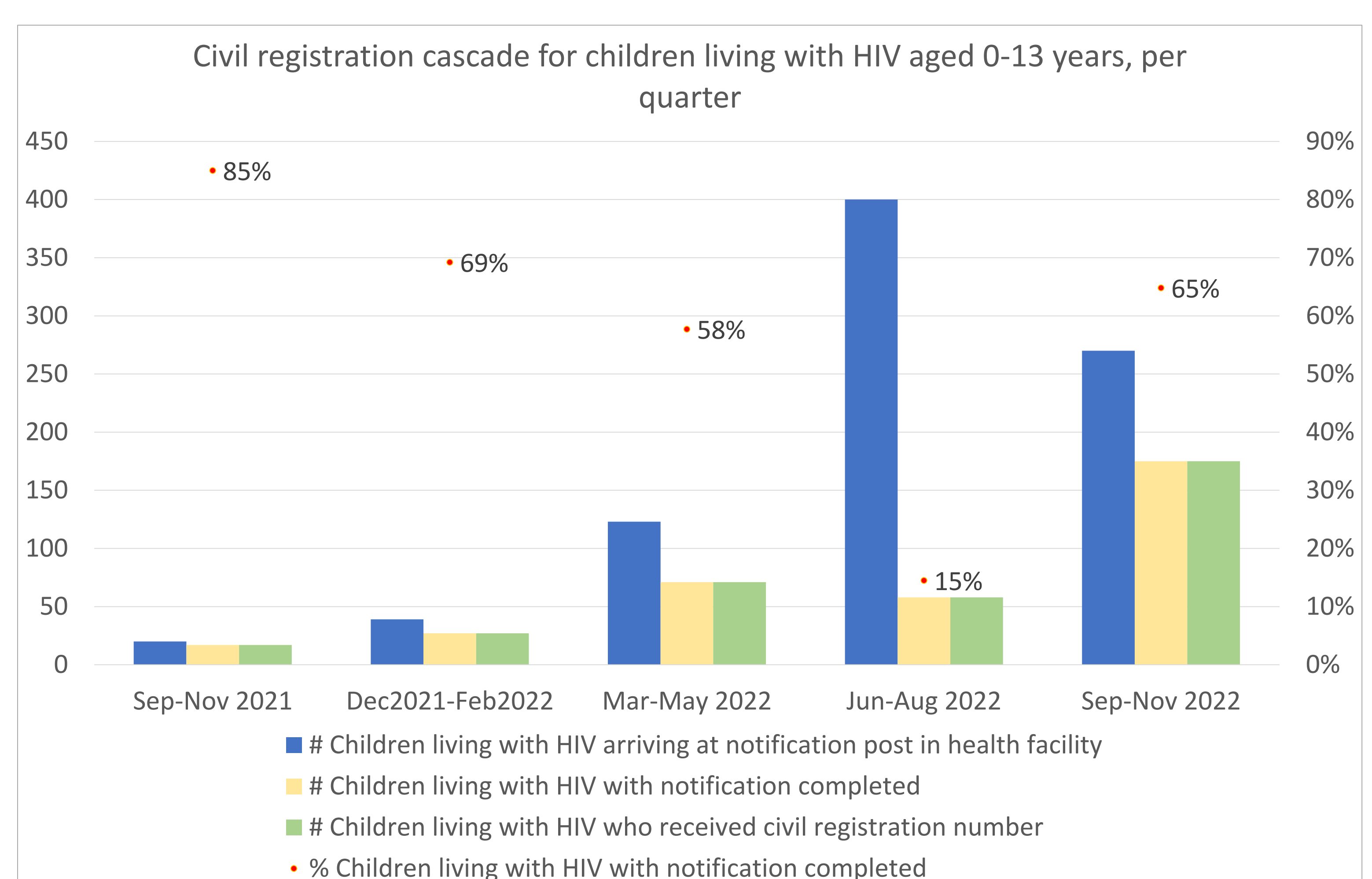


Figure 3: Cascade of civil registration among children with HIV (0-13 years of age) from 4 pilot health facilities in Mozambique between September 2021 and November 2022.

Conclusions/Next Steps

- Although many children were registered through this collaborative pilot, technical inconsistencies, registration delays and clear task delineation need to be addressed before expanding the strategy.
- Lessons learnt from this project could inform the design of mHealth systems used to improve the identification of silent transfers of individuals in HIV care.