THE SAPRIN CONNECTION

C-SHARP Pilots Use of CHAMP Data Collection App

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CHAMP, the Community Health Action Mobile Platform is an innovative data collection application that has been adopted by C-SHARP. CHAMP is being piloted by Community Health Workers (CHWs) in Nomzamo and Bishop Lavis since November 2023.

The app is used to collect all research data required by SAPRIN. CHWs use CHAMP when registering locations and households. Household assessments are also completed through the app.

Data is also collected as part of routine Community Oriented Primary Care services (COPC). It is used for individual health tasks for COPC and flags patients that need further care for referral health facilities.

Dr Hannah Hussey, C-SHARP nodal Director describes CHAMP as the backbone of C-SHARP, explaining that all the work done in the HDSS is dependent on the app. "While the introduction of CHAMP was initially slow as we had only a small team working on the app, and the CHWs required lots of training on the app and C-SHARP at the beginning, there's now real excitement and pride around the app. It's really exciting to see the data flowing from the app. Since November last year, our CHWs have registered 12 000 locations, completed over 13 600 COPC household assessments and enumerated over 38 000 individuals," said Dr Hussey.

CHAMP uses the open source platform, Community Health Toolkit (CHT) which has been customised to meet the unique requirements of C-SHARP. In developing CHAMP, the CHT platform was adapted for the local context. The end product is a robust model with C-SHARP specific functionality which includes questionnaires and forms. CHAMP was developed to ensure minimum viable capabilities. C-SHARP is continually updating and improving the app e.g. by adding capabilities for follow-up forms and verbal autopsies.

C-SHARP opted to utilise CHT because the previous mobile platform developed for and used by the Western Cape called *Catch and Match* became unsustainable to maintain purely for the Western Cape. The team investigated open source options and chose CHT due to its ability for further customization to support consented research questionnaires.

"CHT was chosen as the most mature fully open source CHW platform, with the capabilities to meet both the operational and research needs of C-SHARP and of the rest of the provincial CHW sites," said Professor Andrew Boulle, Principal Investigator at C-SHARP.

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The name CHAMP was chosen to highlight that CHWs are "champions," providing healthcare directly to communities.

CHT offers numerous benefits. Firstly, it is free to use and forms part of a global network of CHW platforms. This means there is a built-in global support network for the app, in the event of any challenges.

The main application database for CHAMP syncs every five minutes, ensuring real time data collection. Adel Visagie, CHW at Bishop Lavis said, "with the app no information is lost. In the past with only our paper-based ticksheets, if the paper gets lost we had to go back to clients and recapture all information, which sometimes irritated the clients."

CHAMP can be accessed on any device with an internet connection. CHWs in the field use mobile phones since they are less conspicuous in high crime communities. Team leaders access the app on tablets while management support staff access it via laptops.

Another important benefit is that CHAMP is extremely user friendly. Only a basic level of computer literacy is required to use the app. This was crucial as many CHWs have matric and the three month CHW training course. C-SHARP Project Manager for Nomzamo, Marcia Torres, emphasizes, "CHAMP is easy to work with and the CHWs are keen to go completely paperless as soon as possible." Princess Khwesa, Quality Assurance Office in the Asanda 1 Team at Nomzamo reaffirms this, "We are very happy with the app. CHAMP is secure, and very reliable and easy to work with."

The Community Health Toolkit is freely available to the public but the version of the app created by C-SHARP is only available to Western Cape government contracted CHWs. C-SHARP is however committed to sharing any code changes or configurations with interested parties.

Data collected on the CHAMP app feeds into the Western Cape's Provincial Health Data Centre. Operational management reports are developed from here. There are plans to link CHAMP with the application for electronic referrals, to streamline the referral process and ensure linkage to care.

If the pilot is successful, the app will be considered for scaling up to all contracted CHWs in the Western Cape Department of Health and Wellness.

Thank you to Dr Hannah Hussey of C-SHARP for the information for this article