CHISU Results in Action

Transitioning to electronic transactional data capture in a complex implementation environment in Ghana's Savannah region

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Background

In June 2023, CHISU worked with the Ghana Health Service (GHS) to train community-level health workers in Ghana's Savannah region to electronically capture maternal and child health (MCH) and family planning service data using the District Health Information Management System 2 (DHIMS2) e-Tracker application. The purpose of this training was to digitize transactional data at the health center and Community-based Health Planning and Services

Seripe CHPS staff demonstrating how the MCH e-Tracker is used when providing services. (Photo credit: CHISU Ghana)

(CHPS) facilities and to simplify data collation, analysis, and interpretation and use for decision making. A total of 237 health facilities, including 595 health personnel in Ghana's Savannah region, benefited from this digital intervention and service providers started using the e-Tracker application immediately after the training.

The transition from paper registers to electronic registers for data capture is happening in a complex implementation environment affected by high staff attrition, overburdened staff, poor internet connectivity or lack of internet bundles to sync or upload data, and personnel issues (such as lack of commitment from some staff and supervisors). This complex implementation environment has affected similar e-Tracker training activities by other implementing partners, such as Evaluate for Health HSS Accelerator.

The newly trained staff in targeted facilities are expected to capture transactional data electronically and document the same data in the paper registers until the e-Tracker data achieves a 95 percent accuracy rate to trigger a complete transition to paperless transactional data capture. But the implementation challenges have generally resulted in a low user rate of the e-Tracker application and inconsistencies in the number of transactions captured by e-Tracker and those documented in the paper register. There are, however, some facilities that have been relatively successful in this complex transitional environment.

Steps Taken

CHISU has put in place a monitoring and supportive supervision scheme to track the use of the e-Tracker application to capture transactional data, the quality of data captured, and to identify and resolve any emerging implementation challenges.

As part of this supportive supervision scheme, a combined team from CHISU Ghana, the Center for Health Information, and regional and district health directorates visited the selected facilities in the Savannah region three months into implementation of the MCH e-Tracker.

Seripe CHPS, a CHPS health post in the Savannah region with staff that attended the e-Tracker training in June 2023, was also visited by this team. Unlike most of the health facilities sampled during this monitoring visit, Seripe CHPS demonstrated exceptional performance in using the e-Tracker application during the team's visit.

Following the June 2023 training of two staff from the Seripe CHPS facility, the facility team took the initiative to train all other staff in the facility on the digital tool and has since integrated use of the application into their routine services for electronic capturing of transactional data for all clients visiting the facilities. This initiative ensured that every team member was proficient in using electronic data capture applications effectively and minimized the potential effect of any attrition. Service providers at Seripe CHPS were committed to using the new system, even though the transition phase comes with increased workload because staff have to capture the same transactional data using paper-based methods.

Results + Next Steps

From July 1, 2023, until October 13, 2023, the Seripe CHPS facility team captured MCH services provided (including clinical outpatient department services) into the e-Tracker application. A data consistency check between antenatal registrants reported in e-Tracker and what was tallied from the paper register and reported in DHIMS2 aggregate was 100 percent. Similarly, the number of outpatient clients captured in the e-Tracker application for the July and August 2023 reporting period was 100 percent consistent with what was reported in DHIMS2. A staff member from the facility said: "We were told that once we are able to capture all transactional data at the point of service, we

wouldn't have to do manual tallying from the paper-based register (for reporting purposes), and this is our motivation."

Internet connection and internet data bundles are a necessity in using the e-Tracker application, especially for service data synchronization and downloading updates for the tablets and e-Tracker application itself. Like many other remote rural communities, internet connectivity is not strong enough for data synchronization at the Seripe CHPS facility; in the absence of internet bundles provided by facility leadership, staff have been using their personal internet data bundles to sync e-Tracker data. Moving forward, it's important for the facility to provide internet bundles from the internally generated funds.

When asked about benefits of the e-Tracker application three months into implementation, a Seripe CHPS senior community health nurse in charge of child welfare clinic sessions remarked that the facility is able to use data from the MCH e-Tracker application to identify clients who missed out on their child health services appointments and follow up with a targeted home visit to provide services. Additionally, the facility can easily retrieve the medical records of those who come for medical appointments, allowing for continuity of care—and this has helped to reduce patient waiting time at the facility.

The successful integration of electronic data capture into the Seripe CHPS health facility's operations (which was a positive outlier among facilities visited) was driven by staff's commitment to change, determination, and resilience. Their proactive implementation can serve as a model for other health facilities in Ghana to emulate.