Harnessing technology to strengthen reproductive health commodity (RH) management in Kenya: a case study of 'Qualicare ®'

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Background

The Kenya health commodities strategic plan identifies distribution and capacity strengthening as key investment areas to avert and reduce stock outs.

John Snow Inc (JSI) carried out an assessment of supply chain management in Kenya in 2016. Gaps such as stock-outs, weak forecasting and quantification, poor data reporting, leakage of family planning (FP) products, non-uniform FP ordering and delivery process, and inefficient distribution and transportation were identified. To address some of the gaps, Health Strat was engaged to provide capacity strengthening in commodity management and affiliated reporting with an ultimate aim of reducing stock-outs. Support supervision, a key tool in forestalling some of the issues in supply chain management was selected as one key intervention in the capacity strengthening effort.

Main Question/ Hypothesis

Most health programs in Kenya have supportive supervision tools to track implementation and quality of care. For the RH program however, the tool was not standardized hence there were varied approaches to supervision by different managers that may have affected the quality of support to facilities resulting in commodity stock-outs. Interventions by Health Strat included standardization of the support supervision tool, training of commodity managers and oversight of the supervision exercise.

Methodology

The support supervision tool was loaded onto Qualicare® which is housed on an open source mobile data collection platform that allows real time data transmission from the interviews to a secure server. The system has a GPS tracker that ensures that data can only be collected at a specific site. The system works both on an online and offline mode allowing data collection in remote areas with limited internet access. A validation check was also programmed in the software to prevent an interviewer from moving on to the next question before answering the previous one. Data entered in the software was uploaded to a central server from where it was exported to a spreadsheet for verification and analysis.

Following development of the supportive supervision tool, commodity managers from six counties and their 47 sub counties were oriented on the tool. Supportive supervision was undertaken where health workers were interviewed and observations made on the state of storage of FP commodities. Stock counts were done and records reviewed. Based on the supervision findings, the facilities were scored. All desirable answers scored a "one" while undesirable ones earned a score of "zero" in the specific supply chain area.

Results

A total of 787 facilities were visited during the support supervision exercise in the six selected counties. The digitized version of the tool was easy to use after two hours of training. The supervision process was guided as the user was prompted on which questions to ask at each point in time. The inbuilt data quality checks on the tool resulted in collection of complete supervision data in all cases. From this data, various commodity management indicators were analyzed including tool availability and accuracy of reporting where both the commodity form and service data registers were both available in 94% of the facilities visited. With regard to accuracy and completeness of reporting, a total of 90% of health facilities were recorded to fill the DAR on a daily basis. However, it was established that only 63% of facilities had sufficient storage. On overall individual facility performance on all scored areas, the average stood at 54%, with a maximum score at 97% and the minimum score was 15%. The standardization provided uniformity across all facilities. Further, we were able to conduct sub-analysis of the data by county, sub-county and by the level of facility enabling the RH managers to develop a dashboard of findings for their area. This enabled the managers to group their facilities by need as per their performance in the various indicators and offer targeted technical support.

Knowledge contribution

In conclusion, standardization of support supervision ensures that all areas of commodity management are assessed providing a platform for improvements. Introduction of scores also allows for tracking of improvements and instills a sense of accountability among health facilities.

The supportive supervision exercise as implemented by Health Strat showed that real time data availability as availed using the Qualicare ® system helped in speeding up decisions at the facility level to avert and reduce future stock-outs. Findings from the exercise also point to the relevance of training health workers on how to correctly use the standard reporting tools on commodity data. It was also found that storage space in Counties needs expansion in order to ensure orderliness and reduce damage and expiries that could occur due to overcrowding of stock.

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