

Sema Nasi: Real-time Feedback for Quality Improvement in Family Planning Services in Tanzania

Mobile technology can be used to provide real-time quality improvement data for family planning services.



Photo: Esabella Neeso, formerly of FHI 360/Tanzania

Ensuring the quality of family planning services is an essential component of effective service delivery. Increased attention to quality assurance services has heightened demand for innovative, low-cost methods to evaluate quality and provide feedback to both facilities and providers. Mobile technology, such as the use of text messaging on mobile phones, is increasingly being used in this way to improve the quality of health care services in settings around the world.

Mobile phones are relatively inexpensive, portable, and accessible, and they offer clients privacy and anonymity in providing honest feedback. Mobile phones also offer a unique opportunity to survey clients about their health care experiences, as clients can answer such surveys on their own time. Mobile data collection also reduces cost, allows for more rapid data collection, and makes data available for viewing and analysis in real-time.

Building on this premise, FHI 360 collaborated with BongoLive (a mobile services technology company in Dar es Salaam) to develop and test a mobile phone-based system called Sema Nasi, which is Kiswahili for “Talk to Us.” The system surveys clients about the quality of family planning services they receive from health facilities, and this feedback is shared with the health facilities to improve their accountability for providing high-quality care.

HOW THE SURVEY WORKS

The Sema Nasi survey was developed through a collaborative process with key stakeholders, drawing from internationally recognized quality-of-care frameworks and from national standards. The final survey contained 10 questions covering a variety of quality-of-care domains, including length of wait time, privacy, respect, and the comprehensiveness of family planning services provided at the health facilities. Topics that the developers believed facilities could address and were important to clients based on previous quality of care studies were included.

The Sema Nasi service was advertised in the target health facilities with posters and palm cards, which were handed out by providers. Clients accessed the system by texting the keyword “Sema” to a designated phone number. The system then sent the 10 survey questions, one at a time, to the clients. Seven of the 10 questions required a yes or no answer; two questions allowed an answer of yes, no, or unsure; and the final question was open-ended, allowing clients to text additional comments they had related to quality of care. Online dashboards allowed stakeholders, including staff at the health facilities, to view the survey responses in aggregate form as they came in.

PROJECT IMPLEMENTATION

Facility staff participated in a brief training on the features of Sema Nasi and how to access the online dashboards. The project was then implemented for three months in five private and one public health facility in Dar es Salaam and Morogoro Regions.

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Women using Sema Nasi

For each client, the responses to the first nine questions were each assigned an individual score value from 0 to 2. Those individual scores were added up to create a total “facility quality score” between 0 and 11. A total score between 0 and 3 meant the client was unsatisfied with the quality of services received. A score of 4 to 7 meant the client was somewhat satisfied. And a score of 8 to 11 meant the client was satisfied. Clients who responded to the survey were reimbursed for the cost of their text messages.

Based on data from all clients, each facility was assigned a mean facility quality score. Following data collection, project staff

visited each facility to share and discuss results from the survey, identify challenges, and provide guidance on how to use the data to improve quality.

FINDINGS

Among the clients who took part in the survey, high completion rates indicated that mobile technologies can be used to collect self-reported data. Two-hundred sixty-two clients responded to the survey. Of those, 222 (85 percent) completed eight of the questions, 216 (82 percent) completed nine of the questions (all close-ended questions), and 65 (25 percent) completed all 10 questions.

About FHI 360: FHI 360 is a nonprofit human development organization dedicated to improving lives in lasting ways by advancing integrated, locally driven solutions. Our staff includes experts in health, education, nutrition, environment, economic development, civil society, gender, youth, research, technology, communication and social marketing — creating a unique mix of capabilities to address today's interrelated development challenges. FHI 360 serves more than 70 countries and all U.S. states and territories.

Overall, clients were satisfied with their care, as the mean facility quality score was 9.3 (range, 8.4 to 10.2 out of 11). Nearly all clients (97 percent) thought the facility staff were welcoming, friendly, and respectful. However, 11.7 percent did not know or were unsure about the side effects of the family planning method they chose, and 11.3 percent did not know or were unsure if they could use the method they chose properly.

CHALLENGES

Although the results of the project indicate that mobile phones can be a highly effective and acceptable platform for collecting feedback from clients, some challenges associated with their use emerged. Many facility staff reported not regularly viewing or being unable to access the online dashboards, and both facilities and clients sometimes reported insufficient amounts of family planning providers, contraceptive methods, and brochures and other informational materials about the methods. Many clients who sought family planning services at the participating facilities did not own mobile phones. Those who did own phones were sometimes hesitant to use their airtime to complete the survey (in case they were not reimbursed) or didn't have airtime available. Clients who did try to respond to survey questions sometimes reported problems with the phone networks. Feedback from providers, as well as the content of clients' responses, also indicated that clients were sometimes confused about how to respond to the open-ended question.

RECOMMENDATIONS

- *Maximize quality improvement:* For Sema Nasi to have maximum effect, it should be coupled with facilities that already have established quality improvement efforts. This way, client feedback can be quickly incorporated into the improvement efforts.
- *Prioritize training for facility staff:* To ensure that staff members can view and use quality improvement data, projects should budget sufficient time and resources to train facility staff on accessing data from mobile platforms and utilizing them to improve quality.
- *Promotion and advertisement of the program:* An adequate promotion budget should be secured. This is essential for the program to have broad coverage and participation.
- *Maximize response rate:* Vouchers could be provided to clients to ensure that they will be able to pay for the text message service. Alternatively, a special phone number could be created that would allow clients to use Sema Nasi free of charge rather than having to rely on reimbursement.



Sema Nasi poster

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