Do Mobile Reminders Boost Health Service Uptake?

Lessons Learned from Breakthrough ACTION-Nigeria

Acknowledgements

Background

Breakthrough ACTION-Nigeria, a social and behavior change (SBC) project funded by the United States Agency for International Development (USAID) in Nigeria, began in 2018 and will run until 2025. Its goal is to increase the practice of priority health behaviors related to malaria; maternal, newborn, and child health and nutrition; family planning and reproductive health; tuberculosis; COVID-19; and Global Health Security priority zoonotic diseases at national and subnational levels, in collaboration with Federal and State Ministry of Health programs and other partners.

The project has engaged community members, leaders, community volunteers (CVs), Ward Development Committees, health providers, and mass and digital media to promote positive health behaviors and increase the use of essential health services.

This learning brief describes a mobile phone reminder approach implemented by Breakthrough ACTION-Nigeria to reinforce SBC messages and increase the likelihood that community members would complete health facility referrals.

Description of
Breakthrough ACTION-Nigeria's
Mobile Reminder

Breakthrough ACTION-Nigeria engaged CVs to educate community members about priority health practices and issue referral cards to the nearest health facility for necessary services. However, some community members did not visit the facilities when referred because they either forgot or had other reasons for not going. The project established a mobile reminder system to support community members to complete their facility visit. Mobile reminders were a joint strategy concept of the Integrated Health Program and Breakthrough ACTION-Nigeria, developed by Viamo.

Breakthrough ACTION-Nigeria introduced mobile reminders in Bauchi and Kebbi in February 2021 and expanded them to Sokoto and Ebonyi in January 2022. The project trained CVs to invite the clients they referred to enroll for digital reminders, emphasizing the benefits of the mobile reminder service. If the clients consented, CVs enrolled them to receive reminders and collected the following information: serial number, services client was referred for, date referred, phone number, and the state where the client enrolled.
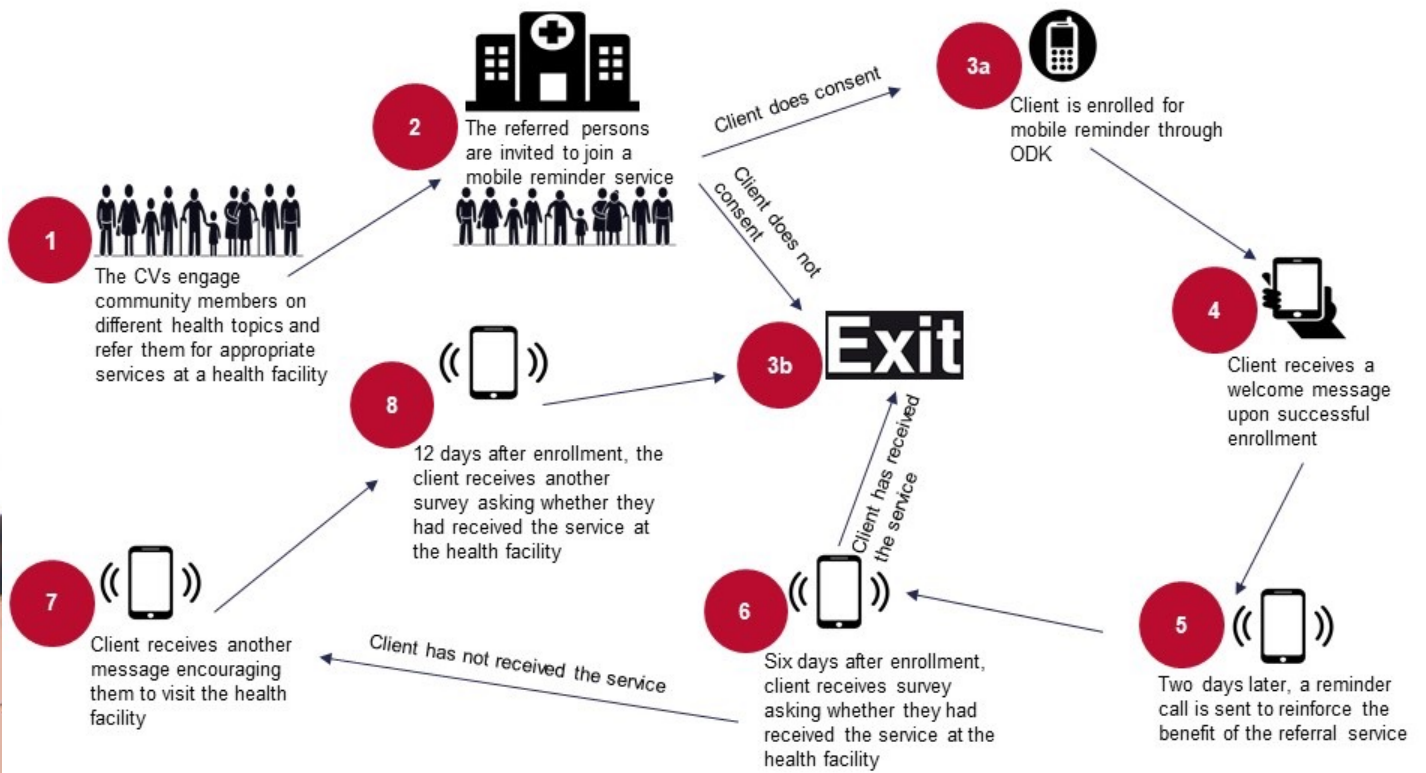
Upon enrollment, participants received a text message to welcome them, followed two days later by a voice recorded SBC message in Hausa or Igbo tailored to the purpose of referral (e.g., family planning,

antenatal care, fever, diarrhea, pneumonia, malnutrition, or immunization). Recorded SBC messages came from one phone number and were free of charge to the client. A call-back feature allowed clients to flash for the project to call them back if they missed the call.

Breakthrough ACTION-Nigeria added a short survey in October 2021 to determine whether clients completed their referrals following reminder messages. Six days after enrollment, participants received a follow-up survey that used an interactive voice response format on their phones. Following voice instructions, participants used keystrokes on their phones to answer questions. Participants who had not completed their referrals received immediate follow-up messages encouraging them to visit the facility. Six days after the last reminder, participants received another follow-up survey call to determine if they had visited the facility.

Figure 1: Mobile Reminder Schematic

1 — The CVs engage community members on different health topics and refer them for appropriate services at a health facility

2 — The referred persons are invited to join a mobile reminder service

Client does consent

Client does not consent

3a — Client is enrolled for mobile reminder through ODK

3b Exit

4 — Client receives a welcome message upon successful enrollment

5 — Two days later, a reminder call is sent to reinforce the benefit of the referral service

6 — Six days after enrollment, client receives survey asking whether they had received the service at the health facility

Client has received the service

Client has not received the service

7 — Client receives another message encouraging them to visit the health facility

8 — 12 days after enrollment, the client receives another survey asking whether they had received the service at the health facility

Between February 2021 and March 2024, the project enrolled a total of

81,945

out of the

1,108,269

people referred by CVs.

The same phone number was often enrolled for multiple referrals or conditions, due to limited phone ownership. Some clients did not enroll because they had no phone.

The project made follow-up calls to

76,201

phone numbers

to find out whether clients had completed their referral.

Of the **11,257** clients who responded,

47%

confirmed they had visited the health facility.

After a second follow-up call, the proportion of people reporting they completed referrals rose to

61%

During the same time period, the referral completion rate among all referrals made by CVs (irrespective of whether they received a follow-up call or not) was **50%**, substantially lower than those who received the mobile reminder.

After 30 days of enrollment, clients received a call to allow them to opt out of receiving further messages. Only 2% of clients opted out.

Lessons Learned

1 Confirm phone numbers before enrollment. People sometimes gave incorrect numbers, and many women who did not own phones gave their spouse's number.

2 Be aware of cultural norms that may restrict men from collecting personal information, including phone numbers, from women.

5 The project provided CVs with mobile devices for the reminder system in the four states. Test how well the system would work if CVs used their personal phones for enrollment and follow-up.

6 Explore strategies to improve follow-up call response rates, such as offering incentives, refining survey content and format, or implementing follow-up reminders for non responders.

3 ✓

Sensitize participants about the call-back feature in case they miss reminder calls. Most clients did not flash the project number when they missed calls.

4 ✓

Explore options for streamlining the enrollment process such as unstructured supplementary service data, sometimes referred to as "quick codes."

7 ✓

Determine the reasons why so few participants opted out. There should be a seamless way for clients to opt out at any point, rather than waiting for an opt-out invitation.