



Introduction

This case study describes how the World Health Organization (WHO) Somalia country office successfully began to roll out a direct disbursement mechanism (DDM) in the polio eradication programme.



Somalia remains free from wild poliovirus since 2014 and has successfully stopped the outbreak of circulating vaccine-derived poliovirus type 3 (cVDPV3) in 2021 after 28 months since this strain of poliovirus was detected in the country. Somalia is currently responding to an outbreak of circulating poliovirus type 2 (cVDPV2), detected for the first time in Somalia in the environment in November 2017 and in a child on 11 May 2018. So far, 23 children have been infected with cVDPV2, with the last reported case detected in October 2021.



Background

Somalia is known as the last resting place for smallpox. Before the disease was eradicated globally, the last endemic case of smallpox was discovered on 31 October 1977 in the port city of Merca, in a patient who had spent barely 15 minutes with a person infected with smallpox. As Somalia took swift measures to isolate the last known case by contact tracing, increasing surveillance and rolling out vaccination campaigns to contain the disease, the country was successful in ensuring there was no further spread, and the world successfully eradicated smallpox.

Forty-five years later, in line with a resolution adopted by the World Health Assembly in 1988 that called for the global eradication of polio, with modern innovation, Somalia continues to use these tested and successful measures, alongside new ones, to eradicate all forms of polioviruses in the country.

In December 2020, WHO successfully piloted the use of direct payment via DDM to pay for a vaccination campaign in Hargeisa, Somaliland. Since then, WHO has used DDM for six other polio immunization campaigns conducted in Somaliland, almost one third (30%) of the total polio immunization campaign budget. It is expected that by 2023, the DDM can be successfully rolled out to cover payments of all immunization campaigns (polio and non-polio mass immunization campaigns) in the country.

The effort to contain the spread of circulating vaccinederived poliovirus type 2 (cVDPV2) in Somalia is spearheaded by the Global Polio Eradication Initiative (GPEI), led by the federal and state governments of Somalia in collaboration with WHO, and has support from other partners. Unfortunately, the country's fragile health systems now face an added distraction of responding to yet another challenge – coronavirus disease 2019 (COVID-19). Although Somalia has been free of wild poliovirus since 2014, surveillance systems in place, led by WHO in collaboration with the government and other partners, have identified three cases of cVDPV2 in 2019, 14 cases in 2020 and one case in 2021, although no additional cases have been reported as of 28 February 2022. Regardless, these cases still pose a threat to children both across Somalia and in neighbouring countries.

The continued outbreak of cVDPV2 poliovirus in Somalia remains a Public Health Emergency of International Concern and a persistent challenge for the global eradication initiative. To address this, the polio eradication programme aims to continue conducting national and sub-national immunization campaigns, strengthening acute flaccid paralysis surveillance to search for polio-like symptoms in children, and mounting an urgent response to the ongoing outbreak of cVDPV2.

Overview

The landscape of limited banking systems, poor infrastructure and a relatively weak economy have posed a consistent challenge to the efficient and effective implementation of immunization campaigns, especially prior to 2018.

Despite this, Somalia's polio eradication programme is comprised of an extensive network of health personnel in every district of every state, though with limited access in some. This includes 15 000–20 000 frontline health workers deployed specifically for mass immunization activities that are conducted for four to six days per campaign. Prior to 2018, the polio eradication programme paid all these health and frontline workers, who include vaccinators, supervisors, independent monitors, cold chain workers and vehicle owners, using cash in the form of



daily wages. This payment and disbursement related to vaccination campaigns and other activities were mainly delivered through cash advances to non-staff polio team members. Due to back-to-back campaigns as part of robust efforts to prevent the spread of any polioviruses, the volume of cash/unsettled advances kept mounting. At times, an individual was carrying large sums of money as unsettled cash advances. This posed an insurmountable security risk to the individual team member carrying the cash and an added financial risk to the polio eradication programme and WHO.

To overcome and mitigate these risks, WHO teamed up with the federal and state governments of Somalia in 2018 to introduce the process of direct payments to beneficiaries by leveraging on modern technology. This innovative approach, known as the DDM, entails payments being delivered straight from the bank or funding institution to beneficiaries at different levels, such as transit polio vaccinators and village polio volunteers. By the beginning of 2019, all cash advance payments related to surveillance activities (e.g. acute

flaccid paralysis investigations, follow-up visits, active case searches and shipments of stool samples for testing) were stopped all across Somalia. The polio eradication programme switched to disbursing direct payment after any surveillance-related activity was conducted throughout the country to tap into a way to reduce cash transactions.

After the successful implementation of direct payment for surveillance activities across Somalia, in October and November 2020, following an extensive review and planning to ensure a smooth rollout, the WHO country office took additional concrete steps to introduce – in an efficient, accountable and transparent manner – direct payment to pay frontline health workers who participated in polio campaigns. In December 2020, WHO successfully piloted the use of direct payment via DDM to pay for a vaccination campaign in Hargeisa offering bivalent oral polio vaccine (bOPV) to children.

Objectives of DDM

By using DDM to deliver payments, WHO aims to:

- transfer the responsibility for payment of frontline workers to a bank or a contracted third-party paying agent;
- ensure accountability, as only health workers who were appointed for the implementation of the campaign, registered by the service and who were indeed verified as participating in campaigns, would be paid for their work;
- contribute to trust-building and reputation management among community members and frontline health workers;
- ensure proper utilization and traceability of funds to maintain donors' confidence;
- increase efficiency, and save time, as technical experts can focus on activities rather than on following up on payments at field level; and
- mitigate the security risks associated with the life of team members who, prior to 2018, had to carry, disburse and be responsible for large amounts of cash.

Using new ways of working for stronger impact and safety of teams

"The use of direct disbursement speaks of WHO's efforts to use innovations to ensure accountability and show impact of what we do in Somalia, which is in line with our Country Cooperation Strategy (2021-2025) and the Thirteenth General Programme of Work (GPW 13). This is even more important in the context of a fragile country with limited banking systems. While we work to keep getting more and more effective and efficient at what we do, which includes reaching every Somali child and adult with essential health services, the security of our personnel is of utmost importance to us. We will continue to ensure that while our teams are making a difference in people's lives, they are safe in every way possible, and work using efficient and cost-effective modalities", said Dr Mamunur Rahman Malik, WHO Representative to Somalia and Head of Mission. "These efforts also show that WHO Somalia is bold and ready to assume new ways of working to leave a mark and create a large footprint for health in Somalia, in line with the revised Essential Package of Health Services and to advance towards the achievement of universal health coverage".



Methodology

Selection of a vendor

In 2018, after due consideration, the WHO country office in Somalia decided to utilize DDM for payments of all grassroots vaccination personnel deployed in immunization campaigns and supplementary immunization activities (SIAs). To identify and select a potential service provider capable of supporting and implementing such disbursement activities in line with stringent WHO requirements, a "Request for Proposal" was issued in collaboration with the WHO Eastern Mediterranean Regional Office (EMRO). To have a transparent selection process, a team of technical and financial experts from EMRO and the WHO Somalia country office convened a twoday procurement review session in Nairobi, Kenya, from 8-10 July 2019, to assess the capacity of five institutions in Somalia that would be capable of making direct payments to individuals across the country. After a thorough comparative analysis of technical and financial proposals, the team arrived at a decision to use the services of Dahabshiil Pvt Ltd., which has wide coverage and an extensive network across Somalia. As per the agreement, the team discussed payment channels and agreed on three modes of payment to be used to pay the end beneficiaries: 1) mobile money; 2) collection from a Dahabshiil branch; and 3) remittances.

Pilot project launched to model innovative payment methods

As mentioned, DDM was first used to pay for a vaccination campaign in Hargeisa as a pilot project in December 2020. Prior to implementation, November 2020, WHO conducted intense capacity-building sessions alongside the service provider, Dahabshiil Pvt Ltd., to develop the technical skills of polio eradication officers at state and regional level to use DDM. As a result, the teams developed and agreed on recording and reporting formats to be used, as well as a step-by-step flow of processes to brief staff at all levels.

Processes of DDM

The DDM starts with an identification system for all grassroots vaccination and other frontline workers. This includes using a mobile phone number/sim card and other personal information. The system then validates the information and issues an unique identification number for each person after the personal details have been verified.

The disbursement of funds is made to the individual (who are registered in the system) upon instruction given to the bank to pay by WHO. Funds are disbursed from dedicated project account directly to the beneficiaries through any of these preferred means-(i) mobile money; (ii) collection from a Dahabshiil Pvt. Ltd. branch; (iii) remittance.

The Direct Disbursement Mechanism (DDM) is part of efforts to better reward and motivate vaccinators and other field workers who face challenging operational and security circumstances in their efforts to reach every child with polio vaccine. The DDM is expected to make cost savings in terms of bank commission for financial transaction (US\$ 750 000 per biennium) in addition to 30 to 40% staff time that is currently dedicated for managing funds disbursement and payment.

Finally, payment records are verified and reconciled online for reporting and final report on payment for vaccination campaigns are produced in real-time.

Orientation is one of the keys to success

At first, Team Lead for the Polio Programme at WHO Somalia, Dr Ali Bin Break, explained that the operations officer for the polio programme, along with management and finance team, held orientation sessions to explain the entire DDM process in detail to WHO's finance and state teams, in addition to regional polio officers and district officers, who are the main individuals responsible for the implementation of vaccination campaigns. They held cascaded meetings from state down to field level, demonstrating how DDM had been successfully implemented in other countries. As a result, these orientation sessions allowed the WHO team to explain the requirements and benefits of the direct disbursement process, starting from registration of the service provider/ end beneficiary through Dahabshiil Pvt. Ltd., to issuing a unique mobile number/sim card (after having received and verified the personal details of a respective individual), and finally processing the disbursement of funds. After this, the individual acknowledges receipt of the funds, Dr Bin Break adds.

Circumventing administrative layers to be more efficient

As finance assistants with WHO based in Hargeisa, Khadra Abdi and Hoddan Jama Nuh were instrumental in rolling out the pilot DDM project for immunization campaigns.

"Before the implementation of DDM, on average, we used to wait for three to six months for financial returns, which include the return of receipts and proof of payment of cash advances, from regional and district polio officers (DPOs) to us for recording and reporting. Now, we are able to circumvent several administrative layers of people handling the returns before they reach us. It now takes only 20 days from the registration of beneficiaries to the disbursement of funds", explained Khadra.

Offering unique identification numbers to service providers

"Every field supervisor or field assistant at district level has five teams in urban areas, four in rural areas and three teams in nomadic areas. Each team is comprised of two people – a vaccinator and a recorder. Overall, for the first use of DDM in Somaliland during December 2020, we had to have transactions for 1650 service providers. The financial institution, Dahabshiil Pvt. Ltd. had to ensure that every recipient had a unique identification number, and that they used consistent spellings for names used in every form and in their bank accounts. This was a laborious, but fruitful task", said Ahmed Jama Farah, Regional Polio Eradication Officer.

Scaling impactful innovation with e-Dahab*

As one of the four DPOs for Hargeisa, Somaliland, Ismahan Abdullahi Hussein is responsible for ensuring polio campaigns under her jurisdiction run smoothly. Before each polio campaign, Ismahan selects vaccination teams. From then onwards, everything works like clockwork. Since the DDM pilot project was rolled out, teams from Dahabshiil visit every pre-campaign training and help vaccinators register for a sim card with e-Dahab, which allows them to be paid using the direct payment mechanism. All that users need is a photo, mobile phone and some form of official identification.

"I joined the polio programme in 2001", said Ismahan, "and since then, this is the first time I have seen an impactful innovation of this scale.

Today, everyone has a phone, and using this system all our beneficiaries can receive instant payments.

DDM has really reduced the hassle of extra paperwork and financial documentation. Everyone is safer as no one carries cash any more, and on top of it all, DPOs like me save around 30–40% of our time as we can focus on our technical jobs".

^{*}e-Dahab is a money transfer system that allows users to transfer money to another person or business through the use of a mobile phone sim card and Dahabshiil Pvt. Ltd. services

Lessons learned and experiences gained

Since 2020, the polio eradication programme has used DDM for six campaigns, almost one third (30%) of the total campaign budget across Somaliland. In the six months during which DDM was in use for immunization campaigns, the polio eradication programme noted the following experiences:

• Increased safety of staff and mitigated risks
Prior to the rollout of DDM in Somalia, polio
health workers were responsible for carrying
large amounts of cash to deliver as advances
to various service providers and, hence, faced
insurmountable risks. After the introduction
of DDM in campaigns, with the direct method
of payment being made through a financial
institution, staff do not face any security risks
related to holding and distributing cash. This
has therefore helped the programme to mitigate
security risks associated with cash transactions.

Saved finances

As a result of negotiations that WHO made by way of implementing the DDM initiation process through the use of one financial institution across Somalia, the commission for financial transactions, amounting to US\$ 60 million, was reduced to 1.5% from 2.75%. As a result, the WHO Somalia country office is saving around US\$ 750 000 per biennium through reduced commission costs for all WHO Somalia programmes, including funds received from the GPEI.

Prior to the implementation of the DDM process, polio programme personnel spent a substantial amount of their time following up on payments and receipts, obtaining clearances at each administrative level, attempting to carry large amounts of cash safely, and trying to meet physically with recipients in a safe environment for cash to exchange hands. With DDM and the reduced lead time in disbursing payments, depending on their roles, polio programme personnel at each level saved between 20% to 40% of the time they had spent on processes related to cash management and payments.

They have been dedicating the time saved to focus

on their technical duties and responsibilities since DDM was put into practice.

- Increased accountability and transparency The programme was able to ensure better accountability by sharing real-time updates of transactions, funds and payments at any given time, which enhances the programme's overall integrity. Additionally, polio workers are able to monitor the attendance and performance of frontline workers and other service providers and tie their efforts to payments. These are becoming mandatory requirements of donors, such as GPEI partners.
- Used innovation and technology to be more effective and efficient

By leveraging technology to disburse payments, Somalia's polio eradication programme used cost-effective and innovative means to ensure transparency and accountability of the work of WHO in Somalia, which is in line with WHO's Thirteenth General Programme of Work (GPW 13) and WHO's Country Cooperation Strategy (2021-2025) for Somalia.

With electronic means to transfer funds, DDM has created a pathway for the programme to reach frontline health workers who are in inaccessible and hard-to-reach locations across the country.

Optimized mobile phone access

Since 74% of Somali households own a mobile phone, according to findings from a survey conducted by the Somalia National Bureau of Statistics (2020), the DDM process tapped into this window of opportunity to reach grassroots vaccination personnel and other frontline health workers for payment.

Improved records and reporting, paving the way for the national registration of individuals The use of DDM allowed polio workers to maintain an online database of information about teams with crucial identification information stored. As Somalia lacks a formal identification system, the opportunity for data storage presented by

DDM paves the way for similar interventions for national databases and information systems.

Additionally, the programme was able to share information on financial management and transactions with the finance and administrative teams in a timely manner, within a short time of dispatch of payments, which ensures an efficient process.

Deepened partnerships

WHO has worked closely with the federal and state ministries of health and ministries of finance to implement DDM as part of the pilot project. The WHO country office for Somalia has also been working closely with the WHO headquarters and the Budget and Finance Unit at the WHO Eastern Mediterranean Regional Office in an effort to ensure payments for the grassroots vaccination personnel are made more effectively and efficiently across Somalia.

Deployed the right channels to inform polio vaccinators about DDM

While introducing DDM, the polio programme assigned the responsibility of informing the grassroots vaccinators about the new payment system to senior national WHO staff and the finance team. This helped to ensure everyone understands the processes and benefits of the use of DDM.

Direct disbursement: a timely solution to mitigate the risk posed towards life and resources

"The direct payment system was a timely solution to mitigate the risk posed toward life and resources involved in the cash payment system. There was also a need to introduce technology to enhance the transparency in recording and reporting of funds to the management and donors. The implementation of a direct payment system across Somalia will help to increase financial accountability, reduce time required for technical team in technical processes; and help to improve the quality of campaign activities", explained Varun Nigam, Polio Operations Officer for WHO Somalia.

Way forward

As next steps, the WHO Somalia country office aims to:

- Scale up DDM to cover all national and subnational immunization campaigns (polio and nonpolio) by 2023;
- Deploy additional staff and other necessary personnel to support the DDM structure; and
- Strengthen the capacity of technical, operations, health, administrative and finance personnel so that they are familiar with the rollout of DDM.

DDM a resounding success in Nigeria and Pakistan

Yehualashet et al. (2016) reported that in 2004, in response to donors' request for a "transparent and effective payment system", the WHO country office in Nigeria collaborated with national partners to introduce the DDM. As a result, for more than 11 years, DDM has ensured thousands of health personnel working in polio campaigns received their payments in a timely, well-documented, efficient and professional manner. With partners including the national government being involved in DDM processes, this has lent the rollout of the mechanism "credibility and transparency". On its notable success, the WHO Pakistan country office also started to use DDM to pay the front-line polio workers directly.

Conclusion

The pilot project on the use of DDM conducted for an immunization campaign in Somaliland in December 2020 showed increased levels of efficiency in terms of the management of finances and time. In the context of a fragile country such as Somalia, where financial management can be difficult, the use of DDM can ensure financial accountability and transparency. The objective of the DDM is to timely deploy operational funds at the field level and directly pay vaccination personnel allowances at the grassroots level. The system, therefore, has the potential not only to save costs and ensure donor's confidence and trust, the system can be used effectively to overcome the security risks and reduce operational costs in

other public health programmes in the country. Public health interventions such as the mass drug administration for neglected tropical disease, COVID-19 vaccination, national immunization days, measles and cholera mass vaccination programme can also benefit from the use of DDM by way of saving operational cost and staff time for managing funds disbursement and payments to grassroots workers.

WHO Somalia also acknowledges the exemplary collaboration with the Federal Government of Somalia and the support offered by the GPEI partners and other donors to successfully roll out the DDM in Somalia.

The DDM can resolve the shortcomings of the old disbursement system and meet donors' expectations. Accordingly, the DDM aims to avail operational funds in time for implementation of field activities, ensure timely payment of eligible vaccination personnel, and ensure transparent and secured payment process to enhance accountability. By ensuring timely payment to the grassroots vaccination personnel on the ground, the system ensures effectiveness, efficiency transparency and accountability on the part of WHO.

References

Brilliant LB, Hodakevic LN. Certification of smallpox eradication. Bull World Health Organ. 1978; 56(5), 722–33.

Deria A, Jezek Z, Markvart K, Carrasco P, Weisfeld J. The world's last endemic case of smallpox: surveillance and containment measures. Bull World Health Organ. 1980; 58(2), 279–83.

Forty-first world health assembly – Global eradication of poliomyelitis by the year 2000. Geneva: World Health Organization; 1998. WHA41.28 (Microsoft Word - PolioWHA41_28-en.doc (polioeradication.org), accessed 3 March 2022).

Somalia National Bureau of Statistics, Federal Government of Somalia. The Somali Health and Demographic Survey 2020 (https://www.nbs.gov. so/somali-health-demographic-survey-2020/, accessed 28 February 2022).

Yehualashet GY, Wadda A, Agblewonu BK, Zhema T, Ibrahim AA, Corr A, et al. World Health Organization's innovative direct disbursement mechanism for payment of grassroots immunization personnel and operations in Nigeria: 2004–2015. Journal Infect Dis. 2016. 213 Suppl 3(Suppl 3):S108–15. doi:10.1093/infdis/jiv485.

Photo credits

Cover page: @WHO Somalia/Ismail Taxta | Cover Inner: @WHO Somalia/Ismail Taxta | Page 3: @WHO Somalia/Siyaad Mohamed | Page 5: @WHO Somalia/Siyaad Mohamed | Page 6: @WHO Somalia/Siyaad Mohamed

Published by:

World Health Organization (WHO) Mogadishu, Somalia

Tel: +252616695096

Email: emacosomwr@who.int; emacosomexr@who.int

URL: http://www.emro.who.int/countries/somalia/index.html

f @WHOSOMALIA

y @WHOSom

⊘ somaliawho

•• flickr.com/whosom