

Neglected tropical disease elimination is a relay race – let's not drop the baton

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Background

The timelines for eliminating neglected tropical diseases (NTDs) are relatively short in comparison to the millennia that these diseases have plaqued communities, yet within our lifetime, several countries have successfully eliminated diseases through focused and concerted public health campaians. As in a relay race, the winning team is not necessarily the fastest, but the one that runs consistently from start to finish without dropping the baton. In the race to eliminate NTDs there are certain moments when the baton needs to be passed, particularly when donor funding ends or when countries transition to new phases in the elimination framework, such as transitioning from mass drug administration (MDA) campaigns to a period of post-treatment surveillance. Regardless of how effectively and efficiently an individual runs his/her leg of the relay, the baton eventually needs to be passed to the next recipient. The challenge is maintaining momentum. National programmes that are successful in eliminating NTDs will be so because they have become efficient in the transition (handovers), although some disruptions may test even the most efficient and committed team. The coronavirus disease 2019 (COVID-19) pandemic is just one example, but civil unrest, natural disasters, climate events and political instability are other well-defined impediments to successful public health campaians.¹⁻³

Accelerating the Sustainable Control and Elimination of Neglected Tropical Diseases (Ascend) was one of the UK Foreign, Commonwealth and Development Office's (FCDO) flagship health programmes to protect millions of people worldwide from NTDs. The 3-year programme (April 2019–August 2022) was funded by UK aid and consisted of the Ascend East programme and the Ascend West and Central Africa programme. However, the full potential of the programme was never realised when the UK FCDO announced mandatory spending cuts to overseas development assistance in early 2021 following a policy decision to reduce UK aid spending from 0.7% of gross domestic product to 0.5%. This led to numerous programme closures, including the Ascend programme at the end of August 2021, despite the impressive progress made by endemic countries because of UK aid support.

Ascend West and Central Africa programme

The Ascend West and Central Africa programme (hereafter referred to as Ascend) was implemented by a consortium of partners led by Sightsavers, along with the SCI Foundation, Mott MacDonald and the Liverpool School of Tropical Medicine. Ascend activities aimed to build on all the partners' existing presence and working relationships with ministries of health (MOHs) and local partners in 13 West and Central African countries: Benin, Burkina Faso, Central African Republic (CAR), Chad, Cote d'Ivoire, Democratic Republic of Congo (DRC), Ghana, Guinea, Guinea-Bissau, Liberia, Niger, Nigeria and Sierra Leone (Figure 1).

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Figure 1. Countries supported by the Ascend West and Central Africa programme.

The Ascend programme at its inception championed largescale integrated NTD programmes and aimed to distribute millions of treatments focused on five NTDs: lymphatic filariasis (LF), schistosomiasis (SCH), soil-transmitted helminthiasis (STH), onchocerciasis (OV) and trachoma, as well as the provision of lymphoedema self-care training and surgeries to individuals with hydrocele and trachomatous trichiasis (TT). The fundamental purpose was to achieve greater traction towards the World Health Organization (WHO) 2030 NTD elimination road map targets while strengthening local health systems and improving cross-sectoral collaboration for disease prevention.

Within the consortium framework, senior leaders from each of the four organisations were recognised as executive group (EG) members. The Ascend EG guided strategy, governance processes, adherence to the contractual obligations to the FCDO and sign-off on technical approaches while providing broad oversight of the government-owned and implemented programmes. The Ascend management structure included a Central Operations Unit to ensure that the programme was maximising value for money as they liaised with finance offices and managers across Ascend countries. The Programme Optimisation Unit oversaw programme implementation and worked with country principals to further enhance their strong relationships with the MOHs to strengthen the resilience of health systems and sustain services that ensure disease prevalence thresholds remained below a certain level. The Knowledge, Innovation and Learning unit advanced adoption of new learning during implementation, facilitated knowledge sharing between countries and managed a unique strategic investment fund that explored innovative approaches to tackling barriers to elimination. The Integrated Systems Unit linked data, data systems, tools and procedures across the programme while ensuring that monitoring and evaluation processes worked efficiently and in harmony with partner systems. Technical advisors and country capacity-building personnel worked together towards creating an enabling environment through which national programmes could then sustain elimination gains. An internally oriented technical subgroup was created to provide a forum for technical discussions and to resolve issues constraining country progress towards elimination targets. This group ensured the programme achieved technical excellence, harmonisation and standardisation where appropriate and elevated learning from Ascend to a global level.

Finally, an Ascend Technical Consultative Committee (TCC) was established as an impartial, independent body to advise Ascend through the wide-ranging expertise and experience of members on specific NTDs, but also on health systems, cross-cutting issues and social and environmental drivers of the complex NTD 'ecosystem'. During TCC meetings, members were invited to share perspectives on a host of topics: service delivery and integration of NTD programmes into the national development plans, advocacy for strengthening human capacity, promotion of 'leave no one behind' (LNOB) strategies to enhance programme effectiveness, functionality of national health management information systems, patient and provider safety during surgical services, safeauardina and procurement and supply chain management. including equipment and drugs being appropriately distributed and stored. TCC members were also asked to help raise awareness among the water, sanitation and hygiene (WASH) community on the critical link between NTD transmission and access to safe water and improved sanitation. The TCC maintained close links to the WHO through the Observer status provided to the Director of the WHO NTD Department, which ensured the programme was fully engaged and apprised of WHO policies and recommendations. This linkage was particularly important following the WHO guidance to suspend certain NTD activities in response to COVID-19 and the impact of that decision on the NTD programmes. Ascend was able to respond quickly and assisted national programmes in resuming activities by instituting a rapid rollout of mitigation measures against COVID-19.4

Programme achievements

These organizational structures allowed Ascend to support largescale disease control and elimination programmes efficiently and effectively across multiple countries. During its first year, Ascend supported the delivery of integrated treatments in seven countries (Chad, Cote d'Ivoire, DRC, Ghana, Guinea-Bissau, Liberia and Nigeria). Health systems strengthening (HSS) assessments were completed in 12 countries. Building upon previous investments and interventions implemented by national programmes, Ascend also supported disease-specific prevalence assessments in Chad, Ghana and Nigeria as part of programme planning. Results showed several areas had prevalence rates below the WHO treatment thresholds and where MDA campaigns could cease. This allowed resources to be shifted towards post-treatment disease surveillance activities. This included Kebbi and Zamfara states in Nigeria, where provisional approval was given by the Nigeria National Onchocerciasis Elimination Committee to stop annual ivermectin treatments for onchocerciasis in these two states. In addition, trachoma impact surveys (TISs) confirmed success in bringing active trachoma prevalence below the WHO elimination threshold in 20 health districts in Chad. A final school-based LF transmission assessment survey in the Greater Accra region in Ghana confirmed that interruption of transmission had been sustained. Additionally, a WASH assessment was initiated in DRC, Ghana, Liberia and Sierra Leone. Ascend had earmarked funds for WASH-NTD coordination, making it a unique programme among all other externally funded NTD programmes. This helped establish or strengthen national mechanisms for coordination between WASH sectors and NTD programmes to improve resource mobilisation and prioritisation of WASH in highly endemic areas.

In its second year, despite the emerging global COVID-19 pandemic, two additional countries (Guinea and Niger) were supported in the delivery of integrated treatment. Supply chain strengthening assessments⁵ were completed in all nine countries where Ascend supported MDA (findings of which informed the development of a supply chain standard operating procedures manual in year 3). In response to the COVID-19 pandemic, risk assessment and mitigation action tools were developed that improved awareness and coordinated efforts across the health sector, including other NTD programmes beyond Ascend. A large mass media campaign initiated by Ascend reached 137 million people across 11 countries with COVID-19 risk mitigation messaging, generating much enthusiasm from programme and government partners alike.⁴ In line with recent WHO guidance in the 2030 NTD road map, six countries (Benin, Cote d'Ivoire, DRC, Ghana, Guinea-Bissau and Nigeria) were supported in updating their new NTD master plans.

During the final eight months (year 3) before project closure, 12 local government administrative units in Nigeria met the criteria to stop LF MDA. In Ghana, an NTD investment case was completed and validated by the Ghana Health Service in time for the official launch and dissemination of the 2021–2025 Ghana NTD Master Plan. Drawing on the beneficiary feedback work in all Ascend countries, a final beneficiary feedback report was produced with accompanying tools to improve participation and engagement of communities and health workers in the design and implementation of NTD services.

By the end of the Ascend programme (2.5 y), more than a quarter of a billion MDA treatments were delivered in nine countries to reduce transmission of five targeted diseases, including approximately 137 million treatments for LF, 91 million treatments for onchocerciasis, 45 million treatments for SCH, 7 million treatments for STH and 1.4 million treatments for trachoma. Cumulatively, >5700 TT cases were managed in two countries (Chad and Nigeria), >8800 people received hydrocele surgery in seven countries (Benin, Burkina Faso, DRC, Ghana, Guinea, Niger and Nigeria) and 6100 health workers and >1400 patients and caregivers were trained in lymphoedema self-care techniques. This was achieved through supporting disease morbidity assessments to identify cases, which helped thousands of people to manage their condition and help reduce disability.⁶

Legacy

In addition to this supplement, the Ascend programme has logged >300 knowledge and evidence dissemination activities, including nine workshops at two Neglected Tropical Disease NGO Network annual conferences and learning papers on LNOB, social behaviour change communication (SBCC), beneficiary feedback and HSS. All documentation produced (peer-reviewed publications, learning briefs, online seminar recordings, story maps and others) is collated in a document library for MOHs to inform future programming. This also included the role of the TCC to inform the global health community of the progress, activities and achievements through presentations at meetings (both in person and remotely during COVID) such as COR/NTD (Coalition for Operational Research for NTDs at the Task Force for Global Health), Royal Society of Tropical Medicine and Hygiene seminars and consultation with major donors. An editorial on COVID and the implications for African NTD programmes at an early stage of the pandemic was published⁷ and Ascend was also represented on the Lancet Covid Task Force on non-medical interventions for COVID, where the importance of the community-directed MDA platforms was recognised as a sustainable resource to assist with the uptake of vaccines,⁸ as were several blogposts by Sightsavers staff that informed an advocacy paper to the FCDO on how NTD programmes could assist with COVID vaccine delivery.9-11

The third-party monitoring (TPM) supplier for Ascend was comprised of four organizations (Ecroys, Tropical Health, ITAD and BDO). In their final learning brief of the Ascend programme, the TPM shared key lessons from three major thematic areas: HSS and integration, collaboration with the WASH sector and beneficiary feedback mechanisms.¹² The fact that these topics were high-lighted exemplifies the importance Ascend-supported countries place on activities and approaches that went beyond the distribution of NTD treatments and surgical outputs. Detailed findings are available through several online learning papers.¹³⁻¹⁵

The articles included in this supplement showcase similar 'elimination enablers' that have become key contributors to the Ascend programme's legacy-innovation, research, equity, inclusion, coordination, integration and working with governments to address the more complex questions surrounding how to sustain elimination and the sustainability of certain NTD services. Consider for example that in 2015 approximately 7.6 million people lived in an open defecation free (ODF) environment, according to the United Nations Children's Fund Eastern and Southern Africa Regional Office. While the number of people now living in a safe ODF environment in Africa has increased by millions, it still means that within the next 10 y access to sanitation needs to be ensured to >2 billion people if the Sustainable Development Goal target of an ODF world is to be achieved by 2030. This is only possible through large-scale behaviour change adopted by local communities. These are not academic debates, but practical issues affecting the ability of national programmes to achieve and sustain disease elimination against changing environmental and geopolitical factors.

The article by Radvan et al.¹⁶ explores the early days of the COVID-19 pandemic and the decision by the Ascend programme to adopt a risk assessment process to monitor and track country mitigation strategies to COVID-19. The authors provide pertinent insights on how NTD programmes can use innovative and collaborative approaches to build back better. This is further echoed by Hill et al.¹⁷ in describing how the Ascend programme was able to leverage its resources and platforms in coordination with other partners to help address the immediate needs of countries to arrest the spread of the virus in the early stages. Hopefully this model approach better prepares countries for current and future pandemics. Indeed, by all measures Ascend partners were able to respond quickly to the COVID-19 pandemic by instituting a rapid rollout of activities to mitigate the effects of COVID-19 using incountry experiences and networks.⁷

Rust et al.¹⁸ highlight the approach taken by the Ascend programme to foster and promote innovative thinking on countryled research showcasing several promising initiatives, while Parke et al.¹⁹ discuss the behaviour insight shadowing (BIS) methodology applied as part of Ascend-funded research to better inform the specific components of behaviour change interventions; specifically, to generate targeted insights from observations of everyday routines and attitudes to inform culturally appropriate content of SBCC on NTD prevention.

The Ascend project helped to champion the LNOB philosophy in the context of enhancing programme effectiveness through ensuring coverage of interventions and services that were compatible with both disease-specific targets and LNOB principles. This commitment to LNOB is reflected in the articles by Harvey et al.²⁰ and Dauda et al.,²¹ with each article reflecting on a different aspect of how Ascend made interventions and services more inclusive in diverse cultural contexts. This includes documenting effective approaches to making service delivery more inclusive and equitable to marginalised groups such as refugees and internally displaced persons, to studying the strengths and limitations of various feedback mechanisms and whether NTD programmes are using effective strategies for collecting and incorporating beneficiary feedback into the design, planning and implementation of activities.

The sustainability of NTD services and some of the key considerations to frame the discussion are captured by Rowan et al.²² by laying out the approach taken by Ascend to address key components of strong health systems, by Martindale et al.,²³ who describe new tools to assess the quality and preparedness of health facilities to manage incident cases of hydrocele, and by Jones and Downs,²⁴ who argue that the investments made in fighting NTDs have unlocked far greater resources and opportunities to engage communities on health issues beyond just NTDs.

The article by Isiyaku et al.²⁵ is a celebration—a culmination of many years of successfully passing of the baton. The authors capture the long road travelled to achieve the interruption of transmission of onchocerciasis in Kaduna, Kebbi and Zamfara States in Nigeria. The detailed evidence provided for this milestone is a testament to the elimination strategy implemented by federal and state MOHs in partnership with local and global partners. The authors also highlight the importance of optimising health management information systems to allow for functional monitoring of progress and reallocation of resources.

The handover

With the closure of the Ascend programme there is a greater risk of the NTD elimination baton being dropped, even though countries are now closer to the elimination finish line. The UK FCDO cuts occurred during a global pandemic when many countries were faced with new and acute financial constraints; from our perspective it was an unwise decision and betrays a lack of understanding and respect for previous commitments made by the UK government to countries and global partners to ensure healthy lives, build more resilient health systems and promote the wellbeing of all ages. The concept of 'Global Britain' has been tarnished and flies against the aspiration of universal health coverage and of LNOB; many millions will continue to suffer as a result. Whether the FCDO returns to previous funding levels, it is imperative that countries remain focused on the transmission of NTDs if elimination objectives are to be met.

Model predictions suggest that suspension of control efforts may have a substantial impact on morbidity and even mortality for some of the NTDs, particularly trachoma and schistosomiasis, which have faster epidemic growth rates. For countries with more limited resources, delays in implementing control activities due to the FCDO cuts has created great uncertainty. Prolonged delays or inconsistency in the timing of NTD-related activities may set back countries in achieving their disease elimination goals, with all the negative consequences to health borne by the millions of people living in endemic communities.²⁶

The need to ensure smooth handovers and momentum in the race to eliminate infectious diseases becomes even more important as climate-related factors (drought, floods through climate-induced unseasonal patterns of rainfall) gain greater recognition for their impact on disease transmission alongside the ongoing challenges presented by conflict and insecurity and the complex epidemiology of diseases in urban and peri-urban areas. These macrofactors are strategic issues relevant to all national programmes, both in the pre- and post-COVID-19 environment.

We hope readers recognise from the scope and breadth of the work accomplished under Ascend the importance that UK aid investments have had in strengthening the capacity and resilience of national and regional health systems to control the spread of infectious diseases and eliminate them as public health problems.

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