North Star Alliance (North Star) is a nonprofit organization that commenced its operations in September 2006, originating from a public-private partnership (PPP) between the World Food Programme (WFP) and TNT, a global logistics company, after both entities started recording HIV infection rates as high as 50% amongst truck drivers. This situation greatly affected the drivers’ ability to perform transportation work, which adversely affected transport companies’ business performance. These dire statistics brought to light the urgent need for preventing further HIV/AIDS and related infections and deaths among truck drivers in sub-Saharan Africa. In response, North Star came in to fill a hitherto unrecognized need for health services designed for truckers and the communities around them by offering a package of HIV prevention and treatment services; testing and treatment for sexually transmitted infections (STIs), malaria, and tuberculosis (TB); and general check-ups and primary care. North Star provides these services at convenient locations and couples them with health education on relevant topics, including positive gender relations. North Star Alliance’s services have been implemented largely in East, West, and Southern Africa. All sites practice the organization’s core values: treat all clients with respect and dignity; embrace transparency and accountability to achieve integrity; offer quality service; and exhibit an entrepreneurial spirit through fostering new ideas and commitment to innovation.

Truck drivers and other mobile populations are not only particularly vulnerable to HIV and other diseases such as TB and malaria, but they also play a role in the spread of these diseases as they move along transport corridors. In addition, these groups have difficulty accessing health services at the usual sites and during the usual hours they are offered, as such visits often significantly compromise available working time. This motivated North Star to bring healthcare closer to trucking work routes to improve geographic access to healthcare and decrease the time away from work required to seek healthcare services. In addition to serving truck drivers, North Star offers its services to sex workers and residents living in communities along transport corridors.
North Star’s core solution is to offer a high-quality health service package tailored to the needs of these designated populations, with support from the local ministries of health (MOH) and various strategic partners, such as the Centers for Disease Control and Prevention (CDC). North Star’s clinics offer a range of services, including a comprehensive package of primary healthcare services; HIV services ranging from HIV counselling and testing to antiretroviral therapy (ART); and testing and treatment for STIs, TB, and malaria. All of these services are offered in their signature clinics, which are housed in converted shipping containers painted blue (thus referred to as “Blue Box Clinics”) and located along transport corridors.

North Star’s second innovation is an electronic health passport system, developed in 2009 in collaboration with a development partner. This system can be used to provide longitudinal healthcare records for hard-to-reach mobile populations such as those in the transport industry. The platform facilitates the exchange of patient-specific data between each Blue Box Clinic, thus ensuring cross-border continuity of care. Since North Star has grown its number of patients, clinics, and countries of operation over the years, a new electronic medical records (EMR) system with fit-for-purpose functionality for the current health landscape and technological advances is currently being piloted to replace the original award-winning software, which is still in operation in most of North Star’s clinics today.

Over the years, many new interventions have become part of the daily operations of the Blue Box Clinics. In 2013, an innovation known as the Balozi Project was piloted to build and train a network of community health workers (CHWs) consisting of truck workers, sex workers, and community members selected by the local community. As part of this project, the MOH trains CHWs and peer educators in addition to supplying commodities such as test kits, ART drugs, and lab tests.

Following the Balozi Project, another intervention known as the “Star Driver Programme” was launched in 2014 in the East Africa region of North Star’s network. This loyalty program encourages truck drivers to return to Blue Box Clinics to not only receive both public health screenings, but also access nonmedical services such as professional development activities and job training to improve self-efficacy and build a sense of community among patients.4

More recently, in 2016, North Star developed Crisis Response Teams (CRTs) to combat sexual and gender-based violence against sex workers and other vulnerable populations. The CRTs were piloted in eight Blue Box Clinics; these teams included sex workers, MOH staff, peer educators, and CHWs. The CRT model has since been embedded within North Star’s existing peer educator model, which now mobilizes sex workers to become ambassadors for their peers. Peer educators mutually identify with each other as individuals and as members of a specific socio-cultural subgroup, and through the program they become strong role models for promoting the adoption of HIV-preventive behavior. The presence of sex workers in the CRTs encourages ongoing efforts to build and maintain trust, and the immediate and stigma-free assistance provided by the teams helps to overcome barriers preventing sex workers from reporting incidents or seeking help. North Star, therefore, actively recruits and trains sex workers as peer educators to expand its reach and impact among sex workers.

Peer educators play a key role in CRT setup and operations. Acting as information brokers and mentors, peer educators share knowledge about matters such as HIV and STI testing and treatment, negotiating safe sex, personal safety while working, and the importance of regular primary healthcare. Peer educators are trained to provide basic health checks and have facilitated North Star’s efforts to improve patients’ knowledge, attitudes, and practices related to sexual and reproductive health, including promoting greater understanding of HIV prevention and increased adherence to ART protocols. In addition, the peer educators provide psychological and social support that reduces stigma and empowers sex workers to advocate for their rights and wellbeing.
North Star’s model entails collaborating with governments, the business community, civil society, and other development partners to build a network of primary healthcare facilities in identified disease hot spot areas along major transport routes. The primary healthcare facilities work hand-in-hand with CHWs, who undertake outreach activities in the nearby communities to increase uptake of care provided at the clinics, make referrals, and provide health education. In Kenya, North Star’s collaborations with the MOH and non-governmental organizations (NGOs) also facilitate effective referrals to more specialized health facilities in the case of complications that cannot be handled at a primary healthcare level. Furthermore, MOH collaboration has enabled training of CHWs and peer educators by certified MOH officials and placement of the trained CHWs and peer educators in every Blue Box Clinic.

Additionally, the Kenyan MOH supplies most test kits, ART drugs, and lab tests to the clinics. The strategic locations of North Star’s clinics along transport corridors, coupled with the electronic health passport system, enable clients to access personal, longitudinal healthcare services at any Blue Box Clinic. North Star’s data analytics provides insights into the health-seeking behavior of hard-to-reach populations and guides North Star and its partners to areas where increased national, regional, and/or local health capacity may be required to equitably address the needs of these high-risk populations. As a MOH requirement, North Star shares its data with sub-county health records officers, who in turn upload the data to the District Health Information System (DHIS).

### SCALABILITY

North Star’s use of containerized structures is highly scalable. The convertible shipping containers are semi-mobile, with a standard layout that can be produced and deployed quickly while still maintaining WHO standards for primary healthcare facilities. North Star Alliance signs memoranda of understanding (MOU) with its partners and conducts regular stakeholder engagement and feedback sessions to maintain and strengthen program offerings. Since its inception, North Star has used a health systems strengthening (HSS) approach to scale up from one clinic in Malawi to a network of primary healthcare clinics across East, West, and Southern Africa – 91 clinics in 20 countries as of October 1, 2020. At the time of publication, 48 of these clinics have been successfully transferred into local governments’ or other local organizations’ health systems.

### SUSTAINABILITY

One of the key approaches used by North Star to create sustainability is the diversification of its services. For example, at its wellness center located in Salgaa, along the Nakuru-Eldoret highway, North Star set up a low-cost, in-house laboratory to pilot the feasibility of providing convenient and timely acute care services to its clients while also saving the costs associated with outsourcing lab services to public and private labs. Similarly, North Star has piloted eye care by selling glasses in its clinic in Mlolongo to generate revenue that could contribute to the operational costs of that clinic.

More recently, in South Africa, North Star piloted a revenue-generation project (RGP) at one of its clinics in Cato Ridge to diversify its funding sources as well as attract potential investors in an effort to decrease dependence on external donor funding and become more financially sustainable. The RGP has shown great potential amid numerous challenges, including the COVID-19 pandemic and its associated lockdown restrictions. The pandemic led to countless unintended consequences, such as clients’ fear of infection and subsequent reluctance to access care or clients’ newfound financial instability and uncertainty surrounding their sources of income. Despite these external factors, the clinic successfully made the transition from free to paid services. As with any pilot, the project offered a wealth of learning, and with time and funding, the pilot has been adapted to maximize its
North Star relies on donor funding to implement its programs and attain its goal of providing high-quality healthcare to mobile workers and their communities. Diminishing funding, however, threatens the organization’s ability to achieve its mission. The organization has begun taking steps to increase its financial sustainability and reduce dependency on donor funding, though many of these programs are still in the pilot phase. Additionally, due to the mobile nature of its clients, North Star must continuously recruit and train peer educators and CHWs to maintain adequate human resources for its programs. Finally, the COVID-19 pandemic has negatively affected care delivery as patients have become more reluctant to seek healthcare services at the clinics.

**CHALLENGES**

North Star relies on donor funding to implement its programs and attain its goal of providing high-quality healthcare to mobile workers and their communities. Diminishing funding, however, threatens the organization’s ability to achieve its mission. The organization has begun taking steps to increase its financial sustainability and reduce dependency on donor funding, though many of these programs are still in the pilot phase. Additionally, due to the mobile nature of its clients, North Star must continuously recruit and train peer educators and CHWs to maintain adequate human resources for its programs. Finally, the COVID-19 pandemic has negatively affected care delivery as patients have become more reluctant to seek healthcare services at the clinics.

**IMPACT**

In 2019, North Star provided 243,694 services, including primary healthcare services as well as STI, HIV, malaria, and TB services to 108,745 clients who visited their Blue Box Clinics across its African network. North Star has supported 91 clinics in 20 countries as of October 1, 2020, of which 28 are owned and operated by North Star, while 48 have been successfully handed over to the MOH or other local organizations*. In addition, about 71,503 clients participated in behavioral change communication engagements, and 39,045 clients received services via additional outreach sessions. Of the total patient population reached, 26% were truck drivers, 34% were sex workers, and 40% were local community members.²

---

2. https://www.northstar-alliance.org/
5. https://www.northstar-alliance.org/key-figures/

*15 clinics were handed over to private organizations
ABOUT INNOVATIONS IN HEALTHCARE

Innovations in Healthcare is a non-profit founded by Duke University Health, McKinsey & Company, and the World Economic Forum supporting a network of growth-stage health innovation organizations that now includes 100+ companies across 70 countries.

ACKNOWLEDGEMENTS

Special thanks to North Star Alliance's Director, Eva Mwai, and Communications Officer, Arnold Otieno, for providing data and information and to Diana Silimperi, Krishna Udayakumar, and Sowmya Rajan for sharing their valuable expertise during the development of this case study.

The case studies in this series are informed by our research on adopting and scaling primary healthcare innovations in Kenya. The research was commissioned by Kenya's Ministry of Health and the UNSDG Partnership Platform and made possible by the generous funding from Takeda Pharmaceuticals, Inc. The views expressed here belong to the authors and do not represent the views of the funders, the UNSDG Partnership Platform, or the Kenyan Ministry of Health.
SCALING HEALTHCARE INNOVATIONS WORLDWIDE