### Characteristics

<table>
<thead>
<tr>
<th>Countries</th>
<th>Botswana</th>
<th>Swaziland</th>
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<td>DRC</td>
<td>Tanzania</td>
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<td>Kenya</td>
<td>The Gambia</td>
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<td>Malawi</td>
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<td>Namibia</td>
<td>Zimbabwe</td>
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<td>South Africa</td>
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<thead>
<tr>
<th>Target Population</th>
<th>General population</th>
<th>Poor/low-income</th>
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<tr>
<td></td>
<td>Women</td>
<td>Transient population</td>
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<td></td>
<td>Men</td>
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<td></td>
<td>Families</td>
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<thead>
<tr>
<th>Geographical Reach</th>
<th>Multinational</th>
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<tbody>
<tr>
<td></td>
<td>Urban</td>
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<td>Rural</td>
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<tr>
<th>Organization Type</th>
<th>Private not-for-profit</th>
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<tr>
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<td>Private-public partnership</td>
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<tr>
<th>Form of Care</th>
<th>Primary care</th>
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<tbody>
<tr>
<td></td>
<td>Prevention</td>
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<td></td>
<td>Family planning and reproductive health</td>
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<td>HIV/AIDS</td>
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<td>Tuberculosis</td>
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<td>Malaria</td>
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<td>Chronic Diseases</td>
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<td>Diabetes</td>
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<td>Counseling</td>
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<td>Electronic Health Records (eHealth)</td>
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<tr>
<th>Innovation Type</th>
<th>Align with patients' locations and behaviors</th>
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<tbody>
<tr>
<td></td>
<td>Standardize operating procedures</td>
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<td></td>
<td>Leverage others' networks and assets</td>
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<td></td>
<td>Open new revenue streams across sectors</td>
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| Website         | www.northstar-alliance.org |

“People on the move, like truck drivers, don't have access to health services like the rest of us. Being on the road for long periods away from home means you can't just pop into your local clinic for a check up. We realized that if the drivers couldn't come to the services, then we were going to have to bring the services to the drivers. That's when the idea of the Blue Boxes was born.”

–Luke Disney, Executive Director
Description of Innovation

North Star Alliance (North Star) provides a range of targeted health care, screening, and health education services to hard-to-reach populations across Africa, including workers in the transport industry. In addition to providing primary care check ups and referrals, North Star clinics treat sexually transmitted infections (STIs), screen for tuberculosis (TB), and provide HIV counseling and testing. Workers in the transport industry are at a higher risk for these diseases due to increased opportunities for risk behaviors, such as unprotected sex, and/or a high-level of people-to-people interaction (TB and malaria). Health education services include behavioral change communication and condom distribution and pair health education with road safety information, via audio CDs.

North Star, founded in 2005, grew out of a groundbreaking partnership between the World Food Program (WFP) and TNT Express, an international delivery services organization. While the primary focus of the partnership was hunger, the health of the mobile transport worker population became a significant issue during the 2003 - 2005 Southern Africa food crisis, when the WFP struggled to find sufficient numbers of healthy truck drivers to deliver food aid to hungry communities. Truck drivers in sub-Sahara Africa still have twice the HIV infection rates compared to the general population. The necessity of a healthy transport sector drove the creation of a treatment and intervention strategy targeting the mobile transport worker population.

The Iron Triangle of Health Care

North Star increases **access** by locating health clinics in high-traffic disease hotspots and allowing continuity of care along major transport corridors and across borders. North Star ensures **quality** of care by tracking quality metrics with real time data feeds and adhering to standard operating procedures rooted in international best practices.

Strategic partnerships allow health care services to be delivered at no **cost** to most patients. Cost of care is minimized by consolidating and standardizing services and by using a robust referral network that enables North Star to focus primarily on high impact diseases that are easily treated on site.

“When it comes to improving people's health you never stop learning. It's a very humbling experience, but a strong motivator to keep innovating.”

Luke Disney, Executive Director
The core innovation of North Star is the conversion of shipping containers (“Blue Boxes”) into strategically located clinics that serve hard-to-reach populations, such as mobile workers and sex workers, in eastern, western, and southern Africa. These semi-mobile, rapidly reproducible Roadside Wellness Centers (RWCs) are strengthened by North Star’s Corridor Medical Transfer System (COMETS), which allows patients to access their health records at all clinic locations and North Star to track epidemiological trends. North Star also created the POLARIS system (Program for Optimizing the Long-term Achievements of the Roadside Wellness Centers Investment Strategy), which identifies optimal locations for future clinics. Daily data feeds from each of the RWCs help North Star maintain quality standards and monitor shifting epidemiological disease patterns along transport corridors and across regions.

Since establishing their first clinic in Malawi, North Star has extended its reach to 32 locations in 12 countries throughout Africa and has delivered treatment, testing, and counseling services to more than 1 million people. The number of patients served per year has increased from approximately 5,000 in 2005 to over 283,000 across east, west, and southern Africa in 2013.

Providing Value to the Patient, Community, and Health System

Mobile workers like long-distance truck drivers are especially vulnerable to HIV, STIs, and other communicable diseases like tuberculosis and malaria.

By nature of their work, mobile workers are separated from regular partners and established social norms, and interact regularly with some of Africa’s most-at-risk populations, including sex workers and traditionally low-income communities surrounding truck stops and border crossings. This situation has played a primary role in the spread of communicable disease across the continent, negatively impacting individuals, communities, and Africa’s essential supply chains.

The susceptibility of mobile workers to communicable diseases is compounded by a lack of access to quality healthcare services due to the nature and demands of their work. Where services are available, they are often not tailored to the circumstances or needs of mobile workers. For instance, health facilities are often located far from the main road or closed in the evening, when mobile workers are not working, making access to prevention and treatment impossible.

North Star’s RWCs offer a standard health service package that includes general health checks, primary healthcare, testing and treatment for STIs,
malaria and tuberculosis testing and treatment, counseling and testing for HIV/AIDS, free condoms, and education and outreach programs on HIV/AIDS, tuberculosis, hypertension, diabetes, and positive gender relationships. North Star is also piloting anti-retroviral treatment along the North-South Corridor.

Strategic partnerships allow health care services to be delivered at no cost to most patients with the cost of care being shouldered by international global health donor organizations and local and national governments.

Each RWC is staffed by a nurse and a behavioral change specialist. All RWC local staff receive one week of clinical training conducted by North Star, sometimes with additional support from external partners like Soa AIDS Nederland and PharmAccess International. Trainings are provided once a year at regional-specific locations.

North Star uses a healthcare resource mapping method to understand healthcare resources and potential referral networks in areas where they plan to establish a new RWC. In areas identified as a potential RWC site, North Star builds relationships with nearby clinics and hospitals and enters into official referral agreements with these health care providers when possible. Clients are referred to these providers when their needs cannot be met at the RWC.

North Star has also worked with partners to develop three programs that support all RWCs and bring value to the patient, community and health system: POLARIS, COMETS and NSEWA. ORTEC, a North Star partner organization and leader in supply chain management software development, worked with North Star to develop POLARIS and COMETS.

Each RWC is placed either within or close to key hot spots for vulnerable hard-to-reach populations, such as truck drivers and sex workers. North Star uses an innovative program, POLARIS (Program for Optimizing the Long-term Achievements of the Roadside Wellness Centers Investment Strategy) to determine optimal locations for RWCs. Developed in partnership with ORTEC, POLARIS uses factors such as continuity of care and number of visitors to identify the best locations for new RWCs.

To support and monitor the impact of their services, North Star’s RWCs are linked together using a proprietary electronic health passport system called COMETS (Corridor Medical Transfer System), developed in collaboration with ORTEC, which allows for the collection, cross border transfer, and analysis of patient health and demographic data. As a result, mobile populations like long distance truck drivers can continue their treatment for HIV and other illnesses while working, safeguarding their income and the wellbeing of their families. Originally launched in 2009, COMETS was updated in 2013 to include biometric

“Every day you learn and every day you face failure, but that’s what builds resilience in your organization. We have a motto at North Star: if it was easy, someone else would be doing it.”

Luke Disney, Executive Director
identification of patients, improved data security, diagnostic recommendations, and to support a more detailed range of key performance indicators. COMETS is designed to be used by staff with limited computer literacy and is resilient to common operational challenges like power outages and breaks in connectivity.

In addition to the health services mentioned, North Star has also launched a new commercial training division called the **NSEWA** (North South East West Africa) Learning Network, which provides accredited health and safety training for truck drivers and transport and logistics firms. The NSEWA training package, developed by North Star and the Fleet Forum, is presented in audio format so that drivers can listen while working. Driver safety modules include general road safety, defensive driving, transporting dangerous goods, and eco driving, while health modules include topics on malaria, HIV, tuberculosis, STIs, and other occupational health issues. Modules also include touchscreen interactive programs, located at RWCs. Intended as a reinforcement package for drivers with previous training on these topics but without specific knowledge and skills, NSEWA training uses behavior change strategies to empower truck drivers to take control of their own health and safety.

**Health System and Policy Context**

The need for affordable and physically accessible care drives North Star’s “Blue Box” model in Africa where health infrastructure and services along major transport corridors are virtually non-existent. Additionally, the opportunity cost of accessing healthcare is high and prevents truck drivers from receiving necessary care. A lack of support for driver health by transport companies, where profit margins are low, compounds the issue.

North Star works closely with the national governments in all the countries where it operates, as well as regional institutions including the South African Development Community (SADC), multilateral and bilateral funding agencies, including The President’s Emergency Plan for AIDS Relief (PEPFAR), the Centers for Disease Control and Prevention (CDC), and the United Nations World Food Program (WFP). North Star also works with private-sector firms like TNT, Chevron, Heineken, and Cisco.

Working in conjunction with existing healthcare and transport systems in its operating countries, North Star extends health infrastructure. For example, North Star works with the Kenyan Ministry of Health to provide on-site HIV and TB treatment at two of the seven Kenya RWCs. These RWCs are listed as official government sites and incorporated into the government’s national HIV and STI action plan.
Operating Model

North Star has two regional offices that manage day-to-day operations of the RWCs, local partnership development, and fundraising. Regional offices are located in Nairobi, Kenya and Pinetown, South Africa (near Durban), overseeing East Africa and Southern Africa respectively.

Maintaining a motivated and friendly staff, in combination with technologies like COMETS and POLARIS, is the backbone of the organization. North Star recruits staff at the local level, regularly training staff on strategic developments, health topics, communication skills, and COMETS technology. Skills are regularly expanded and adjusted to meet the needs of a growing organization. North Star leverages the referral agreements with local health care providers by sourcing health care workers, medicine, and disease testing kits from public health providers that formally recognize North Star as a referral partner, increasing the reach and coverage of public provider partners.

North Star’s operating model is also founded on partnerships. By working closely with international global health donor organizations, local, national and regional governments, businesses, and civil society, North Star has developed pathways to deliver crucial care to mobile populations. Currently, North Star engages with over 70 public, private, and social partners.

Health care services offered at North Star RWCs are organized into three tiers: high impact diseases in Tier 1, primary health services in Tier 2, and non-clinical services in Tier 3.

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"Without question our strongest asset is our people. We have an incredibly motivated and hard-working group of individuals that get up every day and make the best of every situation they encounter. I am deeply grateful to them and their families for the sacrifices they have made and continue to make to help deliver care to those in need."

Luke Disney, Executive Director

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High Impact Diseases
Includes malaria, tuberculosis and sexually transmitted infections, including HIV/AIDS

Primary Healthcare
Includes upper respiratory, gastrointestinal and skin conditions, and occupational health services

Non-Clinical Services
Includes health promotion activities such as advice on nutrition, hygiene and family planning, as well as occupational training courses
Business Model

North Star is a not-for-profit organization. Revenue is generated primarily through donor organizations, allowing most patients to receive health care services free of charge. Patient fees are implemented at some clinics when required by law (as in The Democratic Republic of the Congo) and, in these cases, help fund RWC operations.

The majority of operational funding comes through partnerships between global health donor organizations and national and regional governments, as part of a strategy to strengthen health systems or target specific diseases. The recent policy shift by US government donors (including USAID) and the Global Fund to channel more funding to local NGOs has increased the amount of potential funding available to North Star.

North Star minimizes the cost of care by consolidating and standardizing services, and by leveraging a robust referral network that enables North Star to focus primarily on high impact diseases and those that are easily treated on site. North Star further lowers costs by sourcing shipping containers from A. P. Møller-Maersk free of charge. Referral agreements with nearby health care providers give North Star access to local health care workers, medication, and disease testing kits, reducing overall costs of care provision.

North Star is increasingly focused on ensuring sustainability of their funding model. North Star partners with a wide range of donors and has been quick to demonstrate their value. Still, North Star is looking to open new revenue streams across sectors and diversify their services where possible. For example, the RWC in Salgaa, Kenya generates revenue by charging for basic laboratory services. Additionally, North Star is considering the viability of water sales as another source of revenue.

Impact Metrics

Quality metrics

- Number of times nurses access country specific protocols
- North Star is in the process developing metrics for quality of care using QUALYS (quality-adjusted life years)

Cost and sustainability metrics

- Number of employees
- Number of people supported by employees
Access and utilization metrics

COMETS allows collection of data daily to track measures of access and utilization across all of their RWCs.

- Number of operating countries
- Number of RWCs in operation including location and number of staff
- Number of clients who received treatment, testing and/or counseling services
- Number of clients who received Behavior Change Communication (BCC) training
- Number and kind of medicines prescribed
- Number of clients served by peer educators
- Percent of clients served in target age groups and occupation groups
- Number of COMETS users
- Form of care provided to each client
- RWC operating hours
- Current inventory
- Inventory updates

User satisfaction metrics

- Percent of patients who would refer others
- Percent of patient flow from return visits and patient referral

Achievement of positive health outcomes

- Number of completed treatment courses and if treatment led to a cure, decreased symptoms, or no cure

Goals for Scaling and Replication

1. By 2023, North Star Alliance wants to be recognized as the leading healthcare provider for hard-to-reach populations across Africa, reaching 1,000,000 clients per year with tier 1 services.
2. Maintain current rate of 20% growth per year across Africa.
3. Utilize franchising and licensing to share the North Star model beyond their own network of “Blue Boxes”.

“I sometimes think it’s better that I didn’t know then what I know now at the beginning, or I might never have gotten started! But when I look at all that we’ve achieved, I feel truly privileged by the trust and patience given to me by so many people over the years.”

Luke Disney, Executive Director
North Star Alliance

External Support Required for Scaling and Replication

1. Continued commitment of expertise and resources from the 70 private, government, university, and donor partners while bringing on board new partners through networking and collaboration opportunities.

2. Investment of up to 3 to 5 years to support core processes for business development, quality management, and sustainability.

3. Grant capital in the amount of $1.7 to $2 million USD to support scale of operations in Uganda and Zambia, and to build a cornerstone operation in Nigeria.

Media Attention and Awards

Press


Awards

Schwab Foundation for Social Entrepreneurship (2012) North Star’s Regional Director, Paul Matthew, named Social Entrepreneur of the Year Africa

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North Star Alliance provided the source data for this document and is responsible for the accuracy of the content.