



BCtA Impact Measurement Services (BIMS) Case Study



Access Afya

1. Introduction

This case study describes healthcare provider Access Afya's experience with social impact measurement¹ through BCtA Impact Measurement Services (BIMS). The case study begins with an explanation of Access Afya's core business model and social mission, followed by an assessment of its business activities and potential contribution to social outcomes. The study then details the 'BIMS process' that Access Afya engaged in to develop a social impact measurement framework and integrate regular social-impact data collection into its operations. It concludes by highlighting the lessons learned by Access Afya, which can benefit the broader inclusive business community.

This publication is part of a series of case studies on the *BCtA Impact Measurement Services* (BIMS), a Business Call to Action (BCtA) initiative, demonstrating how inclusive businesses can measure and

apply social impact data.

Twenty one of BCtA's members are BIMS participants. BIMS provides them technical expertise and technology to design and implement survey-based data collection for assessing their operational and social performance.

BIMS is implemented by BCtA with support from our implementing providers, **Arthify** and **Echo Mobile**.

Photo courtesy of Access Afya.

Guiding questions for measuring impact

- Why should businesses measure social impact?
- How should they measure it?
- What kind of data should they collect?
- What should they do with this data, and how is it useful?
- How can they contribute to global priorities and commitments such as the Sustainable Development Goals (SDGs)?²

Inclusive businesses³ across the world face these fundamental questions – whether they are multinational corporations, national conglomerates, small or mediumsized enterprises.

The BCtA Impact Measurement Services (BIMS) works with select BCtA member companies to answer these important questions.

^{1 &#}x27;Social impact measurement' refers broadly to the measurement of business' social, economic and environmental performance.

² Adopted in September 2015 by all United Nations member states, the SDGs are a set of 17 global goals and 169 targets concerning critical development issues. Countries will aim to achieve them by 2030.

³ Inclusive businesses are commercially viable business ventures that engage people living at the base of the economic pyramid (BoP) as consumers, producers, suppliers and distributors of goods and services.

2. About Access Afya

Established in 2012, Access Afya operates micro-clinics and field-based community health programs in the slums of Nairobi, Kenya. The clinics provide a suite of outpatient services including consultations, lab testing, family planning, first aid, chronic care, and pre and post delivery support. Access Afya's clinics also sell medicine and hygiene products, and its clinicians and technicians engage in community outreach.

The company's field programmes work within surrounding communities to increase the clinics' customer base and impact, drive health-seeking behaviours, and improve brand awareness in order to acquire new customers and achieve sustainability. Core initiatives are Healthy Schools, group Chronic Care Management (CCM) and group Antenatal Care (ANC). The latter two seek to improve preventative and maternal care by organizing care groups and providing group services — generating economies of scale and cutting costs to individual patients.

The Healthy Schools Programme works with primary and secondary schools in surrounding communities, charging parents small fees for regular student checkups, phone-based and clinical follow ups, deworming, and education on water, sanitation, and hygiene. Access Afya also conducts outreach to community organizations such as HIV/AIDS, church, and women's groups, and it hosts blood pressure camps to raise awareness, provide free testing, and identify at-risk individuals for treatment.

Access Afya's target market is primarily comprised of casual workers and small informal business owners. The company estimates that incomes in this market average USD 50 to USD 100 per month or between USD 600 and 1200 per year⁴ – placing its customers at the base of the economic pyramid (BoP), defined as less than USD 8 per day.⁵ If the company's model can prove sustainable in the Mukuru area where it currently operates two clinics, Access Afya estimates that this demographic includes another 2 million people across Nairobi and 61 percent of all people in sub-Saharan Africa. The company believes that while incomes are low and private healthcare is costly, this population is willing to pay for reliable health services rather than use inadequate, inaccessible or unsafe alternatives.

Having successfully established its flagship clinics in Mukuru, Access Afya is identifying sites for three new clinics and has engaged BIMS to measure the accessibility, costs and quality of the existing healthcare services in those areas in order to assess the baseline potential for impact.

3. Measuring Social Impact

Access Afya's mission is to build and scale a Kenyan primary health care system in which patients are treated with respect and become active, empowered consumers of good health and healthy behaviours. The company seeks to address both a social problem and market failure: unsanitary conditions and overpopulation in slums lead to communicable diseases, but for the majority of people who live there, the public healthcare system is inaccessible mostly due to reliability and consistency of products, operational hours and human resource constraints.

An informal system of unlicensed clinics and pharmacies has emerged in parallel. These practitioners have few qualifications, unreliable supply chains, and are

ineffective at treating communicable diseases and providing preventive care. Yet they remain viable due to a lack of alternatives and health education.

Access Afya envisions an alternative system that is more accessible, affordable, and reliable than the public and informal options; one that empowers patients through community education and advocacy for health-seeking behaviours. In order to compete with Kenya's public and informal health systems however, the company must offer superior services at similar or lower prices and be located near to BoP customers. Put another way, the company's impact is what makes it commercially competitive.

⁴ Based on Access Afya post-engagement interview.

⁵ BCtA defines BoP as those living on less than \$8 PPP per capita per day in 2005 US dollars.

Within the broader context of achieving the SDGs, the company has identified the following four areas of impact:

SDG 2: Zero hunger

SDG 3: Good health and well-being

SDG 4: Quality education

SDG 6: Clean water and sanitation









With assistance from BIMS, Access Afya designed and deployed a suite of digital customer and community engagement surveys to assess the quality, accessibility and cost of healthcare in areas the company is seeking to expand into. The company intends to create community/market profiles that measure the cost, quality and accessibility of existing healthcare options and project the likely value and impact of its own

business model to determine which areas are most in need of new clinics. The surveys target community members as well as existing health retailers and service providers. Access Afya also developed surveys targeting clinical patients and programme participants in order to measure outcomes and impacts across programmes.

Access Afya's surveys resulted from its engagement in BIMS processes designed to assist companies in measuring social impact and commercial viability. The first step is to develop a **Social Value Chain**, which tracks business operations to intended impacts. The Social Value Chain is an analytic framework combining Theory of Change⁶, log-frames⁷ and Value Chain Analysis⁸ that helps companies to strategically assess the business' social objectives.

Access Afya's Social Value Chain was designed to assess whether the company can compete with existing health systems – and how its activities lead to better quality, access, affordability, reliability, and health-seeking behaviour.

Figure 1: Access Afya's Social Value Chain



Accessibility: distant public clinics; expensive transport

Affordability: high fees and prohibitive drug prices

Education: low public health awareness and knowledge

Reliability: vulnerable, unreliable supply chains and personnel Micro-clinic operations:

- Outpatient consultations
- Lab services
- Group chronic care
- Group antenatal care
- Pharmaceutical sales

Healthy schools:

- Student screenings
- Deworming
- Water, sanitation and hygiene interventions, and education
- Health and hygiene sales
- Referrals

Community health worker programme

- Household assessments
- Clinical outreach
- Data collection

Clinics are affordable
Clinics are close

Clinics are visible

Chronic illnesses managed

Safe pregnancies and births

Health issues resolved

Children screened

Children provided with clean water and sanitation facilities

Children dewormed

Referrals provide for additional services

Improved access to clinical care

Improved patient health and safety Improved child health

Improved child nutrition

Improved connectivity to health system

Increased household savings

Empowered, proactive approach to healthcare

Sustained improvements in children's education and health knowledge

Increased length and quality of life

⁶ http://www.theoryofchange.org

⁷ http://www.adb.org/documents/using-logical-framework-sector-analysis-and-project-design-users-guide

⁸ Porter, M. (1998) Competitive Advantage: Creating & Sustaining Superior Performance.

The Social Value Chain helps companies to clearly articulate the social objectives they seek to achieve, and to identify the inputs, activities and results that help them to meet those objectives. These parameters

are then transformed into indicators that can: (i) be measured; and (ii) inform decision making to improve the company's social impact.

Figure 2. Access Afya's Indicators

| Social Value Chain component | Parameters | Indicators | Decision-making questions |
|---------------------------------|--|--|---|
| Inputs and activities | Brand awareness | Percentage of awareness among community | Are the company's results, impact and competitive advantage sufficient to drive growth through word of mouth? How much marketing is required? |
| | Market need | Breakdown of health issues across programmes and patients | |
| Outputs | Demand for CCM | New CCM members CCM completion rates | Is demand for chronic care worthy of a dedicated programme? |
| | Demand for clinical consultations and primary care | Number of new patients Number of return patients Number of Healthy Schools Programme participants that transition to clnical patients | Is the micro-clinic model financially viable? How extensive is the need for health-seeking behaviour? |
| Outcomes | Accessibility of services | Percent of residents within a fixed area that fit the customer profile Percent of patients living within defined area | Are clinics physically positioned to compete with informal and public services with regard to accessibility? |
| | Affordability of services | Difference in pharmaceutical prices of local competitors Difference in consultation prices of local competitors | Are the prices of consultations and pharmaceuticals more affordable than the competition? Is Access Afya overcoming the affordability constraint? |
| | Patient satisfaction | Reported satisfaction with services Reported resolution of health issues | Do customers feel that they have received the same or greater value for money as with other health services? Is customers' health improving? |
| Impact | Health-seeking behaviour | Number of patients attending clinics Number of repeat and frequent patients Number of programme participants who seek care through clinics | In new clinic areas, is the number of new patients growing steadily? Has this number reached statistical significance? What percentage and number of new clinical patients return for follow-ups or treatment of new ailments? wWhat is the frequency of returns? How many new clinical patients previously participated in Access Afya's community health outreach programmes? |
| | Community health Health spending Education | Prevalence of disease Average monthly spending on health in clinic areas School attendance and performance | Are certain diseases or health issues less prevalent than they were before the Access Afya's clinics opened and programmes began? Are clinical patients paying less for healthcare than the community average prior to opening the new clinic? Do children enrolled in the Healthy Schools Programme show higher attendance and performance rates than school and community averages? |

4. Implementing BCtA Impact Measurement Services (BIMS)

BIMS engages participating companies in planning and implementing social impact measurement through a three-step process. Companies commit to working with the BIMS team for a two-year period. The first six months are focused on developing the Social Value Chain, impact measurement indicators and survey tools; technology transfer, training, and capacity building; and the rest of the period is dedicated to data collection.

Articulating the Context and Rationale for Measuring Social impact

This phase requires the company to take a macro view of its business in terms of expected returns, the maturity of its activities and the purpose of measuring impact.

Access Afya articulated these parameters as follows:

- Expected Returns: Access Afya defines itself as a social enterprise, and therefore has a responsibility to show funders and supporters both financial sustainability and social impact from high-quality healthcare that is more accessible, affordable and reliable than existing options.
- **2. Stage of growth**: progressive. Having established its brand and model through two micro-clinics, commu-

- nity programmes, outreach initiatives and a growing customer base. It is currently seeking sustainability and impact by scaling up to three new clinics.
- 3. Purpose for impact measurement: Access Afya's current focus is communications. In order to grow, the company must communicate the impact of its local fee-for-service model to potential funders and customers.

Developing the Social Value Chain

The next phase of BIMS requires inputs from the company – especially from staff who directly interact with clients on a regular basis. During this phase, staff engage in an ongoing discussion, formulating answers to the following questions:

- What is the business' social vision/goal?
- 2. What social needs is the business trying to address (the problem statement)?
- 3. What social and market constraints does the business work within and seek to change?
- 4. What activities and resources (inputs) does the business deploy? How do these activities impact the constraints?

Figure 3. Context and rationale parameters9

Expected Returns from your Business

Financial Returns

A continuum from charitable investments to market rate of return

Social Returns

- Societal (beneficiaries)
- Environmental

Identity Returns

- Relationships (brand)
- Relationships (community/network)

Process Returns

- Knowledge (of new markets)
- Environmental (improve performance)

Stage of your Business

Pilo

Being developed and adapted to test expected returns

Progressive

Being monitored and tweaked for improving returns

Mature

Stable and being considered for expansive or replication

Purpose of Measuring Impact

To Act

- on operation, relationships, etc.
- on expected returns

To Communicate

- to beneficiaries/clients
- to stakeholders/partners

To Learn

- · test assumptions
- measure performance

⁹ Based on: Measuring and Improving Social Impacts: A Guide for Nonprofits, Companies and Impact Investors by Marc J. Epstein and Kristi Yuthas.

5. What are the indicators of success and timelines for assessing impact?

Access Afya developed its Social Value Chain over four months under management from the Healthy Schools Programme Manager with support from the Managing Director. Milestones included the creation of a results chain map and a logical framework (logframe) to map intended outputs, outcomes and impacts to quantifiable indicators. This led to at an onsite workshop with staff to discuss these issues, review the logframe, and develop a comprehensive understanding of the company's impact.

Designing and Implementing Technology-Enabled Data Collection

In this phase, Access Afya prepared to integrate impact data collection into its business activities to capture data on key indicators. Following the workshop, field staff and management used the indicators to design questions for a suite of surveys.

As the surveys were refined, managers were trained to use an off-the-shelf web platform to digitize and deploy them to mobile devices. Clinical staff, health workers and management were then trained to use a mobile data-collection application to sync data to the platform from the field in real time, and to retrieve the aggregated data from the platform for analysis.

Finally, BIMS guided Access Afya through field testing the survey tools, hardware, and web and mobile software, bringing together the capacity-building exercises completed during the Social Value Chain and survey development processes with technical training and hardware distribution. Ultimately, the company developed and deployed three broad groups of surveys:

- 1. Existing programme impact assessments
- 2. Operational and patient demographic datamanagement forms
- Impact assessments (for competitor and new clinic site surveys)

Access Afya survey implementation

Access Afya has two micro-clinics providing clinical care, pharmaceuticals, group CCM and antenatal care to over 16,000 people. It also implements the Healthy Schools Programme to improve health and nutrition at five schools in Mukuru; the programme is now scaling up to 15 schools.

As it expands, the company is assessing three potential new markets for clinics. With BIMS, it is testing five potential sites in each market by deploying comparative potential impact assessments that target the local population and existing medical facilities. Information was elicited from:

- 300 competitor facilities within prospective markets (20 per area);
- Communities around prospective clinic sites (total population: 20,000 per clinic);
- Informal groups around prospective and existing clinic sites (40 per clinic);
- Healthy Schools Programme staff (75 in 2015 and 225 in 2016); and
- 28 CCM and antenatal care patients.

Access Afya's data collection is largely qualitative. The samples required to achieve 90 percent confidence with a 5 percent margin of error include:

- 143 Competitor facilities within the prospective market;
- Communities around prospective clinic sites (266 per clinic);
- 74 informal groups around prospective and existing clinic sites;
- 59 Healthy Schools Programme staff members; and
- All CCM and ANC Registrants/Patients.

For consumer surveys at potential clinical sites, sampling can only be conducted by cold calling households or people in the street, resulting in some selection bias. Rough stratification may be possible based on characteristics such as age, gender and race, but it cannot be scientifically representative without comprehensive, accurate household-level census information, which does not exist. Moreover, with fewer than 25 full-time employees, Access Afya lacks the resources to collect data from the optimal sample size; non-probability sampling is therefore required. For surveys of local pharmacists and other facilities, a similar approach may be used, although with a larger relative sample size.

Given the relatively small size of the Healthy Schools Programme and the homogeneity of school staff size and structure, optimal sampling may be achieved. The same is likely for the group outreach surveys since the field team plans to integrate the surveys into all of their visits. Optimal sampling can also be achieved with CCM registration and patient-assessment surveys, as well as surveys at blood pressure camps, given the team's ease of access to these very small populations.

5. Improving Social Impact: Data for Decisions

BIMS engages participating companies in going beyond reporting to apply their social-impact data in decision making. In order to facilitate this and to ensure that the survey tools, data and lessons learned by each company benefit the larger inclusive business community, BIMS has defined four common questions for all participating companies to answer based on the data they collect through BIMS.

Who are the beneficiaries of Access Afya's inclusive business?

Access Afya used two beneficiary-focused surveys: a CCM patient assessment and a blood pressure camp demographic survey, which include questions from the Progress-Out-of-Poverty Index⁹ along with questions regarding income levels and health behaviours.

Data collected around the three potential clinical sites shows that the majority of potential customers are living at the BoP - earning less than USD 8 per day in terms of purchasing power parity. In these three areas, between 50 percent and 71 percent of respondents reported household earnings of Ksh 8,000 (approximately USD 80) or less per month. Assuming an average household size of four people, USD 80 per month breaks down to USD 20 per person, or less than USD 1 per person per day. Despite their low incomes, respondents consistently reported spending money on healthcare and confirmed that the costs are often too high – and the quality too low to enable consistent healthy behaviours. In one of the areas, respondents also reported a lack of access to care, further validating Access Afya's assumptions about the severity of this problem.

What aspects of customers' lives are being impacted by the company?

Preliminary data from the CCM survey affirm that the programme has improved the quality of care for patients, who are increasingly empowered in their healthcare decisions. Over half of respondents reported that they were: asked to provide their own ideas and share their personal goals as part of their care plan; given multiple options and explanations of treatment plans and pharmaceuticals; assisted in setting goals for behavioural change required to improve health; shown how their behaviour change influenced their condition over time; and encouraged to attend different classes and other offerings by Access Afya staff. In addition: 85 percent of patients are more informed about their conditions and care than before; 85 percent have increased their physical activity with guidance from Access Afya; 82 percent have improved their diets; and 88 percent reported greater self-efficacy in managing their conditions.

How is Access Afya achieving this impact?

Access Afya tracks pharmaceutical sales through a subscription inventory management system and is moving towards digitizing clinical health records through an electronic medical record (EMR) system. The integration of these systems will enable the company to measure key business parameters and track inputs and activities in order to compare impact data collected over time from the new clinics. Meanwhile, the group outreach survey will begin tracking community members' awareness of the company.

The Healthy Schools Programme creates a pipeline of new clinical patients by offering discounts for parents. The company is collecting data about the value of the programme to parents, teachers and administrators, and comparing against impact goals. This will allow the company to adjust the programme in order to focus on the activities that provide the most value and impact.

Can Access Afya increase its impact?

When inclusive businesses grow, their social impact is likely to increase as they reach a larger number of customers, yet increased social impact need not be dependent on business growth. Global commitments like the SDGs can guide businesses to a wider range of social outcomes. In Access Afya's case, BIMS resulted in new insights related to SDG attainment:

- Explore influencing SDG 5, Gender equality, as part
 of social mission. Over 60 percent of the company's
 patients are women, as are most Healthy Schools
 Programme parent contacts. Community and group
 outreach also target women regarding family planning and antenatal care.
- Collect impact data on SDG 4, Inclusive and equitable quality education, through the Healthy Schools
 Programme. Current surveys are output and outcome focused, collecting qualitative feedback from stakeholders. A more quantitative analysis can be achieved by comparing the attendance rates and grades of participants to those of non-participants.
- Access Afya can validate assumptions about the Healthy Schools Programme and track progress towards SDG 2, Food security and improved nutrition, by establishing baseline nutritional assessments for students and tracking progress over time.
- 4. Access Afya's BIMS data collection is primarily focused on baseline assessments. At the time of this report, it is difficult to assess whether there is room for improvement in the company's primary focus on SDG 3, Good health and well-being, or the extent of potential impact at new sites.

6. Lessons Learned and Next Steps

Company culture is key

Prior to BIMS, Access Afya had been already moving towards better digital data collection and information management through low-cost software. Recognizing that as the company grows and decentralizes across more clinics, the task of information management will be greater, and staying connected will be critical. The EMR is designed to consolidate that data, linking programmes to clinical operations. The company also uses tabletenabled inventory tracking software for pharmaceutical sales and text messaging for customer notifications.

From the outset of the BIMS process, this prioritization of digital connectivity and commitment to digital information measurement and management was an asset to integrating new tools. According to management, integrating mobile tools for impact measurement into field operations has provided "a more personal connection to the data – the surveys have helped people to connect and become more engaged with data collection, distribution and dissemination. The involvement of more people in data collection has strengthened the idea of measurement as a critical part of what we do."

Data collection demands resources

As a social enterprise seeking sustainability, Access Afya is growing rapidly while maintaining a lean staff. Despite the small size, its openness to using mobile technology and data to monitor progress allowed for quick integration and uptake of BIMS tools. Nine months after deploying its BIMS surveys, Access Afya had surveyed over 1,000 respondents, meeting its data-collection targets without a substantial augmentation in staffing.

Challenges related to resource allocation for data collection were still encountered, however, when data collection was not integrated into an *existing* process. After deploying staff to conduct consumer surveys in areas around potential new clinic sites where the team had not previously been present, the opportunity costs to human resources proved too high. Instead Access Afya utilized external community health workers already working in the community.

Impact measurement takes time

Measuring impact requires measuring change, and change takes time. Many BIMS companies look backwards, measuring impact retrospectively with existing customers and beneficiaries. Access Afya's approach is more long-term and forward thinking. By measuring community health metrics at potential new sites before determining where to expand operations, the company is seeking to maximize impact in the coming years. Having established a basic understanding of that potential through BIMS surveys, the company will be able to set clear goals and targets, measure progress towards them, and ultimately hold itself accountable to fulfilling its potential.

Data to support SDG alignment

Prior to engaging BIMS, Access Afya sought to ensure that its operations, mission and impact were aligned with the SDGs in order to demonstrate its contributions to the global health community and secure funding. Through its collaboration with BIMS, the company's management reports that it is better positioned to establish quantifiable goals and metrics for measuring change towards SDG health indicators.

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