INCLUSIVE INNOVATIONS

Providing Ambulatory Services for the Last Mile

**HIGHLIGHTS**
- Ambulatory enterprises have innovated in product and service design, cost structure, and ensuring that the social aspect of the business does not take away from its sustainability.
- The enterprises operate in difficult terrains and fragmented markets with ambiguous policies, but have managed to provide value for BOP consumers.
- These enterprises are changing the healthcare landscape in developing countries by training health workers, making consumers aware of their health care options, and pushing for legislation and regulation in uncharted territories.

**Development Challenge**
Ambulatory services are fragmented in developing countries and face significant challenges of funding, inadequate infrastructure, technological barriers, lack of government support, and access to medical supplies, etc. In spite of the risks of sustaining this type of a business model, many social entrepreneurs are venturing to provide these services due to the sheer demand and value of emergency medical care.

**Business Model**
Social enterprise ambulatory services have focused on several innovations. Some involve product design that allows ambulances to transport patients in remote areas, for a more adaptable and local solution. For example, a Bambulance is a lightweight bamboo stretcher that can easily be attached to a bike. It may actually be faster and more cost effective in certain geographic terrains. There are also Donkey Cart ambulances for pregnant women.

Information technology and mobile technologies plays an important role in patient-centered care coordination with regards to ambulatory service delivery. More than 4.7 billion people are expected to have mobile phones by 2017. Mobile phones provide direct access to patients, especially in low-income communities. GPS can be used to locate patients and manage large fleets of ambulances.

Other initiatives are an easy-to-remember emergency call number; partnerships to allow for larger impact; and the training and deployment of health workers to enhance health outcomes for under served populations.

**Features of the Ambulatory Services Model**

**Need for Emergency Medical Care**
In developing countries, there is huge demand for emergency medical care, particularly for maternal and child health.

**Challenges in Medical Transport**
Ambulatory services face challenges of funding, infrastructure, technology, and lack of government support.

**Role of Social Enterprises**
Social entrepreneurs can help fill the gap by providing adaptable, cost-effective emergency transport.

**Innovations in Ambulatory Medical Services**
- Transport modifications include motorbikes, bamboo stretchers, and Donkey Cart ambulances for difficult terrains.
- Technology modifications include GPS to locate patients and manage ambulance fleets, easy toll-free numbers, call centers, and mobile apps.
- Human resource modifications include community-based training on the ambulance fleets and the training of health workers.
Healthcare points of care and health workers also play an important role to make patients aware of ambulatory services. Significant marketing efforts have also been used to explain the frequently asked questions of these services. These include conventional advertising, radio, billboards, and community outreach.

Ambulatory services keep the user interface simple and easy-to-understand even for those with minimal literacy. For example, 108 has a three digit, toll-free number that is easily accessible from both landlines and mobile phones. Ambulatory services have also customized solutions for specific demographics such as pregnant women, patients in hard-to-reach places, etc. These services are also increasingly provided by public or private providers, thereby increasing rates of acceptance.

Bottom-of-the-pyramid consumers can access ambulatory services, even if they have limited digital literacy, with a design that facilitates easy user interface and understanding of the facilities. Ambulatory services allow those who live in remote places to seek medical attention especially in emergency situations. Many enterprises such as Dial 1298 have invested in state-of-the-art technology, such as call centers, mobile apps, and infrastructure that identify the ambulance closest to an emergency and directs the ambulance team.

Dial 1298's prices are competitive and approximately 10–15 percent cheaper in comparison to the local private ambulance service provider. Through the Dial 1298 program, Ziqitza operates a network of fully equipped Advanced and Basic Life Support Ambulances across two states in India. Dial 1298's business model uses a sliding price scale driven by a patient’s ability to pay, which is determined by the kind of hospital to which patients choose to be taken. Financial sustainability is assured through cross-subsidization.

**Results and Effectiveness**

Ad-din Ambulances in Dhaka is one of the philanthropic projects of the Ad-din Foundation, dedicated to serving the health needs of lower-income women and children. In 2008, they initiated the project with a fleet of 10 ambulances. Less than a year later, the fleet had grown to 46 vehicles, and public interest in the new program increased quickly. In 2011, another 20 vehicles were added to the fleet, bringing the total to 66.

Bike4Care in Africa has reported a 258 percent increase in the number of households visited by community health workers since its launch. Bike4Care serves 63,740 households per month, with the average household at seven people. As of October 2012, there were over 500 community health workers trained and equipped with bicycles in Africa.

Dial 1298 for Ambulance is an easy toll-free number. The calls it receives have increased from 11,417 in 2005 to over 40,000 calls in 2010. It has saved more than 70,000 lives in Mumbai alone. The enterprise Ziqitza currently operates more than 980 ambulances across five states in India and has served over two million people since 2005.

The Bambulance project has created an affordable and sustainable means of medical transport for communities in rural Kenya. It has designed a means of transporting patients in rural Kenya to a hospital or clinic, which will function primarily as an Emergency Medical Transportation Device by improving the comfort, safety, and stability of patient transport. This is achieved by using familiar and available regional modes of transportation such as the bicycle, donkey, or foot travel. It uses local materials and processes, such as bamboo, as the primary structural material. The project also established a small manufacturing facility for the production of the devices in western Kenya. They will also provide community-based training in the management and maintenance of the ambulance fleet and establish a system of community-based project monitoring and evaluation.