Ziqitza Healthcare Limited

Building the Foundation for Emergency Medical Services in India
Problem: Accessing Quality Healthcare Within the “Golden Hour”

In a medical emergency, providing services within the hour can be critical in preventing deaths. Even at the start of the 21st century, Indians were not able to access quality ambulance services in the case of an emergency. In the capital city of New Delhi, access to ambulances was abysmal (less than 2%) and most trauma patients were not able to access care in the first hour.1 In Mumbai, the few (less than 20%) injured patients who were able to access hospital care waited an average of six hours to be seen.2 As a direct result, India led the world in accident-related deaths in 2004, with over 1.1 million fatalities. The reasons ranged from a lack of centralized emergency medical services (EMS) infrastructure, prohibitive costs of ambulance services associated with private hospitals, and a lack of trained ambulance staff. While there has been an attempt to develop a centralized emergency service system in New Delhi, most cities and the rest of rural India lack these services.3

The problem is exacerbated for people in poverty as their ability to access ambulance services is limited. Even though a few nonprofits and charitable organizations own their own ambulances, they do not follow standardized protocols or adhere to quality standards and are usually unable to respond promptly.4 The price point for quality ambulance service was unaffordable and life-saving care was outside their reach.

Solution: Affordable Ambulance Services & Emergency Response Centers

Shaffi Mather and Ravi Krishna’s mothers had diametrically opposite experiences when they needed urgent medical attention in Kerala and New York City, respectively. While one failed to find an ambulance and ultimately rode to the hospital in the back of a taxi, the other was able to access the services of a trained medical professional who reached her within minutes. This shared experience among their loved ones was the spark for these young entrepreneurs who were eager to be part of the solution.

After becoming impatient with the government’s inaction on improving India’s emergency medical services, Shaffi and Ravi partnered with Sweta Mangal, Manish Sancheti, and Naresh Jain to solve the problem themselves in late 2002. Their solution was a financially sustainable and scalable model called “1298,” a network of 10 ambulances and a coordinating emergency response center, which was launched in Mumbai in 2005. 1298 would provide reliable, high quality, and affordable pre-hospital care. Services included transportation and trained personnel to administer CPR, monitor the equipment, and other related services.

In order to ensure that the service was accessible to those who could not otherwise access it, the model incorporated a cross-subsidy element where up to 20% of the calls would not be charged. Pricing was based on the hospital the patient asked to be taken to. This
allowed (in theory) for price differentiation and for the poor to not be charged.

Their business took a dramatic turn when they were the first ambulance to respond during the tragic 26/11 terrorist attacks that shook Mumbai and India. Their ambulance was seen live on TV, and the courage of the attendants made governments take notice, which led to the team securing a contract with the Bihar government. They were able to scale their government partnerships after receiving recognition for significantly improving the quality and reliability of emergency medical services.

Today, 1298 is known as Ziqitza Healthcare Limited (“ZHL”), and has more than 3,000 ambulances. It provides ambulance services across India through partnerships with the government and through fixed fee contracts with hospitals and corporations. Under the government partnerships (which overtook and replaced the cross-subsidy model), a person who needs emergency care can dial “108” (or “102” in some states) and reach the 24/7 call centers operated by ZHL. The center will then deploy the nearest ambulance with trained staff who can provide pre-hospital care for the patient who is taken to the nearest government hospital, free of charge. ZHL is especially focused on reaching pregnant women, as the government of India’s Janani Suraksha Yojana (Maternal Safety Scheme) specifically covers free transportation services for delivering mothers. Once the patient is brought to the appropriate care center, ZHL provides the government with an invoice and is paid a combination of a flat fee per trip and a per-mile fee to compensate for distance.

**Story of Acumen’s Investment**

Acumen invested in ZHL in 2006 as the first institutional investor, increasing its investment size to $2.6 million over time. Acumen took a seat on the board, and provided strategic accompaniment throughout the crucial period of ZHL’s growth. At the time of Acumen’s investment, the ZHL team sought to increase their fleet of ambulances from 10 to 70 and reach patients within 15 minutes of a call. Acumen’s focus was to provide governance oversight and support the scale of the organization, including ensuring the right talent and partnerships were in place. Acumen also helped bring publicity to ZHL, leveraged consulting engagements with leading international business schools, and brought in young professionals through an acclaimed fellowship program to manage key strategic projects for the CEO during its growth phase.

In the initial years of Acumen’s investment, the Indian government had started paying attention to the problem of emergency care services and began allocating budgetary resources under its then flagship health initiative known as the National Health Mission. The government was funding capital expenditure for two types of ambulatory services for the public — one where they would transport pregnant women and children, and the other where they would transfer accident victims, critical care, and other emergencies. A number of state governments started partnering with private enterprises. Between 2010 and 2014, ZHL, which had demonstrated quality and reliable services through its cross-subsidy model, started focusing on
scale through the government partnership model, as it had proven to be more inclusive and easier to implement. Acumen’s core value proposition is to help companies better understand the customers they are impacting. We worked with Grameen Foundation to share insights with ZHL on the type of people using their service, the primary means they are reaching the service, and to validate that those living in poverty were in fact using the free “108” emergency number. One of the findings from the study highlighted that ZHL could improve its marketing in the state of Odisha to increase the percentage of rural poor accessing “108” in case of an emergency.

Between 2014 and 2022, ZHL continued to scale its operations, becoming one of the three largest emergency medical service providers in the country. Simultaneously, their leadership team began to develop divergent viewpoints resulting in significant challenges in ZHL’s growth. The company needed to unify their leadership and begin to move with greater agility at this stage. Acumen played a critical role in trying to unify the leadership and eventually, the founding team came together to decide the leadership structure going forward. This resulted in one of the founding entrepreneurs taking charge and facilitating an exit for Acumen. The enterprise is now in a better position to embark on its next stage of growth.
**Impact**

ZHL's impact stands out in Acumen’s portfolio for its depth, wide breadth, and an almost unduplicated track record on its poverty focus. Its most intangible impact is building the infrastructure that forms the backbone of emergency response systems in several states of India. From a time when they were only present in a few cities and one state with a coordinated EMS system, to one where there are EMS systems in 35 states and union territories; this is a unique example of the contributory effect of markets in transforming a critical component of public health infrastructure in a developing country. For example, according to one survey in Maharashtra, more than 75% of the sample were now aware that there was an emergency medical system they could access in the event of an emergency and knew the number they could call on in case of an emergency. This is significant considering there was no emergency medical response (EMR) system in India’s largest metropolitan city before ZHL launched 1298 in 2005.

**Depth:** In the states where Ziqitza operates the “108” model, those living in poverty have experienced a dramatic change in the way they access critical health services. Many have accessed ambulance services when there was a trauma event for the first time, no longer forced to pay the exorbitant rates charged by private hospitals. Pregnant women in rural areas are now accessing quality services since ZHL also operates helplines associated with the government’s schemes to increase hospital deliveries and reduce maternal mortality in certain states. Studies also indicate that states who adopted the “108” model in their early years have seen improvements in key health indicators such as institutional deliveries and maternal and infant mortality rates.

In a study conducted by Grameen Foundation with the Acumen team in 2014, it was shown that ZHL’s reach among the poor in Punjab and Orissa was between 65% and 78%, depending on the poverty index deployed. In both states, ZHL had a disproportionately high outreach among women users. This was attributed towards the government schemes such as Janani Suraksha Yojana and Janani Shishu Suraksha Yojana which were covered under the partnerships in both states.

**Breadth:** Since Acumen’s investment, ZHL now manages more than 3,000 ambulances and has impacted 48 million lives including 13 million pregnant women.
ZHL has also set new benchmarks in the training of drivers and paramedics — critical stakeholders in any emergency response system. ZHL’s founders actively collaborated with a nonprofit (Lifesupporters Institute of Health Sciences) to ensure India’s EMR training is comparable to that in developed countries.

**Lessons Learned from Ziqitza’s Scale and Impact**

The government plays a critical role in building scalable, repeatable models for the provision of critical public goods.

Acumen’s investment thesis at the time of its first investment was in a pay-per-use model where those living in poverty were provided either free or highly subsidized services, with the subsidy coming from other users. While the 1298 cross-subsidy model was successful in demonstrating the potential of high-quality emergency medical services being made accessible, its reach among people living in poverty was limited. Enforcing the sliding scale/cross-subsidy model was difficult to implement — attempts to do it through a trust-based model or on the type of hospital reached were both fraught with challenges. However, this was an important phase in the evolution of the business model as it demonstrated ZHL’s value proposition and helped build trust with its customers and, eventually, its government partners.

The “108” model enabled ZHL to scale its operation beyond Mumbai and Kerala to other states and develop the operational efficiency that was critical for this model to work. The company demonstrated to the government that partnering with private
companies can open up access to quality emergency services which were previously unavailable. In states where ZHL launched its operations, a population that had previously been without emergency healthcare was now able to access ambulatory services which adhered to global quality standards.

Together with GVK EMRI, another leading player at the time, ZHL was catalytic in crowding-in other private players to provide emergency medical services. Success demonstrated in states like Punjab and Odisha led several other states to adopt the “108” model. A number of associated policy drivers provided the necessary impetus leading to the spread of this model across several states.

“In the Indian context, where large distances needed to be covered from rural areas to hospitals, and where paying capacity is low, we learned that it would be next to impossible for a private enterprise to work through a financially sustainable model that rests only on the paying capacity of the patient or their families.”

- Shaffi Mather, Co-Founder, ZHL

Social entrepreneurs should exercise caution when partnering with government.

While partnering with the government has clear benefits in terms of reach and affordability, those partnerships can be extremely difficult to navigate for a social enterprise. Issues of corruption, regular payments, or a change of government priorities can significantly impact the day-to-day operations, sustainability, and growth of a fledgling enterprise. The excessive reliance on government contracts also made it a challenging business model for later-stage investors to consider.

For ZHL, the journey of partnering with the public sector was never easy — in the late 2000s, a number of state governments began opening up partnership opportunities to help manage their emergency response systems. As bidding processes could be manipulated by unscrupulous actors, bidding for these types of contracts was subject to risk, and the founders of ZHL were forced on occasion to confront the government where there was potential for corruption.

In addition, irregular or delayed payments are often the norm with government contracts, leading to a lot of strain on the cash flow of an organization that has limited access to affordable credit or an equity cushion. Sometimes, these payments were contingent on personal fees by individual government officers making it hard for ZHL to fulfill their obligations to their drivers on time. Despite this, ZHL never succumbed to these pressures. Over time, they learned to appreciate that there are also many principled and courageous individuals in government and they learned to better identify and partner with those individuals.

Transparency and demonstrating moral leadership are critical to serving those living in poverty. At the same time, founders and investors need to find a careful balance between turning a blind eye to corruption and making the government an adversary.
A razor-sharp focus on operational efficiency is the key to scaling rapidly while maintaining service quality.

In order to be sustainable at scale, ZHL needed to build a rigorous operational model — monitoring the key revenue drivers (average number of trips, average charge per trip, ratio of paid to subsidized or free services, and advertising revenue and costs) aggressively. When Sweta Mangal took on the role of the CEO, she demonstrated the operational talent necessary to scale the model from one city to several states in 2010.

After their successful pilot in Bihar in 2009, ZHL started bidding for “108” contracts in different states across India. As the tendering process followed the L1 bidding process (or the least cost selection method most common for tenders in public procurement), ZHL’s approach to financial viability in a given region changed significantly. The model evolved from advertising revenue and trip charges to a much more difficult cost-plus-pricing strategy. As more players entered the market, the pressure on margins increased substantially. The operational rigor and process that was necessary for the early origins of the ZHL model laid the foundation for the company’s ability to expand into new states with relative ease.

ZHL has built a blueprint for the execution of the on-time service model. The company tracks the performance of each ambulance through the connected global positioning system (GPS). The monthly management information system (MIS) tracks the fuel expenses, crew salary, repair and maintenance, and number of trips to ensure the optimal utilization of the vehicles. ZHL has been able to minimize the penalties imposed by the government due to the consistent quality of service.

“The initial part of building this industry was very joyful. It was new and we were creating something that never existed.”

- Sweta Mangal
Strategic investors can bring expertise and capital, but their commitment needs to be firm. A change in their strategy can limit a startup's ability to raise capital elsewhere.

After Acumen’s initial investment, ZHL started fundraising for a $4 million USD round to take the company to its next stage of growth. The Acumen team was a very active stakeholder in the process and worked closely with the ZHL team to find an investor who could lead this round. Over time, a few different options emerged including the participation of emerging impact investors — ultimately, based on commercial considerations, ZHL chose an international strategic investor, one of the largest ambulance companies in the world, to lead the round. The decision was also appealing considering ZHL’s rapid expansion of the “108” model at the time and Acumen’s own interest in aligning with an investor that can provide an exit in the next round.

However, due to changes in leadership and a subsequent change in geographic strategy, the investor’s engagement and partnership with ZHL was deprioritized, potentially impacting the latter’s fundraising plans. The lesson here is that social enterprises should be careful about crafting a growth strategy that is overly dependent on strategic investors. When bringing on such investors at an early stage, it is important to account for potential changes in their strategy.

“Having the largest ambulance company in the world as a strategic investor in ZHL was great for credibility. However, it may have hampered our ability to raise further equity — the natural question that arises is why is the world’s largest ambulance company not putting in a few million into your equity.”

- Shaffi Mather, Co-Founder, ZHL
Lesson for Investors

Social enterprises with multiple co-founders need a strategy in place to manage potential conflict early on.

Social enterprises face a number of the same challenges that other early-stage startups face. Other than external factors, what can really determine the ability of a social enterprise to scale are the traits of the entrepreneurs and their leadership approaches. ZHL had multiple founders who were identified at the beginning as “co-founders” and were projected and functioned in the early days as simultaneous leaders with an equal degree of influence. This kind of democratic approach to leadership was most beneficial in the early days when it was necessary to leverage different skill sets and expertise. However, the co-founders and Acumen as an investor may not have planned for a potential higher level of conflict.

Research indicates that there are several sources of conflict including prior experience and cultural backgrounds that can impact the trajectory of a young enterprise. The very nature of an early-stage startup requires quick decision making which can only be made when there is a high degree of trust in a team with co-founders. However, the trust may not be enough as the company scales and is pulled in different directions that diversified founding teams are not always able to manage skillfully.

For early-stage investors like Acumen who are often the first institutional investor, there is an important lesson on surfacing the potential for conflict early on in their engagement. Investors should also consider taking the lead on encouraging founders to align on how they will tackle thorny issues in leadership. As an early stage investor, Acumen continues to play an important role in helping founders navigate conflict. However, we now encourage founding teams with multiple members to align on a strategy for conflict resolution soon after our investment. Practically, some of the strategies could include rotations among overriding decision-makers or allowing the founder with the largest shareholding to make an overriding decision in the event of continued conflict.

Summary

ZHL’s emergence as a world-class and — most importantly — accessible service provider for those living in poverty was no ordinary story. It required a steadfast commitment to build the business with integrity and a hyper-focus on operational efficiency. Their partnership with state governments was the strategy that has helped them achieve outsized impact among those living in poverty in the states in which they operate. And Patient Capital was among the most important levers that unlocked their ability to partner with the government.
Endnotes

1  L L PoSaw, P Aggarwal, S L Bernstein (1998) *Emergency medicine in the New Delhi area, India*

2  Murlidhar V, Roy N (2004) *Measuring trauma outcomes in India*

3  Sharma M, Brandler E (2014) *Emergency Medical Services in India: The Present and Future*

4  Ibid


6  Desai R, Das S (2017) *Emergence of EMS in India*


8  Yau L (2019) *Effective Leadership Practices of Early-stage Startup Co-founders*