

Wareed

Reimagining the way Healthcare is provisioned & delivered in the Sultanate of Oman

Raif Al Harthy

It was nearly 2am in early 2018 in Muscat, Oman. I woke up to loud banging on the rooftop entrance to my house. My Uncle resides next door, and I thank our Lord for that. I meet my Aunt at the rooftop frantically yelling at me to go next door. My Uncle, who is a long-term diabetic, had gone into a hypoglycae-mic coma. I rush next door to find him in a cold sweat and stiff as a log. My Aunt, who is an experienced nurse, had tried to revive him, but to no avail. Within what now seems like a flash, I dragged him down two flights of stairs before a relative arrived to help transport him to the closest hospital.

At the hospital my Aunt kept blaming herself for not having the intravenous glucagon shot available which, I came to learn, is used to quickly increase blood sugar levels in diabetics with low blood sugar when they cannot be stimulated with taking a form of glucose orally. The reason she didn't have this essential life-saving medication was due to either being too busy with her fulltime job serving patients or otherwise too tired to remember to get the supply when she had run out, in addition to the difficulty of sourcing it from retail pharmacies.

This was the spark that drove my Co-Founders (we are also related through family ties) and I to look for a solution to this potentially life-threatening problem. Collectively we had all experienced this frightening situation too many times before and decided that enough was enough. We knew that something had to be done to drastically reduce the potential recurrence of such incidents and in doing so, provide a solution for many others in a similar situation.



Further investigation quickly highlighted a common problem that sufferers of chronic illness and their caregivers face when it comes to accessing their refill medication. One could wait in line for up to 7 hours to collect their essential medication. This means a patient, like my Uncle, must go through an extremely frustrating process of commuting to the hospital, struggling to find parking and waiting in line at the registration desk, the doctor's office and the pharmacy. All whilst exposing themselves to an environment surrounded by hundreds of other sick patients who collect their free medication from the same centralised pharmacy. It was exhilarating knowing we had a means, using technology, to solve a problem many people were facing. However, that euphoria was also met with sadness that our observations on the ground also highlighted the suffering some people were experiencing on a regular basis.

We quickly set out our first 'proof of concept' in collaboration with the pharmacy department at the renowned Sultan Qaboos University Hospital. This led to an initial trial where we completed roughly 60 deliveries of refill medication to patients in six days. The pull from patients and their caregivers alike was immense which gave us immediate validation of the problem-solution fit. Our second POC was quickly developed to test product-market fit which resulted in further successful deliveries with paying customers from a second government healthcare centre. Early momentum was however slowed due to a lack of clear regulatory framework for such activities which had never been conducted in the country. We spent about two years developing the processes and compliance standards used to deliver the service further. These processes have been reviewed and commended by local and internationally based doctors and pharmacists.



Regulatory Challenges

There has been no clear regulatory framework in place as this is a service that hasn't been delivered previously. We had to ensure that industry best practice and advice from experts within the healthcare sector was very carefully taken into consideration when setting the appropriate standards that would ensure an acceptable level of compliance.

A core component in achieving good compliance is maintaining the right temperature levels for the different types of medication while they are in transit to the patient. This is specifically challenging but acheivable when handling medication that requires to be kept cool within a temperature range of 2 - 8 degrees celsius.

On one hand, convincing some healthcare professionals of the advantages of technology in improving the way things are done can be a challenge especially when the medical world is currently in firefighting mode. This can be a hindrance to progress.

Fortunately, open minded professionals have not only been willing to try new means in the fight against this global pandemic but also expedite and fast track implementation that they would otherwise have taken a very long time to adapt to. Exceptional times need exceptional solutions and exceptional speed in realising positive results.

We have since seen our efforts rewarded by receiving early stage investment from the Oman Technology Fund, which has helped us establish our MVP and entry into the market. We are now operational from two of the biggest hospitals in Oman (the Royal & Khoula Hospitals) and we have a few more lined up for rollout in the very near future.

The last 7 years have seen new technology and innovation bring continuous improvement to the healthcare sector, harnessing the power of hyper connectivity to take the provisioning of healthcare closer to homes through the tap of a button. PillPack, Echo and ZocDoc are examples of start-ups in Europe and the US paving the way towards a smarter, easier and more convenient way for people to access their healthcare. The good news for patients in Oman and the wider GCC region is that Wareed is their digital gateway that strives to improve how patients receive healthcare services and products, including refill medication, hassle-free and conveniently.

Wareed's application improves patients' safety, comfort and health management by establishing an ecosystem that connects patients to essential healthcare services easily and in a secure and timely manner, giving them unparalleled peace of mind.

The Platform

As a platform, Wareed acts as a digital medium for communication that allows patients and their caregivers to request the services of existing healthcare providers from the comfort of their home. These services such as home care and medicine delivery then arrive at the recipient's doorstep safely and conveniently.

As a family-centered society, caregivers in Oman tend to be family members who care for their elders or other dependants such as their ill children. They therefore also largely benefit from this service.

We deliver value through Wareed's intuitive and easy to use mobile web application that allows patients in the first stage to request their repeat prescriptions and keep track of the delivery to their doorstep in just a matter of clicks.

Without Wareed, patients would need to physically commute to the hospitals to collect their medication and this would increase their chances of exposure to viruses that they may not be immune to.

By using Wareed, the patient and their caregiver save a lot of time and effort and reduce risk that they would otherwise have to go through to collect their essential refill medication.

Products requested for delivery can be anything from medication to masks as long as it contributes to the patient realising a healthier and more comfortable life.

The processes and technology we have developed lead to an upgrade in the value added to healthcare in Oman. Solutions like Wareed can help in the national effort to fight Covid-19 by reducing the need for patients to be at the hospital waiting for their medication where the chances of infection are greatest. Delivering medication to patients helps in purging the spread of the virus and the stress for both the hospital and patient in trying to manage crowds and limit gatherings.

Ultimately, Wareed's vision is to do to healthcare what mobile phones did to telecommunication by serving patients with their healthcare needs at the time and place of their convenience. We are determined to continuously challenge the boundaries of healthcare by increasing the impact and reducing the cost of healthcare on individuals and organizations.



