

Customer Stories:

OneLife Technologies Corp.



Smartwatch with highly
secure AT&T LTE-M

connectivity delivers

peace of mind for
patients and caregivers

- **Business needs** - Technology innovator OneLife needed a way to transmit patient data from its wearable medical devices to clinicians and caregivers so they could intervene when necessary.
- **Networking solution** - Powered by highly secure AT&T wireless connectivity, the OneLife smartwatch can deliver highly secure transmissions of critical medical data to the cloud, where it's accessible by the patient's support team.
- **Business value** - The ability to monitor the well-being of senior citizens and others with medical conditions in near-real time and receive alerts if something goes wrong.
- **Industry focus** - Mobile medical software, data collection, and tracking technology.
- **Size** - Startup

About OneLife Technologies Corp.

OneLife Technologies Corp. is a mobile medical software/data collection company with a suite of proprietary, patented, medical-grade wearable tracking technologies designed to provide patients, physicians, nursing homes and hospitals with comprehensive health data. The system and devices will utilize an open application programming interface for easy data communication and integration to existing electronic medical records systems.

The situation

Founder and CEO Robert Wagner started OneLife to help improve individuals' health and reduce medical costs. The company needed the ability to connect OnePulse, its innovative smartwatch, with clinicians and caregivers in near-real time throughout the U.S. and eventually around the world.

Solution

The AT&T LTE-M connection enables OneLife to transmit critical medical and health data to the cloud, allowing clinicians, patients, and their caregivers to monitor user status and well-being in near-real time. The LTE-M low power wide-area network is tailor made for compact Internet of Things devices like the OnePulse.



Smartwatch monitors patient well-being

OneLife designs technology for an active, aging market. The company's typical user is over the age of 50 and often has a medical or aging-related health issue that could benefit from being monitored by a healthcare provider or family member.

Robert Wagner, the company's chairman, CEO and president, said early tests of the company's OnePulse smartwatch found that 80% of users were elderly people whose children wanted to monitor their status remotely. "Our product has the ability to determine that the wearers have a strong pulse that's within normal parameters, and that they're moving around," he said. "For people with dementia, we can create geofence parameters that will send immediate alerts if the loved one goes beyond the defined area."

Initial testing revealed that people preferred a smartwatch to the neck lanyards that some seniors wear so they can summon help and the ankle bracelets that sound an alarm if a dementia patient goes beyond a designated area. "The wearers and providers were impressed that the form factor was a watch, which people are accustomed to wearing," Wagner said. "Wearing an ankle bracelet or something around their neck is foreign to them."

Many nursing homes and other senior care facilities have adopted OnePulse for their residents. "We've been fortunate to be allowed into facilities, and we've learned that the residents like wearing a watch," he said. "If they have to wear something around their neck, some of them feel like they have an impairment. Giving them a watch just shows them more dignity and respect."

OnePulse also sends an automatic alert if the wearer falls. "Many existing fall detection devices require a person to press a button to summon help," he said. But also consider the occurrences of falls because a person loses consciousness. In case of a fall, OnePulse notifies a caregiver or clinician without the wearer having to do anything.

Highly secure transport for medical data

Its success in helping seniors led OneLife to consider other uses for its wearable technology. “We realized that cardiac patients and people with diabetes may need continual monitoring if they’re to live a healthy lifestyle or recover from a hospital admission,” Wagner said.

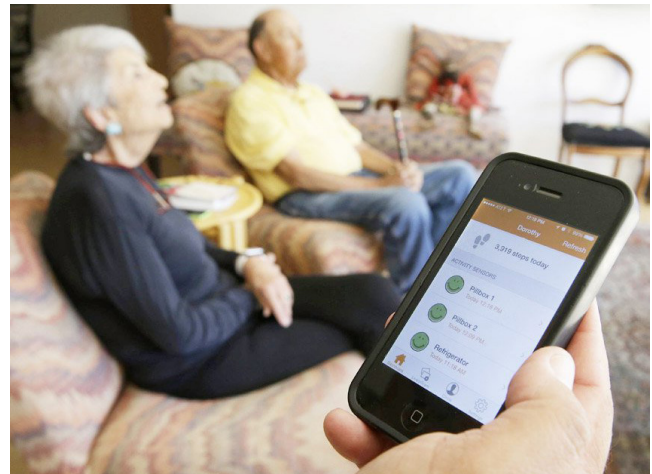
OnePulse already offered pulse, location, movement and sleep data, but cardiac, diabetic and other patients may require additional equipment such as a blood pressure cuff, glucometer, and scale.

For that reason, OneLife built a Bluetooth® protocol into its device that enables users to connect to third party medical devices. The company just needed a way to transmit medical and health data from its powerful OnePulse watch and peripheral devices to the cloud to enable clinicians, patients, and their caregivers to monitor the wearers’ status and well-being.

Communications hub facilitates informed decisions

The AT&T LTE-M cellular network allows clinicians near-real-time access to patient data in a highly secure environment and in near-real time. This enables caregivers to intervene when necessary. The low power wide-area network makes possible OnePulse’s 5 day battery life and always-on feature.

OneLife’s proprietary Bluetooth protocol facilitates easy connectivity with other health and medical devices, which deliver data to the watch via the Bluetooth channel and then use the AT&T network



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Robert Wagner

Founder and CEO, OneLife Technologies Corp.

to send the vital information where it needs to go. “The user turns on the device, double taps on the app pairing screen and it’s automatically connected. We believe that’s the easiest pairing methodology in wearables today,” Wagner said.

Essentially, he said, OneLife has created a communications hub that measures near-real-time pulse, other vitals, and environmental conditions. “Then it delivers that data to a mobile app, telemedicine platform or electronic medical records system to enable healthcare professionals to make educated decisions on what type of care or follow-up is needed.”

OneLife is working on additional technologies that would allow its wearable to connect with other commonly available medical devices.

Extending the technology to other industries

Wagner said AT&T has helped his company introduce its product to industries beyond healthcare. “AT&T couldn’t be a better partner in the opportunities they’ve brought to us,” Wagner said. “They have been more than generous to introduce us to a number of other companies.”

For instance, AT&T recognized the possibility of using OneLife technology to help logistics companies comply with federal health and safety mandates. Long haul truckers in many states must maintain Department of Transportation health certifications. Drivers with health problems are sometimes unable to meet the necessary health requirements, which can mean the loss of their job.

“We’re looking at a methodology whereby drivers wear our watch so they can monitor their health regularly,”



he said. The watch lets the drivers know if they’re having problems with their blood pressure, diabetes or other problems so they can seek treatment. “That way, we help make sure that when they get to their annual exam, they’re in the shape they need to be in to pass it and continue their employment.”

Wagner said AT&T also recognized potential applications in the hospitality industry, where the federal government reports that workers are 40% more likely to be injured on the job than workers in other service industries.¹ OnePulse can detect a fall for workers, and the device can also be used to summon help if an employee is put in a compromised position.

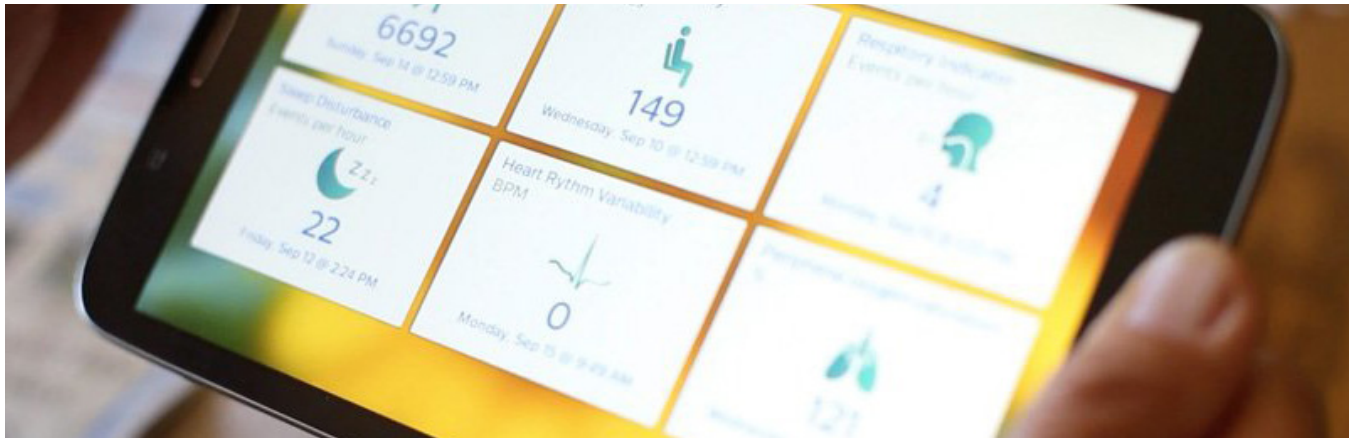
“Our onboard SOS can be used in an emergency to notify someone that the employee is in danger and needs assistance,” Wagner said. “These are just a few of the primary cases we have found in which our wearable solves an immediate need or connects with other technologies to provide health and safety solutions.”

Helping veterans stay connected

OneLife also is using its technology to help former armed services members experiencing post-traumatic stress disorder. “Some of the data that we’re finding is that even just communicating with a veteran once a day through a text message or a phone call to ask how they’re doing can dramatically improve their health and reduce costs,” he said. “We’re looking at how our wearable can be a part of that.”

Because veterans became accustomed to relying on one another when they were on active duty, OneLife plans to use its smartwatch to connect them once again. “We believe our wearable will let veterans know

¹ <https://www.ncbi.nlm.nih.gov/pubmed/19593788>



that they're not alone." The device can also help them monitor their levels of pain, stress and depression. "That way we hope to help bring about a change for the better," he said.

Accessibility to information improves care and reduces costs

While many of the technologies that OneLife uses have long been available, what sets OneLife apart is the company's ability to deliver the information they gather quickly to the people who need it.

"At the end of the day, I think 'connected' is the most important term that we're using," Wagner said. "Blood pressure, blood glucose, and pulse readings have always been there, but the ability to connect with them and get the information where it needs to go, electronically and in near-real time, has not been there."

Wagner continued: "That's what we bring to the marketplace. And in doing that, we reduce labor from the charting and the manual input and the lag from the time the reading is taken until it becomes usable data. It's that accessibility to information that's going to improve our healthcare and reduce costs."

Invaluable assistance in getting help to people who need it

Technology as innovative as the OnePulse medical and health smartwatch, which offers a complete solution for practical, affordable telehealth and remote patient monitoring, requires a top-grade network. Wagner says his company looked immediately to AT&T.

"It helps when it's one of the most valuable and respected brands in the world," he said. "You do your analytics and look at the reach and the breadth of AT&T, their longevity and how the world sees them, because we don't see this as a U.S. or North American opportunity. We see this as a global play to really help as many people as possible."

He appreciated the assistance OneLife received from AT&T—even through the numerous challenges that accompany a startup. These included problems with antennas and the evolution in wireless technology from 3G to 4G and now 5G, as well as product positioning, marketing, branding, and legal hurdles. "There were some tough situations," Wagner said, "and AT&T has always made its resources available to us."

“We feel that we’re a strong company and we’ve got something to say, but obviously the AT&T presence and approval of our product have been an enormous aid in helping us get our message out and really opening doors for us,” he said. “We don’t take that lightly. We have a real responsibility to the relationship and we’re in this situation because of AT&T taking a chance on us.”

OneLife is currently looking at other networking solutions that will be required as it continues to innovate. “Certainly our goal is to integrate with and utilize as many of the AT&T technologies as possible. It just makes sense,” Wagner said. “We’re proud that we got approval and our packaging bears the message ‘connected by AT&T’ and the AT&T logo. And now we can get the product into the hands of people who need it.”

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