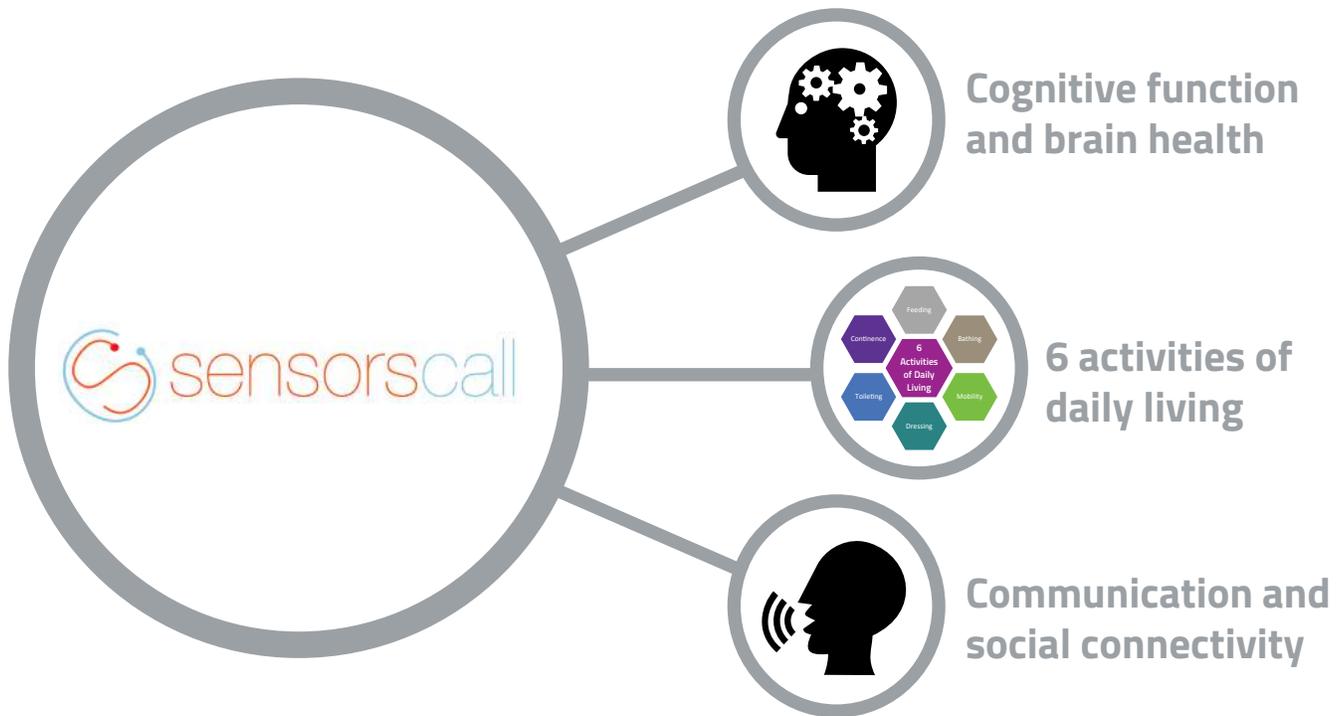




SensorsCall Company Profile



SensorsCall is a company on a mission to enable loved ones to live independently for longer whilst aging in their own homes. The company prioritises privacy and dignity when producing a product for seniors. Just over three years ago, SensorsCall started developing their device, 'CareAlert' as a response to the founders experiencing the eye-opening difficulties of caring for their parents after reaching a stage of increase care dependency. At this time, founder, and CEO, Fereydoun Taslimi noticed the anxiety his wife Lili was facing looking after her mother, who was 83 years old at the time and still living independently at home. Together they felt they needed some way of knowing how Lili's mother was doing each day: was she able to get up OK in the morning, had she taken a shower without any incidents, and if she returned from her shopping trip, &c. After researching the market space, they could not find any devices that could provide all this information in one product, and so SensorsCall was formed with the intention of developing and bringing this product to market.

During their time researching the market space, the team ran into others who all had the same issues with their aging parents. Some lived far away from their parents' homes with no visibility into their well-being and felt a growing nervousness as their parents grew older, worrying that something may happen without them knowing, stopping them from giving their parents the help they may need. The SensorsCall team



discovered, whilst looking into senior demographics, that the market space is a fast-growing segment globally, with the aging in place space offering an impactful solution to the care crisis countries are already facing globally.

While trialling ideas to help produce a monitoring system for seniors, SensorsCall quickly discovered that cameras, and other video or audio recording technology, were widely met with resistance in the homes of seniors as it feels like a great invasion of privacy. It was soon decided that the product should not be focused on simply monitoring a person but monitoring their environment and how they interact with and affect it. SensorsCall developed the first CareAlert prototype, a device that would ensure the safety and security of Lili's mother without compromising her privacy. The prototype was a self-contained, battery-operated device that would be placed throughout the home to monitor a variety of environmental conditions. These devices would include multiple sensors pre-set to certain thresholds and would sound an alert if those thresholds were met or exceeded. As the product developed the team decided to base the design of the device around a night light. This made it compact in size and allowed it to have a removable power adaptor, allowing it to be placed in a variety of spaces and still be connected to power via a USB cable.

The company has uniquely been developing all the product expertise in-house, including: circuit design, embedded software, cloud, data science and machine learning, meaning the team have not had to depend on any contractors or consultants. The team's experience and commitment to attending aging technology events and conferences, continually furthering their understanding about the market and new technologies, is just one reason why SensorsCall has been showing such great promise in the aging in place space.

SensorsCall's future performance goals not only include increasing product sales and installations but also raising greater awareness of its product and how it serves the community of seniors who want to age in place, as well as their relatives and formal carers who want them to be able to do this as safely as possible. Due to this shared goal in making aging in place assessable, SensorsCall is very open to forming partnerships within the market space and has already identified several partnerships opportunities that can develop as the company grows.

What began as a method drawn up to ensure Lili's mother was home safe has now blossomed into a multi-year project aimed at creating an intelligent, interactive monitoring system that ensures privacy and provides peace of mind. SensorsCall's goal is to provide that same level of comfort and peace of mind to users and their loved ones using CareAlert.

Longevity Potential: CareAlert – the simple nightlight keeping you connected.

CareAlert is a device that lets you be there for your loved ones without having to get in contact with them over the phone or visit in person. The device is a 'Smart night-light' that learns a loved one's daily routines to alert you, through the CareAlert app, when an unusual behaviour or activity has taken place. SensorsCall have developed this award-winning technology for senior in-home care based on market research into what real formal and informal carers are looking for in an alert device. In general, caregivers are looking for a device that:



- Lets the caregiver know the individual in question is fine
- Will notify them if anything is out of the ordinary
- Will connect them instantly with the individual

CareAlert was created to solve these three main concerns. The device contains multiple environmental sensors which are connected to the cloud where an AI-driven analytics engine develops an awareness of the habits and activities of inhabitants. Any unusual patterns are detected and verified by the device's multiple sensors and are reported to the caregivers. In addition, the device allows communication directly with the occupants in case of an emergency. It is also customisable to allow alerts based on individuals' medical history, as potential hazards may vary with different conditions seniors are experiencing.

The sensors pick up motion in each room and, using SensorsCall's AI technology, can learn a senior's daily routine, and alerting carers via app notifications when something deviates from that routine. As CareAlert does not use any camera elements, and does not constantly record audio in the home, individual privacy is not impeached, letting monitoring take place non-intrusively. As CareAlert is designed to get smarter over time, offering more features the more it is used, it requires one week after installation to sense and learn the normal routine and environmental conditions in the home. This data is then sent to the CareAlert cloud for analysis and allows the device to establish baseline behaviours and conditions to be used by the AI system to detect any abnormalities. All this is done whilst maintaining the senior's privacy and dignity, without the use of a camera or listening to their conversations.

Interestingly, SensorsCall have put emphasis on developing a monitoring system that not only monitors the individual but also the environment. CareAlert can detect humidity, air quality changes and even unsafe room temperatures. If something is out of the ordinary CareAlert will pick this up and alert the carer immediately using its two-way communicator, allowing the carer to check in with ease.

SensorsCall have already been receiving positive feedback from CareAlert users who are benefitting from being able to have insight into their parents' lives without intruding on their privacy. It has connected parents and their children, when normally older parents have been harder to contact as they tend to have greater difficulty using, or even remembering to use their mobile phones. SensorsCall's success in creating a device and app that is easy to adopt into seniors and carers' lives, yet incorporates smart technology that can monitor several variables in the home, is a step forward in the aging in place market, widening accessibility to more seniors looking to grow old in their own homes.



Flagship Product Deep Dive

Currently, the CareAlert device is on its seventh redesign and, over the last two years, it has been tested and developed to incorporate various features and technologies to enhance it as a final product. What makes CareAlert unique is that it provides an elegant solution for multiple problems in a fusion of sensors in a single package in the shape and functionality of a night light. CareAlert uses powerful sensors with integrated AI technology to monitor environmental factors including:

- Motion
- Temperature
- Humidity
- Air quality
- Light
- Sound

These factors are considered by the device to deduce seniors' daily actions and living conditions and by using machine learning the device can formulate a baseline of daily activities. The device is paired with software that has been integrated into app form and notifications will alert you to behaviours the AI platform deems important.

The CareAlert app allows for remote monitoring and is designed to be used by family members or caregivers, allowing up to five people to access the app dashboard and notifications. Its user-friendly dashboard allows for remote monitoring and instant communication links to the CareAlert device in the home. This live chat feature connects users to residents in the home, at the push of a button, projecting the end-user's voice into their loved one's home. This allows you to get in touch with them without the need for them to work a mobile or landline device. CareAlert also allows carers to pre-record messages to set audio reminders throughout the day, allowing seniors to continue living independently without the fear they will forget important activities, such as taking their medication.

As the CareAlert device is designed like a small nightlight, there is no need to install big or unattractive appliances into the house. The device is easy to adopt into any senior's lifestyle, as it simply needs to be plugged into a socket onto the wall, functioning completely independently of the senior. The set-up from there is hassle-free: after plugging in your CareAlert device (or devices) into your chosen monitoring rooms, the carer downloads the CareAlert app onto their smart phone. From there, the carer can customise the wellbeing dashboard on the app, setting up custom alerts and notifications regarding changes in behaviour or environmental conditions. SensorsCall have created a well thought out, simply designed monitoring system – even in the event of a power outage the system can run on back up battery power and, due to its nightlight feature, can be used as an emergency light!

SensorsCall have manufactured 1000 units of the CareAlert device, which are currently produced in

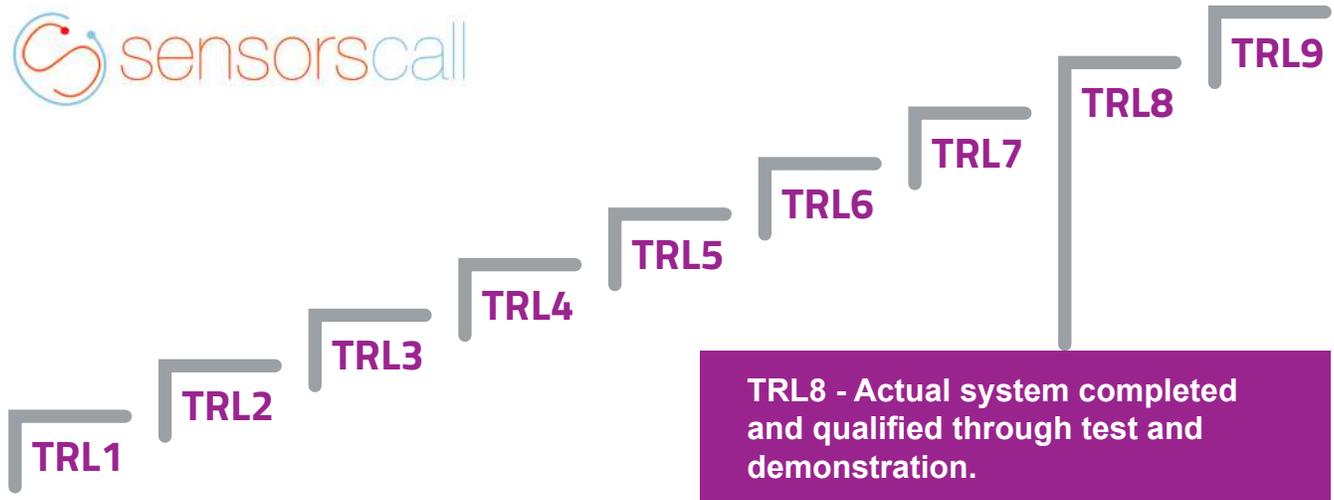


China. Further, the company has already shipped a portion of those units with the devices being delivered to select homes to be test piloted. These test pilots, consisting of approximately 100 units, are currently gathering data and feedback that will aid SensorsCall's next steps in understanding the devices' ability to optimally function in its desired operational environment.

The CareAlert device currently falls at TRL 8 as the device and accompanying software has passed through its prototype phase and has been proven to work effectively through tests in its final form. It has been shown to work in real-world conditions and has evidence of reaching true system development.

SensorsCall for care dependency

SensorsCall have developed a device to aid seniors and their families make the transition to living with a higher care dependency. The CareAlert device has the potential to help make aging in place a safer



experience for seniors, while not overbearing the home with unattractive or invasive technology. CareAlert can be used as a tool to reduce the amount of care needed to be delivered in a senior's home, increasing the chances of living alone safely. The device monitors individuals' daily routines, and so can assure carers that they are completing the six activities of daily living effectively on their own. This will allow insight into the seniors' current state of dependency, and could be the difference between living independently and needing low care intervention in some seniors.

Depending on CareAlert device room placement, the devices monitoring system can provide information about:

Feeding – allowing monitoring of seniors eating times, alerting the carer to missed mealtimes

Mobility – giving insight into seniors' homes and their daily movements





about the house, alerting them to when anything is out of the ordinary such as if no one has gotten out of bed that morning. Also allowing you to know if they have returned from trips out safely.

Bathing – letting carers know that seniors have used the bathroom and are up keeping with day-to-day hygiene routines.

SensorsCall allows for the collection of data to be sure seniors can complete the six ADLs effectively, but it also directly aids seniors with cognitive impairments to live more independently. Carers can secure peace of mind using this device in the homes of seniors that may have a decrease reduction in cognitive ability, as they do not need to constantly check in, because if a senior forgets to eat, or wanders off, the CareAlert system will immediately notify the carer through the app. In addition to this, CareAlerts medical reminder feature boosts its value to cognitively impaired users, with its custom recorded reminders that can be set for specific times, medications and dosages. In the future SensorsCall may be able to use collected data to predict onset of disorders such as depression and even monitor operation recovery.

Finally, the device greatly improves social connectivity in seniors, who, without an instantly connecting communication device, may forget to answer calls or may not be able to answer due to falls and accidents in the home. CareAlert instantly connects carers to their loved ones easily via the app, bypassing the phone, and giving caregivers a direct line to always check in.

Interoperability

SensorsCall has developed the CareAlert device to be interoperable with other devices as the company acknowledges the importance of interoperability across aging in place technology. Currently, the device is interoperable with Google Assistant and Amazon Alexa. Further, the company is developing an Amazon Skill to further upgrade its technology. The CareAlert app has been developed to be available for both IOS and Android users to widen accessibility of the device. SensorsCall prioritise users' data privacy and, while data collection is vital in order for monitoring systems so work effectively, SensorsCall does not collect any personal data. Any data collected is anonymised and only stored for a short period of time to ensure users data is protected.

Target market

SensorsCalls main target market are informal caregivers as the device will reduce the amount of care they will need to provide for their loved ones as, even with the most independent seniors, accidents can still happen in the home and they may be unable to get in contact with their carers. To reduce anxiety in both seniors and care givers, CareAlert has been designed to set up an instant communication link between the two individuals, bridging the communication gap. The CareAlert device is designed to be integrated into senior homes as it can function without the senior needing to know it is there after installation, meaning seniors experiencing cognitive decline can continue living normally with peace of mind that they haven't forgotten to keep their medical alert system nearby, or in the case of wearables, on their person. This increases accessibility of the device amongst seniors who may not be confident using modern technology. The device is simple and does not have to be interacted with by the senior once installed. While the product is extremely accessible, it does require connection to a WiFi network in the home, meaning that



seniors will require internet access to use the device, however, once the connection is set up the device will remain working without intervention needed.

While informal carers are SensorsCall's main target market, formal caregivers and home care facilities will also benefit from this technology. Seniors living with the CareAlert system will benefit due to their wellbeing being monitored discreetly, allowing them access to help immediately should the system notice any abnormalities. In addition, formal caregivers will also benefit as the CareAlert device brings efficiency to caregiving. This is because they will be able to effectively oversee the wellbeing of more seniors with the assistance of a monitoring app that streamlines their work, meaning they will need to complete fewer 'check ins' and can prioritise seniors who have had abnormalities flagged on the app. In addition to these two broad target markets, SensorsCall also want to specifically target: senior monitoring facilities, healthcare companies, cable companies and security system companies.

Channels to market

SensorsCall's predominant channel to market will be directly to the consumer. This will target informal carers, mainly the children of elderly seniors who are looking for a way of monitoring their lifestyle while they choose to age in place. SensorsCall's device is tailored to aiding these seniors live independently, while ensuring their care givers are kept in the know about their wellbeing with ease. This will reduce the risks of living independently in these populations, especially when seniors are experiencing comorbidities associated with age such as cognitive diseases like dementia, or mobility disorders like arthritis.

SensorsCall will also use business-to-business channels, such as through formal care providers and home care facilities who will benefit from using CareAlert, as a tool to enhance their care services significantly by reducing the care dependency of its service users. Both domiciliary providers and care home facilities can oversee multiple residents' wellbeing remotely from the app dashboard, allowing them to pick up on anything out of the ordinary as and when it occurs. This will lead to fewer missed incidences of abnormal behaviours in seniors, ensuing seniors receive the correct intervention from carers as quickly as possible. Further, CareAlerts ability to monitor the environment in the care homes will ensure that seniors are not left in unsafe environments due to carers being stretches to oversee many residents; this includes simple issues, such as the room reaching an unsafe temperature. SensorsCall will also use business-to-business channels to reach their target market through healthcare companies, cable companies and security system companies, which will be able to provide CareAlert to seniors in care and seniors in their homes in order to increase their ability to live independently safely.

Success Factors

Team and Reputation

- Fereydoun Taslimi, CEO and Founder of SensorsCall, has previous experience founding 10 startups companies involved in creating various technologies that include: multilingual computer systems and integration, voice processing, interactive voice response systems, knowledge management and network monitoring and security.



- Taslimi's previous companies saw successes from his leadership with three of the start-ups securing big exits deals.
- Taslimi brings a vast amount of experience to the leadership team, supplemented with his academic background in technology as he holds a bachelor's degree in Electronic Engineering from Kings College London and a MS in Computer Science from Georgia Institute of Technology.
- Anand Krishnan, CTO and co-founder of SensorsCall, is a serial entrepreneur with over 20 years of experience building and leading high-performing technology team in North America.
- After securing his bachelor's degree in engineering from Bangalore University, Krishnan went on to complete an MBA at Emory University. Since then, he has founded a technology services company, a renewable energy company and an AI talent platform company.
- Co-founder Payman Arabshahi is a principal research scientist working with the University of Washington's applied physics laboratory. He has previously held a senior technical position in the communications architectures and research section of NASA's Jet propulsion laboratory.
- Co-founder and chief hardware engineer Mitch Kapa brings his 16 years of experience leading multiple hardware projects, where his focus centred around creating low cost, reliable devices. He is currently responsible for all SensorsCall's electronic design and testing.
- Lili Varzi leads customer acquisition for SensorsCall with 25 years' customer relationship management experience interacting with companies such as, Coca-Cola, Colgate Palmolive, PepsiCo, P&G and McKesson Pharmaceuticals, giving her an impressive network. Varzi holds an MS degree in technology management and studied for her doctorate at the Georgia institute of Technology.
- Shahram Famorzadeh, CPO and cofounder brings 20 years of experience as CTO of Nuesoft Technologies to the company leadership team. He has a strong engineering background with a BSEE degree from the University of Tennessee and later earned his MSEE and PHD in Electrical and Computer Engineering from Georgia Institute of Technology.
- Currently SensorsCall's strong leadership team is supported by several engineers and software developers. In the future SensorsCall is looking to expand their sales and marketing capabilities to drive their customer engagement and in turn, increase sales.

Intellectual Property

- SensorsCall has developed a unique device with a competitive advance as it can directly connect seniors to their carers instantaneously via app. The company is currently looking into processing a patent for the device and its accompanying software.
- The company are currently exploring possible opportunities to process patents they have in the pipeline.
- Through the prototype test phases, SensorsCall learnt a great deal about sensors and experimented



with various models for sound classification. This led the company to become highly experienced in the device manufacturing process and DFM.

- Major milestones of SensorsCall included completion of the inference engine and having both IOS and Android apps fully developed and functioning.
- In the future SensorsCall would like to look at developing a wellbeing device that could possibly be sold like that of a smoke detector, in a way that would allow the technology to regularly be installed into homes.
- SensorsCall have a future upgrade plan in place for the CareAlert device to allow it to integrate more features as the company expands.
- SensorsCall has been named a CES 2020 Innovation Awards Honouree in the Health and Wellness category for its development of the CareAlert device and accompanying software.

Funding

- To date, SensorsCall has \$1 million committed by investors
- The company is self-funded currently, but has accepted investment of \$100,000 from TechStars
- Using a subscription model, SensorsCall aims to grow to reach a revenue of approximately \$40 million in 4-5 years' time
- Currently the CareAlert product cost \$150 per device with a \$250 per year subscription fee. The devices are sold in packs of one, two or three, with SensorsCall recommending three devices per household to maximise monitoring ability.
- SensorsCall is looking to raise \$1.5 million as additional capital over the next six months. This will be used to expand the marketing and sales team, to drive product sales and to increase manufacturing capability, ensuring demand can be met.
- At this time SensorsCall are limited by possible parts shortages due to COVID-19 and as a company are limited on marketing capability. Through future funding these limits will be removed allowing for significant company growth over a short time period.
- Since having paid the NRES, Sensorscall is able to ramp up production quickly, subject to the availability of parts.



SensorsCall success Grid:

<p>Intellectual property:</p> <p>SensorsCall has developed a unique device that can directly connect seniors to their carers instantaneously via app. The company is currently looking into processing a patent for the device hardware and its accompanying software.</p>	<p>Team:</p> <p>The team is led by six highly experienced individuals from technology driven backgrounds, bringing a mix of skillsets spanning from engineering to entrepreneurship. Founder and CEO Fereydoun Taslimi has founded ten start ups with three making successful big exits in the</p>	<p>Unique value proposition:</p> <p>CareAlert monitors daily behaviors but also monitors the home environment. Its set aside from other devices by detecting changes to air quality, temperature and humidity alerting carers to any abnormalities. CareAlert also has an integrated AI-system that monitors the daily routines in the first week to be used as a baseline to detect abnormalities in behavior, this system becomes more accurate with longer use through machine learning.</p>
<p>Added quality of life:</p> <p>100 units of CareAlert have been shipped to be test piloted in homes where they will feedback data to SensorsCall, showing proof of its functionality in its operational environment. Through the prototype test phases, CareAlert was developed into a highly effective monitoring system linking to impressive IOS or Android app interface.</p>		<p>Competitive advantage:</p> <p>Lili Varzi, co-founder of SensorsCall, brings an impressive network of contacts built over 25 years of working in customer relationship management, strengthening an already strong company leadership team.</p>
<p>Target:</p> <p>The device can monitor a senior's mobility, including whether an individual has got out of bed. It can also provide information on kitchen and bathroom use, dependent on device placement in the house. SensorsCall not only targets living with cognitive impairment using its customised medication reminder feature, but it also drives social connectivity by setting up instant communication between senior and carer, bypassing the senior's need to use a device.</p>		<p>Runway:</p> <p>SensorsCall currently has \$1 million committed by investors. While accepting \$100,000 from TechStars, SensorsCall is mainly self-funded, with the aim to raise \$1.5 million over the next 6 months. Through a recurring subscription model, revenue is projected to reach around \$40 million in 4-5 years.</p>
<p>Customer segments:</p> <p>SensorsCall has been designed to benefit the lives of seniors without them needing to interact with the device. It has a clear end-user, the informal carer, who will utilise the technology to discreetly monitor seniors, reducing their anxiety, all through an easy-to-use app interface.</p>	<p>Channels:</p> <p>An omni-channel approach will see a wide range of channels to market covered, but SensorsCall will predominantly focus of selling directly to consumer, targeting informal carers. However, CareAlert will also be sold through B2B channels such as, formal care providers, care homes and healthcare providers.</p>	
<p>Inflection point (p):</p> <p>SensorsCall has developed a device and app to streamline both formal and informal care, benefitting seniors' aging in place. After raising another round of funding, SensorsCall will expand their sales and marketing capabilities in order to drive customer reach and increase sales of CareAlert</p>		

● Positive progress
 ● Work-in-progress
 ● Needs attention