Guardian Service Definition Document – G Cloud 15

Service definition document

The Guardian solution is our digital activity and home monitoring system feeding into the (Whzan) Guardian App, enabling people to live in their own homes safely for longer. We have developed rules-based software using predefined rules to automate alerts and actions, to enable low-cost self-adhesive sensors to act as a movement detection network alerting when data is suggesting inactivity/fall. For example, sending an alert if there is no movement detected in the kitchen by 9am.

We provide Internet of Things (IoT) sensors that monitor almost anything in the home, including falls, movement, appliances, windows, doors, cold and damp, fire & smoke risk. We provide GPS enabled devices to monitor external movement, Gov.NOTIFY for messaging, and lone worker devices to track support visits. The number of sensors is determined by the needs of each individual. The central hub connects via Wi-Fi, ethernet, or 4/5G.

Sensors detect activity and use logic to alert care organisations and informal care networks if residents exhibit unusual behaviour, such as spending too long in the bathroom etc. Our radar-based sensors detect presence alerting carers if someone is up and moving or has had a fall.

We have also developed a LoRaWAN option. LoRaWAN uses low power battery powered sensors, which are easy to install with Velcro stickers in almost any part of the home. Batteries have a typical life of 5 years and the system requires no home infrastructure, such as a WiFi hub and hence can significantly reduce inequalities. LoRaWAN networks are being rollod out across the UK and are growing in both rural and urban communities.

Guardian has a virtual sensor facility, where the inputs from multiple sensors can be combined to provide further information. For example, to create a virtual falls sensor a combination of presence, movement, door and appliance sensors are used with timers to flag a possible falls situation. If the resident is not in their bed or usual chair, a timer will start. If

any motion, door, or appliance use is detected the timer is reset. If they leave the house or return to the bed or chair, the timer stops. If the timer reaches a threshold (1-2 hours), then a fall may have occurred, and an alert is raised.

All monitoring data feeds into the (Whzan) Guardian App used by the caring organisation and/or an informal care network of “loved ones”, reducing the burden of care from solely the caring organisation to close friends and family. The informal care network shares the monitoring data (with the patient’s consent) and are able to respond more readily than the caring organisation, simply by being local. The App enables carers to set and receive alerts, inform others of their caring availability and forward alarms to 3rd party Alarm Response Centres if required.

Guardian is integrated with Alarm Response Centres cloud-based software developers Skyresponse and Enovation UMO. We have device integration with Samsung SmartThings, Cascade 3D, and Oysta GPS. We integrate with new systems at customer request.