

Predictive Care

Innovation

NHS and Social Care services are being adversely affected by continued workforce and funding pressures, exacerbated by an increasingly aging population with more complex needs, and more people with significant long term care requirements. This pressure is placing unsustainable demands on our existing services.

If people's care needs are not addressed early, a decline in their health often follows and this leads to costly interventions. Importantly, post-hospital care is mostly met by local authorities and is typically three times more intensive, compounding the problem and hindering long-term recovery and independence.

The Challenges

- The ageing population is placing unsustainable demands on existing services – in hospitals and post-hospital at home.
- The continuing increase in overall healthcare needs with a growing population, particularly in cases of dementia, heart disease, obesity and diabetes.
- The closure of local services because of funding cuts on local authorities has resulted in a huge pressure on health and social care services.
- A dramatic fall in nursing and social care staff, particularly among community nurses and home health visitors.

The Good News

 We are now at a significant "tipping point"; with an increasing ability to change from being more or less reactive in how we tackle these issues to becoming more proactive and predictive in how we work.

Our Solutions

- Digital transformation in healthcare. SCC works with a number of health and social care providers delivering digital transformation programmes, using technology to help address the ongoing issues surrounding silos of technology, data, and people. In turn this facilitates a single version of the truth, cleaner data, and an ability to correctly interrogate this data to achieve real insight.
- Artificial intelligence. SCC can offer AI solutions that provide customers with an effective way to manage their increased workload more efficiently, stop a patient's preventable decline and develop optimal support plans.
- Working with stakeholders. The key to ensuring the success of our partnership programmes and relevance to customers in this space is to involve a range of stakeholders including surgeons, third party care providers, social workers, directors of adult social care and clinicians. This inclusivity ensures all voices are heard on behalf of patients, NHS and Social Care service providers, and end users

An example of how we do things - AI, SCC and MySense

Our partnership with AI platform MySense helps health and social care professionals to learn an individual's behavioural patterns, providing them with information to quickly identify declining health or immediate care needs. We do this by using data from 8 fixed passive sensors placed around a user's home and a wearable device. App notifications and data sets are shown via the dashboard so family, friends and healthcare professionals can monitor and manage care needs before they escalate.

The platform is based on a powerful algorithm that builds a personalised model for each patient and service user's wellbeing, using new and old data. It constantly evaluates patterns and anomalies around the five aspects of mental and physical wellbeing – independence, alignment, nutrition, mobility and hydration.

If MySense finds a pattern of decline it will automatically update the monitoring dashboard and send a notification to an assigned responder. The insights can be shared with family, friends, caregivers and professionals.

Features

- Sensors discrete and easy to self install.
- Dashboard for our customers to monitor multiple end users.
- App for end users and their nominated responders/carers.
- Connected a package of 8 sensors and a wearable deployed together around the home connected via Wifi or 3/4G (5G and NBIoT in development).
- Personalised a "data portrait" is built of an individual's daily tasks, from making a drink, to getting a good night's sleep, or eating and exercising.
- Intelligent we are able to analyse the smallest changes in behaviour, or patterns of behaviour, indications of decline (or recovery).
- Insightful our aggregate data creates competitive advantage and adds value to our partners, enhancing outcomes for their end

Benefits

- Improve diagnostics and home care. Al's ability to capture and categorise data gives health and social care providers the ability to monitor the health of patients and service users, improving diagnostic and post hospital outcomes.
- Predictive care. With AI, the hundreds of millions of data points will be able to accurately predict trends across conditions. This will lead to more successful diagnoses of conditions often before they are presented.
- Care Pathways. The ability to confidently re-design and optimise care pathways across regions post being able to evidence clear benefit and impact across user groups.



Monitoring that matters

Using 8 fixed sensors and a wristband, MySense learns from between 7,000 and 20,000 data points each day to understand what a person's normal activity looks like. In the event that we pick up a pattern of decline, an alert is sent to the MySense dashboard and mobile app, allowing nominated responders to address care needs before they escalate.

Simple functionality

When you subscribe to MySense you get a box of easy-to-install devices, an app, and if you're a care provider, a dashboard so you can monitor multiple people at once. The app and dashboard are intuitive and offer insights and alerts to take action on. The end user can also nominate family or friends to receive the same notifications.



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