

Improving patient care and fall prevention with data science

STFC Hartree® Centre worked with safesteps™ to help reduce falls in elderly patients and improve healthcare with data science.

Challenge

safesteps™ are a digital healthcare company that create personalised patient care plans aimed to reduce the risk of falls, this is particularly significant for the elderly population as falls can lead to serious injury. The company support healthcare workers to adopt the National Institute for Health and Care Excellence (NICE) guidelines that outline over twelve areas of fall risks and fifty types of interventions. Guidelines need to be mapped against individual needs for every patient which creates a large, unique dataset that needs to be processed, standardised and made accessible. safesteps™ are looking to help GPs and carers access the relevant data through a healthcare dashboard that can be integrated into their existing systems and processes, helping them improve patient care.

Approach

Our data science team helped develop a data dashboard that can process and clean data into a standardised format, ultimately helping to improve fall categorisation. They integrated new, global industry standard classifications from SNOMED to improve sorting features, improving the treatment process for healthcare professionals and patients alike. SNOMED is a system that is used by the NHS to give codes to a wide variety of clinical cases like types of falls. Our team processed the classification codes and provided the relevant codes for safesteps™ to be integrated into their dashboard.

“Working with the Hartree Centre showed us the art of the possible – it helped us understand the differences between types of AI and see how it could work for our business. It’s been not only evolutionary, but revolutionary.”

Gary Swale
Inspirize



Credit: Adobe Stock

Benefits

This data dashboard is now more accessible than ever before and connects with NHS Spine, ensuring data gets to the right people at the right time and helps keep people out of hospital. As the elderly population are more at risk of serious injury resulting from falls, safesteps™ are building on this work to develop their personalised patient care plans to further reduce the risk of falls. The company are looking to do a follow-on project with the Hartree Centre and have already hired data scientists into their team, expanding their data science capacity.

At a glance

- A data dashboard to help reduce falls and unnecessary hospital visits for patients.
- Supporting carers, nurses and doctors to create unified personalised healthcare plans for patients.
- Getting the data to the right people at the right time and helping to prevent hospital admissions.
- Expanding the data science capability of the organisation and supporting job creations.

Who we are

The Hartree Centre was created by UK Government to help businesses and public sector organisations accelerate the adoption of high performance computing (HPC), big data analytics, artificial intelligence (AI) and quantum technologies. We play a key role in realising UK Government's Industrial Strategy by stimulating applied digital research and innovation, creating value for the organisations we work with and generating economic and societal impact for the UK. We are proud to be part of UK Research and Innovation.

What we do

- Boost productivity and innovation for industry
- Offer training and skills development
- Provide insights into future technologies
- Give tailored business development support
- Build bespoke small teams built around your project

