

digitalhealth

REWIRED
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Headline Sponsors:



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Programme Background

- Before the COVID-19 pandemic, NHS England observed that the NHS was facing **rising demand** for healthcare
- People are living longer, but not always in better health, with **long-term conditions** affecting more and more of us
- New technologies offer opportunities for remote monitoring of these conditions: **to provide care out of hospital**
- The COVID-19 pandemic has had a devastating impact on peoples lives and the health and social care providers who take care of them: **it has accelerated demand for healthcare to unprecedented levels**
- Our aim is to help NHS England remobilise this **research programme** to explore ways in which these technologies can help health and care providers recover and scientifically test the hypothesis that asks:

"If information about patient behaviour, conditions and events captured from wearables, monitors and other smart technologies, can predict illness and demand for services, then providing these technologies to patients will enable providers to pre-empt illness and redirect demand, or design new services."

Inclusion Criteria

- Individuals over the age of 18 that:
- Have 2 or more long-term conditions AND/OR
- Have a medium to high frailty score AND/OR
- Are suffering from unsteadiness or falls AND/OR
- Those who are found to have paroxysmal and/or asymptomatic atrial fibrillation (AF), hypertension or heart failure
- Live in their own homes or in residential care homes or in nursing care homes

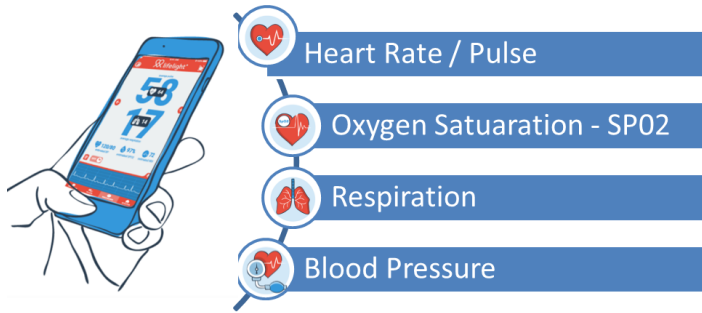
Exclusion criteria

- Children
- Individuals for whom consent cannot be obtained (i.e. individuals with severe mental impairments or learning difficulties)
- Patients on palliative care
- Individuals lacking mental health capacity or whose mental health conditions might be influenced by participating in the study
- Individuals whose mental capacity deteriorates during the study period will be removed from the study.



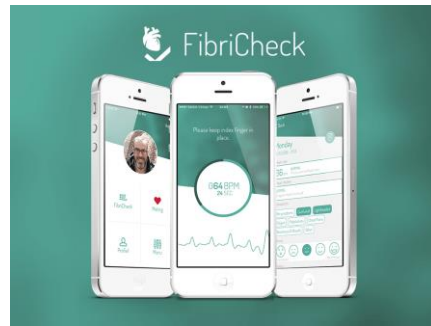
Within the ethical boundaries set out by the Research Ethics Committee, this study is **completely non-interventional**. The project will not act upon any medical data collected during the study, even if that data is indicative of a person's worsening health. All devices provided will be blinded to participants, so they will not be able to see their own health measurements.

Lifelight



- Regularly take their health measurements at home using the devices / apps provided
- Wear a wrist band that collects data such as sleep and activity (if they are able to)

FibriCheck



- All medical devices are safe, fit for purpose, easy to use and comfortable to wear.
- They are CE marked and approved by the Health Research Authority, the local Research Ethics Committee and clinicians providing healthcare in the Lincolnshire area

ActiveInsights



Device	Records	% of Total
Active Insights	5,678	6.8%
Fibrichk	33,304	40.1%
LifeLight	29,038	34.9%
Questlink	15,125	18.2%
Total	83,145	100.0%

- Clear communications with Surgeries and participants
- Co-designed with patients and clinicians
- Support available (and taken)

Online help @ <https://nhsts.org>

The screenshot shows the NHS Lincolshire Clinical Commissioning Group website. The header includes the NHS logo, 'Proof of Concept - Technical Support', and contact information: 'Freephone: 0800 280 8048 / e-mail: support@nhsts.org'. Navigation links include HOME, PAGE, LINKS AND DOWNLOADS, GUIDES & HOW-TO'S, SUBMIT A SUPPORT REQUEST, SUBMIT LIFELIGHT SERVICE ID, and CONTACT FORM. A banner image shows two people wearing headsets. Below the banner, there is a 'Complete the Consent Form' button. The main content area is titled 'Welcome to technical support for the 'Proof of Concept - Smart Technology' research study in Lincolnshire'. It includes a brief description of the service and a list of frequently asked questions: 'What is this service for?', 'Who operates this service?', 'What are the opening hours?', and 'What does this service not cover?'.

Participant User Guide

The Participant User Guide document is divided into several sections:

- Included in your study pack:** Lists items provided to participants: Mobile Phone, Phone Charger & Cable, Phone Stand, Digital Thermometer, Digital Wristband, and Storage Bag.
- Charging the mobile phone:** Provides instructions on how to charge the phone, including a note that the percentage remaining is shown in the top right hand of the mobile screen (image 1) and that the charging cable and plug should be plugged into the bottom port of the phone (image 2).
- Section 4: Using Lifelight - once each day:** A three-step process:
 - Tap the Lifelight icon to open the app. Use the mobile phone stand to steady the phone.
 - Once the app is open, your front facing camera will automatically turn on. You should see yourself in the window at the top of the screen. If you cannot see yourself, press the 2 arrows in the bottom right-hand corner of the window to switch the camera.
 - Once you can see yourself, position your face in the blue box. You will need to hold still for the test to complete. Under the start button, you may get a warning that "light is too low". If so, move nearer a window or turn on a light. Once your face is in the blue box and there is enough light, the message will turn to "Measure can start".
- Section 5: Using FibrCheck - once each day:** A three-step process:
 - Tap the FibrCheck icon to open the app. Use the mobile phone stand to steady the phone if easier for you.
 - You will be prompted to enter a pin each time you access FibrCheck. The pin is the same each time and will be 1234.
 - When you are ready to test, click on the "Start" button on the main screen of the app. Please ignore the other options on screen.
- 4. To perform a measurement:**
 - Sit down in a comfortable position.
 - Rest your arms on a solid surface.
 - Place the finger on the camera of the smartphone without applying too much pressure (do not cover the face with your finger).
 - Keep still and relax.
- 5. What if the measurement is of insufficient quality, as shown in images 2 and 3 below?**
 - Take a seated position.
 - Warm up your hands.
 - Change the position of your finger.
 - Change the pressure of your finger on the camera.
 - Try not to move, talk or laugh.

Insights and next steps.....

- 447 participants completed trial
- Low cost and scalable technology
- Challenged many assumptions and inequalities
- Very early insight data (received last week)
- Reporting to NHS England
- Rural and Coastal 'Campus for Future Living' Mablethorpe
- Remote Care Strategy
- Academic Health Science Networks

Want to hear more?

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