THE HILL

REMOTE MONITORING SHOWCASE BROCHURE

21 Sep 2022

www.thehilloxford.org

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Welcome

“TheHill provides a step-change in our ability to engage with innovators and is an invaluable source of innovation for the Trust, as well as developing the innovative capacity of the organisation. The community built by TheHill empowers staff, improves care and ultimately helps to digitise the NHS for the benefit of patients.”

David Walliker
Chief Digital and Partnerships Officer, Oxford University Hospitals NHS Foundation Trust

Welcome

Megan Morys-Carter, Director of TheHill

Showcasing innovation is an important part of TheHill's work connecting innovators with frontline healthcare workers who could benefit from technology. We have a fantastic line-up of remote monitoring technologies on display in this showcase, and at least as many again who didn't make the cut this time but still bring worthwhile opportunities to the table.

I would encourage clinicians and operational staff attending the showcase to immerse yourselves in the possibilities these technologies bring, to engage with the exhibitors and understand what is possible, and consider the challenges that you have in your daily work. We hope you will return to your departments invigorated by the possibilities, and ready to engage with us to scope out your requirements and find the right fit for your needs.

For those exhibiting, this is a fantastic opportunity to get feedback and engagement from a wide range of NHS stakeholders. We hope you will leave with ideas, opportunities, a greater understanding of clinical realities and a renewed enthusiasm to shape and promote your products. If you're a company who would like to join us next time for this or our other innovation support services, reach out to a member of the team or fill in our triage form at www.thehilloxford.org

I'd like to take this opportunity to thank all of the exhibitors who have made the effort to join us today, all of the staff who have taken time out of their day to engage, and all of TheHill team who have worked together to make this event a success. A particular shout out to Katrina Chou, our events coordinator, who has done a fantastic job of organising us all.

If you didn't make the showcase, or you'd like to follow up outside the event, please don't hesitate to contact us on connect@thehilloxford.org.

Spotlight on TheHills Needs-Led Innovation Project

Sophie Shang,
Remote Monitoring Project Officer

Ishbel Henderson,
Remote Monitoring Project Officer

To understand where remote monitoring technology can assist the delivery of care in hospitals and at home, TheHill has been conducting a needs-led innovation project for the past 6 months. Ishbel and Sophie are both DPhil students at the University of Oxford and lead TheHills Remote Monitoring Research Project.

As part of this project TheHill has conducted semi-structured interviews with a range of people from different levels, in different job roles and in different departments within Oxford University Hospitals. Through thematic analysis our initial findings has revealed what technology has worked so far, what hasn't been so successful. Furthermore, we identified some of the benefits, drawbacks, and future opportunities for remote mentoring.

Below are two quotes from respondents of the research project, sharing their clinical experiences working with remote monitoring solutions within OUH.

Head of production

"Patience responses are overwhelmingly positive. Very heart-warming to read. Early detection of deterioration and extra assurance to the patients are very good. virtual wards allow you to cover more people as well. A speedy response and reducing hospital visits and getting patients to the right service at the right time as well."

Palliative care nurse specialist

"Having people with time and energy and engineering skills are essential for remote monitoring for the best clinical interests. Specifically, get a digital buy ins and adapt the system into something the clinical staff need"

About TheHill

TheHill, Oxford is a health and care digital transformation catalyst, and is part of Oxford University Hospitals NHS Foundation Trust (OUH). TheHill was founded in 2016 to build a community to support digital innovation in Oxford. Its aim was to catalyse change by facilitating connections between staff, patients, researchers, entrepreneurs and businesses. It received backing from the AHSN and Oxford Health Partners. TheHill works with NHS Trusts, universities, digital developers, innovators and investors to promote and encourage commercial and impactful technological solutions to problems in health and care.

TheHill explores health innovation needs, identify solutions presented by entrepreneurs and bring the appropriate ones to market through our innovation pipeline.

The innovations TheHill supports may be ideas internal to the NHS or the technology of external companies, but all of them seek to make the NHS more efficient and effective, empower staff and benefit patients.

Our Vision

Empowering digital innovation in health and care

Our Goals

To empower NHS colleagues with[through] innovative digital technology, leading to more efficient and effective care for patients.

To make OUH a leading example of digital innovation within the NHS. We aim to increase digital innovation adoption in the NHS to improve efficiency and effectiveness, thus empowering staff and benefitting patients.

Our Objectives

Identify needs within OUH and match them with digital innovations.

Build capacity, understanding and skills to enable NHS staff to engage and champion digital innovation.

Support SMEs and individuals to understand the NHS better and bring their innovations to market. Connect people, systems and resources to encourage a thriving ecosystem that promotes partnership, investment and digital solutions for the benefit of all.

Facilitate adoption of innovation into the Trust by designing and implementing an innovation pipeline process.

Partnering with TheHill

We are currently receiving expression of interest from prospective partners who wish to explore the exclusive opportunity to invest in The Hill's proven success. At present we are plugged into over 400 NHS Staff members and have access to over 200 companies working on different forms of technologies from AI and machine learning to monitoring and tracking software, new technologies and innovation for healthcare adoption.

How to Partner With Us

1. Partner with our NHS Market Access Accelerator programme

This programme is all about supporting the development of technologies and ideas relevant to the NHS. The Hill is embedded into the NHS, providing an extensive network and insights into the inner workings of the NHS as well as investment and grant-writing support and business mentoring.

#TheHillMAA gives our partners the opportunity of first insight into our participating companies from the beginning of their journey. In addition to our networking and Meet the Clinician events, we host further dedicated support events, including a deep dive into APIs for integration into electronic patient records, and a matchmaking events geared specifically to developing research collaborations.

2. Partner with us to champion the promotion of digital health systems

Partner with TheHill to have a front row seat at all our networking events and leverage on the opportunity to associate your brand with the NHS through the Hills speaking opportunities at our bi-monthly mixer events, strategic market placement in agreed upon outputs produced by the Hill and leverage on local, national and international media visibility.

Partnering with TheHill

3. Partner with our Digital Innovation Ambassadors programme

Partner with TheHill in bringing together a selected cohort of OUH colleagues from all disciplines to champion digital skills and adoption in every department and setting as well as participating in engagement and the pipeline to adoption, evaluating new companies and technologies from The Hill networks.

4. Partner with us to deliver Transformative Digital Skills programme for NHS

Assist us in building capacity within the NHS to understand digital technology and adopt new innovations. We are seeking support for our digital skills programmes and our work developing a culture of innovation within the NHS. We can also engage with a wide network of students and academics for collaborative projects and skills programmes, in addition to NHS staff.

5. Partner with us to develop a digital eco-System

Help us develop connectivity across the ecosystem so that the NHS is better placed to respond to the COVID-19 pandemic and other pressures. We are able to connect key partners, institutions and individuals to create an effective and innovative environment. Join our grant consortia, partner with us and engage with our extensive networks.

We are looking at new opportunities for partnerships and contributors to our programmes and activities. Opportunities for involvement are broad, and can be tailored or follow our Bronze, Silver and Gold package structures.

Get in touch with hellen.chabunya@ouh.nhs.uk to discuss your growth and engagement objectives and to see how we might be able to support these and work together.

Hellen Chabunya, Partnerships and Communications Manager

Our Current Partners

OXFORD TRUST
oxford innovation
Oxford Computer Consultants
Eagle Labs
Taylor Vinters
NOVARTIS
Mathys&Squire

TheHill Remote Monitoring Showcase 2022 Companies

Ed Jaspers, Clinical Engagement Manager

Congratulations to the 15 companies that were selected from a longlist of 44 to showcase at this year's Remote Monitoring Showcase.

The process was extremely competitive and we were spoilt for choice, with some fantastically interesting submissions to review. We think our final selection demonstrates the range of activity taking place in this area and that the companies showcasing their solutions represent some of the most innovative, compelling and successful examples of remote monitoring technology available to clinical teams. We're only sorry that we weren't able to host all the companies who got in touch.

TheHill Remote Monitoring Showcase gives colleagues from OUH and beyond the opportunity to engage in person with companies that are championing the role of digital innovation in improving patient experience and outcomes while freeing up site-based resources. We hope that these meetings will lead to new relationships, new ideas and new possibilities for healthcare in the future.


THE HILL
REMOTE MONITORING SHOWCASE
21 September 2022

Company Spotlight on Dignio

Dignio Remote Monitoring Solution

Dignio provides software, hardware and support services to help deliver care where it is most appropriate and keep people out of hospital. We have a disease agnostic, flexible architecture to support multi-level, multi-disciplinary care. In addition, we have 20+ integrated Bluetooth enabled devices and support manual entry of data from legacy/preferred devices. Our solution leads to high levels of engagement from the patients and enables the clinical teams to priorities those who need their attention the most.

Dignio is deployed at scale- we support one of the largest virtual wards in the. UK - 500 beds (disease agnostic) with the Northern Care Alliance. We also run the first UK AF Virtual Ward, with integrated, NICE-recommended ECG device

'We have been working collaboratively with our clients since 2010, improving and developing our solution to ensure that it can be used by a wide range of patient users, and meets the needs of the clinical teams looking after them. This led us to build a disease agnostic, flexible tool, which can be tweaked locally without any delays or costs. We are the only supplier in the UK with this capability. We also invested heavily into regulatory standards, and have a medication compliance solution as part of our offering. We can also provide the full service solution with devices delivered, collected, and patient support provided'.....Dr Ewa Truchanowicz

Key Impact of Dignio as a Remote Monitoring Solution

- Reduction in hospital bed days
- Reduction in hospital admissions
- Reduction in ambulance call outs
- Improved deterioration detection
- New models of staffing to support remote care releasing clinical staff

Key Dignio Team Members

Our tech team is based in Norway, our home country, where we are a market leader in remote care. We work with all Norwegian University Hospitals in some form (our solution can be used light touch, or with vital signs, and for supporting research). Our team in Norway is disciplinary. and our CMO is a UK trained physician. Our UK Team included a female Managing Director, Customer Success Director, Quality and Regulatory Apprentice and clinical advisors. We work on this solution because we see the difference it makes in practice to the patients, and those caring for them.

Dr Ewa Truchanowicz

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Eupnoos Remote Monitoring Solution

Digital pulmonologist and lung function monitor on your smartphone.

Eupnoos is the only app that enables screening and pre-diagnostics of chronic respiratory disease with a smartphone and breath sound. By analysing acquired breath audio for changes in lung spirometry combined with adventitous sounds, Eupnoos cuts down time to diagnosis and improves health outcomes without the need for devices, consumables and in person appointments.

‘Eupnoos is a complete software only solution that converts the smartphone into a lung function measurement device. Sound is used as a surrogate for flow volume. The data is analyised by our proprietary AI to identify restriction or obstruction in the airways and tracked over time dependant on the patient’s baseline. The app also identified adventitous sounds from the audio signal even in asymptomatic patients, making the Eupnoos app and powerful screening tool.

Eupnoos has completed a occupational disease screening and observational study on 650 shipyard workers in Singapore. Data readout by November 2022.

Key impact of Eupmoos

- Highly scalable as it is completely app based for smartphones and does not require dedicated hardware
- Applicable to multiple conditions that involve tracking of lung function
- Enables lung function testing during tele-consultations in real time
- API enabled so can easily plug into existing telehealth and remote monitoring platforms to provide a test that is derivative of spirometry.
- Real time adaptive AI enables coaching of patients to ensure accurate technique, repeatability and reproducibility

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Company Spotlight on ICT Healthcare

ICT GROUP ICT HCTS

ICT Healthcare have developed software solutions for obstetrics and medical software development. The new solution PregnaOne is a remote CTG Monitoring system for Acute and Community/Home monitoring and connects wirelessly to a cloud-based platform enabling a digital Midwife or Foetal monitoring nurse to monitor a patients CTG remotely. It can also integrate with our CTG platform called MososNxt. PregnaOne is currently being used in Manchester and will be starting an evaluation in Kings/GSTT.

PregnaOne Remote Monitoring Solution

The ability to monitor remotely has many benefits. In the Acute setting, it enables the midwife team to monitor the patient anywhere in the hospital and all report in to one system. For the home/community setting, in areas where patients might live a long way away, patients struggling financially or high-risk patients requiring frequent trips to hospital for CTG's, this solution would enable the clinicians to monitor the patient and foetal heart rate from a distance, reducing anxiety and giving some early warnings to the clinical team.

All of the above would reduce the travel time for patients reducing emissions, enabling equal care to all patients, and reducing patients time they wait before contacting maternity for help reducing mortality.

PregnaOne innovation points of difference from other players on the market

'The connectivity of the device and that it has SpO2 and Blood Pressure monitor to see the difference between maternal and Foetal heart rate.

Key Impact of PregnaOne

- Reduction in Travel and emissions – Green Initiative
- Improve patient experience – Comfort, Reduce Anxiety and Stress
- Potential to reduce still births – More information on Foetal heart rate
- Free up bedspace – reduce costs and improved care
- Improved efficiency - Remote monitoring in acute and community and enabling the connecting of both and fully integrated in to Mosos CTG monitoring software

ICT Healthcare team members working on PregnaOne

ICT GROUP
ICT HCTS

Marco van Elst - International Product Manager

Marco started looking in to remote monitoring solutions 10 years ago to improve the patient journey and provide more care to patients who are in difficult situations. This developed in the form of a product called Sense4baby and progressed to PregnaOne. This provides more information, connectivity and instruction to the patient.

Nils Mundy - UK Sales Manager

Nils joined ICT Healthcare to drive forward PregnaOne and has since worked with many people who could have potentially benefitted from this solution had it been rolled out, for example patients managing Cancer or who previously miscarried and required frequent CTG's. Aside from reducing stress, anxiety and time/cost to get to hospital this solution would have given those people relief financially, time and reassurance.

Nils Mundy

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Company Spotlight on Isansys Lifecare Ltd

The Patient Status Engine is an end-to-end fully regulated medical device, which continuously monitors all clinical vital signs in real-time using wireless wearable devices.

Isansys Remote Monitoring Solution

- Is an all wireless end-to-end Class 11a CE/UKCA/FDA medical device platform that is scalable and affordable
- Remotely monitors patients in any environment (hospital, home, helicopter, ambulance, anywhere)
- Continuously monitors all vital signs (heart rate, ECG, heart rate variability, respiration rate, oxygen saturation, blood pressure, temperature)
- Enables rapid deployment of virtual wards for delivery of acute care outside the hospital
- Provides real-time Early Warning Scores for each patient demographic group
- Provides smart notification services to healthcare organisations for each individual
- Is designed with recyclable wireless wearable medical devices which is a first in remote monitoring diagnostics
- Creates accurate data sets for the development of AI predictive and diagnostic models
- Integrates with the Hospital Information System and Electronic Patient Records
- Has the ability to develop applications specific to the client organisations

Isansys Key Features

- Bluetooth, Wifi and GSM/mobile communications enable uninterrupted connection between the wireless wearables and the Patient Status Engine
- Secure access and login from anywhere on any mobile device is possible to view the Patient Status Engine dashboard and make clinical decisions
- Data is stored in the cloud and is accessible and available in real-time
- Live and remote operation of a patient's ECG is possible
- An open API (application programming interface) which enables applications to communicate with each other and increases the production of new ideas, further applications and insights and to meet client specific requests.
- Integration to SMS, Whatsapp and email for individual notification services

Company Spotlight on Isansys Lifecare Ltd

Isansys Impact on Remote Monitoring

Continuous remote monitoring of patients with the Isansys solution enables:

- Clinical decisions to be made in real-time on on who to step down and who to step up
- Improved patient flow through the hospital by reducing hospital bed use and blockages
- The setting up of virtual wards, observation areas and remote monitoring of patients in their homes and in the community
- The co-development of predictive AI models of disease states with the partner hospitals/trusts/ organisations
- Improving patient care and improving service delivery

Isansys Team Members

Keith Errey (CEO)

Keith is the CEO and co-founder of Isansys and is a strong advocate of digital and data driven methods in healthcare. He has physics degrees from Oxford University and the University of New South Wales and is a founding member of the Bessemer Society.

Rebecca Weir, Co-founder and Director of Business Development

Rebecca is the co-founder and Director of Business Development at Isansys. Before Isansys she was responsible for the setting up and managing clinical trials at Toumaz (now Sensium) and worked closely with a number of hospitals, project leaders, ethics committees and clinical and nursing staff.

Rebecca has an MSc in Molecular and Cellular Biology from the University of Glasgow and worked on the possible role of transcription factors in tumour cells while undertaking doctoral studies at Oxford University.

Mat Key (CTO)

Mat is the Chief Technical Officer at Isansys. He leads the Research and Development team in the UK office creating the next generation of the Patient Status Engine. Mat brings 20 years of development experience across a broad range of both electronics' hardware design and high/low level software.

We are currently looking to raise capital with our finding partners CapEQ at the moment

Robin Gogoi (VP of Customer and Business Development)

Robin Gogoi is the Vice President of Customer and Business Development at Isansys. With more than 15 years commercial experience in medical devices, Robin plays a key role in driving customer goals, product utilisation, business transformation and revenue expansion by ensuring the engagement,

Isansys Key Milestones

- Please find the link to some of our published clinical evidence here
- Isansys named one of the UKs Top 10 Medtech companies
- Three ground-breaking clinical studies show the future of post-operative care and rapid discharge
- Isansys is the “UK manufacturer first to achieve UKCA mark for wearable sensors and remote patient monitoring platforms”

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Company Spotlight on K2 Medical Systems Ltd

Maternity specific interactive remote monitoring solution

Complete digital maternity solutions aimed at improving safety and reducing costs/time

K2 Hampton allows pregnant people to input observations such as their blood pressure, blood glucose, urinalysis and more. The initial aim of K2 Hampton was to monitor blood pressure for hypertensive pregnant people in order to reduce unnecessary hospital visits, unnecessary early interventions and to save costs for pregnant people and hospitals. It has since expanded into monitoring blood glucose levels complete with a food diary for gestational diabetes.

This enables clinicians to remotely monitor in real time and action any out of range results. Hampton, being a registered medical device, is able to highlight to the user their out-of-range results (based on NICE guidelines by default but can be specific to the individual) and suggest recommended actions that should be taken.

K2 Hampton is an established product with a good presence in the maternity market.

Key Impact of K2 Hampton as a Remote Monitoring Solution

K2 Hampton is aimed to be a single app for maternity specific monitoring with the ability to fully integrate into maternity information systems. It was developed from research in collaboration with Professor Asma Khalil and is backed by evidence and supported with an economic study showing a real cost saving to NHS trusts.
K2 Hampton is focused solely on maternity, it involve clinicians, customers and maternity voice partners (MVPs) in all development where possible to ensure we have products that benefit everyone.
‘Reduces need for unnecessary hospital visits, saving both pregnant people and hospitals money and time.
Net saving of £937 per person when compared to traditional monitoring.
Saves time in busy areas such as day assessment or clinic by only seeing those who need it.
Empowers pregnant people in their care through improved communication channels.
Helps to identify risks of pre-eclampsia.

K2 Hampton Team Members

K2 Hampton has always held an interest and commitment to develop technology that will help all involved in maternity. K2 Hampton was no different and with the help of Professor Asma Khalil, we were able to build technology that empower pregnant people and save on time and costs for hospitals. The team at K2 are fully committed to improving care through the use of innovative technology and have done for the past 20 years. K2 has a team full of talent from a variety of backgrounds and have combined it with the belief that our products really do make a difference.

> K2 are looking for feedback on the current functionality and raise interest in the product. We also want to seek new ideas for the future direction of maternity remote monitoring and are always open to collaborative working and research ventures. Contact:

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Company Spotlight on Lenus Health Ltd.

Lenus

Lenus Health channels patient-generated data and AI into existing care pathways to drive critical efficiencies in healthcare delivery for patients, clinicians and providers.

Lenus Health developed a structured data sets to support clinical insight and decision making. These structured data sets have been leveraged to co-develop, with NHS Greater Glasgow and Clyde, risk prediction models to generate individual risk scores of 72 hour exacerbation, 3 month re-admission and 12 -month mortality.

The remote service is for high-risk COPD patients, enabling sharing of data with healthcare professionals, that is combined with existing patient data and presented in clinical dashboards.

Lenus Remote Monitoring Solution

The Lenus Health COPD Support Service provides a patient application which enables daily, prompted recording of patient reported outcomes, personalised self-management and care plan, and asynchronous messaging to the clinical team, in real time. The clinical dashboard links data from the patient application, patient wearable devices and, where appropriate, home ventilation therapy to provide curated data visualisation along with clinical history to enhance patient management and inform care planning.

The solution has been developed to support admission avoidance in severe (Gold C&D) COPD sufferers. By monitoring and managing these patients using the COPD service, patients can access care in the community and prevent COPD related hospitalisation admissions, directly addressing

the need for more timely preventative treatments and interventions for high-risk COPD patients. It supports the shift from reactive to proactive COPD population health management.

Key Impact of Lenus

1. 12-month admission or death rates improved and median time to readmission or death improved from 2 months to 12 months in RECEIVER cohort

2. 54% reduction in admissions

3. 4.53 days reduced bed days per patient

4. Sustained patient engagement with 3.5 PRO sets completed per patient at 2 years

5. Projected annual saving of £3.38M in avoided OBD costs with 500 users onboarded

Lenus Health journey with this product

Lenus Health is currently in clinical use across NHS Scotland with additional 2 sites in NHS England anticipated in 2022.Lenus Health has been working in collaboration with NHS Greater Glasgow and Clyde (NHS GG&C) to co-design and develop the digital healthcare service to enhance the management of chronic COPD following initial Innovate UK funding in August 2018. The service is CE Marked and is DTAC compliant.

The Lenus Health COPD Support Service now delivers routine clinical care for management of COPD patients with over 700 active patients on the service in Glasgow. The service has completed a clinical study which is now in pre-print publication and has completed a NICE Medtech Innovation Briefing.

> Lenus Health is currently looking for Partnerships Collaborators to demonstrate evidence and adoption of the solution. Please contact:

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Company Spotlight on Luscii

Luscii is the leading digital healthcare platform for monitoring patients remotely. Luscii provides remote patient monitoring platform for long or short term conditions via Virtual Ward, community management, PIFU and selfcare models.

Luscii has been active in this space for over 10 years and are market leaders in the Netherlands in over 70% of hospitals. Luscii is actively operating in numerous UK locations and the company is actively working with these sites to showcase their deep evaluations, with some already in the process of submitting their successful results for peer review.

Luscii Remote Monitoring Solution

Patient's submit vital sign readings, symptom questionnaire responses and information to their care team via an app. A clinical dashboard displays trends, threshold alerts and patient communication via video and messages.

'Multiple condition approach that is scalable and flexible. Highly customisable allowing care teams to make changes to protocols, baselines, care plans educational material and much more through a no code approach. Pan ICS SOPs and pathway mapping blueprints available as part of the pathway transformation service.

Design best practise programs and gain 70% of the licensing fees when these are used by other customers in an innovative revenue sharing model.

Smart partnerships have seen the breath of service offered increase significantly eg. digital exclusion tackled by a managed ipad service via our partnership with Apple or flexible work force solutions available with pre trained Luscii nursing staff.

Company Spotlight on Luscii

Key Features of Luscii

- Measure patients vitals and symptoms whilst they are at home
- Automatic alerts provide a warning if the condition deteriorates
- Contact patients when needed via chat or video calling
- Deliver digital coaching, education and self-management tools
- Open: simple APIs based on international standards enable EHR integrations
- Modular and flexible platform adapts to local clinical pathways
- Full implementation support including care pathway optimisation
- Help desk available for patients and clinicians
- Full regulatory compliance

Benefits

- Save time: help more patients without needing more clinicians
- Save money: reduce unplanned and unnecessary admissions and appointments
- Help patients become more independent
- Improve the care experience for health care professionals and patients
- Increase patient satisfaction and patient wellbeing
- Standard care pathways available such as COPD, CHF and diabetes
- Create your own bespoke care pathways if required
- Choose your own measurement data, questionnaires and connected devices
- Create combination alerts and automated processing and responses
- Adjust alert thresholds per patient or per condition

Key Impact of Luscii as a Remote Monitoring Solution

Luscii

We have multiple deployments in multiple countries covering multiple condition pathways. The key importance for us at Luscii is to ensure we deliver solutions that truly work for the clinical and operational teams, allowing the right information to be displayed at the right time so decisions can be made quickly and safely. Practising digital evidence based medicine is paramount. Our results speak for themselves and should form a large part of a procurement decision in this space. Here are some examples:

- For Heart Failure Virtual Ward at Imperial Hospital (NWL ICS): a reduction in A&E attendance of 65% and a reductions in unplanned admissions of 81%. 27% lower A&E costs and 65% lower unplanned hospital costs.
- For Heart Failure at the Slingeland Hospital, The Netherlands: a reduction in admissions and readmissions of 65% and a reduction in average healthcare costs of 89%
- For COPD, also at the Slingeland Hospital, The Netherlands: a reduction in average healthcare costs of 54%
- For Heart Failure, Hypertension and Atrial Fibrillation at the Cardiologie Centra of The Netherlands: a reduction of A&E visits of 70%, a reduction in ambulance rides of 30% and a reduction of total hospitalisation days of 40%
- 58% fewer A&E visits for patients with COPD (NHS Sunderland).

Luscii Team

Luscii international team consists of around 60 people and 18 nationalities. With a mix mainly of developers and people with a medical background. Luscii follows an organisational form without hierarchy, known as Holacracy, and every employee enjoys a four-day working week. Everyone has freedom and responsibilities within their own role.

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Company Spotlight on Masimo

Masimo is a Global leader in innovative noninvasive monitoring technologies leading the development of a SafetyNet solution which continuously measures patients' vital signs, the results of care and the experience (PROMs & PREMs) of patients.
Director Jean-Christophe Pouplier is leading the Telehealth initiative in Masimo for Europe, Africa, Australia and South East Asia.
Masimo is convinced that people/patients can live a normal life at home and at work and be alerted to take specific preventive actions and treatments to reduce the risks of complications or disease.
We are engaged to help Hospitals to develop virtual wards in order to improve patient experience, outcomes, increase Professionals working conditions and extend Hospital capacity. Ultimately, we are engaged to reduce the cost of care for the community and increase access to care.
Opportunity to present our Masimo SafetyNet solution and initiate some evaluation of our solution in several hospitals in the UK to create virtual beds.

Remote Monitoring Solution

Masimo SafetyNet is a secure, scalable, cloud-based patient remote management platform that allows clinicians and hospitals to continuously monitor patient's vital signs and be alerted in case of patient deterioration.

Masimo SafetyNet continuously measures patients' vital signs, the results of care and the experience (PROMs & PREMs) of patients. It alerts clinicians if this data turns out to be outside the pre-defined parameters

Masimo SafetyNet has been designed to help Hospitals and Clinicians to create virtual wards. This solution can help clinicians remotely manage patients from other units in the hospital or at home to:

- extend hospital capacity, avoid hospital admittance, reduce length of stay, reduce re-admission
- increase staff efficacy, reduce workload, automate administrative tasks
- Improve patient satisfaction, mobility, adherence

Company Spotlight on Masimo

Masimo SafetyNet platform includes:

- an application with customizable digital care programs to measure patient outcomes (PROMs), patient experience (PREMS) and patient compliance to their treatment with multi-way audio and video based virtual appointments.
- Wearables continuous sensors and spot check sensors
- A secure cloud network
- And a clinician dashboard to alert Care providers

Masimo SafetyNet innovation points of difference from other players on the market

- Masimo is well established Global Company with 30 years operational experience in Hospital Grade Technology
- Measure accurately patient vital signs whatever motion or low perfusion of the patient and demonstrated by more than 200 studies
- Maximize Patient Freedom and Comfort with Hospital Grade Wearable sensors
- Stay connected to your patients by having continuous visibility to their status (vital signs, PROMs, PREMs)
- Ready to be deployed

Key Impact of Masimo SafetyNet

The potential to extend hospitals capacity in avoiding patient admission and re-admission, reducing the length of stay, avoiding unnecessary staff deployment, improving patient experience, mobility and adherence. Ultimately, Masimo SafetyNet can support the community to reduce the cost of care, increase the access to care and move from a curative to preventive and personalized model.

> Masimo SafetyNet is currently looking to partner with a hospital to create virtual beds

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Company Spotlight on BPR Medical Ltd

BPR Medical Ltd manufacturer of intelligent medical equipment. Creating safer use and better patient outcomes

The device has been available in Europe for some years. Since 2019 it has been used in Scandinavia, Germany, Italy, Spain and the UKIn the UK we are at a point in the journey of proving the effectiveness of the technology to manage this specific aspect of the patient care and improve/speed outcomes.

The O2matic, although manufactured in Denmark, will be represented in the UK by BPR Medical. The team at BPR include Ian Buckle with 30 years of experience working in the service of home oxygen provision and respiratory medical equipment as well as Clara Baldwin a qualified respiratory physiotherapist. In Denmark, there is Anja Rode a qualified and very experienced ICU nurse offering training and support to the UK.

The O2Matic intelligent device system is an automated oxygen flow control device delivering only the oxygen the patient needs.

O2Matic Remote Monitoring Solution

Automatic titration has improved oxygen treatment in hospitals, and the time has now come to also use the technology outside hospitals to treat patients in need of long-term oxygen treatment (LTOT), e.g., COPD patients.
The O2matic device controls the flow of oxygen to the patient according to their need. It records the flows and saturations and pulse thus enabling the clinical team to observe the patient's history and make judgements about their treatment based upon real time data.
Through accurately adjusting the flow rate, according to saturation requirements, the patient will stay within the desired target SPO2 range
From Canadian trials of a similar device, it is suggested that the use of the automatic oxygen titration may reduce a patient's stay in hospital by on average 25%.

Company Spotlight on BPR Medical Ltd

O2Matic Key Milestones

‘Compared with similar devices, the O2matic is a more competitively priced product, it has the ability to set a range for the patient saturations reducing nuisance alarms. The O2matic range of devices enables the patient to be treated in the ward or at home using the same technology with remote monitoring functionality. It has built in failsafes to ensure it can never overdose the patient. Today, COPD patients in oxygen treatment receive a fixed dose of oxygen, which is usually only adjusted once or twice per year. With O2matic HOT 100 (Home Oxygen Therapy), we introduce a new way to treat patients with oxygen at home.

O2matic HOT 100 has advanced software and AI that ensures an unprecedented and unique course of treatment for patients in their own homes, which is recognizable from the patient’s hospital course.

Key Impact of O2Matic

- O2Matic Connectivity connects citizens in home oxygen treatment with the health care providers by:
- Enables clinical teams to prioritise their efforts and time on patients requiring additional interventions
- Improvement to patient outcomes
- Reduction in likelihood of patient hospitalisation through individualised treatment and remote monitoring
- Enabling central monitoring of automatic titration at home therefore reducing staff intervention
- The ability to adjust the prescription for oxygen treatment centrally and transfer the configuration to O2matic HOT and to hospital systems.
- Deliver key historic and trend data with the ability to exchange data with other systems through a secure interface.
- Enabling other relevant equipment to be connected to the O2matic Connectivity infrastructure and collect data.

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https://o2matic.com/homecare/

Company Spotlight on TSC Connected Care

Founded in 1993, The Surgical Company, headquartered in The Netherlands, has grown both organically and through mergers and acquisitions to a Group of 4 companies employing 150 employees and generating Euro 135 million in annual sales.

TSC Connected Care's vision is that no patient will deteriorate unnoticed, during the acute phase of their treatment.

TSC Connected Care Remote Monitoring Solution

Sensium is a wireless system designed to monitor vital signs of patients outside of high acuity areas. By notifying clinicians of changes in patients' vital signs, Sensium efficiently brings the nurse to the deteriorating patient. The Sensium platform ensures clinicians have the data they need to act in any setting, including pre and post hospital admission.

Sensium provides reliable data to support clinical decisions and detect the earliest signs of patient deterioration

Key Aspects of Sensium Remote Monitoring Solution

- Clinical Evidence base

To date Sensium have 28 peer reviewed publications supporting the use of our technology. The outcomes we can point to from these clinical studies include the following;

6 hours quicker treatment in the presence of sepsis

30% reduction in length of stay

80% reduction in unplanned ICU transfers

£1,470 average cost reduction per patinet monitored with Sensium

- Effortless and scalable deployment

Our technical support team utilise years of experience supporting clinical change to rapidly deploy scalable, remote monitoring solutions with minimum effort to hospital clinical and IT staff.

- Clinical change management

Our in-house clinical team execute a four-phase deployment program, developed using change management expertise. This program reviews current clinical practice, provides support for developing new standard operating procedures (SOPs) and on-going analysis of the new system once deployed.

- Training and ongoing support

We have developed high quality, CPD accredited training programs, delivered by Nurses onsite or online. Detailed training videos and quick reference guides are available on our online training portal.

Key Impact of Sensium as a Remote Monitoring Solution

The Surgical Company
CONNECTED CARE

- Better clinical outcomes for your patients based on earlier deterioration detection and intervention
- Shorter lengths of hospital stay for any Sensium monitored patients
- Fewer unplanned Critical Care transfers
- Higher throughput in the clinical service areas that are utilising Sensium
- Overall more economically efficient care delivery
- TSC Connected Care would like to engage with clinicians with an interest in Remote Patinet Monitoring and those involved in Hospital at Home/virtual ward programs. Contact:

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https://www.tsc-group.com/connected-care/

Company Spotlight on Spirit Health

Multi-award winning CliniTouch Vie provides virtual wards and remote patient monitoring, enabling brilliant healthcare at home.

'Spirit Healthcare have over 150yrs of collective experience working on digital pathway service redesign within the NHS. We have clinical, operational, technology and health economics teams that can help at all stages of a virtual ward project. Our wrap around service and expertise are what sets us apart from other digital health suppliers. Spirit Health are currently supporting the largest virtual ward and remote patient monitoring roll out in England. You can rely on us to use our vast experience to deliver, brilliantly'..... Martin Bogdaniec

Spirit Health Remote Monitoring Solution

CliniTouch Vie is Spirit Health's award-winning digital health platform. It provides remote patient monitoring and hospital at home solutions, allowing health professionals to shift care from hospitals into homes. The technology reduces admissions, shortens hospital stays and keeps people healthier for longer in communities.

CliniTouch Vie has been featured in the NHSX Respiratory playbook and for ease of procurements is registered on a number of frameworks such as G Cloud, SBS and more. CliniTouch Vie provides a free Virtual Ward Toolkit shares best practice from Spirit Health and our NHS partners which can support NHS teams to design and run successful virtual wards.

Key Impact of CliniTouch Vie as a Remote Monitoring Solution

'Proven, published research evidencing reduction in length of hospital stay and re-admission rates

Positive impact on workforce capacity issues.

Increase capacity for flow across clinical pathways freeing up capacity in hospitals, to support the elective care backlogs.

Proven, published research evidencing health economic benefits with ROI of 484%.

Proven, published research which evidences how CliniTouch Vie supports patients to self-manage their condition.

CliniTouch Vie Team Members

CliniTouch Vie team is made up of clinical, operational, and IT experts working alongside in-house health economists - all with lived experience of deploying digital health tech at scale within the NHS.

Clinical Director, Dr Noel O'Kelly who heads up our clinical team. He was one of the first accredited GPwSI in respiratory, as well as a GP commissioner and an Associate Medical Director of a large community and mental health NHS trust. Noel's passion lies in designing innovative systems of care and clinically-led service transformation, working closely with NHS teams to improve patient outcomes.

Rebecca Perry supports the operational deployment of CliniTouch Vie solution ensuring all paperwork, governance and training needs are covered and the whole implementation process runs as smooth as possible.

Jim Swift heads the Health economist function of CliniTouch Vie. Jim has worked with multiple NHS trusts to measure outcomes from virtual ward projects. Jim can support projects to be published in peer reviewed health journals and has helped our NHS partners design digital projects in a way that outcomes can be evidenced to secure long term funding.

> Looking for NHS partners involved in virtual ward/remote patient monitoring projects and innovative clinical digital pathways. Happy to discuss any potential opportunities with other suppliers who can add value to our overall service proposition in this area. Contact:

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Company Spotlight on UNEEG medical

UNEEG medical Remote Monitoring Solution

The 24/7 EEG™ SubQ is a CE marked solution that allows for continuous EEG monitoring day and night for up to 15 months in a real-life setting. This offers healthcare professionals objective knowledge of a patient's seizure activity.

A subcutaneous implant and discreet external recorder, combined with data reduction software, provide automated seizure detection.

'UNEEG medical have the only CE marked subcutaneous solution for ultra long-term EEG in the market.

Ultra long-term, objective seizure tracking represents a new way forward for epilepsy care and complements the tools currently available.

The solution is CE marked and we have initiated study sites across the UK and Europe. An NIHR multicentre study will begin in October.

This solution is in the current cohort of the NHS Innovation Accelerator programme for 2022.

The 24/7 EEG™ SubQ Remote Monitoring Impact

- Manage patients remotely
- Data on demand
- Detect treatment effect with objective seizure counting
- Identify seizure cycles
- Empower patients

UNEEG Medical Team

Chris is the Director of Sales & Market Development for the UK & Ireland at UNEEG medical. He is passionate about bringing innovative technology to the NHS for patient, clinician and system benefit. He has 13 years' experience in the MedTech sector having previously worked for various companies across different specialist fields.

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Company Spotlight on Vinehealth

Vinehealth's platform is a Cancer Companion App that supports people with cancer to have the best possible quality of life. In addition to our working with charities such as CRUK and Bowel Cancer UK, Vinehealth is working with NHS Trusts, and cancer centres to distribute Vinhealth app to cancer patients.

Vinehealth's Remote Monitoring Solution

Vinehealth's platform improves the quality of life and outcomes of cancer patients. Co-developed with hundreds of patients and NHS oncologists, the platform combines behavioural science and AI to empower patients to self-manage effectively, through personalised Trust-specific information, remote support and communication with their care team.

Key Impact of Vinehealth's

Patient self-management and remote care are currently done poorly - this adversely affects outcomes. Evidence shows that when patients simply track their symptoms and medications effectively, survival can increase by up to 20%.

To illustrate this - in a recent study with the Royal Marsden using the Vinehealth app (https://www.vinehealth.ai/royalmarsden-case-study) patients demonstrated 98% patient engagement, 100% completion of PROMs through the app, 52% increase in medication adherence compared to literature, 87% of patients reported improved quality of life while using the app

Personalised patient support through technology leads to:

- Better patient experience
- Better patient self-management (Sx, meds, appts, information)
- Reduced burden on clinicians
- Reduced overall healthcare utilisation and ED attendances

Consistent, validated PRO collection in the community, informing:

- Validated toxicity scoring
- Better clinical decision-making
- More efficient service delivery, inc. remote tracking and triage
- Enabling PIFU and PSFU

Company Spotlight on Vinehealth

Vinhealth Key Milestones

-Rated 93% by ORCHA - highest rated cancer app globally
-CE Marked Class 1 Medical Device
-Regulatory approvals for rapid scale are complete including: NHS DSPT Compliant, GDPR & HIPAA, FHIR/HL7 compatible for integration with EHRs

Vinehealth team members working on PregnaOne?

Rayna Patel - CEO and Co-Founder

Is a medical doctor & neuroscientist (Cambridge, Harvard, MIT, Columbia). She graduated top of her year from Medicine at Cambridge, and later returned there to complete a GSK-funded MPhil in Translational Medicine (i.e. translating drugs from clinical trials to patients), in which she received a distinction. She has extensive experience in academic and clinical trial research. Rayna has held strategic & commercial roles in government policy, tech startups & the Cabinet Office's Nudge Unit, leading the way in using behavioural science to rewire patient behaviours through commercial products, before co-founding Vine Health.

Georgina Kirby - CTO and Co-Founder

Is a data scientist with 8 years' experience developing AI-driven health technology. She holds a Master's (Imperial College) & led GSK's first data-driven clinical trial to predict patient outcomes whilst at McLaren Applied Technologies. She was then the Head of Data Science and part of the Executive Leadership Team at Digital Surgery (acquired by Medtronic) where she built and grew technical and product teams and was instrumental in their growth to Series B.

Vinehealth are now looking for additional NHS partners to roll-out and conduct real-world evaluations of the technology. Please contact:

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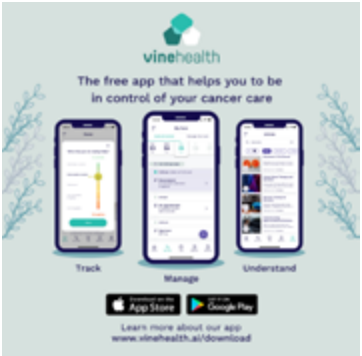

Company Spotlight on Walk With Path

Smart insoles: Foot health and gait monitoring + balance improving therapeutic haptic feedback

'Our competition today in diabetic foot ulcer prevention is the standard of care - routine periodic appointments with a podiatrist. Whereas we provide continuous monitoring and data to inform the timing and content of the appointments. Our patented haptic feedback feature sets us apart from emerging other digital solutions by creating a comprehensive tool for managing both effects of diabetic peripheral neuropathy: ulcers and falls.

With the mission to create inclusive innovations that make a positive impact, Walk With Path creates products to empower people to take charge and move forward. Bringing Path Finder Laser Shoes for people with Parkinson's and has since then grown significantly and now developing Path Feel, a product aimed at assisting the diabetes, stroke and multiple sclerosis population.Enhancing mobility of people with chronic conditions.

Walk With Path Remote Monitoring Solution

1. Prevents diabetic foot ulcers in people with peripheral neuropathy by alerting them to pressure and temperature readings indicating a risk.
2. Improves balance and reduces falls by providing step-synchronised haptic feedback to the feet.
3. Monitors in detail gait characteristics: useful for patient monitoring, therapeutic monitoring, falls prevention and diagnostics.

Key Impact of Walk With Path

- A reduction in diabetic foot ulcers (71% reduction observed for similar devices) and the amputations that follow, with an immense impact on users' QOL and the NHS budget (presently nearly 1% is spent on DFU care).

- Digitising diabetes foot care through continuous monitoring and generating data to inform the timing and content of the appointments (personalised care).

- Reducing falls of people with peripheral neuropathy (20x more likely to fall) by providing vibrational feedback and analysing gait to establish a fall risk index.

- Remote, continuous gait monitoring to assess patient condition or therapy effectiveness. Compared to lab-based gait studies, we can deliver more robust data (captured in real-life environment and without a lab bias), more data (continuous monitoring whenever the insoles are used), more cost-effectively (no lab time and technician time involved) and without a lab visit (lower carbon footprint, no risk of catching an infectious disease).

Company Spotlight on Walk With Path

Lise Pape - the founder, on a personal mission to improve the mobility of people with chronic conditions.

Florian Puech - co-founder and lead engineer dedicated to building life-improving products.

Luke Staniczek - co-founder and business development lead, committed to growing Walk With Path

> Walk With Path is currently looking for clinicians interested in piloting our product and developing new use cases. At present Walk With Path is raising seed-stage equity, please contact:

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Company Spotlight on Wellola

The Wellola (www.wellola.com) team believes that only the sickest of the sick should be hospitalised and that the future of healthcare is preventative, community-based and supported by digital tools. Wellola has 8 communication modules that facilitate the Virtual Ward or Hospital at Home care models and fully integrated and interoperable with the key incumbent technologies in a given healthcare ecosystem.

Wellola is easy to use, modularised, Integrated with EPR via FHIR APIs, proven across multiple healthcare settings, scalable, with no hidden transactional costs. It is due to go-live imminently at Birmingham Community Healthcare NHS and we are also contracted with Leeds Teaching Hospitals NHS.

Wellola Remote Monitoring Solution

The 8 modules support our clients as their communication needs grow, complimenting existing systems to offer everything from appointment management and secure messaging to remote care delivery via our symptom tracking, video and remote device connectivity. Built by clinicians for clinicians, where Wellola differs from other patient portal providers is that the communications platform is rich in functionality, highly modularized & interoperable. Wellola is a platform rather than a point solution.

Wellola platform incorporates eight core modules as follows:

- Secure Patient Portal- accessible via desktop or app
- View Patient Record: Integrated with EPR via FHIR APIs
- Secure Messaging (1:1, Broadcast, Automated, Manual)
- Appointment management
- Customiseable Educational Resource Library
- Online Forms & Assessments
- Symptom Tracker
- Device/ Wearables Connectivity
- Video Consultations

Company Spotlight on Wellola

The team at Wellola believe that the future of healthcare is preventative, social and digital and we are committed to make the relationship between health institutions and patients fluent, trusted and safe. By creating an intuitive, trustworthy and safe technology we are wanting to positively impact on patients lives and on health businesses.

> Wellola is currently looking to work in partnership and to enhance the product in areas such as voice activation and where patients are less physically able to use the platform manually. Contact:

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