NHS INNOVATION2020ACCELERATOR2021



The AHSN Network England

ns

"The NIA has prepared our innovation, our company and myself to scale nationally in to the NHS, and direct support from the NIA Team has introduced us to previously unattainable organisations."

Dave Burrows, 2017 NIA Fellow



Innovation is absolutely critical to healthcare; particularly in the way that we deliver services in the NHS, and our aim and ambition to improve the lives of citizens in England. The award-winning NHS Innovation Accelerator (NIA) is one of our key initiatives in driving forward that innovation, as highlighted in the NHS Long Term Plan, published in January 2019.

It is incredibly challenging to take a great idea for an innovation or service improvement through to a tangible product or sustainable model that can be delivered and deployed in order to benefit patients and NHS staff. The NIA focusses on supporting the individuals who have these innovative solutions - providing them with the infrastructure, connections and shared learning needed to enable implementation at scale and pace.

Each of the evidence-based innovations on the NIA and the individuals ('Fellows') who represent them have been selected through a rigorous, multi-stage assessment process - involving the expertise of patients, clinicians, commercial and improvement leads, AHSN Network and NHS England partners. Through their commitment to spreading the world's best tried and tested innovations across the NHS, Fellows are helping to transform the health and care of England's population. Equally, they are supporting the system to understand the barriers and enablers to innovation spread, by sharing their real-world insights and experiences.

Through the partnership between NHS England and the Academic Health Science Networks (AHSNs), the NIA is making an incredible impact on the NHS and the people it serves. As of February 2020, over 2,210 NHS sites are now using NIA innovations, with more than £134.8m external funding raised, 468 new jobs created, and 113 awards won.

Not only are we seeing the benefits for NHS patients and staff, the work of our Fellows is increasingly spreading across the globe, with 45 innovations now deployed internationally. This is a true testament to the essential work of the NIA and its Fellows, and the strength of its national partnership.

Professor Stephen Powis

Chair of the NHS Innovation Accelerator, National Medical Director, NHS England and NHS Improvement



Supporting faster take-up of high impact, evidence-based innovations for NHS patient and staff benefit

The NHS Innovation Accelerator (NIA) is an award-winning NHS England initiative. It supports delivery of the NHS Long Term Plan priorities by accelerating uptake of high impact innovations for patient, population and NHS staff benefit, and providing practical insights on spread to inform national strategy.

Launched in 2015, the NIA is chaired by Professor Stephen Powis, National Medical Director of NHS England and NHS Improvement, and delivered in partnership with the 15 Academic Health Science Networks (AHSNs), hosted at UCLPartners.

"This is a revolutionary programme to give innovators the skills and guidance to support fast and systematic spread of innovation across the NHS. It has been a fantastic experience for me and my innovation."

Maryanne Mariyaselvam, NIA Alumni

SELECTING FELLOWS AND INNOVATIONS

As part of an annual international call, the NIA invites applications from exceptional individuals representing evidence-based innovations that meet a real need in the NHS. To be appointed as an NIA Fellow, applicants need to demonstrate a passion for spreading their innovation to benefit more people across the country, and a willingness to openly share their learnings and experiences for others to benefit.

Applications undergo a robust, multi-stage assessment process involving a college of over 100 expert patient, clinical and commercial assessors. This panel is drawn from a wide range of organisations including NHS England and NHS Improvement, AHSNs, the National Institute for Health and Care Excellence (NICE), the Association of Medical Research Charities (AMRC) and The Health Foundation.

The NIA is open to applicants from a range of backgrounds, including clinical, industry and academia. Innovations can be of any type, including medical devices, apps, new models of care and artificial intelligence (AI).

WHY IS THE NHS INNOVATION ACCELERATOR IMPORTANT?



Solution identification

Go-to place for the NHS to find evidenced, endorsed solutions addressing critical challenges and priorities for NHS patients and staff



Supporting national spread

NIA innovations are already being used in the NHS or elsewhere, have a robust evidence base, and have been rigorously selected



Real-world knowledge sharing

Capturing insight, learning and expertise on how to spread new solutions across the NHS in England



Unlocking barriers nationally

Using real-world examples to highlight barriers to innovation spread and inform national policy change

THE SELECTION PROCESS



APPLICATION SCREENING AND ASSESSMENT

All applications are reviewed by at least 5 assessors across a range of perspectives. These are scored based on the individual, the innovation and the scaling strategy.



NICE REVIEW

Applications shortlisted by an expert panel for interview are informally reviewed by NICE.





Interview panels comprise a range of expertise, including clinical, commercial and patient. The panel recommends whether an applicant should be invited to join the NIA.

"The NIA is providing bespoke support to some of the most exciting health innovators in the UK; this is why we're so proud of the work the NIA has been doing."

Baroness Nicola Blackwood, Former Undersecretary of State, Health and Social Care



SELECTION

Recommendations are presented to a final decision-making group made up of the NIA Programme Board, chaired by Professor Stephen Powis.

DUE DI

DUE DILIGENCE

Successful applicants are offered a conditional place on the NIA subject to a due diligence process, which includes regulatory compliance and information governance.



BESPOKE SUPPORT FOR FELLOWS

Fellows are supported by a learning programme to help them take their innovations to a larger number of patients at greater pace. This learning element has been co-designed with patient networks, Fellows and AHSN partners around an agreed set of principles to ensure it:

- is agile and adaptive
- builds from existing national and international infrastructure (rather than reinventing the wheel)
- is collaborative
- enables Fellows to test hypotheses around diffusing innovations within the NHS





SHARING LEARNING AND INSIGHT ACROSS THE NHS

The NIA collects and shares real-time practical insights on spread to inform national strategy. Fellows are continuously developing a body of learning on the enablers and barriers to achieving innovation uptake. The NIA is committed to sharing these learnings with the system, which can be accessed as follows:

- NHSACCELERATOR.COM: Visit the NIA website for the latest content, including events and opportunities for innovators
- **INSIGHTS NEWSLETTER:** Sign up to the NIA's quarterly newsletter, featuring real-world case studies, blogs, articles and podcasts from NHS adopter sites, patients, Fellows and Mentors
- ANNUAL RESEARCH OUTPUTS: Download the 2018 and 2019 research reports, featuring Fellows' case studies, from the NIA website
- **PATIENT CASE STUDIES:** The 'My Story' series on the NIA website highlights the lifechanging impact and benefits of NIA innovations from those with lived experience
- EVENTS: Follow the NIA on Twitter to find out which events we'll be presenting at in 2020-21, @NHSAccelerator

"The NHS Innovation Accelerator focuses not just on the innovation, but also on the innovator. It opens doors, supports networking, and helps in overcoming challenges in adopting innovation."

Professor Asma Khalil, NIA Fellow

Early diagnosis and prevention

Dip.io	3
Population Genetic Testing	4
PrecisionPoint™ Transperineal Access System	5
Safe Steps	6
Skin Analytics	7
SkinVision	8
QbTest	9

Hospital-based care

MediShout	11
MyPreOp	12
Patient Experience Platform (PEP)	
RespiraSense	14
The WaterDrop	15

Integrated community-based care

ESCAPE-Pain	17
Health Navigator	18
Joint Pain Advice	19
ORCHA	20
RIX Wiki	21
WaitLess	22

Mental Health

ChatHealth	24
Management and Supervision Tool (MaST)	25
Mush	26
S12 Solutions	27

Patient-led care and education

САТСН	29
Droplet	30
ECHO	31
Fibricheck	32
HaMpton	33
Low Carb Program	34
My Diabetes My Way	35
Oviva	36

Workforce support and process improvement

CHC2DST	38
Lantum	39
Locum's Nest	
SHREWD Resilience	41
Virti	42
NHS Innovation Accelerator Alumni	43
With thanks to our Mentors	44
NHS Innovation Accelerator:	15
a partnership initiative	40

EARLY DIAGNOSIS AND PREVENTION

Dip.io

Population Genetic Testing

PrecisionPoint™ Transperineal Access System

Safe Steps

Skin Analytics

SkinVision

QbTest



Dip.io

Smartphone-based urinalysis device enabling home urine testing with no quality compromise

Dip.io, developed by Healthy.io, uses pioneering technology to offer the only CE-marked and FDA approved home urine test equivalent to lab-based devices. Built around existing semi-quantitative and qualitative urinalysis dipsticks, Dip.io complements established clinical efforts by empowering patients to test themselves at home and securely share results with a clinician.



"A new and innovative way for patients and clinicians alike, offering speedy tests for patients... with results available for clinicians in a quick and responsive way."

Tracey Meyer, Programme Director, Modality Partnership

THE CHALLENGE

Smartphone-powered urinalysis is a cost-effective solution to improve access to critical testing, enable early interventions and reduce workforce pressure:

Primary care: Urinary tract infections account for 3% of GP consultations in England.

Prevention: Low compliance to urine testing leaves millions at increased risk of CVD and CKD.

Patient safety: At-risk pregnancies require increased monitoring and testing in between scheduled visits.

Long-term conditions: Routine testing results in avoidable outpatient appointments and increased self-management.

THE SOLUTION

Dip.io was built around the established urinalysis dipstick, a tried and tested medical tool. The dipstick measures 10 parameters, indicating a range of infections, chronic illnesses and pregnancy-related complications. Users are guided through the process step-by-step, and results are automatically sent to the patient's electronic medical record for clinical follow-up.



IMPACT

- 99.5% usability success across 18-80 year olds
- Commercial success in UK, EU, Israel making smartphone powered urinalysis a clinical reality for pregnant women, women with UTI and people with diabetes, hypertension and other long-term conditions
- Achieved 72% adherence to testing in previously non-compliant patients with diabetes and patients with hypertension
- Fully integrated albumin screening proven cost-effective in an NHS setting
- Successfully shifting UTI management to community pharmacy

FELLOW



Population Genetic Testing

Genetic testing of entire populations for breast and ovarian cancer early detection and prevention

Population Genetic Testing is a model of care for testing entire at-risk populations for BRCA gene mutations, leading to identification of at-risk individuals for earlier diagnosis and prevention. The initial focus of the intervention is in the high-risk Ashkenazi Jewish population, where individuals are five-times more likely to carry the BRCA gene mutation.

"Broadening BRCA-testing across the entire population, beyond the current clinical-criteria or familyhistory based approach, heralds a new paradigm to prevent many more breast and ovarian cancers, saving many lives. As awareness and societal acceptability of this type of testing increases, it can provide huge new opportunities for cancer prevention and changes in the way we deliver cancer genetictesting in healthcare."

Athena Lamnisos, CEO, The Eve Appeal

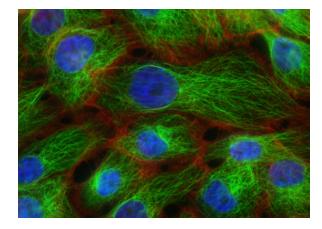
THE CHALLENGE

One in every 200 people in the UK will carry a BRCA mutation, with that increasing to one in 40 among the Ashkenazi Jewish community. These mutations significantly increase a woman's risk of both ovarian (17-44%) and breast (69-72%) cancers. However, gene testing is currently only available based on clinical criteria or family history, potentially missing over half of at-risk carriers.

THE SOLUTION

Offering BRCA gene testing to everyone, irrespective of family history, enables double the number of people to be identified as at risk of breast and ovarian cancer. Those identified as BRCA carriers can then opt for screening and/or preventative interventions, which can save more lives.

The reduction in treatment costs for breast and ovarian cancer can lead to cost savings of £3.7m for the NHS.



IMPACT

An RCT evaluating the concept of population-based BRCA-mutation testing by comparing it to the traditional family history strategy in 1,034 Ashkenazi Jewish women and men:

- Identified over 50% additional carriers
- Found overall 71% acceptability and 88% uptake of BRCA testing with high satisfaction rates of ~95%
- Showed a reduction in anxiety among patients



FELLOW

Ranjit Manchanda r.manchanda@qmul.ac.uk

PrecisionPoint[™] Transperineal Access System

A urology device to enable transperineal prostate biopsies under local anaesthetic

The PrecisionPoint[™] Transperineal Access System enables transperineal (TP) biopsies to be carried out in the outpatient setting by both doctors and Urology Nurse Specialists, avoiding the need for general anaesthetic and reducing waiting times. Use of the device delivers safer and more effective prostate biopsies in a timely fashion to optimise cancer diagnostic resources.



"Rick has provided outstanding clinical leadership to transform the South East London diagnostic prostate pathway. His vision, expertise and energy has supported the roll out of transperineal biopsies under local anaesthetic at all 3 South East London acute trusts."

Dr Kate Haire, Clinical Director, South East London Cancer Alliance

THE CHALLENGE

Patients with suspected prostate cancer need prostate biopsies to evaluate their cancer risk.

The standard of care for prostate biopsy practice is outpatient transrectal biopsy (needle inserted via the rectum) under local anaesthetic. This method risks missed diagnosis, infection and sepsis.

Alternatively, transperineal biopsies (needle inserted through the perineal skin) provide more effective sampling and can virtually eliminate biopsy-related sepsis. However, they are impractical as a primary outpatient procedure because they require complex equipment and a general anaesthetic.

THE SOLUTION

The PrecisionPoint[™] Transperineal Access System features a novel needle guide that allows for 2 simple punctures, which can be performed by trained nurses and radiographers in an outpatient setting. By enabling safer, more effective TP biopsies to be carried out under local anaesthetic, it transforms the prostate cancer pathway and improves the patient experience.

Across the UK, transrectal biopsies are being abandoned in favour of TP biopsies and the associated savings through reduced use of general anaesthesia.

IMPACT

- The South East London Cancer Network stopped all transrectal biopsies in March 2019
- Local Authority (LA) TP Biopsy Training courses are being provided twice per month at Guy's Hospital for both doctors, nurses and Allied Health Professionals
- The number of UK centres using the PrecisionPoint System nearly doubled in 2019 – from 40 in March to 76 in December
- TP biopsy procedures using the PrecisionPoint device continue to increase, with 1,835 procedures occurring between March and June 2019 to 3,395 between October and December 2019
- Most of the 15 AHSNs have at least one centre providing LA TP biopsies
- In the UK, 49 nurse specialists have attended training courses and 15 nurses are carrying out the procedure independently of doctor supervision

FELLOW



Reducing the number of preventable falls in the ageing population through digital, evidence-based interventions

Safe Steps is a digital falls risk assessment tool, providing a standardised approach for falls management across care settings. In alignment with NICE guidance, carers measure 12 risk factors for early identification of high-risk citizens and the tool creates personalised action plans based on 50+ evidencebased interventions. Commissioner dashboards allow real-time evaluation and usage tracking, providing data and insights for decision-making and planning.

"Safe Steps is a new, innovative way of alleviating staff workload and improving patient care. Falls cost the NHS billions at the moment - with a hip fracture costing on average between £16,000 and £24,000 in one instance - and so with Safe Steps reducing the amount of falls it has the potential of significant savings for the NHS."

Dr Saif Ahmed, General Practitioner and Clinical lead for Primary Care, Clinical Director Tameside and Glossop ICFT and SRO for LHCRE Frailty at Salford Royal Foundation Trust

THE CHALLENGE

For the 11.6 million older people living in the UK falls represent a major problem, with 6 people falling every minute. Forty per cent of people who suffer from a fall are left with a moderate or extensive injury. However, the impact of falls often goes beyond the physical, with over one-fifth of people losing their confidence and being more at risk of falling again. Falls cost the NHS £2.3bn per year.

THE SOLUTION

Safe Steps can reduce the risk of preventable falls by up to 25%. Co-created with care professionals, Safe Steps provides a consistent way for care organisations to implement a falls prevention strategy and adhere to Care Quality Commission (CQC) regulatory requirements. By reducing the number of falls in care homes, Safe Steps decreases demand on the NHS and reduces expenditures. NHS Health Economics evaluation data suggests a 28:1 ROI between the cost of software versus cost savings through reduced, non-elective spend via reduced A&E conveyances and reduced bed-days.



IMPACT

- Safe Steps is used by 106 health & care organisations; 400+ staff accounts have screened 2,840 residents/patients a total of 9,784 times since February 2018
- CCG outcomes data shows a 25-30% reduction in falls and an approximate 20% reduction in falls-related ambulance call-outs
- This represents a cost saving of £1.8m for the NHS



FELLOW

Lee Omar lee@safesteps.tech | safesteps.tech | @SafeStepsTech



An artificial intelligence (AI) solution that brings specialistquality skin cancer assessments to Primary Care, improving outcomes and health economics

Skin Analytics provides a decision support tool that helps GPs make the right diagnosis on skin cancer. It uses AI algorithms to assess dermoscopic images of skin lesions, enabling dermatologistquality assessments in Primary Care. The algorithm identifies suspected melanoma, common types of nonmelanoma skin cancer and benign (noncancerous) lesions to allow for appropriate referral pathways.

"With an increasing number of skinrelated consultations and referrals in the NHS, this technology provides a potential tool for clinicians to better manage more dermatology cases in the community, enable appropriate referrals and reduce variation in diagnosis and management of skin-related cases."

Dr. Harpreet Sood, GP and Global Health and Health Technology Advisor

THE CHALLENGE

Existing skin cancer pathways are under pressure to cope with rising rates of skin cancer. GPs don't receive sufficient training to recognise skin cancer, making them more inclined to refer to a dermatologist when in doubt. This leads to around 535,000 referrals from Primary to Secondary Care per year, 75% of which are for benign conditions. Problematically, the NHS has a shortage of dermatologists, with one per 124,000 citizens, compared to a best practice ratio of one per 62,000.

THE SOLUTION

Skin Analytics helps Primary Care clinicians make the right diagnosis on skin cancer within current appointment times and without the need for expensive equipment. It can reduce costs to the health system by acting as a filter to specialist care, as well as reducing variability in diagnosis and missed skin cancer cases.



IMPACT

- Based on the 2015 NICE Melanoma Evidence review, GPs operate with a sensitivity and specificity of 60% and 72% respectively when assessing melanoma. Using dermoscopy, where trained, this increases to 75% and 78%. Dermatologists operate at 88% and 90%. Skin Analytics' AI has been shown to operate at a level comparable with specialist clinicians
- Skin Analytics has shown the ability to reduce referrals to secondary care by around 50% based on a live teledermatology model, with the Al tool further reducing referrals
- Even a 30% reduction in national skin cancer referrals would lead to a saving of £20m per annum based on a first dermatology appointment cost of £125



Neil Dalv





An app empowering patients to proactively check their skin for signs of cancer and seek the right care in time

SkinVision's CE-marked app aims to drive early detection of skin cancer to make an impact on the skin cancer care pathway. The patient can take photos of their skin spots and will receive a risk indication from the clinically-validated technology within 30 seconds. The app provides recommendations on the next steps to take, including whether to visit a healthcare professional.



"I am extremely lucky to have caught this early, and I genuinely believe that SkinVision saved my life, or at least made the quality of my life greater had I not had this checked out soon, the outcome would have been a lot different."

Jason Sheridan, SkinVision User, London, United Kingdom

THE CHALLENGE

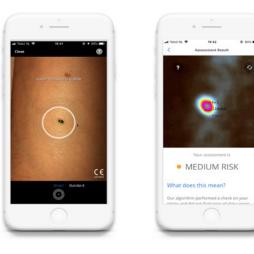
Incidence of skin cancer is increasing rapidly. In 2015 it was estimated that 159,000 people were diagnosed with some form of the disease, with 3,604 related deaths (Cancer Research UK).

When diagnosed early skin cancer is easier and less expensive to treat, and its prognosis is more favorable. However, most patients don't know what to look for, resulting in unnecessary consultations and further pressure on a system under strain from a shortage of dermatologists. This leads to both over and under treatment, with unnecessary costs being tied up in the skin cancer pathway.

THE SOLUTION

With 1.2 million users globally (190,000 in the UK), SkinVision is used to perform 1,500 skin checks every day. The app's algorithm processes user photos through deep neural networks and classifies them based on similar frameworks identified from other skin cancer photos in the database. Users can understand the level of risk for a skin spot instantly.

The latest peer reviewed study on the SkinVision algorithm determined a 95.1% sensitivity recognising skin cancer (melanoma, BCC, SCC and pre-malignant stages) with a specificity of 78.3%.



IMPACT

- Over 190,000 UK citizens use SkinVision
- Estimated to have already saved the NHS £2.5m in 2018 by identifying 240 skin cancers including 63 melanomas
- On a mission to save 250,000 lives globally in the next decade
- 1,500 skin checks performed per day
- Assisted in the finding of almost 2,000 cases of skin cancer in the UK to date



FELLOW

Loes van Egmond loes.vanegmond@skinvision.com | skinvision.com | @SknVsn

QbTest

A test using objective measures to speed up ADHD diagnosis and treatment evaluation

QbTest is a CE-marked, FDA approved medical device that simultaneously measures attention, impulsivity and motor activity, a core requirement of the diagnostic criteria for ADHD. The individual patient's performance is compared to an age and sex-matched control group in a clear visual report which aids diagnosis and treatment evaluation.



"For me, the QbTest was a really big eye opener because now there wasn't just someone looking at me and noticing my struggles, there was a scientific foundation to it. I finally felt like someone was listening to me."

Service user

THE CHALLENGE

Undiagnosed and/or untreated ADHD can have significant negative effects on the person's academic performance and family interactions, and dramatically increases the likelihood of anxiety disorders, eating disorders, psychosis, and depression. Early diagnosis and timely interventions reduce such risks, yet in the UK the average delay from first clinic visit to diagnosis is 18 months, the worst in Europe.

THE SOLUTION

The objective data from QbTest helps clinicians to rule out or diagnose ADHD more efficiently. Most patients receive a decision at their first appointment rather than making 2 or 3 visits over a prolonged period as per the current approach to diagnosis. ADHD clinics benefit from a 20% increase in capacity and greater confidence in decision making.



IMPACT

- Time from assessment to diagnosis reduced by 153 days
- Released 20% clinical workforce time
- 85% of patients found the QbTest results helpful
- 94% of clinicians reported greater understanding of patients' symptoms
- Return on Investment per clinic of £84,000 per annum

*Evaluation by EMAHSN from 3 NHS Trusts over 12 months



HOSPITAL-BASED CARE

MediShout

MyPreOp

Patient Experience Platform (PEP)

RespiraSense

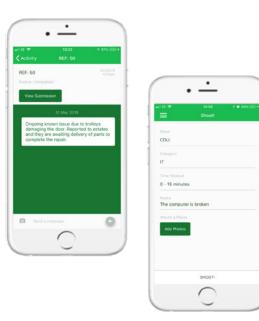
The WaterDrop



-MEDISHOUT

Digital platform and app improving operational efficiencies in hospitals

MediShout uses digital technology and artificial intelligence (AI) to provide a 'logistical brain' to hospitals. It is the world's first platform to integrate all logistical departments, giving clinicians an app to instantly report issues and using AI to predict future problems. This improves efficiencies and prevents delays, enabling better care and cost savings.



THE CHALLENGE

Logistical problems in hospitals (eg broken IT, faulty equipment, facilities issues) delay staff, prevent best patient care and waste money. The impact is huge – the NHS has experienced a 32% increase in cancelled operations due to factors like faulty equipment.

THE SOLUTION

MediShout digitally connects front line staff to those who can create change and drive improvement. The platform collects data on the issues most impacting care in an organisation so those can be fixed first, and Al algorithms predict issues in advance so planned maintenance can prevent them occurring.

Medishout can make an impact across a wide customer user base: doctors, nurses, pharmacists, administrators, physiotherapists and more. "Since we have started using MediShout to log our Estates, Equipment and ICT issues we have had a much more robust oversight of the issues affecting our service delivery and are able to easily identify outstanding tasks and chase with the relevant service teams".

Ian Gilmour Paediatric ED Matron

IMPACT

By using MediShout,

- NHS Trusts can save £1 million per year in efficiency savings plus cash-releasing savings too (Health economic impact report by Health Enterprise East)
- Clinicians can save up to 15 minutes daily
- Time spent reporting issues reduces from 10 minutes to 35 seconds per issue





^{My}PreOp

Patient-driven online preoperative assessment

Ultramed has developed MyPreOp®, a cloud-hosted programme, enabling patients to enter, own and share their preoperative assessment information. A report is electronically provided to the hospital to integrate into the Electronic Patient Record. Complex algorithms suggest which preoperative tests and actions should be considered. MyPreOp® empowers patients and saves nursing time.

"I recently used MyPreOp in preparation for upcoming surgery. It was very simple to use and I went through my medical history methodically. It was wonderful to be able to explain all of my concerns without worrying that I would not have time to speak to the doctor or, forget what I wanted to mention. Fabulous way to prepare."

Manjit, Patient

THE CHALLENGE

Before an operation a person's fitness needs to be assessed by a registered nurse. A lot of time is spent collecting information from the patient. Many hospitals have paper-based systems which cannot automatically process the information or give guidance to the nurses about what preoperative tests and actions might be needed.

THE SOLUTION

MyPreOp® provides a patient-owned, cloud-hosted solution to these problems. Through the programme, the patient completes a comprehensive assessment of their general health and medical history, which is then digitally submitted to the healthcare provider. The clinical summary report highlights areas of concern and flags patients with complex comorbidities who will need further consultations. By facilitating one-stop preoperative assessment, MyPreOp® helps patients potentially avoid a further hospital appointment and saves time for healthcare professionals.



IMPACT

- 30% of patients completing MyPreOp® avoid having a face-to-face appointment
- In the NHS this could save 1m outpatient appointments per year
- 78% of patients said they would be extremely likely or likely to recommend MyPreOp[®]
- Avoiding an appointment saves mileage, carbon and patient transport costs



FELLOW

Paul Upton
paul.upton@ultramed.co | ultramed.co | @Ultramed_LTD



AI platform transforming healthcare and improving safety by empowering the digital voice of patients

Using sophisticated artificial intelligence (AI), Patient Experience Platform (PEP) listens to and understands what patients say about their care across social media and review sites. PEP creates real-time insights to drive improvements in care and save costs. Since 2018, over 10m discrete public comments have been collected, covering every UK hospital.

"The NHS is truly committed to listening to patients but has never captured their views in a large scale and meaningful way, thus limiting our ability to shape services to deliver better outcomes and experience. This is exactly what PEP offers - a digital solution, using channels citizens use already, delivering real time insights into what patients really think."

Dame Barbara Hakin, Dr and former Deputy Chief Executive of NHS England

THE CHALLENGE

Currently, 10 to 12% of patients in the NHS receive some form of harm, and approximately half of this is thought to be preventable - including around 11,000 deaths per year. According to the NHS Patient Safety Strategy (July 2019), the NHS aims to continuously improve patient safety. Since 2013, the Department of Health, Care Quality Commission (CQC) and NHS England, amongst others, have stated their support for the monitoring of online patient feedback to improve quality, but this is difficult to do.

THE SOLUTION

PEP offers a standardised, highly scalable way of representing patient views to help shape services in the future and improve quality. It makes sense of the millions of publicly available comments patients across the UK make about their care and converts them into near real-time feedback, helping to drive improvement and transformation of care services. Patient safety concerns are flagged immediately to support prompt action and learning, reducing preventable harm and associated costs.



IMPACT

- Over 10m UK comments collected and analysed in the first 2 years
- Empirically proven that overall PEP score is a strong predictor of CQC rating
- Improves quality and has reduced complaints by up to 30%

FELLOW

 Increases staff engagement by providing speedy feedback to front-line staff





RespiraSense

Respiratory rate monitor for identifying deteriorating patients

RespiraSense is the world's only continuous, motiontolerant respiratory rate monitor, supporting medical teams to quickly identify deteriorating patients up to 12 hours earlier than the standard of care. It is a discrete wireless sensor, ideal for use on general ward patients who are at high risk of adverse events.

"RespiraSense provides a unique way of continuously monitoring respiratory rate, offering a safe and motion-tolerant solution that will identify deteriorating patients earlier, improve patient safety, and reduce the burden of emergency care on the NHS, as well as releasing clinical staff for time to care."

Professor Anoop Chauhan, Portsmouth Hospital NHS Trust

THE CHALLENGE

Respiratory rate is proven to be the earliest and most sensitive indicator of patient deterioration more so than heart rate or systolic blood pressure. The standard of care for measuring respiratory rate remains the manual counting of breaths per minute. This is shown to be biased and prone to error; thereby contributing to 31% of acute care deaths resulting from poor clinical monitoring.

Identifying the deteriorating patient as early as possible is a significant challenge that faces NHS hospitals. Deteriorating patients experience serious adverse events such as sepsis shock and respiratory compromise. This puts pressure on intensive care units and bed capacity.

THE SOLUTION

RespiraSense enables a patient's respiratory rate to be continuously and closely monitored, therefore allowing for prompt preventative action if a patient begins to deteriorate. Early intervention can reduce re-admission rates, producing better patient outcomes and an overall reduction in hospital length of stay for patients.



IMPACT

- Improves patient flow by reducing rate of preventable escalations of care and supporting timelier patient discharge
- Supports improvements in quality of care and patient safety
- Releases capacity and improves healthcare economics to realise a 70% return on hospitals' investment
- Over £115m potential net savings in pneumonia and sepsis pathways, from 5% reduction in preventable escalations of care



FELLOW

Myles Murray



Solving the problem that vulnerable patients have in reaching, lifting or holding drinks and helping prevent dehydration and avoidable intravenous drips

The WaterDrop is a low-cost, high impact innovation that enables patients to easily access fluids at any time without needing to call for help. It is a one litre hydration system that attaches to beds, drip stands, chairs, drawer handles - somewhere around the hospital bed - like an intravenous drip that is used orally.

"We highly recommend The

WaterDrop for any patient for whom it is appropriate and plan to roll this out on a Trust wide basis. It clearly offers many quality and cost saving benefits along with the opportunity to reduce our carbon footprint.

It is impossible to find any reason not to support its introduction to all hospitals in the NHS."

Mark Standen, Head of Nursing for Diagnostics, Anaesthetics and Surgery, Conquest Hospital, East Sussex Healthcare NHS Trust

THE CHALLENGE

Dehydration is potentially the biggest single issue in healthcare. Over 25% of hospital patients are unable to reach, lift or hold drinks.* This means around 30,000 patients every day are at risk of dehydration and its consequences, which include urinary tract infection (UTI), acute kidney injury (AKI) and falls.

To prevent dehydration patients are often placed on intravenous drips, but up to 60% of these drips are considered avoidable. Hydration can, and should, be achieved more effectively and with less plastic waste.

*2010 The Francis Enquiry; 2011 Care Quality Commission; 2015 British Journal of Nursing; 2016, The Patients Association; 2018, Chelsea & Westminster Hospital

THE SOLUTION

The WaterDrop provides a simple, easy to use, easy to measure way of enabling vulnerable people to stay hydrated without the need of assistance. Preventing avoidable drip use massively reduces both infection risks and plastic waste.



IMPACT

- Promotes independence and dignity for users:
 90% of patients said it helped them drink more.
 (Chelsea & Westminster Hospital)
- Efficiencies on wards by releasing time to care: reducing the need to help patients drink means more time available to care for more vulnerable people
- 86% cost reduction versus using intravenous drips (Hastings Hospital)
- Reduced infection risk by preventing new cannulas being inserted
- 70% reduction in plastic waste 90g versus 300g where an intravenous drip is avoided (Southmead Hospital)





INTEGRATED COMMUNITY-BASED CARE

ESCAPE-Pain
Health Navigator
Joint Pain Advice
ORCHA
RIX Wiki

WaitLess





An education programme helping older people selfmanage knee and hip pain

ESCAPE-pain gives older people with knee and/or hip pain information and advice about the problem and allows them to experience the benefits attained from simple exercises. It alters participants' health beliefs and behaviours, and they learn to control their symptoms and improve their quality of life.



"...I now stopped taking Tramadol and only use Paracetamol when I really need it, plus I now walk without my stick..."

ESCAPE-pain programme participant

THE CHALLENGE

In the UK, knee and hip pain - often labelled osteoarthritis - impairs the physical and mental health and wellbeing of 8.5 million people. It is the third largest health and social care expenditure. The National Institute of Health and Care Excellence (NICE) evidence-based guidelines show that increasing physical activity has wide physical and psychosocial benefits. However, many people do not receive this advice, instead being given potentially harmful medication. Only 2% undergo joint replacement, leaving many to endure years of unnecessary pain and disability.

THE SOLUTION

ESCAPE-pain delivers NICE recommendations in hospital and community/leisure settings across the UK. The programme is safe, effective, cost-effective and the benefits can be sustained for up to 30 months.

ESCAPE-pain is currently an AHSN national programme and will be launching ESCAPE-pain for backs in 2020 to help people with back pain.



IMPACT

- The programme is more clinically and costeffective compared with usual care, reducing pain, improving physical and mental wellbeing, and is popular with participants*
- For every 1,000 people who go through the programme, about £1.5m in healthcare savings can be realised. Consequently, ESCAPE-pain is endorsed by many professionals and national bodies
- As of January 2020, ESCAPE-pain is delivered in 273 centres across the UK, nearly 1,200 people have been trained to deliver the programme and over 15,000 people have benefited, saving around £23m

*https://onlinelibrary.wiley.com/doi/full/10.1002/acr.20642





AI-guided proactive health coaching to prevent avoidable urgent and emergency care

Health Navigator uses data-driven, algorithmic, real time identification of patients at risk of preventable hospital admissions. It then refers them to the company's digitally-supported proactive health coaching service, led by experienced registered nurses, for support. The service has significantly improved patient activation and self-reported health outcomes and demonstrated a 34% reduction in A&E attendances and non-elective hospital bed days.

"What the programme teaches you is that if you are brave enough to take control, you can make a tremendous difference. In my case, the impact has been quite dramatic, going from six attendances in a few month to zero since I onboarded the Health Navigator programme. Previously I was an asthmatic and now I am someone who happen to have asthma."

Tim, user with chronic asthma

THE CHALLENGE

Ever increasing demand for Urgent and Emergency Care is one of the most pressing problems for the NHS. The Health Foundation reported a 42% increase in non-elective spells between 2006 and 2018. NHS England's own figures suggest that 24% of admissions and 40% of attendances are preventable. This means costs of up to £6bn a year for the NHS and hundreds of thousands of patients visiting A&Es around the country with preventable causes.

THE SOLUTION

After a combined automated and manual, real-time identification of patients at risk of unplanned care, Health Navigator uses proactive health coaching to support patients to stabilise their condition, feel more confident in managing their conditions and navigating the often complex health care system. This minimises the risk of unplanned care, reducing costs for this high usage group and freeing up much needed acute resources.



IMPACT

Interim results from a 3,000-patient Randomised Control Trial run alongside the Nuffield Trust have shown:

- > 34% reduction in A&E attendances
- A decrease in non-elective admissions (-23.7%)
- 33% increase in patient activation (PAM 13) scores
- Increased patient-reported general health (+16%)
- 49% reduction in mortality rate



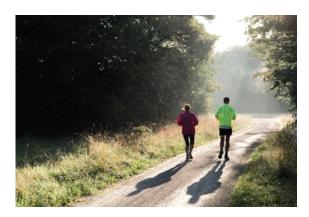
FELLOW

Joachim Werr Joachim.werr@health-navigator.co.uk | health-navigator.co.uk | @healthnavigato2



A service delivering core NICE advice for self-management of long-term joint pain

Joint Pain Advice (JPA) is a safe and cost-effective alternative to GP consultations for joint pain. Involving a series of face-to-face consultations, Advisors work collaboratively with people who experience hip and/ or knee osteoarthritis and/or back pain, focussing on supporting self-management.



"You know when you went in there it was going to be nice, friendly and a lovely experience."

Service user

THE CHALLENGE

In the UK, long-term disabling knee, hip and back pain affects more than 10 million people - around one fifth of the population. It impacts adversely on all aspects of a person's personal, social and working lives, and results in enormous health and social care expenditure, including over 2m GP consultations, prescription medication, and approximately 150,000 knee/hip replacements.

GPs acknowledge that they manage joint pain poorly because they receive little training in promoting and supporting lifestyle changes, and these cannot be conveyed in a 12-minute consultation. Consequently, few people receive NICE advice, regard the management they received as ineffective, and have to live many years in unnecessary pain.

THE SOLUTION

JPA trains a wide range of professionals to deliver NICE advice, so that it supplements their roles rather than creating an additional position. It is delivered in a range of settings (primary care, community, people's homes, workplaces), increasing accessibility and reach. Simple outcomes, including pain, function and physical activity level, are measured at each consultation. "I was sceptical when I began... within a week I was totally converted, I was doing the exercises every day, without fail."

Service user

IMPACT

- 128 Advisors have delivered JPA to over 1,500 people
- Regardless of the setting (clinical, community or workplace), participants report:
- less pain, ability to do more and be more active
- fewer GP consultations and reduced medication
- increased work productivity
- A social return on investment report for NICE demonstrated that every £1 invested results in £2-4 social return, equating to a benefit of £200 per person

FELLOW Michael Hurley



19

The world's leading health and care app evaluation and distribution organisation, offering unique app review, accreditation, curation and recommendation services

ORCHA is a world-leading organisation that has transformed the way in which health apps are reviewed. Its unique approach meets the scale of the market, pace of development and breadth of test requirements. Continuously scanning the market, it spots the apps that will make the biggest impact and helps NHS organisations successfully integrate them into services.

"The role of apps is absolutely essential to creating a good digital health environment. With their breadth and depth of knowledge, ORCHA has helped us to develop a good ecosystem of safe and secure apps that we could never have achieved on our own. We have partnered with ORCHA because they understand the app landscape and the needs of the UK health system."

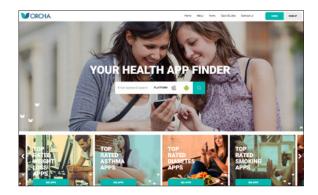
Rachel Dunscombe, Head of Digital, Salford Royal NHS Foundation Trust, Global Digital Exemplar

THE CHALLENGE

Although there are over 365,000 health and care apps available today, there are no regulations on app stores. This leaves health professionals and the public with limited guidance on which apps could make a significant improvement to health, and which are dangerous. More than 90% of health professionals think apps could help their patients, but don't know which ones to trust. As such, app usage and contribution within the NHS remains untapped.

THE SOLUTION

The ORCHA Review process is the most advanced review mechanism for health and care apps. ORCHA has reviewed almost 6,000 apps to date and has built the world's biggest health and care app comparison site. ORCHA provides app accreditation services for national health bodies worldwide, everywhere from Norway to New Zealand, as well as working with Clinical Commissioning Groups (CCGs) and NHS Trusts to develop local health App Libraries and recommendation services which fit with systems and strategies.



IMPACT

- Over 25% of NHS organisations now use the ORCHA platform to find and recommend the best health and care apps for patients
- Thousands of professionals, who support more than 20 million residents, have signed up to the ORCHA recommendation service
- The ORCHA platform achieves a 71% activation rate - the highest activation score on the market
- Every month, more than 5,000 UK residents access the ORCHA App Library
- NHS Digital has selected ORCHA to be an approved assessor for the NHS Apps Library



FELLOW

Liz Ashall-Payne liz@orcha.co.uk | @OrchaHealth Software that enables people with learning disabilities to share personal health and care information for effective personcentred support in their communities

The RIX Wiki is an accessible multimedia communication, planning and information-sharing tool developed with and for people with learning disabilities alongside their carers, families and professionals. Users create personal portfolios using pictures, video clips and sound to capture the best ways to understand and support them, enabling genuinely personalised care for their health and wellbeing.



"The Wiki can save a lot of time and is really key for information sharing and consistency. It means a person or their family carer won't have to keep repeating themselves."

THE CHALLENGE

People with learning disabilities experience avoidable suffering and significantly higher mortality due to poor understanding of their communication and inadequate care-coordination between agencies. Carers of people with high support needs commonly report that professionals do not listen to them, and they are forced to constantly repeat themselves to different service providers.

THE SOLUTION

RIX Wikis capture the personal needs and wishes of individuals alongside information from their families and carers to improve understanding of their needs. 'About Me' information integrates with personal care records for secure sharing with professionals, providing a trusted data source to inform and transform health and care for learning disabled people.

Best practice models of support and personal care are shared between multi-disciplinary professionals via self-made instructional media, reducing patient discomfort, nursing needs and hospital admissions.



IMPACT

- Better communication and informationsharing between providers and users of services
- Improved care and saving costs with a personcentred system that matches services to individual need for effective personalisation
- Less adversarial relationships lead to streamlined assessment and delivery of care packages, with reduced recourse to difficult meetings and costly tribunals





21

Learning Disability Nurse, Camden



An app showing the quickest place to access care for minor emergencies

WaitLess is an app for patients. It combines real-time waiting time information, routing and traffic and travel information to show patients the fastest place to be treated by a clinician for urgent minor conditions.

"WaitLess can direct people with not so serious conditions to alternative sites where they can be treated faster, which in turn will help to reduce the pressure on our A&E departments. This is the first app of its kind in the UK - other apps use waiting time information, but this is the first to combine with travel times, which as we know can be unpredictable."

Dr John Ribchester, Clinical Lead and Chair, Encompass MCP

THE CHALLENGE

The NHS Five Year Forward View (FYFV) states: "...between 1.5 and 3 million people who come to A&E each year could have their needs addressed in other parts of the system. They turn to A&E because it seems like the best and only option."

Next Steps on the NHS FYFV identifies that minor injury units and urgent care centres could be better used by patients. These are equipped to treat a range of urgent conditions but are under-utilised as many patients do not realise these facilities exist or that they can access them for urgent treatment.

THE SOLUTION

WaitLess reduces minor attendances in A&E when waiting times are high by empowering patients to choose alternative venues of care where they can access faster treatment. This takes pressure away from busy A&Es and improves the utilisation of minor injury units, spreading demand across the system.



IMPACT

- WaitLess has been proven to reduce minor A&E attendances by up to 11% through a study undertaken by Encompass Multi Speciality Community Provider which was ratified by the University of Greenwich and the Behavioural Insights Team
- A tool developed by Yorkshire & Humber AHSN links activity to tariff, demonstrating a saving of, on average, £160,000 per CCG area following the introduction of the WaitLess tool in an area



FELLOW

MENTAL HEALTH

ChatHealth

MaST

Mush

S12 Solutions







A messaging service putting young people and parents directly in touch with healthcare professionals

Developed by Leicestershire Partnership NHS Trust, ChatHealth helps to safeguard vulnerable teenagers and parents. Service users use their mobile device to send a message that is delivered to a centrally managed inbox. Clinical staff simply respond via the web-based application to send a message back to the service user.



"It allows us to express ourselves in ways we couldn't express to our friends - to know its confidential makes me open-up."

Service user

FELLOW

Jimmy Endicott jimmy.endicott@leicspart.nhs.uk @ChatHealthNHS

THE CHALLENGE

Teenage suicide in England and Wales increased 67% between 2010 and 2017. When ChatHealth launched in 2013, the number of reported young suicides was the highest they'd been in 10 years, with depression and self-harming doubling. Meanwhile one in 5 mothers suffer from perinatal mental health issues.

Traditional ways of accessing healthcare can be stigmatised and are inconsistently available across areas. Where services are available, they are often underserviced. Currently 11% of clinical posts in mental healthcare are vacant.

THE SOLUTION

ChatHealth provides a timely, age appropriate and confidential solution for improving service access. The messaging service improves efficiency of healthcare teams by enabling an individual nurse to provide services to a population of 85,000.

The messaging service is now available to nearly 2 million young people and used by over 40 organisations in England. It has grown to over 48% uptake in England's school nursing teams and 21% uptake by health visiting teams.



IMPACT

- ChatHealth requires only 0.5 WTE staff to deliver the same number of contacts as 4 staff members using traditional face-to-face methods - this results in an approximate savings of £113,600 per year
- In a 2014 trial, 97% of all enquiries received were effectively resolved via messaging nurses, with just 3% requiring more resourceintensive face-to-face input
- Clinicians involved in piloting said they spoke with more new service users than before across a broader range of issues

•MaST

Dashboard that uses predictive analytics to generate insights which support staff to deliver high quality effective mental health care

Management and Supervision Tool (MaST) is a powerful and easy to use dashboard which uses predictive analytics to identify those people who are most likely to require crisis services such as A&E, Community Crisis Services or inpatient care. MaST supports improved caseload management. It also ensures decision-making about resource allocation is based on service user needs.

"MaST improves our management of CMHT caseloads. We are now using predictive analytics to focus our attention on the people who need it most. Our clinicians now benefit from having better visibility of their caseloads, team leaders have improved insight into team themes, and strategy managers can see where system-level changes are required. MaST helps to provide safe care."

Adam Drage, Clinical Business Change Manager, Mersey Care NHS Foundation Trust London Cancer Alliance

THE CHALLENGE

Community mental health teams are experiencing rising caseloads and increasing numbers of service users with complex mental health problems. This, alongside a decline in numbers of mental health nurses, impacts staff morale and retention. Providing a structured and evidence-based approach to caseload management means that staff have a clear, visual display of information so they can allocate time and resource to the service users who need it most.

THE SOLUTION

MaST enables clinicians to adopt a dynamic approach to skill resourcing and prioritising care pathways. By providing insight into people's risk of using crisis services and identifying those who may benefit from a review of their care, this more structured approach to decision-making improves resource management and supports better care.



IMPACT

- 70-80% of all uses of crisis services identified by MaST analytics as 'high risk of crisis' up to 28 days in advance
- Fewer people in crisis requiring inpatient admissions when compared with community management
- Improved quality and safety performance indicators including risk assessments, physical health reviews and care planning
- Improved service user flow, including rates of discharge to primary care
- Reports of enhanced staff satisfaction from a more streamlined clinical supervision and improved allocation of new service users so that caseloads are balanced



FELLOW

MAST

mush

An app that brings new mums together to prevent loneliness and improve wellbeing both offline and online

Mush is free to download and gives mums the opportunity to find their own community of support, based on the age of their children, shared interests and how close by they live. Mush is free to the NHS and is proven to reduce social isolation and anxiety, as well as increasing the confidence and self-esteem of its users.

1	• •			
	• —			
•	••• 🗢 0.41 AM	100.0		
• —	Mum matcher	5 E	• —	
*** ·· · · · · · · · · · · · · · · · ·	Q, Search Mums by name		9 41 AM 19	
C, Browse Topics		B. 10	isks	•
0		3	are you up to today?	
What are you up to today?			are you up to today?	8
Sophie T			e T	
Vesterbility at 21-96 - Camden Town		A CONTRACTOR	lay at 21.10 · Camdon Town	
Helio/ Has anyone else's little ones sleep temble since teething? Mine is up every	and the second second		oted to join Mush! How are you 2 month old and looking forward	10
crying	STILLING - CARLON	Contraction of the local division of the loc	ound Islington :)	- 1
Reathing	Michelle S	Camden Town 0.2 MI	meetups	
15.lbea	SEMINEUT TTO GRE.	- 2 Mi	h July 2018 @ 11:00 (sh)	100

"I can't stress how good Mush was for me - it really helped with my anxiety. It's totally transformed my life by reassuring me that others are going through the same thing and getting me out of the house to have these conversations in person!" brings mums TOGETHER

THE SOLUTION

are still suffering alone.

THE CHALLENGE

Forty-three per cent of mums say that having a peer support network helped them recover from mental ill health. Mush directly addresses mental health challenges that many parents experience during and after pregnancy by providing vital support, solidarity and a sense of camaraderie from a community who understands.

One in 4 women suffer poor mental health during

pregnancy and beyond. Medical support is stretched,

with limited resources for health visitors and midwives.

In 2018, the NHS pledged further funding for specialist

mental health services for new mums, however many

The app empowers mums and mums-to-be to build a local community for friendship, meet-ups and advice, bridging the gap between healthcare appointments and providing support for those who don't have family networks nearby.

IMPACT

- Over 2.5m friendships formed through Mush
- Over 500,000 users across the UK
- Included in the UK government strategy on loneliness
- Endorsed by the Institute of Health Visiting and Royal College of Midwives
- In an independent evaluation by Imperial College London and Self-Care Academic Research Unit (Jan 2020), 50% of women reported improved measures of well-being as a result of using Mush, and 36% reported significant improvements in their ability to better understand health information

Abbie, mum and Mush user

CONTACT

letsmush.com @mushmums

MUSH



An app and website enabling quicker and easier Mental Health Act assessment set up

S12 Solutions is an app and website that connects Approved Mental Health Professionals (AMHPs) with section 12 (s.12) approved doctors, enabling quicker and easier Mental Health Act (MHA) assessment setup, claim form creation and submission. By intuitively capturing data, the platform has the potential to inform and support the development of mental health crisis care.

"We have often found it extremely difficult to find s.12 doctors in an expedient manner when we have had a high volume of referrals. Doctor availability has improved significantly since the app was launched, which has led to a reduction in delays to assessments."

Dominic Marley, Lead AMHP for the London Boroughs of Richmond and Wandsworth, Team Manager, Wandsworth Borough Council

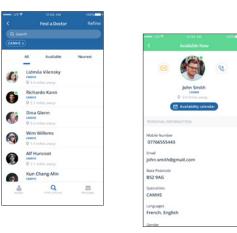
THE CHALLENGE

The current paper-based MHA assessment set-up method routinely delays assessments because there is no easy way for AMHPs to identify available local doctors. The Association of Directors of Adult Social Services (ADASS) reported in 2018 that difficulty finding doctors was the second most common cause of delay. Assessment delays can leave service users waiting for care, often in distress or at risk, while also detrimentally impacting the emergency services and places of safety, including A&E departments.

THE SOLUTION

S12 Solutions enables AMHPs to quickly identify, contact and make arrangements with s.12 doctors. It facilitates claim form creation and submission, replacing the current paper-based, non-GPDR compliant process. S12 Solutions helps ensure service users are assessed by the best available team as soon as possible, minimising their distress and risk; in section 136 scenarios, this also reduces the impact on police and A&E departments and the likelihood of unlawful detention. Additionally, AMHPs have more time to prepare for assessments, and doctors get fairer access to and more control over their s.12 work and contact information.

S12 Solutions is part of the Evidence Generation Fund, a subset of the Innovation and Technology Payment (ITP) programme.



IMPACT

Pilots in Cumbria and South West London demonstrated:

- An increase in the number of doctors in their network and evidence that those doctors were invited to assessments
- Assessments happening sooner than expected and more assessments completed by the shift that received the referral
- Improved ability to arrange assessments that were the best fit for service users

Since the pilots concluded, S12 Solutions has expanded across half of England (as of February 2020)

 Newer sites are demonstrating claim form process efficiencies, with one area reporting a 56% reduction in the average time taken to pay claims

FELLOW



PATIENT-LED CARE AND EDUCATION

САТСН
Droplet
Echo
Fibricheck
HaMpton
Low Carb Program
My Diabetes My Way
Oviva





Free NHS health app for parents and carers of children from pregnancy to age 5

CATCH (Common Approach to Children's Health) gives parents appropriate and understandable information when they need it via smartphone or tablet. The app features locally NHS-approved personalised advice, health news and information, and details about local services.



THE CHALLENGE

Some parents lack the confidence and knowledge to self-care when appropriate, instead relying on NHS services. The Cheshire East Council's Annual Report of the Director of Public Health 2013/2014 determined that large numbers of young children aged 0 to 5 were being taken to A&E and sent home with advice, as medical treatment wasn't required. This put an unnecessary strain on A&E staff and indicated an inappropriate use of NHS services.

THE SOLUTION

The CATCH app is a trusted resource that parents can access at any time, giving them the confidence to look after their children at home. Support and clinical knowledge is aggregated from local GPs and public health department building a region-specific and tailored database. CATCH curates this local health information and articles from trusted sources, such as NHS.uk and national and local charities.





"Often, [parents'] anxieties stem from not knowing what else to do when their child is ill. The CATCH app offers guidance and reassurance for parents to provide selfcare for their children at home, without visiting the hospital."

Dr Kilroy, Lead Clinician for Emergency Medicine, Macclesfield Hospital

IMPACT

Eastern Cheshire CCG has reported a 33.7% reduction in under five-year-old's Guidance-Only A&E attendances after CATCH was implemented in 2016. CATCH has also been identified as able to support a number of other public health outcomes such as vaccination uptake.

Results from in-app surveys indicate:

- 87% of users feel more confident to care for their children
- 93.8% of users would recommend CATCH to a friend or relative

CATCH is now live in seven regions

FELLOW







Intelligent hydration aid that provides visual and verbal reminders to drink

Droplet is a smart hydration reminder, designed to combat dehydration in community-based and acute environments. Droplet cups and tumblers have detachable electronic bases that track how frequently a user drinks and provides reminders to hydrate.



THE CHALLENGE

There are almost 4 million vulnerable people currently living in the community, often alone, who are at serious risk of dehydration. Dehydration results in emergency hospital admissions, poor clinical outcomes, extended stays in hospital and emergency readmissions following discharge. The most effective intervention is through personal prompting, but in busy hospital wards this is often impossible to do effectively, and there is no current at-home alternative.

THE SOLUTION

Droplet was developed in consultation with over 100 healthcare professionals and older people. A series of spoken messages and flashing lights in the Droplet Smart Base remind the person to drink, and the timing of the reminders can be adjusted to suit the individual's needs. Pilots in care homes and hospitals have shown to increase fluid intakes by over 500ml per day.



IMPACT

- In a trial at Musgrove Park Hospital, Droplet users drank on average 63% more than those without
- In a trial at Polebrook Nursing Home, average fluid intake rose by 69% and by the end of the pilot 61% were drinking their European Food Safety Authority recommended daily intake
- Where Droplet is currently used in hospitals and care homes, the following benefits have been consistently observed:
 - Patients/residents drink more per day
 - Illnesses and symptoms relating to dehydration reduced
 - Decreased number of patients at risk of dehydration
 - Improved wellbeing
 - Reduction in prescriptions for IVs and antibiotics to treat UTIs and similar infections

"Droplet supports the crucial element of hydration for healthcare professionals to monitor, manage and improve patients' fluid intake. This is why at Musgrove Park we are introducing Droplet in every ward."

Phil Shelley, Former National Chair of the Hospital Caterers Association

CONTACT



An app that makes it easier for people to take and manage their medicine

Designed and built by patients, Echo enables users to order repeat prescriptions and have medicine delivered to their door. Built on top of NHS Electronic Prescription Service (EPS) and Electronic Prescription Service (EPS) infrastructure, Echo takes GP directions and converts them into smart reminders that nudge users towards better compliance. In-app content provides important clinical information, plus the ability to chat with Echo's pharmacy team, promoting concordance and patient understanding.



THE CHALLENGE

NHS England spends over £17bn a year on medicine, yet NICE estimates that between a third and half of medicines prescribed for long-term conditions are not taken as directed.

Patients not taking their medicine properly results in waste - notably, the cost of drugs and clinician time. More importantly, non-adherence leads to poorer outcomes, which have a significant impact on longterm patient health and NHS costs.

Supporting better medicines adherence therefore represents one of the greatest opportunities for improved outcomes and efficiencies within the NHS.

THE SOLUTION

Echo works with a patient's NHS GP to take care of repeat prescriptions. Patients can request a prescription in the app, which is then dispensed by Echo's pharmacist team and delivered directly to the user.

In-app reminders improve medicine adherence, reducing waste and improving health outcomes.

"As someone who doesn't drive and struggles to pick up my monthly medication it's not an exaggeration to say this app is a literal life saver."

Service user

IMPACT

- Second largest dispenser of medicines in England, supporting over 100,000 patients across all CCG areas
- Over 75% of Echo users are adherent to their medication*
- Over 85% engagement with Echo's adherence-supporting features, including dosage reminders and supply prompts*
- 90% patient ratification rating
- Echo was acquired by McKesson in Summer 2019
 - *Based on a review of 8,481 patients over 12 months using the Echo mobile application





Prevents strokes by enabling early detection of heart rhythm disorders, with a focus on atrial fibrillation (AF)

FibriCheck is the world's first medically certified app (CE Class IIA, FDA approved) capable of the early detection of heart rhythm disorders, such as atrial fibrillation, using a smartphone or smartwatch. The application turns heart rhythm monitoring into an at-home solution that can be used by anyone at any time, without the need for extra hardware.

"The issue is that Atrial Fibrillation is not always present during a visit at the cardiologist. Over 40% of patients do not present any symptoms. Suffering a stroke is often the first presented symptom.

FibriCheck uses a smartphone or smartwatch to measure the heart rhythm, turning it into an accessible and budget-friendly medical device."

Dr Pieter Vandervoort, Cardiologist, ZOL Genk

THE CHALLENGE

Over 1 million people in the UK are diagnosed with AF, while hundreds of thousands go undiagnosed. Undetected and untreated AF is responsible for 20% of all strokes. 75% of these strokes can be prevented by timely detection and treatment.

THE SOLUTION

FibriCheck makes the detection of heart rhythm disorders possible with a smartphone or smartwatch using the clinically validated photoplethysmography (PPG) technology, with proven ECG accuracy. The application measures and evaluates heart rhythms to immediately produce accurate and actionable results for patients and healthcare professionals.

Users' data is recorded and can be stored in a clinician dashboard, allowing for easy follow-up from a healthcare professional. FibriCheck enables more efficient care and follow-up of symptomatic patients along with an effective (pre)screening of higher-risk patients.

The launch of continuous monitoring on a smartwatch in spring 2020 will further increase data outputs and effectiveness.



IMPACT

200,000 users in 43 countries

- 3,900 cases of atrial fibrillation and 16,000 arrhythmias detected from over 2m reviewed heart rhythm measurements
- Highly cost effective (cost per QALY <5k) in untargeted digital pre-screening, with the expectation to be cost-saving in targeted prescreening



FELLOW

Bieke Van Gorp bieke.vangorp@fibricheck.com | fibricheck.com | @fibricheck



Care pathway enabling pregnant women to monitor high blood pressure at home

HaMpton is a new care pathway developed at St George's Hospital London that involves the use of an innovative smartphone app for monitoring high blood pressure. The app alerts women if they need to attend the hospital, and it also links with a hospital computer system where the data can be monitored by clinicians in real time.



"There was always someone monitoring me. There was always someone at the end of the phone. I can't think of a reason not to use it."

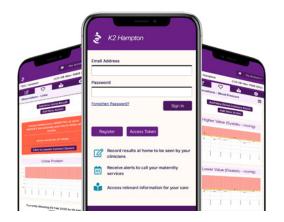
Patient and HaMpton user

THE CHALLENGE

High blood pressure disorders complicate 10% of pregnancies, and pre-eclampsia affects between 2% and 8%. Pre-eclampsia can be life-threatening for both mother and baby. Standard care pathways for women who have high blood pressure in pregnancy require frequent hospital visits. This has significant cost implications, both to the NHS and to patients, and can cause anxiety to pregnant women.

THE SOLUTION

HaMpton empowers women to be involved in their own care. By allowing women to monitor their blood pressure, urine and symptoms at home, it reduces the number of hospital visits and has achieved excellent patient and staff satisfaction.



IMPACT

- 53% reduction in number of appointments for hypertension monitoring, and amount of time per appointment
- 16% reduction in induction of labour
- £300 average cost saving per patient per week according to basic health economic study
- £50m potential annual cost saving if scaled up across the UK

FELLOW

Helps to diagnose white coat hypertension



Asma Khalii akhalil@sgul.ac.uk | asmakhalil79@googlemail.com | hampton-k2ms.com

Data driven self-management platform for people with diabetes

My Diabetes My Way (MDMW) is an online platform and smartphone app that comprises over 250 educational resources, including 6 QISMET accredited e-learning courses and multi-language content, and communication tools for healthcare professional contact and peer support. MDMW also enables online health record data access and remote home data upload, driving highly personalised data-driven advice.

"I am much more in control of my condition, but importantly, I now understand the goals that I should be achieving and am able to have a constructive discussion with my consultant. This patient access through My Diabetes My Way is an outstanding achievement in the care, education and involvement of people with diabetes."

THE CHALLENGE

Diabetes is a growing health problem, currently affecting 10% of the global population. Diabetes spending will consume around 17% of the NHS budget by 2025, mainly through treatment of complications that could be avoided through better self-care, medication compliance and pre-emptive screening.

People with diabetes only spend a few hours per year with healthcare professionals due to constrained resource, relying on self-management the rest of the time. Access to good trusted advice, information and motivational support at times of need is limited.

THE SOLUTION

MDMW helps people with diabetes better self-manage through data access and automated, personalised data feedback, supported by online education. It encourages goal-setting and improves motivation, resulting in reduced long-term complications, clinic visits and hospitalisations. MDMW can be scaled across entire regions for only £1-2 per year (multiplied by diabetes population size).



IMPACT

- MDMW currently has over 55,000 registered users
- Cost saving with 5:1 return on investment (ROI) through complication reduction*
- Proven improvements in long-term blood glucose demonstrated and sustained to at least 3 years**
- > 70% user retention rate even after 10 years
- 90% of users felt MDMW helped them to manage their diabetes better ***
- Available for commissioning via Diabetes Transformation Funding

* health economic modelling (UKPDS2) **case-control study *** evaluation survey (>1,000 users)



Patient

FELLOW

Debbie Wake debbie.wake@mywaydigitalhealth.co.uk | myway digitalhealth.co.uk | @MyWayDigital



Digital support for people with type 2 diabetes to achieve a lower carbohydrate lifestyle

Low Carb Program is a behaviour change app that provides goal-focussed education, personalised resources and coaching support to help people reduce the amount of sugar in their diet and achieve their health goals. It is available on iOS, Android, Apple and Android watch, Alexa and web.



"My HbA1c has gone down from 53 (7.0%) to 37 mmol/mol (5.5%) and I've lost about 19kg in total. I am in type 2 remission and have never been fitter. If it wasn't for the Low Carb Program and the support I received, I wouldn't be where I am today."

Peter Palmer, Patient

THE CHALLENGE

Type 2 diabetes is prevalent and costly, and it is a potentially progressive disease with serious health consequences, including blindness, amputation, stroke, dementia and premature death. Patients typically spend 3 hours per year with their healthcare professional, and in community settings type 2 diabetes is rarely reversed.

Researchers agree that type 2 diabetes may be effectively treated with a carbohydrate-reduced diet, which could improve management and potentially lead to remission.

THE SOLUTION

Low Carb Program achieves sustainable behaviour change in patients. Members participate in a core 12-week structured therapeutic nutrition and wellness program personalised to disease type and profile. Resources include meal plans, food swaps and over 1,300 recipes tailored to budget, culture and preferences. Support is provided by Behaviour Change Coaches and over 430,000 like-minded peers. Members can also participate in weekly online fitness, yoga and mindfulness classes.



IMPACT

One-year outcomes published as part of a 3-year study on a randomly selected cohort of 1,000 people who joined the Low Carb Program*:

71% platform retention at one year

- 40% of people on medication eliminate at least one treatment from their regime
- 60% of people on insulin eliminate or reduce it from their regime

For people with type 2 diabetes who complete the programme, outcomes include:

- 7.4kg weight loss
- 13mmol/mol HbA1c reduction
- 39% place HbA1c under type 2 diabetes threshold, with 26% placing type 2 diabetes in remission

*https://diabetes.jmir.org/2018/3/e12/



OVIVA DIABETES SUPPORT

Digital structured education and behaviour change programme for people with type 2 diabetes

Oviva Diabetes Support is a fully remote, QISMETaccredited programme to help people with type 2 diabetes learn more about their condition and make lasting changes to their diet and activity levels. Participants receive weekly one-to-one coaching from a diabetes specialist dietitian over 10 weeks to support behaviour change and develop sustainable self-management strategies.



to improve your health.

your door, featuring changes into practice and improve your advice and videos from diabetes specialists. health

THE CHALLENGE

Diabetes costs the NHS over £10bn per year, of which 80% is spent on treating complications which could be prevented through good diabetes management. Structured education and guided behaviour change are crucial to help people self-care and reduce risk factors. However, the National Diabetes Audit and research indicate that uptake of traditional group-based, face-to-face structured education programmes is poor, and the impact on clinical outcomes and complication rates is limited.

THE SOLUTION

Oviva Diabetes Support helps the NHS reduce demand on primary care and hospitals by supporting patients to better self-manage their type 2 diabetes. Proven benefits include average increases in education attendance rates of 50-100% in 38 commissioned CCGs and average participant HbA1c reduction of 13mmol/mol, reducing their risk of complications.

"[Oviva] has offered our patients an alternative choice in the way they receive their diabetes support and this is proving to be successful both in health outcome data as well as patient satisfaction."

Angela Jessop, Diabetes Commissioner, Buckinghamshire CCG

IMPACT

- Over 6,000 NHS participants treated to date with average uptake from GP referral of 75%, and 85% of participants completing the programme
- Clinically meaningful improvements in diabetes treatment targets, as demonstrated by outcome data (including average 13mmol/ mol reduction in HbA1c and 4.3kg body weight loss at 12 months)
- 94% of participants recommending Oviva Diabetes Support to friends or family
- Estimated NHS savings of £1,000 per participant based on reduced medication needs and primary and secondary care service utilisation
- Available for CCGs to commission via Diabetes Transformation Funding and through cost-avoidance from medication savings



FELLOW

Mark Jenkins Mark.jenkins@oviva.com oviva.com @OvivaHealth

WORKFORCE SUPPORT AND PROCESS IMPROVEMENT

CHC2DST

Lantum

Locum's Nest

SHREWD Resilience

Virti





A software innovation delivering better outcomes, better experience and better use of resources in Continuing Healthcare (CHC) teams

IEG4's CHC2DST is a cloud-based software solution accessible to different stakeholders involved in the delivery and management of the CHC assessment process. It increases data transparency and accelerates eligibility decisions, while reducing administration effort and time wasted on non-value adding activity.



"Can you please put this in all CCGs tomorrow?"

Patient representative

THE CHALLENGE

The CHC assessment process is often manually intensive. The process requires activities to be co-ordinated across multiple organisations which can lead to delays in decision-making, causing considerable distress to patients and families. Delays cause knock on effects in health and social care organisations and is a factor in delayed discharge from hospital.

A common cause of setbacks is the handling of paper without an effective automated process to co-ordinate activities from the different stakeholders involved.

THE SOLUTION

The CHC2DST digital platform and patient portal eliminates paper and introduces effective workflows into the CHS assessment process. The status of each application can be viewed on a single dashboard, with transparency around activities driving recommendations. Audit trails are automatically updated as a result of activity being completed.

Digitising CHC saves time, leads to faster decisions for patients, and increases work transparency and focus.



IMPACT

- Evidence from NHSE states that 13 hours of professional capacity can be released for each CHC referral
- An increase in attainment of the 28-day turnaround target, results in a reduction in occupied excess bed days and associated expenditure and has been shown to support programmes to speed up discharge from hospital where CHC patients occupy a hospital bed, as is the case in many Acute NHS Trusts
- Reduction in delays across the health and care system – NHSE case study reports a digital referral and workflow system produced a reduction of 52% in delay days



FELLOW

Charles MacKinnon charles.mackinnon@ieg4.com | @ChasMacKinnon



New generation workforce platform transforming how healthcare organisations e-roster and communicate with staff

Lantum enables healthcare providers to e-roster their staff. Clinicians can use the app to view, swap and book extra shifts, while AI-powered messaging proactively engages with staff to fill shift gaps. Trusts save millions on overtime, bank and agency spend reduction. Providers can join together and create collaborative staff banks. Lantum also automates payment, timesheets, invoicing and compliance. Its unique RocketPay feature ensures staff are paid the next day.

"Lantum has transformed how I manage and communicate with my staff about shifts."

Dr Kate Mackay, Consultant Birmingham Women and Children's Hospital

THE CHALLENGE

NHS trusts have outdated software to e-roster staff and manage their banks. For a long time there has been no choice in the market and Trusts have been left with clunky and difficult to use technology. To fill shift gaps, Trusts have had to employ manual processes, which have caused high agency and bank spend totalling £5bn. NHS clinicians often have to wait for months to be paid for bank shifts, leaving them dissatisfied, demotivated and less likely to take bank shifts.

THE SOLUTION

Lantum's new generation platform transforms the experience of e-rostering and shift fulfilment. E-rostering is a simple and easy experience. Lantum identifies shift gaps and pinpoints the right clinician to fill it with no manual workarounds. Substantive staff is optimised, bringing both bank and agency spend down. Lantum can also pay staff next day for shifts worked, boosting staff satisfaction and retention.

Lantum's clients include Acute Trusts, Primary Care Networks, Urgent Care Centres and ICS / STPs in over 95% of CCGs in England.



IMPACT

- £30m savings for the NHS in reduced bank agency and overtime spend
- Staff satisfaction increase from 33 to 68 in the Net Promoter Score measure
- Support to meet CQC requirements rota managers improve governance processes by ensuring only compliant clinicians can book shifts
- Safe staffing compliant with rules and contracts
- On average, organisations who partner with Lantum:
 - achieve a 97% fill rate
- fill three-month rotas in 3 to 6 days
- reduce agency spend by 35%
- save time by automating processes





Award-winning software platform aiming to solve the staffing crisis through total workforce mobility by connecting healthcare professionals to vacant work

The Locum's Nest workforce suite of products provides healthcare organisations with a cloudbased web platform to manage their vacancies efficiently and eliminate paper-based admin barriers. The platform provides a mobile app for healthcare professionals who are instantly notified of vacancies within their chosen parameters increasing fill rates from within the organisations by supercharging the staff bank.

"Locum's Nest has been a great exemplar of digital enabled transformation by helping us better empower our workforce vastly improving shift fill rate and reducing costs. It has supported us to create a collaborative staff bank with 8 other Trusts, which has transformed the way we are able to fill locum medical shifts and improved harmonisation of rates."

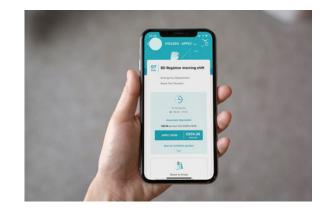
Suzanne Rankin, CEO, Ashford and St. Peter's Hospitals NHS Foundation Trust

THE CHALLENGE

With over 100,000 vacancies in the NHS workforce and an ever-tightening squeeze on funding, healthcare organisations are spending an increasing amount of their time filling workforce gaps and managing the temporary workforce. Flexible working has become essential to the provision of safe and effective frontline care. In 2018 the NHS spent £3.5bn on agency spend. On top of being expensive, inadequate temporary staffing adversely impacts patient safety, as well as workforce morale, retention and engagement.

THE SOLUTION

Locum's Nest helps healthcare organisations find the right staff at the right time, with the right skillsets. The software enables them to plug their needs into a simple system which communicates those needs out to all the relevant healthcare professionals that are registered on the platform, safely and efficiently.



IMPACT

- £60m savings for the NHS in 2 years
- Over 25,000 doctors empowered to work flexibly
- Established the Digital Collaborative Banks, the first and biggest medical workforce coalition of 8 NHS Trusts, sharing a pool of 5,000 doctors working together for 4 million patients
- Matched approximately 2m hours of patient care delivered by non-agency doctors



FELLOW

Ahmed Shahrabani ahmed@locumsnest.co.uk | locumsnest.co.uk | @LocumsNest



A platform that captures operational data to display urgent care whole system capacity and flow in real-time through SHREWD Resilience

The Single Health Resilience Early Warning Database or SHREWD - helps clinical, operational and executive teams to understand capacity and demand across whole systems in real-time. The platform can be accessed via both smartphone and web browser. SHREWD Resilience helps providers reduce delays across the urgent care pathway, supporting a better experience for patients and staff.

"Implementing SHREWD has led to an improvement in patient care. Operational managers can accurately identify which parts of the system are under pressure and take action early to improve the situation. It also means that system on-call managers make decisions based on hard data, rather than relying on subjective opinions."

David Strivens, NHS Commissioning Manager, NHS Southampton City Council CCG

THE CHALLENGE

Occupancy levels across acute and emergency services are frequently above 90%, causing a queue in entry points of urgent care. It is common practice for health economies to run a daily whole system teleconference to understand system pressure and demand. This practice is time inefficient and does not account for real-time changes.

THE SOLUTION

SHREWD Resilience addresses the poor access to, and visibility of, real-time information across all providers involved in the urgent care pathway.

By visualising constraints as they become apparent, SHREWD Resilience empowers providers to manage more effectively, with services able to prioritise resourcing around the busiest sites, improving flow and reducing the need for daily calls, manual Operational Pressures Escalation Levels (OPEL) reporting, and helping to ensure patients are moved to the right place at the right time.

IMPACT

- Currently deployed across 23% of England's NHS
- Reduces the number of whole system teleconferences required to manage systems during winter. A Kent University rapid review of SHREWD showed conference call times reduced from 60 minutes to 15 minutes on average
- Currently the only market provider proven to use real-time data feeds for all providers across health and social care



virti

An extended reality (XR) tool providing training services to health professionals at scale

Virti is a virtual and augmented reality platform that enables remote training of users in an immersive environment. Users' decision-making ability is assessed when managing patients, just like in real life training. Trainers gain objective feedback from multiple data points and use Virti to scale existing courses.

"Simple and fun are two words that describe the platform. This will revolutionise how we, as med students and health professionals, learn to perform under pressure before entering a clinical environment with patients benefitting. Using the platform has made me more confident in my practice."

Sarah Humphries, Final Year Med Student

THE CHALLENGE

In-person coaching to improve human performance is time consuming and costly to scale. Additionally, learning retention rates are just 10% for reading or a lecture, 20% for a video and 40% in person, whereby rates using Virti can be as high as 75%.

Virtual Reality (VR) simulation has been shown to reduce cost and improve safety in advanced life support training (Buttussi et al., 2013). VR can improve patient safety and reduce healthcare costs through the improvement of the medical provider's competencies (Al-Elq et al., 2010).

THE SOLUTION

Virti's simulations are high-quality, flexible, evidencebased and cost-effective alternatives to traditional teaching methods; providing users with challenges to perform under pressure and learning opportunities not available in their local institution. The assessment platform collects objective data points about the performance of the health professionals to better quantify ability and standardise training, consequently improving engagement and performance.



IMPACT

- 20% improvement in information retention over alternatives
- > 35% increased engagement in training/therapy
- 40% reduction in time spent in training/therapy sessions
- 52% reduction in skill-fade and 77% improvement in confidence
- New revenue streams created for institutions by licensing content
- Used in UK and US healthcare institutions SBRI grant recipient



Alex Young alex@virti.com | wirti.com | @virtimed

NHS INNOVATOR ACCELERATOR ALUMNI

The NHS Innovation Accelerator (NIA) Alumni is for 'graduating' Fellows who have received up to 3 years of support from the NIA. Alumni can access a range of benefits, and their insight and learning continues to be shared via the NIA and AHSN partners.

For more information about the NIA Alumni, visit nhsaccelerator.com/alumni





Anne Bruinvels

Ben Underwood





Cosmin Mihaiu

Craig Newman



Matt Jameson Evans



Outcomes Based



Episcissors-60

Adrian Flowerday



Andrea Haworth



Anna Moore



John Moore

The AHSN Network England

NHS Innovation Accelerator

ALUMNIJ



Paul Volkaerts



Karina Allen

Penny Newman



Peter Young

Lloyd Humphreys Mark Ireland Patients Know Best Severe Sore Throat



Piers Kotting







Simon Bourne

myCOPD



Sophie Bostock

Neil Guha

Chronic Liver Disease



Paul Jennings



Tom Whicher











WITH THANKS TO OUR MENTORS



Adrian Downing



Professor Lord Ajay Kakkar



Tichy



Professor Ara Darzi Archna Sharma





Arun Krishna



Ben Maruthappu MBE



Celia Ingham Clark



Professor Donal O'Donoghue



Ed Jones



Fiona Bride

Gary Gallen

Pam Garside



Professor Joanne Hackett



Professor Sir John Burn

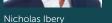


Mayur Vibhuti



Manish Miglani







Noel Gordon



Robert Mollen



Dr Sam Barrell



Samantha Jones

44

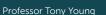


Professor Sudesh Kumar



Dr Tom Weaver





Fellows benefit from bespoke support from Mentors. This expert, high-profile group represents a broad skills base. Their support is predominantly in the form of advice, guidance and networking. Our pool of Mentors is regularly expanded to support the experiences and identified needs of the Fellows.

For more information visit <u>nhsaccelerator.com/mentors</u>





NHS INNOVATION ACCELERATOR: A PARTNERSHIP INITIATIVE

NHS ENGLAND

NHS England's primary aim is to improve health outcomes for people in England. NHS England sets the direction and priorities for the NHS, allocates funding to England's GP-led clinical commissioning groups, and directly commissions primary care, specialised services and healthcare services for offenders.

ACADEMIC HEALTH SCIENCE NETWORKS (AHSNS)

The AHSNs facilitate change across whole health and social care economies, improving health, driving down the cost of care, and stimulating economic growth. They do this through connecting academics, NHS, researchers and industry to accelerate the process of innovation and facilitate the adoption and spread of innovative ideas and technologies across large populations.

All 15 of England's AHSNs are formal partners in the NHS Innovation Accelerator (NIA) and provide a contribution towards the cost of the bursaries offered to each of the Fellows.

Eastern AHSN: www.eahsn.org East Midlands AHSN: www.emahsn.org.uk Health Innovation Manchester: www.healthinnovationmanchester.com Imperial College Health Partners: www.imperialcollegehealthpartners.com Innovation Agency (AHSN for the North West Coast): www.innovationagencynwc.nhs.uk Kent, Surrey, Sussex AHSN: www.kssahsn.net North East and North Cumbria AHSN: www.ahsn-nenc.org.uk Oxford AHSN: www.oxfordahsn.org South West AHSN: www.swahsn.com UCLPartners: www.uclpartners.com Wessex AHSN: www.wessexahsn.org.uk West Midlands AHSN: www.wmahsn.org West of England AHSN: www.weahsn.net Yorkshire & Humber AHSN: www.yhahsn.org.uk

UCLPARTNERS

UCLPartners is a partnership of world-leading academic and clinical research centres, NHS organisations, industry, patients and others that aim to harness research and innovation for excellent patient care and a healthier population. UCLPartners is host to the NHS Innovation Accelerator on behalf of the Academic Health Science Network and NHS England.

