SBRI HEALTHCARE ANNUAL REVIEW 2014/15



Accelerating innovation in health

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The **AHSN**Network

SBRI Healthcare is run by England's 15 Academic Health Science Networks (AHSNs)



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CHAIR'S MESSAGE

It's been another excellent year for SBRI Healthcare – bringing essential funding to help companies develop solutions that improve patients' lives and support NHS efficiency.

SBRI Healthcare is funded by public money through NHS England and that money is working very hard to focus the creativity of industry onto the biggest challenges that the NHS is facing. We have now awarded more than 150 contracts across all phases of the programme and this year, have invested £22 million and are supporting 95 companies at various stages in the development pipeline, addressing clear unmet needs in themes such as the diabetic foot ulcer, child and adolescent mental health, and brain injury.

Improving quality of lives and outcomes is paramount. SBRI Healthcare supported innovations enable patients to better manage and understand their own conditions or improve the safety and quality of care – potentially saving lives and reducing harm. There are also economic benefits with independent health economic assessments conservatively estimating savings to the NHS to be in the region of £1.5 billion, roughly equivalent to what the NHS spends every five days.

This is exciting work, but we need to do more to support the NHS. NHS England's *Five Year Forward View (FYFV)* points to the necessity of organisations from different sectors combining to address current healthcare challenges – of which care of older people is at the top of many regions' lists. This coming year we are therefore running competitions on older people with multiple morbidities and reducing pressure on urgent and emergency care.

SBRI Healthcare particularly wants to find and attract companies not currently in the healthcare area, identifying science and technology developed in one sector and supporting their redesign to meet healthcare needs. We are already working with

AMBULANCE

companies in the defence sector and have other organisations selling products in sectors such as motorsports and consumer technology that are now moving into the healthcare space for the first time. This is good to see, but we think there is scope for more and this is a goal for the coming year.

The role of the AHSNs is critical both in the development of clearly articulated description of the challenges faced by clinicians, patients and NHS but also their system stewardship to create an environment where companies can overcome the barriers that sometimes prevent their innovations from developing into maturity and being widely adopted.

I will be stepping down this autumn as Chair of the SBRI Healthcare Programme Board having completed

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SBRI Healthcare particularly wants to find and attract companies not currently in the healthcare area, identifying science and technology developed in one sector and supporting their redesign to meet healthcare needs.

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two years. I'm delighted that Adrian Bull, MD of Imperial College Health Partners AHSN, is taking over. I will continue to take an active role in the work particularly with the opportunities that we provide for SMEs, and I look forward to continuing to support Adrian and the AHSN teams.

Finally I want to say thank you to all the companies, clinicians, researchers and others who have worked with us to make 2014-15 a successful year for SBRI Healthcare. Please be encouraged that the work you are doing is improving quality, improving efficiency, creating wealth and – most importantly – improving the lives of patients.

Peter Ellingworth, Chair

<image>

ABOUT SBRI HEALTHCARE

WHAT WE DO

SBRI Healthcare is an NHS England-backed programme that provides funding to companies to solve healthcare problems.

This year we have awarded new contracts with a total value of £22.4m to 60 companies. And we have worked with AHSNs and the NHS to give detailed specifications to industry for some of the NHS's most pressing needs.

Our goal is to create solutions that will improve patient care, improve efficiency for the NHS and enhance economic growth for UK companies.

FUELSD

KEY FACTS

- known NHS challenges
- contract to develop the product
- economy

•

sure the products meet frontline needs

SBRI Healthcare supports a programme of competitions inviting companies to come forward with ideas and new technologies for

These ideas are assessed and a fully-funded development contract is agreed between the company and the NHS. SBRI Healthcare monitors the contract, the NHS is the lead customer

The SBRI Healthcare programme starts with an initial identification of unmet need, undertaken by clinicians and front-line staff. Challenges are offered to industry to test the feasibility of their ideas. If these projects are successful in testing this can result in a

We design our process to be especially suitable for SMEs and early stage businesses to give funding for a critical stage of product development. We are also particularly keen to help businesses test cross-over innovations from other sectors

While the public sector has the right to license the subsequent technology, the intellectual property (IP) remains with the company enabling growth and wealth creation for the UK

AHSNs ensure that clinicians specify the challenges while making

PROGRAMME MANAGEMENT BOARD MEMBERS (DURING 2014/15)

The programme is run by the Eastern AHSN on behalf of England's 15 AHSNs, listed below.

programme but is directly funded by NHS England.

SBRI Healthcare is part of the Government's wider SBRI

HOW WE ARE RUN

We are governed by a programme management board with representation from AHSNs, industry, NHS England and Department of Health. The Chair of the board is Peter Ellingworth, former Chair of Greater

Manchester AHSN, non-executive member of Oxford AHSN and Chief Executive of the Association of British Healthcare Industries.

Karen Livingstone, Director of Partnerships and Industry Engagement at Eastern AHSN is the National Director of SBRI Healthcare.

The day-to-day management support of SBRI Healthcare is carried out by Health Enterprise East.

ACADEMIC HEALTH SCIENCE NETWORKS

Eastern	Oxford
eahsn.org	oxfordahsn.org
East Midlands	South West
emahsn.org.uk	swahsn.com
Greater Manchester	UCL Partners
gmahsn.org	uclpartners.com
Health Innovation Network (South London)	Wessex
hin-southlondon.org	wessexahsn.org
Imperial College Health Partners	West Midlands
imperialcollegehealthpartners.com	wmahsn.org
Kent, Surrey and Sussex	West of England
kssahsn.net	weahsn.net
North East and North Cumbria	Yorkshire and Humber
ahsn-nenc.org.uk	yhahsn.org.uk
North West Coast nwcahsn.nhs.uk	

ROB BERRY	Head of Innovation representing West
ANNE BLACKWOOD	Chief Executive O
STEPHEN BROWNING	Head of SBRI, Inn
ADRIAN BULL	Managing Directo Partners
ANDREW CHEESMAN	Finance Manager
DAVID CONNELL	SBRI expert and b
TONY DAVIS	Commercial Direc
PAUL DURRANDS	Chief Operating C
PETER ELLINGWORTH (Chair)	Chief Executive of non-executive Dir
CHRIS HART	Commercial Direc
JOHN HOLDEN	Director of Policy,
KEVIN KIELY	Managing Directo
ANNA KING	Commercial Direc
KAREN LIVINGSTONE	National Director,
PATRICIA ROBERTS	Programme Mana
SUE SMALLEY	Commercial Direc
RICHARD STUBBS	Commercial Direc East and North Cu
LARS SUNDSTROM	Director of Enterp representing Sour
DR ROBERT WINTER	Former Managing the year before h

- on and Research, Kent, Surrey and Sussex AHSN and ssex AHSN.
- Officer, Health Enterprise East, Management support
- novate UK
- or, Imperial College Health Partners and representing UCL
- r, Financial Strategy, NHS England
- ousiness representative
- ctor, West Midlands AHSN
- Office, Oxford AHSN
- f Association of British Healthcare Industries (ABHI) and irector, Oxford AHSN and Health Innovation Network
- ctor, East Midlands AHSN
- , Partnerships and Innovation, NHS England
- or, Medilink UK
- ctor, Health Innovation Network (South London AHSN)
- ; SBRI Healthcare and Director, Industry Partnerships EAHSN
- ager, North West Coast AHSN
- ctorate representative, Department of Health
- ctor, Yorkshire and Humber AHSN and representing North umbria AHSN
- prise and Translation, West of England AHSN and th West Peninsula AHSN
- g Director of EAHSN, served on the board for the first half of ne moved to UCLP

STAGE 1 PROBLEM IDENTIFICATION

Lead AHSNs work with the NHS and academics to give clear specification to address the needs of the NHS in a particular theme. See page 12 for the subjects covered in this year's competitions.

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STAGE 2 OPEN CALL TO INDUSTRY

SBRI Healthcare publishes the competition details and invites businesses to apply for funding. At this stage industry is encouraged to use skills, expertise and creativity to develop solutions for healthcare problems. AHSNs organise briefing events for companies with clinicians and researchers, to understand and explore the needs fully.

The application process is completed via an online form. Applicants are asked for details of their idea, and plans for testing and developing the product along with any initial ideas on commercialisation.

STAGE 4 ASSESSMENT AND SELECTION

Bids are assessed by a panel of technical, business and clinical experts and the most promising ideas are selected for funding. Assessors are looking for projects that are well thought through, that meet the brief and have a clear business plan.

STAGE 5 PHASE ONE: FEASIBILITY TESTING

Projects start in an initial stage of testing to establish clinical, technical and commercial viability. Companies design and carry out product testing, with AHSNs giving advice on product development, clinical trials and accessing patients and NHS specialists. SBRI Healthcare sources health economists to help with the business model and provides 'light touch' monitoring to ensure projects are on track to meet agreed milestones. Phase 1 contracts for feasibility testing are valued at up to £100,000 and last for six months.

STAGE 10 SUCCESS

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The ultimate goal of the SBRI Healthcare programme is to improve care for patients in a way that brings efficiencies to the NHS and growth for companies. Each year we are seeing more and more companies reaching this stage and patients benefitting from innovations that help them.

STAGE 9 DIFFUSION AND ADOPTION

Having demonstrated a product can improve the quality and efficiency of patient care by successfully completing the SBRI Healthcare test phases, AHSNs will use their networks to assist with accessing the NHS market. The purpose of AHSNs is to accelerate innovation and as such, they have a particular interest and expertise in seeing good products adopted although can make no promises as to the end result.

STAGE 8 COMMERCIALISATION

This stage involves product production and marketing with the NHS as the lead customer. There is no funding for this stage and companies compete for NHS procurement contracts.

STAGE 7 PHASE 2: PROTOTYPE DEVELOPMENT, EVIDENCE GATHERING AND COMMERCIAL PREPARATION

Companies continue with prototype development and testing of their products during this phase. Contracts are worth up to £1 million over a period of 12 months.

STAGE 6 ASSESSMENT PROCESS FOR PHASE 2 FUNDING

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Companies can bid for Phase 2 funding to continue product development and testing. All applicants are assessed by the same clinical, technical and business experts with the panel looking for game-changing technologies and commercial plans to make a real difference in the challenge areas defined at the start of the process.

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THE SBRI

HEALTHCARE

PROCESS

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STAGE 3 APPLICANTS SUBMIT PROPOSALS

SBRI Healthcare Annual Review 2014/15 The Impact of SBRI Healthcare

OUR YEAR AT A GLANCE



10 new clinically-led competitions where NHS needs have been articulated for business to respond to



£4.2m

40 Phase 1 contracts awarded with a total value of £4.2m

382

382 applications from industry assessed

20 Phase 2 contracts awarded with a total value of £18.2m

SBRI HEALTHCARE **TOTAL IMPACT** TO DATE

eff.5bn







152 contracts awarded across Phases 1,2,3



200

£42m **£42m** total funds awarded

£32m

£32m additional funding leveraged through grants and venture capital



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SPARK 2014

The SPARK 2014 event in London in December showcased innovations from 50 companies that are testing and developing their ideas with support from SBRI Healthcare.

300 delegates from across the NHS, government, academia and industry heard presentations from George Freeman, Minister for Life Sciences; Ian Dodge and Prof Tony Young, directors representing the commissioning and clinical functions at NHS England; and Iain Grey, Chief Executive of Innovate UK.

lain Grey said, "The SBRI process enables any part of the public sector to engage with new suppliers for mutual benefit – stimulating economic growth. SBRI Healthcare is a clear example of this in action. It plays a pivotal role in ensuring small, innovative companies get the opportunity to turn bright ideas into commercially viable products. It benefits patients, the NHS, industry and UK plc."

The 15 AHSNs were on hand all day to guide delegates through the application process for funding and to speak with the NHS about how innovations can be procured and put into practice to enhance healthcare.

Feedback from delegates was excellent and gave us useful guidance for the next event which is pencilled in for Autumn 2016.

2014-15 COMPETITIONS

The SBRI Healthcare process is built around defined competitions. Companies are invited to bid for funding to develop solutions for specific health needs.

SPRING 2014

- Child and maternal health
- Integrated care
- Medicines adherence
- Musculoskeletal
- Learning disabilitie

AUTUMN 2014

- Brain injury
- Outpatient services
- Child and adolescent mental health (CAMHS
- Improving the care of the diabetic foot ulcer
- Medical imaging

AHSNs at the heart of SBRI Healthcare successes

SBRI Healthcare is run by England's 15 Academic Health Science Networks (AHSNs) who take the lead running competitions, promoting the competitions to industry in their regions and encouraging adoption o successful innovations.

All the AHSNs are active in promoting SBRI Healthcard competitions to potential innovators and businesses throughout their region often through events, newsletters, social media, trade bodies and webinars They will also promote successful bidders from their region. For Oxford AHSN this included encouraging winners from their region to showcase their work via posters at the BioTrinity 2015 event.

Nominated AHSNs lead on running the calls and competitions. East Midlands AHSN ran the 'improvin the care of the diabetic foot ulcer' category within Autumn 2014 last year, working with Innovate UK's Knowledge Transfer Network (KTN).

The region has two world-leading centres for researce and treatment of diabetes patients – the Leicester Diabetes Centre, (run by Leicester University Hospital NHS Trust and University of Leicester Medical School and Derby Teaching Hospitals NHS Trust. Clinical staff from both these centres and primary care clinical staff contributed to defining the unmet needs and requirements and were also part of the assessment panel.

"The SBRI Healthcare programme is a key opportunit to focus the initiatives of innovative companies on developing solutions to unmet needs and challenges within the UK NHS and healthcare system," says Chris Hart, Commercial Director. "The subsequent support which successful applicants receive has been critical in enabling some East Midlands-based companies to make the investments required to bring innovations and products to market.

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The SBRI Healthcare programme is a key opportunity to focus the initiatives of innovative companies on developing solutions to unmet needs and challenges within the... NHS.

The **AHSN**Network

l in to of re	"NHS clinicians involved in the SBRI Healthcare programme have also benefited by learning more about new technologies and innovations which could be of use in their areas of practice, even if some of these are not yet at the stage where they are suitable for direct SBRI Healthcare support. All of this is clearly beneficial to patients, staff and the UK economy."
S.	South West AHSN ran the integrated care call in Spring 2014. They were keen to make sure commissioners as well as clinicians were involved.
a	"We recognised the importance of getting the perspective of the potential customer, in this case, commissioners," explains Jon Siddall, Director of Investment Partnerships. "This meant that the companies selected had the opportunity to match up with CCGs during the feasibility stage to co-create innovative new solutions."
ch	For all AHSNs SBRI Healthcare offers the chance to assist industry in their region by giving support and being clear about identifying needs.
als I) ff	Jon Siddall explains, "SBRI Healthcare is well-aligned with what AHSNs are here to do: finding innovations that help us solve problems we face in NHS. This is why South West AHSN has positioned SBRI Healthcare as a core part of our work programme. If we work in a joined up way it meets the success criteria for SBRI Healthcare, our AHSN and our member organisations.
ity s is t	"We encourage a 'challenge-led' way of working – understanding the needs and problems in the NHS and working out how to pull through solutions into the NHS with the ultimate aim of benefiting patients. This is central to how SBRI Healthcare works and gives focus for industry so that they don't have to throw ideas at the NHS and hope they stick."

Vital signs monitor improves patient safety

Company: Isansys Lifecare

Competition: Patient Safety and Patient Monitoring / Improving Diagnosis and Treatment Management of Cancer

Innovation: The Patient Status Engine (PSE), continuous, wireless vital sign data acquisition and analysis platform

Total award: £1.2 million awarded across Phase 1 and Phase 2 development stages

Savings to the NHS: In excess of £30 million per annum

Product availability: Available

SUMMARY

Isansys Lifecare has developed a way of continually monitoring the vital signs of patients whether they are in hospital or at home. The Patient Status Engine (PSE) integrates a range of advanced medically-certified, wireless, wearable sensors, with secure networking technologies and predictive analytics.

The PSE addresses critical patient safety issues reducing the number of avoidable deaths and adverse events in hospital, reducing length of stay and enabling new pathways to keep patients out of hospital in the first place. It offers significant cost savings to the NHS and increased independence for patients.

OVERVIEW

Isansys is a new-generation digital healthcare company combining medical devices, healthcare IT and big data analytics to provide an innovative, low-cost and scalable patient monitoring platform. The PSE integrates a range of advanced, medically-certified, wireless, wearable sensors, with secure networking technologies and predictive analytics to continuously collect multiple vital sign data simply, securely and automatically from patients. It works whether patients are in hospital or at home and it analyses the data and delivers patient status indicators to a nurse station. call centre or via secure apps to clinical staff in any location.

The platform addresses critical patient safety issues that cost the NHS an estimated £5 billion annually. By significantly improving patient monitoring and providing more robust and timely early warning indicators, the PSE enables healthcare providers to reduce the number of in-hospital avoidable deaths and adverse events, and to discharge patients earlier and with greater confidence. By enabling critical care to be extended out of the hospital into the home, the PSE also supports new pathways to keep patients out of hospital, with subsequent benefits for patients and cost reductions for providers.

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The SBRI Healthcare funding has enabled us to rapidly re-engineer the PSE for scalability, lower cost manufacture and expanded functionality. It has also provided support for early stage clinical deployments, so that we now have a proven world-leading medical product that is gaining traction in export markets as well as the NHS, placing Isansys in a leading position in a rapidly developing multi-billion dollar global market.

Isansys CEO Keith Errey

PATIENT PERSPECTIVE

On general wards a patient's status can easily change in between observations. The PSE gives patients the same level of observation that they would get on an intensive care ward, giving clear benefits to staff and patients. As one patient said, "With this system I can move about, feeling reassured that the doctors and nurses can continually check on my condition. I feel free and comfortable and safe."

ECONOMIC IMPACT

The estimated costs to the NHS associated with patient safety are £5 billion. It's difficult to assess the exact saving that the PSE could release but it is likely to be in the region of 50%. The cost of widespread adoption of the PSE is of the order of £1 billion leading to annual net saving of £1-2 billion if 100% adoption achieved.

Visit: www.isansys.com



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KEY FACTS

- A device worn by patients that
- allowing patients to leave hospital earlier
- Improves patient safety observed
- Could save a significant

Lung cancer diagnosed from patient breath

Company: Owlstone **Competition:** Better Health Outcomes (Cancer) Innovation: LuCID (Lung Cancer Indicator Detection) Total award: £1.2 million across Phase 1 and Phase 2 development stages Savings to the NHS: Estimated at £82 million per year Product availability: 2017

SUMMARY

Owlstone took chemical detection technology developed in the defence sector and applied it to health. The LuCID (Lung Cancer Indicator Detection) project will help the diagnosis of lung cancer by measuring the trace chemicals present in the breath of patients. It's a less invasive test and by allowing more effective and less expensive treatments after an earlier diagnosis, LuCID has the potential to save 3,200 lives and £82 million each year.

OVERVIEW

Owlstone was founded in 2004, as a spin-out from the engineering department at the University of Cambridge, to commercialise the miniature chemical detection system that co-founder Andrew Koehl had developed during his PhD. In the wake of the 9/11 attacks, the company's focus was originally on defence and security applications. However, it became clear that the underlying technology would be equally useful in medical applications involving the detection of biomarkers - tell-tale chemicals in breath and/or bodily fluids that indicate the presence of particular diseases. The LuCID project applies this technology to the detection of lung cancer by measuring chemicals in patients' breath.

Every year, there are around 45,000 new cases of lung cancer in the UK. When diagnosed at stage one, 35% of patients will live at least a further five years, while for those diagnosed at stage four, the five-year survival rate is close to zero. However, at present just 15% of new cases are diagnosed at stage one. By increasing this to 25% of cases, LuCID aims to save 3,200 lives every year. During Phase 1 of the project, 12 lung cancer markers were identified and measured in simulated human breath samples. Phase 2 will work with Papworth Hospital in Cambridge and Glenfield Hospital in Leicestershire to verify the effectiveness of the test using a cohort of lung cancer patients and controls.

PATIENT PERSPECTIVE

LuCID promises the twin benefits of a more pleasant clinical experience and improved health outcomes. Current lung cancer screening techniques, such as chest x-ray, CT-scan and bronchoscopy, are not without risks, and bronchoscopy in particular is a highly invasive medical procedure, involving a tube being fed through the nose or mouth, down the windpipe and into the lungs. By contrast, a breath test is a straightforward, minimally-invasive procedure that can be quickly and easily carried out.



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If you could change only one thing in the fight against cancer, it would be to detect the disease earlier where existing treatments are already proven to save lives. Owlstone's technology has the potential to deliver a quick and easy-to-use breath test, and SBRI Healthcare funding is allowing us to turn that potential into a reality.

Billy Boyle, Owlstone Co-Founder

ECONOMIC IMPACT

Cancer Research UK estimates the average cost of treating patients diagnosed with stage four lung cancer to be £13,078, while treatment for patients diagnosed at stage one is just £7,952. Increasing the proportion of patients diagnosed at stage one from 14.5% to 25% will lead to a corresponding reduction in treatment costs of £82 million per year. For Owlstone, adoption of the breath test into a national screening programme would lead to around 1.3 million tests being carried out each year, at an estimated cost of £15 per test.

Visit: www.owlstonenanotech.com



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KEY FACTS

- A non-invasive breath test to help diagnosis of lung cancer
- A cross-over innovation from the defence industry
- Early detection means 3,200 lives could be saved
- Potential savings of £82m in treatment costs

Case studies

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Cancer detector reduces repeat operations

Company: Lightpoint Medical

Competition: Better health outcomes: research tools

Innovation: Real time detection of cancer using a hand held molecular imaging fiberscope

Total award: Phase 1: £96,600. Phase 2: £947,120

Savings to the NHS: Estimated to be £28 million per year

Product availability: Planned Q4 2016

SUMMARY

Lightpoint Medical has developed a proprietary molecular imaging technology with the potential to detect cancer in real-time during surgery, and thereby reduce the need for re-operation. It helps doctors to ensure that they have identified all cancerous tissue. It helps patients by limiting the recurrence of cancer and has potential savings of £28 million for the NHS.

OVERVIEW

Cancer frequently requires multiple operations. For example, 20-40% of breast cancer patients who undergo breast-conserving surgery will require a reoperation. The consequences, in addition to the repeat operation itself, include delayed follow up treatment, higher risk of mastectomy, increased likelihood of recurrence, poorer functional and cosmetic outcomes, patient anxiety, and enormous financial cost.

Cancerous tissue often fails to be completely removed during the initial operation because there are no tools to rapidly and effectively detect cancer during surgery. Today, surgeons primarily rely on visual and tactile assessment to find microscopic cancerous deposits. Consequently, there is a tremendous medical need for improved tools to image cancerous tissue in real time during the operation.

Lightpoint Medical is a company dedicated to improving health outcomes for cancer patients through margin assessment and image-guided surgery.

The technology is based on Cerenkov Luminescence Imaging (CLI), a ground-breaking imaging modality that can perform optical imaging of Positron Emission Tomography (PET) agents. CLI combines the benefits of optical imaging (namely, low cost, high resolution, and portability) with the power of PET imaging (high diagnostic performance, and widespread availability of imaging agents).

Relative to competing technologies, CLI has the potential for greater diagnostic performance across a broader range of indications, without the need for developing novel contrast agents. CLI is roughly 100 times cheaper than a whole-body PET scanner. The company is developing engineering solutions to make CLI feasible for routine clinical use.



PATIENT PERSPECTIVE

There is significant benefit for patients if the operation succeeds in removing all cancerous tissue first time round. As a result of the technology, patients will benefit from reduced anxiety, reduced likelihood of recurrence, and improved survival, functional and cosmetic outcomes.

ECONOMIC IMPACT

Lightpoint Medical is expecting to release their first commercial product towards the end of 2015 and a second product in 2016. The team is rapidly growing from three in 2014 to a team of 15 in May 2015 and an expected growth to a total of 20 staff members at the end of 2015.

Revenue for Lightpoint Medical is expected to double year over year for the next three years with savings to the NHS in excess of £28 million annually.

Visit: www.lightpointmedical.com



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KEY FACTS

- An innovation that helps surgeons detect cancerous tissue during an operation
- Significant health benefits for patients – reducing reoperations and recurrence of cancer
- Potential savings to the NHS of £28m

Case studies

CASE STUDY UPDATES

CASE STUDIES IN PROGRESS

In last year's annual report we listed all companies that were receiving funding, and showcased several companies in case studies. Here is an update on the progress some have made in the last year.

Company: Polyphotonix

Innovation: Noctura 400 is a light-therapy sleep mask for the treatment of diabetic retinopathy. The alternative treatment is much more invasive and unpleasant for patients requiring surgery and eye injections. The sleep mask can show reversal of eye disease after six months.

Progress: After testing in eye clinics across the country, including Moorfields Eye Hospital, Noctura 400 is currently being sold privately and is in the process of NICE approval for authorisation and use in the NHS.

www.polyphotonix.com



Company: Fuel3D

Innovation: The Eykona Wound Measurement System delivers accurate and repeatable 3D imaging technology to wound care, allowing any wound, scar or tissue blemish to be scanned, measured and mapped over time to inform medical processes. An innovative, lightweight and easy-to-use hand held unit captures the 3D images, which can then be analysed and shared by clinicians through pioneering software.

Progress: Available since 2012, the Eykona Wound Measurement System has sold over 100 units and is used in over 25 NHS trusts as well as in universities and research projects in the UK, Europe and Australia.

The innovation has allowed re-designed services in podiatry and wound management, for instance in the Solent NHS Trust and the wound healing research unit at Cardiff University.

www.fuel-3d.com

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With the support of SBRI Healthcare funding Fuel3D has been able to design and manufacture the world's first point and shoot 3D Scanner that has a multitude of applications within medicine and in a growing number of additional applications both in the UK and internationally.



Company: ADI – Advance Digital Institute

Innovation: ADI created a digital support app, Painsense, to help patients in the Leeds area. The app is based on The Pain Toolkit booklet developed with Pete Moore and Dr Frances Cole and helps those with persistent pain and the associated anxiety and depression.

Progress: The service has been commissioned by three clinical commissioning groups (CCGs) covering the entirety of Leeds and is being 'prescribed' by 109 GP practices. As part of this, Leeds West CCG, as clinical commissioning partner for the Phase1 development stage, redesigned the clinical care pathway to prepare for introducing the e-learning and digital apps to their clinicians and patients. This 'real world' test bed has ensured that the pathway refocusing now being offered by PainSense is both realistic and achievable within today's NHS.

www.pain-sense.co.uk

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PainSense aims to reduce the load on primary care through reduction in face to face appointments, and provide better care with less acute hospital admissions. Outcome evaluation data will be collected in the coming months and will be used to promote and evolve the service for national roll out.

COMPETITION RESULTS

Mental Health and End of Life

5 companies completed Phase 2 in Spring 2015

Company	Award	AHSN location			
Advanced Digital Innovation (UK) Ltd	£786,550	Yorkshire and Humber			
Summary: Rolling out a Leeds-wide demonstrator of a new digital service, PainSense, to support patients with persistent pain. The service is integrated into a new pathway of care and provides patients with digital resources for self-assessment and management in the form of engaging multi-media smartphone apps. These are integrated securely with NHS clinical systems, allowing a GP or other health care professionals to better monitor and advise patients. PainSense aims to reduce the load on primary care through reduction in face to face appointments, and provide better care with less acute hospital admissions. Outcome evaluation data is being collected and will be used to promote and evolve the service for national roll out.					
Big White Wall Ltd	£393,254	Health Innovation Network (South London)			
Summary: Big White Wall is a digital mental health service supporting people with anxiety, depression and other conditions to improve their emotional wellbeing. Individuals with mental health problems are more likely to be overweight, to smoke, and to drink too much, which leads to health problems. The project has developed online courses on losing weight, stopping smoking, and cutting down alcohol, specifically for people with mental health problems. As courses are online, they can be accessed from home at any time with no need to see a doctor for a referral. The courses will be free on the NHS for people in many parts of the UK, and through some employers and universities.					
Docobo Ltd	£427,775	Kent, Surrey and Sussex			
Summary: Developing in association with Aintree University Hospital, OptNIVent, to optimise non-invasive ventilation during palliation. Motor neurone disease (MND) is a progressive disease that attacks the nervous system where messages gradually stop reaching muscles including those which help us breathe, often resulting in the need of a ventilator for the last 18-24 months of life. The OptNIVent telehealth system enables more frequent ventilation management, down from once every 3-4 months to once per week if necessary and without increasing the number of clinicians involved. The improvement means less anxiety for patients and the regular health checks, recorded on the system, help clinicians to intervene earlier to prevent illnesses from developing. This new capability ensures the delivery of a higher level of care and a more comfortable quality of life for patients.					
Dynamic Health Systems Consulting LLP	£897,000	Yorkshire and Humber			
Summary: Developing a secure, personalised and flexible digital health and care services delivery platform, with a package of digital services focused on supporting individuals who are felt to be in the last year of life. People in this position are able to use these services to identify and communicate with their own unique network of personal carers and supporters, to signal their needs, aspirations and end of life care choices to those caring for them. Both they and their carers receive relevant information from trusted sources to help them make appropriate choices. Using the same platform and the package of digital services to manage comorbidities, such as long term conditions, significantly extends the reach and range of this approach, particularly relevant today as the proportion of people diagnosed with life limiting illness due to non-malignant disease is increasing rapidly.					
Handaxe Ltd (University of Bristol)	£464,115	West of England			
Summary: Pesky gNATs is a cognitive behavioural therapy (CBT) based mental health intervention for young people. It combines a desktop computer game and a mobile app to provide age-appropriate and engaging support for young people. Interventions for anxiety and depression and for trauma focused CBT have been created as well as a game and app to support mindfulness. These interventions will be available to mental health professionals who work with young people.					

Phase 3 competition

8 companies completed Phase 3 in Spring 2015

Company	Award	AHSN location		
Aseptika Ltd	£999,240	Eastern		
Summary: Developing a use-at-home test to measure the level of bacteria in the lungs of people with long-term respiratory diseases such as: COPD, Bronchiectasis, Asthma and Cystic Fibrosis, as part of a self-management solution called Activ8rlives. In the Phase 3 project, the test was moved from a laboratory format onto one which patients could use for themselves at home, along with other health monitors also provided by the company. A clinical trial was also undertaken in which 30 volunteer patients, with an average age of 67 yrs, successfully recorded and uploaded medical data on iPads provided each day for up to six months, proving that older patients can use Information Technology and are motivated to manage and maintain their own health, and enjoyed doing it. Education, empowerment and engagement of patients in managing their own health can be successfully achieved with the right tools and with support and encouragement.				
Fuel 3D Technologies Ltd	£685,831	Oxford		
Summary: Design and manufacture of the wo medicine and in a growing number of addition	rld's first point and s al applications both	shoot 3D Scanner that has a multitude of applications both within n in the UK and internationally.		
Halliday James Ltd	£625,900	Oxford		
Summary: Developing Auto-Motive in conjunc people with bipolar disorder which affects 1-2 app and sensors to monitor the mood, activitie user is taught to recognise feelings and situation often affects the ability of the person with bip analyses the data on mood and events which to objective measurements which can alert the u	ction with the Unive % of the population es and sleep of user ons which may lead olar to recognise the the user enters in the user with an early in	ersities of Cardiff and Warwick and the charity Bipolar UK to support a and costs the NHS £342M per annum.The system uses a smart phone rs. It is intended to augment self-management programmes where the to a manic or depressive episode. However, because the condition ese signs with adverse consequences. As Auto-Motive automatically he app and the activity and sleep data from the sensors it can provide dication of the problem.		
Just Checking Ltd	£877,703	West Midlands		
Summary: 'Just Right' proved that the Just Checking activity monitoring system could bring substantial efficiencies to supported living and residential services for adults with learning disabilities. 11 local authorities and their service providers used Just Checking to match service-user needs and get the care 'just right' - not too little, not too much - resulting in improved person-centred care for service users and financial savings which exceeded expectations. Return on investment was 500%, with the technology paying for itself within 3 months. Importantly, activity monitoring brought greater insight into the abilities and support needs of service users, leading to more finely-tuned support and better outcomes for service users.				
OBS Medical Ltd	£617,096	Oxford		
Summary: Piloting Visensia Mobile, to improve patient safety and outcomes through the early detection of patient deterioration and instability. Continuous multi-dimensional monitoring in the form of a single index (VSI) of patients status via non-invasive measurement of Heart Rate, SpO2 and derived Respiratory Rate from the PPG waveform.				
Polyphotonix Ltd	£999,784	North East and North Cumbria		
Summary: The Phase 3 project has been the catalyst for Noctura 400 (non-invasive, home based treatment for Diabetic Retinopathy) evaluation within the NHS. It has also initiated complimentary evaluation for early stage disease intervention in a primary care Optometry setting. Noctura 400 exposure has been increased as a result and as such has stimulated significant adoption interest from both patient groups and eye care professionals.				
Rapid Rhythm Ltd	£664,400	North West Coast		
Summary: Economic validation and accelerate	ed adoption of a rap are.	id one-step ECG handset device to replace traditional 12 lead ECG for		

£928,462

Veraz Ltd

Summary: Trial and Adoption of the Green Badge System, a suite of technologies for monitoring and improving hand hygiene compliance in healthcare.

North West Coast

Better health outcomes

Autumn 2013 (Cancer, Cardiovascular, COPD, Diabetes, Mental Health, Patient Safety, Research Tools)

35 companies completed Phase 1; 20 of these were successful and started Phase 2 in December/ January 2014

Cancer Companies	Award Phase 1	Award Phase 2	AHSN location
Oncascan Ltd	£64,774	£996,688	Oxford

Summary: Introducing a step change in cancer diagnosis and management with a brand new test that will allow earlier de-selection of patients without cancer before embarking on dangerous and invasive investigations.

The LGS test has been found to distinguish between patients with and without cancer. This project is to develop this invention into a practical system for use in clinical laboratories to improve the management of patients with suspected cancers.

Owlstone Ltd	£95,158	£999,614	Eastern
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Summary: A non-invasive screening device for early stage lung cancer utilizing breath diagnostics. As for most cancers, early diagnosis of lung cancer leads to better patient outcomes.

A 12 month programme to evaluate the performance of a novel, highly sensitive and highly selective, Volatile Organic (VO) analyser, in the context of the early stage diagnostics of lung cancer by breath sampling. The programme includes instrumental development and clinical assessment

Astrimmune Ltd	£95,180	£1,000,000	East Midlands
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Summary: Developing a diagnostic test for pancreatic and other gastrointestinal cancers based on detection of shed tumour cells in the blood. The test provides unique insight into surface markers and gene expression of pancreatic cancer cells; isolating these cells from blood allows detection before metastasis can occur. Survival rates of pancreatic cancer could be improved dramatically if early detection were possible.

The test uses techniques that are familiar in hospital labs for diagnosis of virus infections and tissue typing for transplantation. In this project the test will be 'road tested' in hospital labs and further work will be done in research to demonstrate the ability of the test to detect cancer before it has spread, and its ability to discriminate among gastrointestinal cancers.

Isansys Lifecare Ltd	£99,918	N/A	Oxford
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Summary: To extend the existing Patient Status Engine wireless patient monitoring platform and repurpose for home use, to provide warning notifications of sepsis early in the 72-hour period during which the condition becomes critical. During Phase 1 Isansys developed a new wireless clinical thermometer and created a mobile gateway to securely connect the small unobtrusive wearable sensors worn by the patients at home to a mobile network so that patients' vital sign data can be observed on a dashboard in real time by their caregivers. Additionally in a closely related clinical study, clinicians working with Isansys have shown clear correlations between changes in heart rate variability and the early onset of inflammation, providing evidence that an automated alerting system using HRV as a surrogate measure for early indications of sepsis can be now be incorporated in the enhanced PSE monitoring system."

Cardiovascular Companies	Award Phase 1	Award Phase 2	AHSN location		
pintech Ltd	£100,000	N/A	West of England		
Summary: Production of anatomically shaped ife of the product. Utilising a patent protected commercially viable, biodegradable, non-wove	disposable compres , revolutionary non n fabric providing a	ssion garments which a -woven dynamic fibre, Il direction elasticity a	do not lose their compression levels during the based on natural elastomer and cotton. The only nd micro-porosity.		
Cardiocity Ltd	£98,000	£945,821	West Midlands		
Summary: Combined Cardio and Vascular Screening (C2VS). This projects aims to converge two screening concepts, those of Blood Pressure and ECG, into a single system, with no wires or electrodes to provide combined cardio and vascular screening. It will produce a paradigm shift in the patient screening technology market that not only addresses the high cost of screening, but presents a device that has high patient acceptance levels.					
Plessey Semiconductors Ltd	£97,166	£999,992	South West		
Summary: Using a proprietary sensor technology to develop a very low cost, easy to use, lead-one ECG device, known as imPulse, to Issist primary care staff to identify arrhythmias and improve long term management and secondary prevention. The device can display a Ineart rhythm strip on any desktop, laptop, tablet or smartphone via a USB or Bluetooth link and is ideal for patients monitoring their own condition.					
ilverCloud Health Ltd	£93,621	N/A	Ireland		
ummary: Developing an online platform to support self-management of symptoms and promote wellbeing of people with cardiovascular lisease (CVD). CVD is responsible for premature death, impaired quality of life and has disproportionate service usage and costs. Psychological distress in CVD is common and associated with poor outcome. The project will develop an online cognitive, psycho- ducational and psycho-therapeutic CVD-specific package to support self-management and promote wellbeing. This will improve access o holistic care while reducing costs.					
Docobo Ltd	£99,648	N/A	Kent, Surrey and Sussex		
ummary: The Aegle system, developed in partnership with Crawley, Horsham and West Sussex CCGs, will support proactive programmes on primary care focused on CVD. Aegle integrates 'pointing' to patients at risk from existing risk stratification with remote monitoring echnology to deliver individual care plans and track patients through screening, assessment and monitoring. It will enable clinicians to nanage CVD as a single family and optimise a case finding approach that relies on the specific cardiovascular conditions.					

Cardiovascular Companies	Award Phase 1	Award Phase 2	AHSN location		
pintech Ltd	£100,000	N/A	West of England		
ummary: Production of anatomically shaped disposable compression garments which do not lose their compression levels during the fe of the product. Utilising a patent protected, revolutionary non-woven dynamic fibre, based on natural elastomer and cotton. The only ommercially viable, biodegradable, non-woven fabric providing all direction elasticity and micro-porosity.					
Cardiocity Ltd	£98,000	£945,821	West Midlands		
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Oocobo Ltd	£99,648	N/A	Kent, Surrey and Sussex		
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COPD Companies	Award Phase 1	Award Phase 2	AHSN location				
Aseptika Ltd	£99,960	£999,384	Eastern				
Summary: Developing a medical-version of a S home. The device will alert the wearer, their fa	martwatch to help mily and their medi	people with respirator ical team of rapid decli	y disease to better manage their condition at ne in health. Aseptika				
BuddyWOTCH continuously records blood oxygenation, heart rate, temperature, physical activity and chronical medication taken. It acts as an early warning of respiratory decline or failure and is combined into a potentially new index of respiratory efficiency. In Phase 2, two batent applications were made to protect the inventive steps.							
BuddyWOTCH is designed to be worn 24/7 for a 'rest-of-life assist' as a next-generation medical monitor, and will be marketed to consumers and the NHS under the Company's Activ8rlives brand for self-monitoring and self-management.							
Respiratory disease is the third largest cause of days. 5 million people in the UK have respirator	death in the UK an ry disease.	d costs the EU €102 bi	illion each year in treatment and lost working				
Team Consulting Ltd	£98,930	N/A	Eastern				
Summary: Developing an engineering prototyp market-leading devices but at a fraction of the	oe capsule dry powo cost.	der inhaler (cDPI) whic	h offers performance consistent with current				
The cDPI employs an innovative airway geomet patients.	try that makes effici	ent use of the limited	inspiratory energy available from severe COPD				
Using only plastic components, the risk profile avoided.	of the product is dr	amatically reduced, as	expensive, precision metal piercing elements are				
Glyconics Ltd	£98,941	N/A	Wales				
Summary: Accurate diagnosis of COPD is an ext and rapidly identify COPD samples and differen the system into a cost-effective clinical tool for	tremely difficult pro tiate them from oth the NHS.	cess. Using Fourier-Tra er respiratory syndron	nsforming Infrared Spectroscopy we can reliably nes. This project provides the means to develop				
Cambridge Respiratory Innovations Ltd	£99,348	£999,759	Eastern				
Summary: The COPD home monitoring and tre of their respiratory function. This will result in l exacerbations.	eatment manageme better management	ent device will enable C t of the disease itself, v	COPD sufferers to better understand the quality vith users experiencing fewer uncontrolled				
The project demonstrate that an inexpensive COPD home monitoring and treatment management device is technically feasible, confirming that the concept is attractive to both COPD sufferers and healthcare professionals. The study also indicated that due to the disruptive nature of the proposed technology, healthcare professionals will require access to the results of both independent clinical evaluations and health economic research prior to adoption.							
HealthQuest Solutions Ltd	£95,000	£964,107	Wessex				
Summary: Developing myCOPD, a web based s community care, the system aims to help patie exacerbation frequency. The organisation of m improve the efficiency in service delivery for al	elf-management sy nts understand the edicines and patien I those who care for	istem for patients with ir condition, react to cl t held material is at the r patients with COPD.	COPD. Built by experts in the field of COPD hanges in their symptoms and reduce e heart of this innovation to reduce cost and				
Phase 2 will trial, enhance and develop system management, and telemedicine, as it assists pa though a 6-week online pulmonary rehab prog work together to deliver an enhanced service a	s interoperability fo atients though educ ram. myCOPD also at reduced cost by h	r the myCOPD. The we ation, symptom report delivers a clinician faci nelping nurses and doc	b based system delivers much more than self- ting, inhaler technique videos and diary, exercise ng dashboard where patients and clinicians can tors utilise their resources more efficiently.				

Diabetes Companies	Award Phase 1	Award Phase 2	AHSN location				
Oxford Medical Diagnostics Ltd	£88,596	£750,519	Oxford				
Summary: Developing a breath ketone analysis for improved diabetes management. High blood ketones are associated with elevated breath acetone, and are indicative of the dangerous condition DKA. Laser sensor technology can measure breath acetone and provide a non-invasive early warning of this condition, but is not financially accessible for home use. This project assessed the feasibility of using cost effective technologies to achieve the goal of providing a non-invasive home based DKA warning device.							
PsychologyOnline.co.uk Ltd	£98,032	N/A	Eastern				
Summary: Teams at PsychologyOnline, uMotif and Kings College Hospital have collaborated to build an integrated system to deliver online psychological therapy to people with Type 1 diabetes who are struggling to achieve optimal control of their blood sugar. Weekly therapy sessions are delivered by specialist diabetes nurses who have been trained to administer cognitive behavioural therapy (CBT) alongside normal diabetes care. The sessions take place in real time over the internet and are delivered via the PsychologyOnline website, using instant messaging. Care is augmented between therapy sessions through the use of motivational enhancement tools created by uMotif, which are delivered via a smart phone app.							
GB Electronics (UK) Ltd	£96,813	N/A	Kent, Surrey and Sussex				
Summary: Reducing the impact of Diabetes Peripheral Neuropathy (DPN) on healthcare services and patients' quality of life through the development of a cost-effective thermal perception screening and monitoring device for early detection and long-term management. DPN currently costs the NHS £662 million each year, and can devastate a patient's quality of life and life expectancy. The project aims to develop an inexpensive thermal perception screening and monitoring device that can be used in primary care by practice nurses and other healthcare professionals as an early indicator of the onset of DPN.							
i2r Medical Ltd	£96,221	£710,134	Wessex				
Summary: Developing a wound healing device specifically for the treatment of diabetic foot and leg wounds at an early stage to prevent infection and subsequent complications including amputations Achievements made during Phase 1 of the project included the identification and successful proof of concept testing of a novel wound healing device, specifically for diabetics suffering from chronic wounds. This device can potentially provide a very significant economic benefit to the NHS as well as materially improving the quality of lives of patients suffering from diabetic wounds.							
Inotec AMD Ltd	£92,075	£997,499	Eastern				
Summary: Developing a topical oxygen therapy device for non-healing diabetic foot ulcers (TODFU). Collaborating with Addenbrooke's, St Georges and a group of other leading hospitals in a 100-patient clinical study on the healing of diabetic foot ulcers with Inotec's NATROX ambulatory topical oxygen therapy, which gives continuous day and night treatment while the patient carries on with normal life. In the same project Inotec and healthcare manufacturer Kimal plc will work on extending the scope of the product to cope with the most awkward wounds that occur in this condition. Initial clinical studies have been very encouraging but this larger trial will confirm just how effective this treatment is in healing wounds that may lead to severe complications including amputation.							
ICNH Ltd	£100,000	N/A	UCL Partners				
Summary: Developing an online application th	at allows patients to	o view, manage and int	eract with their test results and appointment				

The study set out to assess whether or not patients would use online and SMS test results and care planning tools. 70% of patients in the pilot viewed the online portal, and all of those viewed their test results; 40% then went on to fill out a digital care plan. Feedback from patients and medical staff was very positive; patients turned up prepared to talk about their issues with a far more pro-active and self-motivated attitude, and the system had very little overhead for the practice manager.

times.

Mental Health Companies	Award Phase 1	Award Phase 2	AHSN location				
Mayden House Ltd	£69,655	£467,000	West of England				
Summary: Developing IAPTus, a widely used patient management system for psychological therapies. The aim was To test the feasibility of, then develop a secure referral hub for, online psychological therapies. The intention is to provide a platform across which patients from Improving Access to Psychological Therapy (IAPT) services can be referred for online treatment more easily in order to facilitate a step change in use of this treatment modality, whilst enabling the patient's clinical record to be updated and maintained securely by the referring service and online provider throughout referral and treatment.							
P1vital Ltd	£99,958	N/A	Oxford				
Summary: Antidepressants are widely prescribed for the treatment of depression but can take 4-6 weeks after starting an effective drug therapy before a patient feels any better. Many patients do not respond to the first drug prescribed and have to try several different drugs, one after the other, before an effective treatment is found. P1vital has developed a computer test called the GP-ETB, designed to be completed by depressed patients, to predict, early in treatment, whether an antidepressant drug is working. Initial results from a pilot clinical investigation showed that, when the GP-ETB test was completed after 7-9 days of treatment, it accurately predicted whether a patient was going to feel better after 4-6 weeks of treatment.							
ProReal Ltd	£99,870	£987,247	Oxford				
Summary: The ProReal avatar therapy for men therapeutic process by providing a visual and c	tal health care pilot lynamic platform wh	confirms there is pote nich helps the user to e	ntial forProReal software to provide benefit to the plore and label thoughts and feelings.				
The Phase 2 project will design and pilot a ProReal avatar-based software intervention for young people between 11 and 18 years. Building on the existing technology, the project will provide an easy access 'guided self-help' function which supports emotional resilience and the capacity to regulate affect.							
IXICO plc	£97,780	N/A	Imperial College Health Partners				
Summary: MyBrainBook is a tool for supportin IXICO and the South London Health Innovatior	ng patients post a di 1 Network. MyBrain	agnosis of dementia a Book captures a profile	I nd was developed as a collaboration between e of the patient and guides them through building				

a personalised careplan with the help of a facilitator. It can be shared with friends and family, healthcare practitioners or social workers to help improve the quality of life for those living with dementia, and can smooth transition to other care settings.

Patient Safety Companies	Award Phase 1	Award Phase 2	AHSN location
ViVO Smart Medical Devices Ltd	£97,435	£759,310	East Midlands
Summary: Developing Pupiloscope, an innovat assessment and monitoring of pupil reactivity	tive hand-held elect in patients with susp	ronic device with pater pected head injuries.	nted technology that enables real-time deter
The device helps doctors, nurses and paramed response. In such cases, quantified measurem stay intensive care costs.	lics in trauma and er ents enable faster tr	mergency care to accur eatments which impro	ately measure and monitor subtle changes i ve outcomes for patients and reduce length
Worldwide, traumatic brain injury (TBI) is a lea A&E with a head injury.	ding cause of death	and permanent disabi	lity. In the UK over 1 million people a year at
Doctor Communications Solutions Ltd	£99,975	£1,000,000	West of England
The project demonstrates how routinely colleg and used to improve the reliability and safety data, as well as expert opinion, suggest that C	cted patient data, ir of the care delivere areflowConnect's m	cluding observations, d by healthcare profes obile alerting and mes	blood results and investigations, can be anal sionals. Qualitative and provisional quantita saging platform, can improve patient safety
The project demonstrates how routinely colle- and used to improve the reliability and safety data, as well as expert opinion, suggest that C deliver health economic benefit to the wider N this technology across a wide range of care se	cted patient data, in of the care delivere areflowConnect's m NHS. Evidence also s ttings.	cluding observations, d by healthcare profes obile alerting and mes supports the company'	blood results and investigations, can be anal sionals. Qualitative and provisional quantita saging platform, can improve patient safety s ability to further develop, implement and
The project demonstrates how routinely colle- and used to improve the reliability and safety data, as well as expert opinion, suggest that C deliver health economic benefit to the wider I this technology across a wide range of care se The Learning Clinic Ltd	cted patient data, ir of the care delivere areflowConnect's m NHS. Evidence also s ttings. £99,471	cluding observations, d by healthcare profes obile alerting and mes supports the company' N/A	blood results and investigations, can be anal sionals. Qualitative and provisional quantita saging platform, can improve patient safety s ability to further develop, implement and North West Coast
The project demonstrates how routinely colle- and used to improve the reliability and safety data, as well as expert opinion, suggest that C deliver health economic benefit to the wider I this technology across a wide range of care se The Learning Clinic Ltd Summary: Developing VitalPAC to monitor and technology with the time to document critical	cted patient data, in of the care delivere areflowConnect's m NHS. Evidence also s ttings. £99,471 d record patient's vi information quicke	cluding observations, d by healthcare profes obile alerting and mes supports the company' N/A tal signs. Nursing staff r than with paper char	blood results and investigations, can be ana sionals. Qualitative and provisional quantita saging platform, can improve patient safety s ability to further develop, implement and North West Coast very quickly familiarised themselves with th ts and errors reduced. User acceptability is
The project demonstrates how routinely colle- and used to improve the reliability and safety data, as well as expert opinion, suggest that C deliver health economic benefit to the wider I this technology across a wide range of care se The Learning Clinic Ltd Summary: Developing VitalPAC to monitor and technology with the time to document critical Isansys Lifecare Ltd	cted patient data, in of the care delivere areflowConnect's m NHS. Evidence also s ttings. £99,471 d record patient's vi information quicke £99,918	cluding observations, d by healthcare profes obile alerting and mes supports the company' N/A tal signs. Nursing staff r than with paper char 1,000,000	blood results and investigations, can be anal sionals. Qualitative and provisional quantita saging platform, can improve patient safety s ability to further develop, implement and North West Coast very quickly familiarised themselves with th ts and errors reduced. User acceptability is Oxford

Outside of intensive care wards hospitalised patients are generally poorly monitored with manual spot check observations only carried out every four to eight hours. Between these times serious and often life threatening changes in a patient's condition can occur. The Phase 2 project will reengineer the Patient Status Engine to reduce the cost and increase the functionality so that it will be financially viable and clinically practical to provide continuous monitoring and automatic early warning indications for all patients in a hospital.

Veraz Ltd	£98,853	N/A	North West Coast
Summany Caro Tracker empowers patients an	d rainfarcas good n	ractice through (touch	monitoring of interactions between patients

Summary: Care Tracker empowers patients and reinforces good practice through 'touch' monitoring of interactions between patients, their surroundings, and healthcare workers. Care Tracker can monitor and improve care quality in any environment, from hospital to home.

Research Tools Companies	Award Phase 1	Award Phase 2	AHSN location				
TwistDx Ltd	£99,928	N/A	Eastern				
Summary: Developing a 15 minute point of ca	re test for Chlamydi	a/Gonorrhoea.					
Studies have found that urine inhibits the test of a device that removes inhibitors from urine development of the device will help bring the diagnosis and treatment of Chlamydia/ Gonor	and samples requir and a proof of conc test to the market, o hoea in a single visi	e pre-treatment. The F ept with Chlamydia pc enabling a transformat it to the clinic.	Phase 1 award funded early-stage development ositive urine has been demonstrated. Further ional change in clinical practice by enabling				
Capillary Film Technology Ltd	£97,760	£998,850	Kent, Surrey and Sussex				
Summary: To meet the growing need for quan highly cost-effective microfluidic assay platform product prototypes and delivered feasibility da justify investment into point-of-care cardiovaso	titative measureme n utilising a novel m ata illustrating quan cular product develo	ent of multiple biomark aterial, micro capillary titative rapid cardiac m opment.	ers at the point of care, CFT has developed a film. The Phase 1 programme developed pre- narker measurement in human blood samples, to				
CFT has further developed affordable microflu more biomarkers in a single clinical sample. By made far more rapidly, not only speeding up tr	idic testing technolo measuring multiple reatment but also al	ogy that allows mass p e cardiac markers, diag llowing many people to	roduction of simple devices that can test three or nosis of myocardial infarct (heart attack) can be o avoid a worrying and costly hospital stay				
Lightpoint Medical Ltd	£96,600	£947,120	UCL Partners				
Summary: Developing a handheld camera for oprogressed into clinical trials. For the next phase, the device is being develop reimbursement.	detecting cancer du	ring surgery. The device arket entry, and resear	e successfully passed laboratory testing and rch is being conducted on optimal pricing and				
St George's University of London	£97,064	£992,416	Imperial College Health Partners				
Summary: Developing innovative reagents for improving rapid diagnosis of mycobacterial infections. Supplements that when added to conventional culture testing media have been found to significantly speed up the normal very slow growth of mycobacteria and offer the potential to significantly improve diagnostic testing and treatment strategies. Tuberculosis affects nearly a third of the world's population and is so slow to grow that it makes diagnosis difficult and treatments costly. A novel media will significantly improve the time to detecting the bacteria and help with tests to decide on which antibiotic treatment will							
University College London	£99,449	£1,000,000	UCL Partners				
Summary: Dementia research recruitment and for people interested in taking part in dementi help desk or their memory clinic. Researchers, studies.	d feasibility tool – ar a research to be cor with ethical permis	n innovative application nnected to appropriate sion, can use the regis	n of cloud-based technology will make it easier e studies. People can register via the internet, a ter to find people quickly and efficiently for their				
The Phase 2 project will see further developm for dementia rolled out across the UK, address technology and service model will be scalable benefits of consent for approach across all are	ent of the technolog ing one of the chall and generalizable, p as of healthcare.	gy platform through wl enges identified in the providing a platform to	hich a national consent-for-approach service Prime Minister's challenge on dementia. The deliver the cost saving and public involvement				
University of Edinburgh	£98,336	N/A	Scotland				
Summary: Developing of a novel triage test to unnecessary colposcopy.	reduce numbers of	women with Human F	Papilloma Virus (HPV) infection referred for				
Persistent infection of the cervix with high risk screening is performed is changing and molect as most infections clear naturally there is a lar up and treatment. Initial evidence suggests that differentiates significant disease. The aim is to to NHS service laboratories.	types of HPV can ca ular HPV-DNA testin ge numerical discre at a signature bioma develop a diagnosti	ause cancer which cerv g will replace cytology pancy between infecti arker measurable in HF ic assay for triage of HI	vical screening aims to prevent. The way cervical of cervical smears as the first line test. However, ons detected and women who need follow- V-DNA positive cervical screening samples R-HPV-positive women that would be practicable				

Telehealth/Telecare for people with Learning Disabilities) December 2014

	Award	AHSN location			
Azureindigo Ltd	£99,961	West Midlands			
Summary: Developing a non-intrusive device t modifying their sleep habits.	o help children age	d 4-16 years old with nocturnal enuresis by studying and gently			
The device is of significant benefit to the NHS a deliver a large reduction in out-patient contact	as it has the potenti hours and to subst	al to eliminate the requirement for the drug therapies currently u antially improve family and patient wellbeing.			
The primary benefit for patients using this inve They can be treated in their own homes in a ne	ention is they will sto on-invasive, discree	op bedwetting without experiencing the side effects of drug thera t manner, leading to increased patient wellbeing and better outco			
BioSensors Ltd	£99,600	North West Coast			
Summary: Working with a sensor system deve miniature, wireless and disposable transderma using invasive procedures.	loped at Liverpool J Il sensors can meas	ohn Moores University (LJMU), BioSensors is investigating the us ure levels of various bio-chemical markers in a patient's blood, wi			
The sensors transmit messages to Med eTrax, a mobile patient monitoring and early warning system, that automatically alerts staff to changes in a patient's condition, giving clinical staff a consistent view of a patient's health, progress and trends in real-time.					
BioSensors is a joint venture between LIMU an	nd Med ePad Ltd.				
Digital Creativity in Disability Ltd	£100,000	North West Coast			
Summary: Developing WarnDry to predict enu from multiple sources to alert on enuresis, not a potential episode. Trials will identify the best patented technology developed initially by Live	resis from a numbe on heavy sweating factors to feed into erpool John Moores	er of common and proven indicators. The technology will correlat , and compile a profile of a child so eventually an algorithm can p this algorithm in order to predict enuresis. The product is based University.			
University of Central Lancashire	£100.000	North West Coast			
University of Central Lancashire Summary: The proposed UCLAN enuresis device its occurrence. This approach will enable the cl	£100.000 ce has the potential hild to reach stable	North West Coast to alert children to an impending episode of nocturnal enuresis dryness whilst learning bladder control.			

Spring 2014 (Child & Maternal Health, Integrated Care, Medicine Adherence, Musculoskeletal,

26 companies were successfully awarded Phase I contracts and started their projects in

SBRI Healthcare Annual Review 2014/15

Competition results

Integrated Care Companies	Award	AHSN location					
Bering Ltd	£94,470	Kent, Surrey and Sussex					
Summary: Developing and testing a mathematical model able to predict unplanned emergency hospital admissions with 91% accuracy. The model points to key factors that determine individual risk, allowing for initiation of a person-centred intervention.							
Docobo Ltd	£96,860	Kent, Surrey and Sussex					
Summary: With partners at Crawley, Horsham and Mid Sussex CCGs, Docobo is developing an integrated care community system which, amongst other things, will provide rich data to identify people with complex needs and with a particular risk of social isolation. The initial test results include interviews with patients which have corroborated the "system produced intelligence" and proved the feasibility. The availability of pooled health and social care data has identified many patients who can be managed by both health and social care professionals in an integrated manner for better patient outcomes and improved efficiency.							
Know Your Own Health Ltd	£95,454	Kent, Surrey and Sussex					
Summary: Life for people with health conditions can be very challenging, but now their GP practice can support them to build their confidence to manage and live well with their condition(s). The KYOH Wellbeing Snapshot and Integration Toolkit allow GP surgeries to embed supported self-care into everyday practice with the minimum of time and effort. Early results indicate this will lead to faster and more accessible support for patients, time and cost savings to the GP practice and significant improvements the quality of life for people with health conditions.							
We Predict Ltd	£100,000	Wales					
Summary: Using routine anonymised data to p can be identified and interventions put in plac	oredict people at ris e then some illnesse	k of becoming complex patients. If people at risk of becoming complex es and more general poor health can be prevented.					

Medical Adherence Companies	Award	AHSN location
Advanced Digital Innovation (UK) Ltd	£99,937	Yorkshire and Humber

Summary: Developing a novel service to improve people's medications adherence. Recognising that routine support is more effective than reminder alarms, ADI has created an app that reminds, motivates and adapts to medications behaviour. In trial participants, mainly with type-2 diabetes, the app has been well received and improved adherence. ADI propose to enhance the app with more extensive routine algorithms and download of prescription data from patient records as well as the reporting of progress to clinicians and pharmacists.

Biovici Lt	Biovici Ltd			£98,828	Wales	

Summary: Improving medical adherence through Point-of-Care non-invasive diagnostics. In order to realise this, Biovici has created a proof of concept non-invasive sensor to detect lithium in saliva. The aim is to further develop the technology and explore other drug and biomarker developments

Blue Maestro Ltd	£92,880	Kent, Surrey and Sussex
Summary: Developing a unique medicine adhe	erence tracking sens	or that can be placed on standard over the counter medicine containers.
The sensor will determine whether the medicin	ne has been used ar	In if not, will remind the patient through their smartphone and carers

and family members through the internet. This will be a cost effective solution and will seamlessly integrate with existing NHS practices.

Cambridge Respiratory Innovations Ltd	£99,100
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Summary: Completed a feasibility study for a personal asthma management device for medicines adherence including a detailed stakeholder research covering both patients and medical professionals. The study also received positive reactions and valuable feedback from patients and respiratory nurses to the feasibility demonstrators.

Eastern

Folium Optics Ltd	£99,986			
Summary: Taking an 'internet of things' approach to develo developed a smart electronic tag that can be attached to m which medicine should be taken and when. It has a simple u to a cloud data service. A separate 'reminder' display, desig ambient feedback to the user.				
Selective Antibodies Ltd	£99,908			
Summary: Developing positive readout technologies to add tests, both patient and health care-worker will be able to se are rapid, minimally-invasive, and critically – simple to perfor Lack of adherence to prescribed therapies is a major proble				
Therakind Ltd	£98,500			
Summary: Conducting an initial assessment of technical feat for drug delivery. The aim is to provide an alternate drug del delivery methods have problems which affect treatment adh drug, used for the treatment of endocrinology disorders, so favourable.				
Musculoskeletal Companies	Award			
Armourgel Medical Limited	£95,160			
Armourgel Medical Limited Summary: 1 in 3 women will suffer a fragility f fractures is paramount to maintaining quality integrates active protection, revolutionary hol market, for an integrated preventative and pre-	£95,160 racture in the of life of faller ster design an edictive solutio			
Armourgel Medical Limited Summary: 1 in 3 women will suffer a fragility f fractures is paramount to maintaining quality integrates active protection, revolutionary hol market, for an integrated preventative and pre Docobo Ltd	£95,160 Fracture in the of life of faller ster design an edictive solution £100,000			
Armourgel Medical Limited Summary: 1 in 3 women will suffer a fragility f fractures is paramount to maintaining quality integrates active protection, revolutionary hol market, for an integrated preventative and pre Docobo Ltd Summary: GaitSmart provides an objective m used in the home, replacing the need to atten A system combining Docobo's telehealth moni secure proven data management and integrat novel technology-enabled service, rather than	£95,160 Fracture in the of life of faller ster design an edictive solution £100,000 easure of func d an outpatien itoring of pain ion with NHS, a bolt-on tecl			
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Armourgel Medical Limited Summary: 1 in 3 women will suffer a fragility f fractures is paramount to maintaining quality i integrates active protection, revolutionary hol market, for an integrated preventative and pre Docobo Ltd Summary: GaitSmart provides an objective m used in the home, replacing the need to atten A system combining Docobo's telehealth moni secure proven data management and integrat novel technology-enabled service, rather than MIRA Rehab Ltd Summary: Developing Exergames which can b while preventing falls. A clinical evaluation, cor very interested in using Exergames with users a Exergames easy to use. Peacocks Medical Group Summary: Developing new kinds of foot ortho reat overpronation/ supination. The results o motion control to those without the optimisat Work will continue to further develop the foot	£95,160 fracture in the of life of faller ster design an edictive solution £100,000 easure of func d an outpatien itoring of pain ion with NHS, a bolt-on tecl £98,000 e safely used i nducted by the reporting posi £76,940.85 sses optimised f the work sug- ion, but may of c orthoses whi			

Summary: Developing an antibacterial coating for orthopaedic, trauma and spinal implants, to prevent post-operative infections. Taragenyx has developed a multiple antibiotic-eluting, bioactive, biocompatible and bioresorbable coating, applying it to a variety of clinically relevant materials. The project has allowed Taragenyx to considerably accelerate the development of its technology to the point of optimisation and preclinical trials.

West of England

pping a technology to help with medicine adherence. Folium Optics has edicine packaging - the tag has an 'always-on' vivid display and shows clearly user input to log medication, and ultra-low power wireless communication ned to be a desirable household object, provides guidance and continuous

North East and North Cumbria

Iress a key problem in patient care – that of patience adherence. With the new ee at a glance whether the correct level of medicament is in the body. The tests orm and understand.

m, especially with respect to infectious disease where multidrug resistance ne example of this in targeting non-compliance of therapy for tuberculosis.

UCL Partners

sibility and market potential of a patented novel, reusable intranasal device livery method for medicines suitable for nasal delivery and for which current nerence. Therakind are now concentrating on reformulating one such suitable it can be delivered using this device; initial testing with this drug has proved

AHSN location

Imperial College Health Partners

eir lifetime with hip fractures costing the NHS £1.9bn/yr. Prevention of hip rs and an efficient use of NHS resources. The Active Angel hip protector nd the latest in wearable electronics in the thinnest protector design on the on.

Kent, Surrey and Sussex

ctional rehabilitation following hip (TKA) and knee (THA) surgery that can be nt's clinic or GP surgery.

, infection and other required physiological and symptomatic measures with GP and alarms services. This provides a technology platform to underpin a hnology addition to a fixed service model.

UCL Partners

in the community with older people to improve and maintain independence e University of Manchester suggests that older people up to the age of 92 are itive physical and some psychological improvements after 6 weeks and finding

North East and North Cumbria

with finite element analysis and to be made with additive manufacturing to ggest that the optimised orthotics have a similar mode-of-action in terms of differ from standard devices in their plantar pressure redistribution properties. ich will be eventually launched as a commercial product.

Scotland

Telehealth/Telecare for people with Learning Disabilities Companies	Award	AHSN location		
Cupris Ltd	£99,873	Health Innovation Network (South London)		
Summary: Following extensive user-centred design testing with people with learning disabilities, carers, GPs, ENT surgeons and audiologists, Cupris has completed a re-design of their smartphone-connected otoscope and software platform including aesthetics, ergonomics and technical specifications. The testing has validated that clinical quality images of the eardrum can be captured using the device, and the app and software platform can easily and intuitively be used to carry out hearing tests, capturing and sharing patient cases over a secure cloud service. This allows people with learning disabilities to have ear examinations and hearing tests conducted by their carers in more familiar environments without the need to go to the doctor, thus saving resources for the NHS and making the whole process less stressful.				
Disabled Living Foundation Ltd	£82,925.50	Imperial College Health Partners		
Summary: A web app developed to guide users to impartial advice and information about assistive technology with the topics chosen by, and developed with, individuals with learning difficulties. Users trialled the app and found it accessible and easy to understand. Particularly popular with users was the text to speech facility and the videos developed on topics such as memory, vision and hearing.				
Maldaba Ltd	£77,778	UCL Partners		
Summary: My Health Guide is a ground-breaking app focussed on empowering the lives of learning-disabled adults. Adults with learning difficulties have a tailored solution to their medical and day-to-day life needs, enabling them to capture information and communicate preferences and wishes far more effectively than before.				
Melton Health Care Technologies Ltd	£99,924	North West Coast		
Summary: iPersonally Invite is a new generation smart app that provides a personal lifestyle and health dashboard, putting the individual in control of their own health and care information and critically giving absolute control over the sharing of information.				
It is designed to support the move to personalised health and care services and not just a focus on keeping records, but planning and controlling support and treatment alongside the storing of the data in one single reference point.				
The platform is accessed via smart phone, tabl completely under the control of the patient or	et or laptop and de person designated	signed to be subtle and easy to use. Consent to access records is to ensure best interest decisions are made.		
Red Embedded Systems Limited t/a v-connect	£98,070	Yorkshire and Humber		
Summary: The Bold project extends the successful Sandwell Council's 'Greater Independence Project' to include remote healthcare services as part of the project's v-connect secure videoconferencing service. Using two use cases, one will and training programmes, the project specifically focuses on the better use of health facilitation nurse services to promote health and wellbeing.				
Sensixa Ltd	£96,800	Health Innovation Network (South London)		
Summary: With the aim of developing technologies to assist people with learning disabilities to live an independent, healthy and active life, the CareforAll project has developed innovative wearable devices and software apps that target the individual needs of people with learning disabilities. Through the partnership with local special needs schools, the project team has found that every child has specific needs and conventional one-size-fits all approach will not work. As such, flexible wearable sensors and an intuitive customisable app is				

being developed which enables teachers, health works, carers, and parents to design and customise learning and caring solutions.

Autumn 2014 (Brain Injury, CAMHS, DFU, Medical Imaging, Outpatients) 14 companies were successfully awarded Phase 1 contracts and started their projects in March 2015

Brain Injury Companies	Award	AHSN location	
GSPK Design Ltd	£73,740	Yorkshire and Humber	
Summary: Patients who have experienced acute brain injury can acquire severe physical disabilities. For some this may result in being 'locked in', having lost all muscle control apart from eyes and some facial muscles, while awareness and cognition remains unimpaired. Others may have less severe disabilities but still struggle to control equipment independently. This loss of control and independence can have an immense impact on an individual's quality of life and on the families and carers who support them. Working closely with the NHS Assistive Technology team at Barnsley Hospital, GSPK Design has developed a novel form of muscle activities sensing that provides a reliable method by which patients can use assistive technology to communicate and operate computers and other equipment making a real difference to their lives.			
Inspiration Healthcare Ltd	£97,200	East Midlands	
Summary: Based on the treatment of acute brain injury through inhalation of novel gases, Inspiration Healthcare is developing a breathing system that is suitable for in-hospital (ITU) use. Future plans include a portable device for use by paramedics in the field to deliver this therapy within the critical 'golden hour'.			
Obex Technologies Ltd	£76,662	Eastern	
Summary: It is important that brain injury patients are treated holistically and with seamless access to relevant patient information for stakeholders caring for the patient. This project takes an existing, proven hospital-based and registry platform and extends its applicabil into community based healthcare including capturing quality-of-life information directly from the patient. The aim is to show the feasibility and benefits to both patients and the NHS of this approach through a pilot scale roll-out and associated study.			
CAMUS Companies	Award	AUSN location	
	Awaru	Answirocation	
Advanced Digital Innovation (IIK) 1td	£00 873	Vorkshire and Humber	

Summary: CAMHS Open Outreach Platform (CO-OP) uses digital media to provide young people with anxiety, depression and self-harming behaviour, and their parents, with instant access to personalised support resources. As part of an early CAMHS assessment and intervention strategy, CO-OP provides software apps and services built around a Personal Health Record and interfaces with professional systems such as SystmOne, CareNotes, and VLEs in schools.

Motif Digital Health	£95,220

Summary: A mobile software application to deliver structured support for young people and young adults who are self-harming or are at risk of self-harm.

UCL Partners

DFU Companies	Award	AHSN location	
Blueberry Therapeutic Ltd	£99,244	Greater Manchester	
Summary: By exploiting a recently described nanoparticle based drug delivery system Blueberry Therapeutic is developing a new treatment for patients with diabetic foot ulceration. This new concept allows a range of beneficial medicines to be incorporated into a hydrogel wound dressing. The new enhanced hydrogel dressings enable more effective infection control and promote wound healing in patients with diabetic foot ulcers.			
Cadscan Ltd	£99,785	North West Coast	
Summary: This project will assess the feasibility of an extremely cost-effective system for making tailored insoles to prevent ulceration without the typical wait.			
Peacocks Medical Group	£75,840.24	North East and North Cumbria	
Summary: Foot orthoses (FO) are commonly used to reduce plantar pressure in diabetic feet. This project addresses the design and finite element optimisation of new kinds of FOs directly from 3D scan data and pressure measurements. The FOs would be manufactured			

Medical Imaging Companies Astrimmune Ltd £100,000 East Midlands

directly via additive manufacturing (3D printing) utilising the design freedoms disruptive manufacturing processes provide.

Summary: Developing high throughput fluid-flow cell imaging for bladder cancer monitoring and diagnosis. Astrimmune has developed the unique capability to biochemically analyse and image individual cells *en masse* under high-speed flow conditions. The company will develop enabling software tools to allow application of the technique as a cheaper, non-invasive alternative to cystoscopy for the postsurgical monitoring of bladder cancer.

UCL Business (BrainMiner)	£98,630.40	UCL Partners

Summary: Developing Diagnosis in Dementia (DIADEM), an automated, extensible, and personalised healthcare platform for assisting the clinical diagnosis of dementia using multi-modal imaging and non-imaging data. DIADEM aims to make the best use of currently available imaging data by delivering a software infrastructure that can automatically and intelligently analyse MR imaging data and feed the results to the end-user clinicians in a visually intuitive fashion.

Summary: Aiming to develop a perfusion phantom for use with Arterial Spin Labelling (ASL), a non-invasive MRI technique for quantitatively measuring cerebral perfusion. ASL shows great promise for clinical studies and diagnosis, but is currently hindered by the lack of such a gold standard to allow for calibration and quality control of this method.

Dutpatients Companies	Award	AHSN location	
Vessage Dynamics Ltd	£48,117	Kent, Surrey and Sussex	
Summary: Outpatient Monitor uses a patient's own phone, either landline or mobile, to remotely monitor recovery and wellbeing. By sending an automatically generated phone call, or messages to a smartphone, clinicians will be able to ask the same questions that they would otherwise ask in a face to face setting without the patient needing to travel.			
SOMA Analytics UK	£99,520.54	UCL Partners	
Summary: In conjunction with leading research institutes, SOMA Analytics has developed a digital health product that will screen and nonitor outpatients' mental health status on a scientifically-validated basis using non-invasive mobile technology. SOMA Analytics' solution will allow clinicians to appropriately prioritise outpatient resources by need/risk, including follow-up appointments, whilst offering a means to provide remote, tailored interventions that enhance the recovery of patients suffering mild to moderate depression or anxiety disorders.			
Jlsys Ltd	£99,996	Yorkshire and Humber	
ummary: Developing a wearable solution to significantly enhance and monitor the treatment of venous leg ulcers, enabling pro-active			

management, patient participation and more efficient use of outpatient treatment resources.

FINANCIAL REPORT

Cash budget

The opening credit balance from 2013/14 was £19,876. The cash expenditure at year end was \pm 20,017,252 exclusive of VAT (see below for breakdown of expenditure by competition).

Cash spend for 2014-15 by Competition and Type

Programme			Type of Spend		Spend
Mental Health & End of Life	Phase 2	Committed	Awards	5	£1,907,801
Better Health Outcomes	Phase 1	Committed	Awards	35	£1,216,026
Better Health Outcomes	Phase 2	Committed	Awards	20	£7,899,601
Spring 2014	Phase 1	Committed	Awards	26	£2,130,282
Autumn 2014	Phase 1	Committed	Awards	14	£578,579
Phase 3 Call	Phase 3	Committed	Awards	8	£4,809,850
PMO Costs (incl. irrecoverable VAT at 5%)			Staffing, Assessors, Marketing etc		£1,494,989
Credit Balance					(£19,876)
Total Spend					£20,017,252



Treasury target

The treasury target is the total value of all new contracts awarded in year (inclusive of VAT). The total achieved for 2014/15 from the NHS England programme was £22.4m broken down as follows:

Total:	£22,288,601 (£18,648,015 + VAT)
Autumn 2014 Phase 1 awards:	£1,337,979
Spring 2014 Phase 1 awards:	£2,095,501
Better Health Outcomes Phase 2 awards:	£15,214,535



AWARDS COST CATEGORY

f1,907,801 f1,216,026 f7,899,601 f2,130,282 f578,579 f4,809,850 f18,542,139

ADMIN COST CATEGORY

£198,025 £151,637 £138,095 £1,007,232 **£1,494,989** SBRI Healthcare Annual Review 2014/15 Plans for 2015/16

PLANS FOR 2015/16

Recognising the achievements of the SBRI Healthcare programme to date, our focus this year is to work with the AHSN leaders to deliver four main objectives.

OBJECTIVE ONE:

build a **strong financial footing** for the programme beyond the annual budgeting cycle ;

- continue to deliver good results for our main funders, NHS England
- build relationships with regional commissioning structures as they evolve
- discuss with devolved administrations and Scottish Government opportunities for match funded programmes
- investigate opportunities for charity and philanthropic funding
- investigate opportunities for commercial funding.

OBJECTIVE TWO:

improve the identification of the problems that will respond to technology intervention;

- recognise the importance of accurate identification of needs, and adjust and refine processes accordingly
- work with Healthcare Knowledge Transfer Networks (KTN) part of Innovate UK to improve our understanding of needs and problems in a given care pathway
- continue to build our work with our delivery partners, AHSNs, on identifying and articulating needs

OBJECTIVE THREE: deliver an **efficient competition process** that engages and supports the widest participation of companies;

- refine and build on the centralised process
- strengthen work with AHSN commercial directors and communications leads to ensure all AHSNs are supported to promote their participation
- grow awareness of the SBRI Healthcare opportunity with a wider network of companies
- run Spring and Autumn competition rounds and assessments of theme areas AHSNs have agreed with NHS England and Department of Health.

OBJECTIVE FOUR: support the **adoption and spread** of the developed solutions in the NHS and wider

international markets:

- agree adoption strategies and activities with AHSNs
- work with test-beds and vanguard sites to ensure that SBRI Healthcare companies are integrated where appropriate
- continue and strengthen dialogue with NHS procurement leads
- publicise and build understanding of SBRI Healthcare solutions in the pipeline
- supply events and briefings for AHSNs and NHS on the learning gained so far on accelerating innovation.

DELIVERING FIVE YEAR FORWARD VIEW

our plans for the coming year we are committed to seizing this opportunity.

FYFV makes it clear that innovation is critical for success and makes a commitment that NHS England will 'improve the NHS' ability to undertake research and apply innovation – including by developing new 'test bed' sites for worldwide innovators and new 'green field' sites where completely new NHS services will be designed from scratch."

It also set out new opportunities for the SBRI Healthcare programme with its focus on public health and its 'radical upgrade in prevention and *public health'* - a commitment that 'patients will gain far greater control of their own care' as well as the commitment to redesign urgent and emergency care services where digital and medical technologies can bring a significant contribution to changing the way care is provided.

We will be especially involved with the NHS Innovation Accelerator and the test-bed programme.

Five Year Forward View (FYFV), NHS England's strategy, holds much opportunity for the SBRI Healthcare programme to bring new innovations to the NHS landscape. In

> NHS Innovation Accelerator The NIA programme aims to give patients a more equitable access to high impact innovations by developing the conditions and cultural change that will enable the NHS to adopt new approaches and technologies at scale and pace. The programme has appointed 20 fellows - one of which is an SBRI Healthcare company - with a portfolio of high impact innovations. The SBRI Healthcare programme is working with the NIA to ensure that the opportunity for SBRI Healthcare products and innovators is secured for the future.

Test Beds NHS England is backing a series of localitybased test beds where the adoption of combinatorial innovations will be accelerated. This is an opportunity for SBRI Healthcare companies that are close to market to join an AHSN planned test bed. The SBRI Healthcare plan for 2015/16 will capitalise on this opportunity.



SBRI Healthcare is run by England's 15 Academic Health Science Networks.

For more about AHSNs visit www.ahsnnetwork.com

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