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)



CONTENTS

Chair's message About SBRI Healthcare The SBRI Healthcare process The Impact of SBRI Healthcare SPARK 2014 exhibition and conference AHSNs Case studies Competition results Financial report Plans for 2015/16

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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03

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

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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	
(a)	
Second Second	

ROB BERRY	Head of Innovatio representing Wes
ANNE BLACKWOOD	Chief Executive Of
STEPHEN BROWNING	Head of SBRI, Inno
ADRIAN BULL	Managing Directo Partners
ANDREW CHEESMAN	Finance Manager,
DAVID CONNELL	SBRI expert and b
TONY DAVIS	Commercial Direc
PAUL DURRANDS	Chief Operating O
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 Sout
DR ROBERT WINTER	Former Managing the year before he

- 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.

3

2

4

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.

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

7

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

8

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.

6

10

THE SBRI

HEALTHCARE

PROCESS

09

STAGE 3 APPLICANTS SUBMIT PROPOSALS

STAGE 4 ASSESSMENT AND SELECTION

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



12

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



15

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



17



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

18

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



19 SBRI Healthcare Annual Review 2014/15 sbrihealthcare.co.uk



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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21

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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

	Award	AHSN location
Advanced Digital Innovation (UK) Ltd	£786,550	Yorkshire and Humber
is integrated into a new pathway of care and p of engaging multi-media smartphone apps. Th professionals to better monitor and advise pa	provides patients wit nese are integrated s tients. PainSense ain ess acute hospital ad	I service, PainSense, to support patients with persistent pain. The service th digital resources for self-assessment and management in the form securely with NHS clinical systems, allowing a GP or other health care ns to reduce the load on primary care through reduction in face to face missions. Outcome evaluation data is being collected and will be used to
Big White Wall Ltd	£393,254	Health Innovation Network (South London)
their emotional wellbeing. Individuals with me which leads to health problems. The project h specifically for people with mental health prol	ental health problem has developed online blems. As courses ar	rting people with anxiety, depression and other conditions to improve as are more likely to be overweight, to smoke, and to drink too much, e courses on losing weight, stopping smoking, and cutting down alcohol, re online, they can be accessed from home at any time with no need for people in many parts of the UK, and through some employers and
Docobo Ltd	£427,775	Kent, Surrey and Sussex
Motor neurone disease (MND) is a progressivi including those which help us breathe, often r telehealth system enables more frequent ven without increasing the number of clinicians in	e disease that attack resulting in the need tilation managemen volved. The improve ervene earlier to prev	ital, OptNIVent, to optimise non-invasive ventilation during palliation. Is the nervous system where messages gradually stop reaching muscles I of a ventilator for the last 18-24 months of life. The OptNIVent t, down from once every 3-4 months to once per week if necessary and ement means less anxiety for patients and the regular health checks, vent illnesses from developing. This new capability ensures the delivery patients.
	£897,000	Yorkshire and Humber
Dynamic Health Systems Consulting LLP Summary: Developing a secure, personalised services focused on supporting individuals wh to identify and communicate with their own u end of life care choices to those caring for the them make appropriate choices. Using the same	and flexible digital h to are felt to be in th inique network of pe m. Both they and th me platform and the d range of this appro	tealth and care services delivery platform, with a package of digital the last year of life. People in this position are able to use these services ersonal carers and supporters, to signal their needs, aspirations and their carers receive relevant information from trusted sources to help e package of digital services to manage comorbidities, such as long term bach, particularly relevant today as the proportion of people diagnosed
Dynamic Health Systems Consulting LLP Summary: Developing a secure, personalised services focused on supporting individuals wh to identify and communicate with their own u end of life care choices to those caring for the them make appropriate choices. Using the sar conditions, significantly extends the reach and	and flexible digital h to are felt to be in th inique network of pe m. Both they and th me platform and the d range of this appro	tealth and care services delivery platform, with a package of digital te last year of life. People in this position are able to use these services ersonal carers and supporters, to signal their needs, aspirations and teir carers receive relevant information from trusted sources to help e package of digital services to manage comorbidities, such as long term bach, particularly relevant today as the proportion of people diagnosed

Phase 3 competition

8 companies completed Phase 3 in Spring 2015

Company	Award	AHSN location
Aseptika Ltd	£999,240	Eastern
such as: COPD, Bronchiectasis, Asthma and C project, the test was moved from a laborator monitors also provided by the company. A clin successfully recorded and uploaded medical of Information Technology and are motivated to	vstic Fibrosis, as part v format onto one w ical trial was also un data on iPads provid manage and mainta	bacteria in the lungs of people with long-term respiratory diseases of a self-management solution called Activ8rlives. In the Phase 3 hich patients could use for themselves at home, along with other heal dertaken in which 30 volunteer patients, with an average age of 67 yrs ed each day for up to six months, proving that older patients can use in their own health, and enjoyed doing it. Education, empowerment successfully achieved with the right tools and with support and
Fuel 3D Technologies Ltd	£685,831	Oxford
Summary: Design and manufacture of the wo medicine and in a growing number of additio		shoot 3D Scanner that has a multitude of applications both within in the UK and internationally.
Halliday James Ltd	£625,900	Oxford
people with bipolar disorder which affects 1-2 app and sensors to monitor the mood, activit	2% of the populatior ies and sleep of user	rsities of Cardiff and Warwick and the charity Bipolar UK to support and costs the NHS £342M per annum.The system uses a smart phone rs. It is intended to augment self-management programmes where the
often affects the ability of the person with bip	olar to recognise th the user enters in th	to a manic or depressive episode. However, because the condition ese signs with adverse consequences. As Auto-Motive automatically ne app and the activity and sleep data from the sensors it can provide dication of the problem.
often affects the ability of the person with big analyses the data on mood and events which	olar to recognise th the user enters in th	ese signs with adverse consequences. As Auto-Motive automatically ne app and the activity and sleep data from the sensors it can provide
often affects the ability of the person with big analyses the data on mood and events which objective measurements which can alert the Just Checking Ltd Summary: 'Just Right' proved that the Just Ch and residential services for adults with learnin service-user needs and get the care 'just right users and financial savings which exceeded es 3 months. Importantly, activity monitoring br	elar to recognise th the user enters in th user with an early in £877,703 ecking activity moning disabilities. 11 lo c' - not too little, not pectations. Return o ought greater insigh	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. West Midlands itoring system could bring substantial efficiencies to supported living cal authorities and their service providers used Just Checking to match too much - resulting in improved person-centred care for service on investment was 500%, with the technology paying for itself within
often affects the ability of the person with big analyses the data on mood and events which objective measurements which can alert the Just Checking Ltd Summary: 'Just Right' proved that the Just Ch and residential services for adults with learnin service-user needs and get the care 'just right users and financial savings which exceeded ex	elar to recognise th the user enters in th user with an early in £877,703 ecking activity moning disabilities. 11 lo c' - not too little, not pectations. Return o ought greater insigh	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. West Midlands itoring system could bring substantial efficiencies to supported living cal authorities and their service providers used Just Checking to match too much - resulting in improved person-centred care for service on investment was 500%, with the technology paying for itself within
often affects the ability of the person with big analyses the data on mood and events which objective measurements which can alert the Just Checking Ltd Summary: 'Just Right' proved that the Just Ch and residential services for adults with learnin service-user needs and get the care 'just right users and financial savings which exceeded ex 3 months. Importantly, activity monitoring br finely-tuned support and better outcomes for OBS Medical Ltd Summary: Piloting Visensia Mobile, to improv	the user enters in the user enters in the user enters in the user with an early in £877,703 tecking activity moning disabilities. 11 loc '- not too little, not cought greater insight service users. £617,096 te patient safety and intoring in the form of the f	ese signs with adverse consequences. As Auto-Motive automatically the app and the activity and sleep data from the sensors it can provide dication of the problem. West Midlands itoring system could bring substantial efficiencies to supported living cal authorities and their service providers used Just Checking to match too much - resulting in improved person-centred care for service on investment was 500%, with the technology paying for itself within it into the abilities and support needs of service users, leading to more Oxford I outcomes through the early detection of patient deterioration and of a single index (VSI) of patients status via non-invasive measurement
often affects the ability of the person with big analyses the data on mood and events which objective measurements which can alert the Just Checking Ltd Summary: 'Just Right' proved that the Just Ch and residential services for adults with learnin service-user needs and get the care 'just right users and financial savings which exceeded ex 3 months. Importantly, activity monitoring br finely-tuned support and better outcomes for OBS Medical Ltd Summary: Piloting Visensia Mobile, to improvinstability. Continuous multi-dimensional more	the user enters in the user enters in the user enters in the user with an early in £877,703 tecking activity moning disabilities. 11 loc '- not too little, not cought greater insight service users. £617,096 te patient safety and intoring in the form of the f	ese signs with adverse consequences. As Auto-Motive automatically the app and the activity and sleep data from the sensors it can provide dication of the problem. West Midlands itoring system could bring substantial efficiencies to supported living cal authorities and their service providers used Just Checking to match too much - resulting in improved person-centred care for service on investment was 500%, with the technology paying for itself within it into the abilities and support needs of service users, leading to more Oxford I outcomes through the early detection of patient deterioration and of a single index (VSI) of patients status via non-invasive measurement
often affects the ability of the person with big analyses the data on mood and events which objective measurements which can alert the Just Checking Ltd Summary: 'Just Right' proved that the Just Ch and residential services for adults with learnin service-user needs and get the care 'Just right users and financial savings which exceeded ex 3 months. Importantly, activity monitoring br finely-tuned support and better outcomes for OBS Medical Ltd Summary: Piloting Visensia Mobile, to improvinstability. Continuous multi-dimensional mor Heart Rate, SpO2 and derived Respiratory Rat Polyphotonix Ltd Summary: The Phase 3 project has been the evaluation within the NHS. It has also initiated	bolar to recognise the the user enters in the user with an early in £877,703 ecking activity moning disabilities. 11 loo c' - not too little, not cought greater insight service users. £617,096 re patient safety and hitoring in the form of e from the PPG wav £999,784 catalyst for Noctura	ese signs with adverse consequences. As Auto-Motive automatically the app and the activity and sleep data from the sensors it can provide dication of the problem. West Midlands itoring system could bring substantial efficiencies to supported living cal authorities and their service providers used Just Checking to match too much - resulting in improved person-centred care for service on investment was 500%, with the technology paying for itself within it into the abilities and support needs of service users, leading to more Oxford I outcomes through the early detection of patient deterioration and of a single index (VSI) of patients status via non-invasive measurement eform.

	£928,462
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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			
Spintech Ltd	£100,000	N/A	West of England			
Summary: Production of anatomically shaped disposable compression garments which do not lose their compression levels during the life of the product. Utilising a patent protected, revolutionary non-woven dynamic fibre, based on natural elastomer and cotton. The only commercially viable, biodegradable, non-woven fabric providing all direction elasticity and 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			
	and improve long t	erm management and	lead-one ECG device, known as imPulse, to secondary prevention. The device can display a nk and is ideal for patients monitoring their own			
SilverCloud Health Ltd	£93,621	N/A	Ireland			
Summary: Developing an online platform to support self-management of symptoms and promote wellbeing of people with cardiovascular disease (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-educational and psycho-therapeutic CVD-specific package to support self-management and promote wellbeing. This will improve access to holistic care while reducing costs.						
Docobo Ltd	£99,648	N/A	Kent, Surrey and Sussex			
Summary: The Aegle system, developed in partnership with Crawley, Horsham and West Sussex CCGs, will support proactive programmes in primary care focused on CVD. Aegle integrates 'pointing' to patients at risk from existing risk stratification with remote monitoring technology to deliver individual care plans and track patients through screening, assessment and monitoring. It will enable clinicians to manage 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			
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Summary: Production of anatomically shaped disposable compression garments which do not lose their compression levels during the life of the product. Utilising a patent protected, revolutionary non-woven dynamic fibre, based on natural elastomer and cotton. The only commercially viable, biodegradable, non-woven fabric providing all direction elasticity and micro-porosity.						
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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 assist primary care staff to identify arrhythmias and improve long term management and secondary prevention. The device can display a heart rhythm strip on any desktop, laptop, tablet or smartphone via a USB or Bluetooth link and is ideal for patients monitoring their own condition.						
SilverCloud Health Ltd	£93,621	N/A	Ireland			
Summary: Developing an online platform to support self-management of symptoms and promote wellbeing of people with cardiovascular disease (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-educational and psycho-therapeutic CVD-specific package to support self-management and promote wellbeing. This will improve access to holistic care while reducing costs.						
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24

sbrihealthcare.co.uk

COPD Companies	Award Phase 1	Award Phase 2	AHSN location			
Aseptika Ltd	£99,960	£999,384	Eastern			
Summary: Developing a medical-version of a Smartwatch to help people with respiratory disease to better manage their condition at home. The device will alert the wearer, their family and their medical team of rapid decline 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 patent applications were made to protect the inventive steps.						
BuddyWOTCH is designed to be worn 24/7 for consumers and the NHS under the Company's						
Respiratory disease is the third largest cause of days. 5 million people in the UK have respirato		nd costs the EU €102 b	illion each year in treatment and lost working			
Team Consulting Ltd	£98,930	N/A	Eastern			
Summary: Developing an engineering prototy market-leading devices but at a fraction of the		der inhaler (cDPI) whic	h offers performance consistent with current			
Ŭ		ient use of the limited	inspiratory energy available from severe COPD			
Using only plastic components, the risk profile avoided.	of the product is dr	ramatically reduced, as	expensive, precision metal piercing elements are			
Glyconics Ltd	£98,941	N/A	Wales			
	tiate them from oth		nsforming Infrared Spectroscopy we can reliably nes. This project provides the means to develop			
		C000 7E0				
Cambridge Respiratory Innovations Ltd	£99,348	£999,759	Eastern			
	eatment manageme	ent device will enable (COPD sufferers to better understand the quality			
Summary: The COPD home monitoring and tre of their respiratory function. This will result in	eatment manageme better managemen COPD home monitor th COPD sufferers ar healthcare professi	ent device will enable (t of the disease itself, v ring and treatment ma nd healthcare professio	COPD sufferers to better understand the quality with users experiencing fewer uncontrolled magement device is technically feasible, onals. The study also indicated that due to the			
Summary: The COPD home monitoring and tre of their respiratory function. This will result in exacerbations. The project demonstrate that an inexpensive C confirming that the concept is attractive to bot disruptive nature of the proposed technology,	eatment manageme better managemen COPD home monitor th COPD sufferers ar healthcare professi	ent device will enable (t of the disease itself, v ring and treatment ma nd healthcare professio	COPD sufferers to better understand the quality with users experiencing fewer uncontrolled magement device is technically feasible, onals. The study also indicated that due to the			
Summary: The COPD home monitoring and tre of their respiratory function. This will result in exacerbations. The project demonstrate that an inexpensive C confirming that the concept is attractive to bot disruptive nature of the proposed technology, evaluations and health economic research price	eatment managemen better managemen COPD home monitor th COPD sufferers at healthcare professior to adoption. £95,000 self-management sy ents understand the edicines and patien	ent device will enable (t of the disease itself, v ring and treatment ma nd healthcare professio onals will require acce £964,107 /stem for patients with ir condition, react to c t held material is at th	COPD sufferers to better understand the quality with users experiencing fewer uncontrolled inagement device is technically feasible, onals. The study also indicated that due to the ss to the results of both independent clinical Wessex			

Diabetes Companies	Award Phase 1	Award Phase 2	AHSN location
Oxford Medical Diagnostics Ltd	£88,596	£750,519	Oxford
	erous condition DK ut is not financially	A. Laser sensor techno accessible for home us	logy can measure breath acetone and provide a se. This project assessed the feasibility of using
PsychologyOnline.co.uk Ltd	£98,032	N/A	Eastern
psychological therapy to people with Type 1 di sessions are delivered by specialist diabetes no normal diabetes care. The sessions take place	iabetes who are stru urses who have bee in real time over the	ugg ^l ing to achieve opti n trained to administe e internet and are deliv	ated to build an integrated system to deliver online mal control of their blood sugar. Weekly therapy r cognitive behavioural therapy (CBT) alongside vered via the PsychologyOnline website, using tivational enhancement tools created by uMotif,
GB Electronics (UK) Ltd	£96,813	N/A	Kent, Surrey and Sussex
development of a cost-effective thermal perce DPN currently costs the NHS £662 million each	ption screening and n year, and can deva screening and mon	I monitoring device for state a patient's qualit itoring device that car	, , , , , , , , , , , , , , , , , , , ,
i2r Medical Ltd	£96,221	£710,134	Wessex
identification and successful proof of concept	ns including amputa testing of a novel w very significant ecor	ations Achievements m ound healing device, s	nade during Phase 1 of the project included the
Inotec AMD Ltd	£92,075	£997,499	Eastern
Summary: Developing a topical oxygen therap	y device for non-he	aling diabetic foot ulce	ers (TODFU).
Collaborating with Addenbrooke's, St Georges diabetic foot ulcers with Inotec's NATROX amb patient carries on with normal life.	0 1	0	a 100-patient clinical study on the healing of as continuous day and night treatment while the
	Initial clinical studie	s have been very enco	g the scope of the product to cope with the most buraging but this larger trial will confirm just how uding amputation.
ICNH Ltd	£100,000	N/A	UCL Partners
Summary: Developing an online application th times.	nat allows patients t	o view, manage and in	teract 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.

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 prescrib	oed for the treatme	nt of depression but ca	an take 4-6 weeks after starting an effective drug		
therapy before a patient feels any better. Man	y patients do not re treatment is found. ct, early in treatmer showed that, when	spond to the first drug P1vital has developed nt, whether an antidep the GP-ETB test was c	g prescribed and have to try several different a computer test called the GP-ETB, designed to ressant drug is working. ompleted after 7-9 days of treatment, it		
therapy before a patient feels any better. Man drugs, one after the other, before an effective be completed by depressed patients, to predi- linitial results from a pilot clinical investigation	y patients do not re treatment is found. ct, early in treatmer showed that, when	spond to the first drug P1vital has developed nt, whether an antidep the GP-ETB test was c	g prescribed and have to try several different a computer test called the GP-ETB, designed to ressant drug is working. ompleted after 7-9 days of treatment, it		
therapy before a patient feels any better. Man drugs, one after the other, before an effective be completed by depressed patients, to predi- Initial results from a pilot clinical investigation accurately predicted whether a patient was go	y patients do not re treatment is found. ct, early in treatmen showed that, when ing to feel better af £99,870 tal health care pilot	spond to the first drug P1vital has developed at, whether an antidep the GP-ETB test was c ter 4-6 weeks of treatr £987,247 confirms there is pote	g prescribed and have to try several different a computer test called the GP-ETB, designed to ressant drug is working. ompleted after 7-9 days of treatment, it nent. Oxford ntial forProReal software to provide benefit to the		
therapy before a patient feels any better. Man drugs, one after the other, before an effective be completed by depressed patients, to predi Initial results from a pilot clinical investigation accurately predicted whether a patient was go ProReal Ltd Summary: The ProReal avatar therapy for men therapeutic process by providing a visual and d The Phase 2 project will design and pilot a ProF	y patients do not re treatment is found. ct, early in treatmen showed that, when ing to feel better af £99,870 tal health care pilot ynamic platform wh Real avatar-based so	spond to the first drug P1vital has developed it, whether an antidep the GP-ETB test was c ter 4-6 weeks of treatr £987,247 confirms there is pote ich helps the user to e ftware intervention fo	g prescribed and have to try several different a computer test called the GP-ETB, designed to ressant drug is working. ompleted after 7-9 days of treatment, it nent. Oxford ntial forProReal software to provide benefit to the		

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 i			ted technology that enables real-time detection,
			ately measure and monitor subtle changes in pup ve outcomes for patients and reduce length-of-
	ding cause of death	and permanent disabi	ity. In the UK over 1 million people a year attend
Doctor Communications Solutions Ltd	£99,975	£1,000,000	West of England
	of the care delivered areflowConnect's m	d by healthcare profes	plood results and investigations, can be analysed sionals. Qualitative and provisional quantitative
		upports the company'	s ability to further develop, implement and scale
deliver health economic benefit to the wider N		upports the company'	
deliver health economic benefit to the wider N this technology across a wide range of care set The Learning Clinic Ltd Summary: Developing VitalPAC to monitor and	tings. £99,471 I record patient's vit	N/A tal signs. Nursing staff	s ability to further develop, implement and scale North West Coast very quickly familiarised themselves with the
deliver health economic benefit to the wider N this technology across a wide range of care set The Learning Clinic Ltd Summary: Developing VitalPAC to monitor and	tings. £99,471 I record patient's vit	N/A tal signs. Nursing staff	s ability to further develop, implement and scale North West Coast

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
Summary: Care Tracker empowers natients an	d reinforces good n	ractice through 'touch	' monitoring of interactions between natients

/ers pa es good pract: nrougn toucr their surroundings, and healthcare workers. Care Tracker can monitor and improve care quality in any environment, from hospital to home.

devices, more robust clinical data is generated, including continuous non-invasive blood pressure indication.

Research Tools Companies	Award Phase 1	Award Phase 2	AHSN location		
TwistDx Ltd	£99,928	N/A	Eastern		
	and samples requir and a proof of cond test to the market,	e pre-treatment. The cept with Chlamydia p enabling a transforma	Phase 1 award funded early-stage development positive urine has been demonstrated. Further ational change in clinical practice by enabling		
Capillary Film Technology Ltd	£97,760	£998,850	Kent, Surrey and Sussex		
highly cost-effective microfluidic assay platforr product prototypes and delivered feasibility d justify investment into point-of-care cardiovas CFT has further developed affordable microflu	n utilising a novel m ata illustrating quan cular product devel idic testing technol v measuring multipl	naterial, micro capillar titative rapid cardiac opment. ogy that allows mass e cardiac markers, dia	rkers at the point of care, CFT has developed a y film. The Phase 1 programme developed pre- marker measurement in human blood samples, to production of simple devices that can test three or ignosis of myocardial infarct (heart attack) can be to avoid a worrging and costly bospital stay.		
Lightpoint Medical Ltd	£96,600	£947,120	UCL Partners		
Summary: Developing a handheld camera for progressed into clinical trials. For the next phase, the device is being develop reimbursement.	-		ce successfully passed laboratory testing and arch is being conducted on optimal pricing and		
St George's University of London	£97,064	£992,416	Imperial College Health Partners		
conventional culture testing media have been potential to significantly improve diagnostic te Tuberculosis affects nearly a third of the world	found to significant sting and treatmen I's population and is	ly speed up the norm t strategies. s so slow to grow that	rial infections. Supplements that when added to hal very slow growth of mycobacteria and offer the it makes diagnosis difficult and treatments costly. h tests to decide on which antibiotic treatment will		
University College London	£99,449	£1,000,000	UCL Partners		
Summary: Dementia research recruitment and feasibility tool – an innovative application of cloud-based technology will make it easier for people interested in taking part in dementia research to be connected to appropriate studies. People can register via the internet, a help desk or their memory clinic. Researchers, with ethical permission, can use the register to find people quickly and efficiently for their studies.					
	sing one of the chall and generalizable,	lenges identified in th	which a national consent-for-approach service e Prime Minister's challenge on dementia. The o deliver the cost saving and public involvement		
University of Edinburgh	£98,336	N/A	Scotland		
screening is performed is changing and molec as most infections clear naturally there is a la up and treatment. Initial evidence suggests th	types of HPV can c ular HPV-DNA testir ge numerical discre at a signature biom	ause cancer which ce Ig will replace cytolog apancy between infec arker measurable in F	rvical screening aims to prevent. The way cervical cy of cervical smears as the first line test. However, tions detected and women who need follow-		

Spring 2014 (Child & Maternal Health, Integrated Care, Medicine Adherence, Musculoskeletal, Telehealth/Telecare for people with Learning Disabilities) 26 companies were successfully awarded Phase I contracts and started their projects in December 2014

Child & Maternal Health Companies	Award	AHSN location
Azureindigo Ltd	£99,961	West Midlands
Summary: Developing a non-intrusive device to 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		al to eliminate the requirement for the drug therapies currently used, antially improve family and patient wellbeing.
	,	op bedwetting without experiencing the side effects of drug therapy. t manner, leading to increased patient wellbeing and better outcomes
BioSensors Ltd	£99,600	North West Coast
		ohn Moores University (LIMU), BioSensors is investigating the use of ure levels of various bio-chemical markers in a patient's blood, withou
		onitoring and early warning system, that automatically alerts staff to ew of a patient's health, progress and trends in real-time.
BioSensors is a joint venture between LIMU and	d Med ePad Ltd.	
Digital Creativity in Disability Ltd	£100,000	North West Coast
from multiple sources to alert on enuresis, not	on heavy sweating factors to feed into	er of common and proven indicators. The technology will correlate dat , and compile a profile of a child so eventually an algorithm can predic o this algorithm in order to predict enuresis. The product is based on s University.
University of Central Lancashire	£100.000	North West Coast
	e has the potentia	I to alert children to an impending episode of nocturnal enuresis prior

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		
amongst other things, will provide rich data to test results include interviews with patients w	identify people wit hich have corrobora e data has identified	Gs, Docobo is developing an integrated care community system which, h complex needs and with a particular risk of social isolation. The initial ted the "system produced intelligence" and proved the feasibility. d many patients who can be managed by both health and social care s 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 predict people at risk of becoming complex patients. If people at risk of becoming complex can be identified and interventions put in place then some illnesses 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 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
	0	sor that can be placed on standard over the counter medicine containers. nd if not, will remind the patient through their smartphone and carers

Eastern

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.

Folium Optics Ltd	£99,986			
Summary: Taking an 'internet of things' approach to develop developed a smart electronic tag that can be attached to me which medicine should be taken and when. It has a simple u to a cloud data service. A separate 'reminder' display, design ambient feedback to the user.				
Selective Antibodies Ltd	£99,908			
Summary: Developing positive readout technologies to addr tests, both patient and health care-worker will be able to see are rapid, minimally-invasive, and critically – simple to perfor Lack of adherence to prescribed therapies is a major probler can occur, and so the current programme is aiming at a prim				
Therakind Ltd	£98,500			
Summary: Conducting an initial assessment of technical feasi for drug delivery. The aim is to provide an alternate drug deliv delivery methods have problems which affect treatment adhe drug, used for the treatment of endocrinology disorders, so it favourable.				
Musculoskeletal Companies	Award			
Armourgel Medical Limited	£95,160			
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	of life of fallers ster design and			
Summary: 1 in 3 women will suffer a fragility f fractures is paramount to maintaining quality integrates active protection, revolutionary hol	of life of fallers ster design and			
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	of life of fallers ster design and edictive solution £100,000 easure of funct			
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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 me used in the home, replacing the need to atten A system combining Docobo's telehealth moni secure proven data management and integrat	of life of fallers ster design and edictive solution £100,000 easure of funct d an outpatien toring of pain, ion with NHS, 0			
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Summary: 1 in 3 women will suffer a fragility of fractures is paramount to maintaining quality of integrates active protection, revolutionary hol market, for an integrated preventative and preventing falls. A clinical evaluation, corvery interested in using Exergames with users and Exergames easy to use. Peacocks Medical Group Summary: Developing new kinds of foot orthor treat overpronation/ supination. The results of motion control to those without the optimisation.	of life of fallers ster design and edictive solution £100,000 easure of funct d an outpatien toring of pain, ion with NHS, C a bolt-on tech £98,000 e safely used in educted by the reporting positi £76,940.85 wass optimised f the work sugg ion, but may d			

Imary: 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 s 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)		
audiologists, Cupris has completed a re-desig ergonomics and technical specifications. The device, and the app and software platform ca cases over a secure cloud service. This allows	n of their smartphor testing has validated in easily and intuitive people with learning	eople with learning disabilities, carers, GPs, ENT surgeons and ne-connected otoscope and software platform including aesthetics, I that clinical quality images of the eardrum can be captured using the ely be used to carry out hearing tests, capturing and sharing patient g disabilities to have ear examinations and hearing tests conducted by to the doctor, thus saving resources for the NHS and making the whole		
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		
	edical and day-to-day	empowering the lives of learning-disabled adults. Adults with learning I life needs, enabling them to capture information and communicate		
Melton Health Care Technologies Ltd	£99,924	North West Coast		
• • • •		rovides a personal lifestyle and health dashboard, putting the individual giving absolute control over the sharing of information.		
is designed to support the move to person ontrolling support and treatment alongside		e services and not just a focus on keeping records, but planning and ta in one single reference point.		
		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 -connect	£98,070	Yorkshire and Humber		
services as part of the project's v-connect see	cure videoconferenci	ncil's 'Greater Independence Project' to include remote healthcare ing service. Using two use cases, one will and training programmes, the nurse services to promote health and wellbeing.		
Sensixa Ltd	£96,800	Health Innovation Network (South London)		
fe, the CareforAll project has developed inne earning disabilities. Through the partnership ueeds and conventional one-size-fits all appro	ologies to assist peop ovative wearable dev with local special ne pach will not work. A	ple with learning disabilities to live an independent, healthy and active vices and software apps that target the individual needs of people with reds schools, the project team has found that every child has specific 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

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. Dthers may have less severe disabilities but still struggle to control equipment independently. This loss of control and independence can ave an immense impact on an individual's quality of life and on the families and carers who support them. Norking closely with the NHS Assistive Technology team at Barnsley Hospital, GSPK Design has developed a novel form of muscle activitiensing 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. nspiration Healthcare Ltd £97,200 East Midlands correction system that is suitable for in-hospital (ITU) use. Future plans include a portable device for use by paramedics in the field to beliver this therapy within the critical 'golden hour'. Dbex 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 takeholders caring for the patient. This project takes an existing, proven hospital-based and registry platform and extends its applicability and benefits to both patients and the NHS of this approach through a pilot scale roll-out and associated study.	Brain Injury Companies	Award	AHSN location	
locked in', having lost all muscle control apart from eyes and some facial muscles, while awareness and cognition remains unimpaired. Dthers 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 activitiensing that provides a reliable method by which patients can use assistive technology to communicate and operate computers and ot equipment making a real difference to their lives. nspiration 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 preathing system that is suitable for in-hospital (ITU) use. Future plans include a portable device for use by paramedics in the field to leliver this therapy within the critical 'golden hour'. Dbex 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 takeholders caring for the patient. This project takes an existing, proven hospital-based and registry platform and extends its applicabilito community based healthcare including capturing quality-of-life information directly from the patient. The aim is to show the easibility and benefits to both patients and the NHS of this approach through a pilot scale roll-out and associated study.	GSPK Design Ltd	£73,740	Yorkshire and Humber	
Summary: Based on the treatment of acute brain injury through inhalation of novel gases, Inspiration Healthcare is developing a oreathing 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 takeholders caring for the patient. This project takes an existing, proven hospital-based and registry platform and extends its applicabil nto community based healthcare including capturing quality-of-life information directly from the patient. The aim is to show the easibility and benefits to both patients and the NHS of this approach through a pilot scale roll-out and associated study.	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 activity 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.			
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Summary: It is important that brain injury patients are treated holistically and with seamless access to relevant patient information for takeholders caring for the patient. This project takes an existing, proven hospital-based and registry platform and extends its applicabil nto community based healthcare including capturing quality-of-life information directly from the patient. The aim is to show the easibility and benefits to both patients and the NHS of this approach through a pilot scale roll-out and associated study.	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'.			
takeholders caring for the patient. This project takes an existing, proven hospital-based and registry platform and extends its applicabil nto community based healthcare including capturing quality-of-life information directly from the patient. The aim is to show the easibility and benefits to both patients and the NHS of this approach through a pilot scale roll-out and associated study.	Obex Technologies Ltd	£76,662	Eastern	
CAMHS Companies Award AHSN location	Summary: It is important that brain injury patients are treated holistically and with seamless access to relevant patient information for all stakeholders caring for the patient. This project takes an existing, proven hospital-based and registry platform and extends its applicability 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.			
	CAMHS Companies	Award	AHSN location	
Advanced Digital Innovation (UK) Ltd £99,873 Yorkshire and Humber		and the second		

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.

uMotif 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

Award	AHSN location		
£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.			
£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.			
£75,840.24	North East and North Cumbria		
	£99,244 anoparticle based o ation. This new com nydrogel dressings o £99,785 cy of an extremely c		

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.

Gold Standard Phantoms Ltd £100,000 UCL Partners
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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.

Outpatients Companies	Award	AHSN location		
Message 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 monitor 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.				
Ulsys Ltd	£99,996	Yorkshire and Humber		
Summary: 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	Phase	Stage	Type of Spend	No. of Contracts	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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