



Mental Health – A Focus on Health Technology

SBRI Healthcare NHS England competition for development contracts

September 2013

Summary

A new national Small Business Research Initiative (SBRI) Healthcare competition is being launched by NHS England in partnership with the Academic Health Science Networks (AHSN's) to find innovative new products and services. The projects will be selected primarily on their potential value to the health service and on the improved outcomes delivered for patients.

The competition is open to single companies or organisations from the private, public and third sectors who will ultimately be capable of supplying the NHS with the resulting product or service on a commercial basis. The competition will run in two phases:

- Phase 1 is intended to show the technical feasibility of the proposed concept. The development contracts placed will be for a maximum of 6 months and up to £100,000 (inc. VAT) per project
- Phase 2 contracts are intended to develop and evaluate prototypes or demonstration units from the more promising technologies in Phase 1. Only those projects that have completed Phase 1 successfully will be eligible for Phase 2.

Developments will be 100% funded and suppliers for each project will be selected by an open competition process and retain the intellectual property rights (IPR) generated from the project, with certain rights of use retained by the NHS.

This competition theme, led by the East Midlands AHSN, focuses on technology for mental healthcare and encompasses:

- Primary mental health problem across the lifespan including children and young people, adults and older people:
 - Examples of primary mental health problems include depression, bipolar disorder, psychosis, anxiety disorders, eating disorders, alcohol and drug use disorders, dementia, attention deficit hyperactivity disorder (ADHD), Tourette's syndrome, autism spectrum disorder (ASD) and other childhood-onset mental health and neurodevelopmental disorders
- Mental health problems are often associated with physical health problems – and proposals could target improved physical health in people with primary mental health problems

The competition opens on 16th September 2013. The deadline for applications is 1200hrs on 31st October 2013.

Background

Mental health problems affect one in four people in the UK and the number of people at risk is increasing, for example the proportion of the English population meeting the criteria for one common mental disorder increased from 15.5% in 1993 to 17.6% in 2007¹. The economic and social costs of mental health problems are also increasing; they were estimated to be over £100bn in 2010, an increase of 36% over the period 2003-10¹. Despite so many suffering with mental health problems it is estimated that only a quarter of those with depression or anxiety-related mental health problems in England are in treatment and with resources in this area already constrained it is unlikely that keeping pace with rising demand is likely to be met through existing models of service delivery¹.

¹ E-mental health: what's all the fuss about? – Mental Health Network discussion paper, January 2013 Issue 12

Mental health has traditionally lagged behind other areas of healthcare in the development of application of new technology. Although it accounts for the largest area of government health spending (13%) it is an area of healthcare with high unmet need and little technological innovation to date to help meet those needs. The development of new technology is needed particularly in the area of mental health since currently much of the diagnosis and assessment within the mental health field is subjective. Recent advances in neuroscience allied to computer science will allow a potential revolution in practice through the development of objective computerised assessment and clinical management tools. Furthermore, the application of e & m-health technologies have the potential to transform mental healthcare by increasing patient's involvement in their care, monitoring and outcomes and enhancing interactions with both real and virtual clinicians.

The Mental Health Network, in its 2009 report – *A future vision for mental health* – set out the need for a new relationship between mental health services and those who use them and recognised the potential for technology to improve mental health care. The Government's mental health strategy, *No health without mental health* (2011) and the subsequent implementation framework for the strategy (2012) states that mental health services should consider "the power of information to transform services" including the "potential of mental health and wellbeing services that use technology to provide self-care and peer support within a well-governed, safe, immediately accessible and stigma-free environment"¹. Thus technology is a focus for change within mental health care provision.

Challenges

The focus of this competition will be on technologies that can improve care for people with mental health illnesses from identifying those at risk, as well as those with symptomatic or established illness, to better approaches to self-management and personalisation. Technologies could therefore assist in the diagnosis, treatment planning and management of disease. The unmet needs that technologies should seek to address have been identified as:

1. Making treatment or care more accessible and patient-centred by reducing the need for routine clinic-based appointments and face to face consultation (e.g. using virtual coaches, educational games, avatar therapy, video-consultation).
2. Ways of helping older people/people with dementia to access normal experiences (e.g. using virtual reality to increase access to arts and sports participation, or getting exposure to horticulture; allowing people with dementia to safely leave the home, go for walks, access public transport etc).
3. Ways of reducing isolation for older people/people with dementia (e.g. secure social networking, robotic therapeutic pets).
4. Ways of using mobile technology to improve engagement, information provision and acceptability of mental health services for hard to reach groups (e.g. adolescents and young people, offenders and 'looked after' populations, substance users).
5. Increasing objectivity and reliability of diagnostic assessment and sensitivity of treatment monitoring, enhancing early detection to prevent relapse and reduce risk (e.g. computerised assessments, machine learning algorithms, wearable devices and biosensors).
6. Ways of supporting adherence with medication.

Application process

This competition is part of the Small Business Research Initiative (SBRI) programme which aims to bring novel solutions to Government departments' issues by engaging with innovative companies that would not be reached in other ways:

- It enables Government departments and public sector agencies to procure new technologies faster and with managed risk;
- It provides vital funding for a critical stage of technology development through demonstration and trial – especially for early-stage companies.

The SBRI scheme is particularly suited to small and medium-sized businesses, as the contracts are of relatively small value and operate on short timescales for Government departments.

It is an opportunity for new companies to engage a public sector customer pre-procurement. The intellectual property rights are retained by the company, with certain rights of use retained by the NHS and Department of Health.

The competition is designed to show the technical feasibility of the proposed concept, and the Phase 1 feasibility contracts placed will be for a maximum of 6 months and up to £100,000 (incl. VAT) per project. It is envisaged that a competition for Phase 2 Development contracts will be run during 2014.

The application process is managed on behalf of NHS England by the Eastern Academic Health Science Network through its delivery agent Health Enterprise East. All applications should be made using the application forms which can be accessed through the website www.sbrihealthcare.co.uk.

Briefing events for businesses interested in finding out more about the competition will be held on the 24th September (Nottingham), the 30th of September (London) and the 2nd of October (North West). Please check the website for confirmation of venues and to register attendance.

Please complete your forms using the online application process and submit them by 1200hrs on the 31st October 2013.

Key dates

Competition launch	16 th September 2013
Briefing events	24 th & 30 th Sept, 2 nd Oct 2013
Deadline for applications	1200hrs 31 st October 2013
Assessment	November 2013
Contracts awarded	February 2014

More information

For more information on this competition, visit:

www.sbrihealthcare.co.uk

For any enquiries e-mail:

sbrienquiries@hee.org.uk

For more information about the SBRI programme, visit:

www.innovateuk.org/SBRI



www.sbrihealthcare.co.uk



The SBRI Healthcare programme is directed by the Eastern Academic Health Science Network on behalf of NHS England and managed by Health Enterprise East.