Towards a healthier future...

NHS South Central

South Central SHA Innovation Challenge

July 2010

Briefing Document

SBRI Government challenges. Ideas from business. Innovative solutions.

Summary

This challenge is being launched by South Central SHA. It is looking to all sectors – both within and outside the NHS and including industry to bring new technologies and new practice to bear on the achievement of an ambitious target of

a 20% reduction in admissions to hospital within the next 2 years.

Successful responses will offer the following benefits:
Efficiency – responsive to the quality and productivity agenda
Scale – wide impact
Acceptability – improves patient and staff experience
Cost – sound return on the investment
Pace – rapid results
Evidence – clinically acceptable

Responses to the challenge are likely to include proposals to increase the scale and pace of uptake of current technologies and innovative practice and also proposals for new technologies and practice.
This challenge will be shared with all sectors including: the NHS, social care organisations, the voluntary sector, industry, and the emerging Health Innovation and Education Clusters (HIECs). It is open to all comers, including organisations not currently engaged in the health sector.

Have you got an innovative approach that could contribute to a reduction in hospital admissions of 20%?

Your offer might use technology that is established in health care or be from another field but with transferable benefits. You might know of innovative practices from inside or outside the NHS that have made services more efficient and effective for users.

All responses must offer an opportunity to reduce admissions to secondary care whilst maintaining or preferably enhancing quality. There is likely to be a focus on supporting individuals to stay well, look after themselves, be cared for remotely, to receive care in non-acute settings or receive care that does not require admission.

Although no single proposal is likely to achieve our objectives taken together we are ultimately looking to avoid one admission in 5. We are looking for ideas that impact on one or more of our 8 clinical pathways – see below.

Background

The recent pattern of bed usage in secondary care (hospital) has been one of continued growth despite the development of community based services and numerous initiatives to promote more patient-centred care, including integrated care pathways, patient and public involvement forums, and telephone help-lines.

Poor professional or self management in patients with established conditions can result in a high number of inpatient stays in hospital and in high lengths of stay as well as extra complications and early death. Less than optimal health screening and unhealthy lifestyles can also contribute to hospitalisation of the acutely ill. Hospitalisation in itself can have an adverse effect on the individual's health and well-being.

Population growth and increasing longevity will increase demand for services. Consequently the biggest healthcare challenge is that of delivering care to older people and those with chronic conditions, and in supporting the more vulnerable members of society.

Another consequence of the demographic change is that the number of care professionals will decrease as demand for care rises. It is clear that we need to identify and adopt new approaches that reduce

the demand on health-carer time and ensure that when contact with a health carer takes place it is maximally effective.
This will mean new technologies and new practices and a focus on developing a better informed and more expert public and patient.

In embracing these changes health and social care services will have to make greater use of technology, develop the prevention agenda and deliver care closer to home and make increasing use of supported self-care.

Effective healthcare
Health and social care is most effective when it is centred on the person and those they live with. Continuity of care between GPs, primary care, hospitals, the third sector and social services and a range of providers and community group can prevent unplanned admissions and re-admissions to hospital.

It is vital to involve patients in the care process. Patients may not adhere to treatments they do not understand, or see as relevant or appropriate to their circumstances, and they may not tell their care professionals about this. This problem is particularly acute among older patients; for example it is estimated that three quarters of prescriptions to over 75s are not taken as prescribed.

Increasing preventative healthcare, for example by healthy eating, taking physical exercise, giving up smoking and reducing harmful levels of alcohol consumption, reduces the prevalence of long-term conditions.

Current developments
A number of technology led service changes aimed at promoting self care have been implemented across NHS SC. These draw on products from a variety of sources and operate on a number of platforms. Inter-operability between these technologies is generally poor or non-existent and thus opportunities for integrating packages and creating bespoke solutions is limited.

Additionally service redesign based innovations such as enhanced recovery nurses are being implemented across NHS South Central.

Programmes and policy
Increasingly, the NHS is trying to move services to more local and convenient locations for patients, to enable them to live more independently and keep them out of hospital. Moving the information with the patients and across agencies is a crucial factor in ensuring that services function well in this way. The national ‘Connecting for Health’ programme will address this in time, but there is room for simple solutions to support care closer to home.

Currently the health service is focusing on improving the screening of the population to more effectively identify people with long-term conditions and those at risk of illness or hospitalisation. This enables preventative strategies and more proactive management of conditions through personal health plans which anticipate individual needs. Personal Health Budgets, whereby patients will be allocated costs (and maybe cash) relating to their care and will be able to purchase their own care, are to be piloted over the next few years.

The Expert Patient Programme which trains patients to manage their own conditions will be extended to more people. Along with rehabilitation and other education programmes.

NHS SC is working to ‘add life to years, not just years to life’, and will increase supported self care through provision of information, education and appropriate support to enable individuals and their carers to live full lives and improve their overall health and well-being in the context of any ‘health condition’ they may have.

Priority Areas for consideration

The following summarises established priorities but should not be seen as an exhaustive list of areas of interest.

Acute Care

- Reduce the need for urgent and emergency care through prevention, self care and pro-active healthcare interventions
- Deliver definitive care as quickly and efficiently as possible e.g. stroke pathway
- Reduce handoffs between services through an integrated system
- Ensure that healthcare is simple to access
- Prevention of further non-elective contacts
- Prevention of need for urgent and emergency care
- Reduce the need for urgent and emergency care through prevention, self care and pro-active healthcare interventions

Maternity and Newborn

- Reduce ante-natal admissions through remote screening, remote advice provision and improved patient information
- Increase % of normal births through improved organisation of services and clinical practice

End of Life Care

- Early identification of those at end of life and communication of this across sectors and settings
- Assessment, care planning and advance care planning for those at the end of life
- To ensure that both patients and their families/carers choices are supported.
- Early identification of those at EoL and communication of this
- Enhanced community care services to enable people to be cared for at home

Children and Young People

- Improving access to urgent care outside of hospital and reduce urgent care attendance
- Promoting prevention and improving parent confidence
- Improving non urgent care outside of hospital including development of paediatric community care teams

Planned Care

- Early access to assessment and diagnosis to enable patients to make informed choices about treatment options and promote self care to help reduce unnecessary elective procedures.
- Use of enhanced recovery pathway techniques to enable to patient to be better prepared for operations and recover quicker.
- Enabling patients to make informed choices which help reduce unnecessary elective procedures – decision aids in SW England reduce hysterectomy rates by 20%
- Technologies that reduce secondary care referrals

Long Term Conditions

- Promotion of self management
- Remote monitoring to support early intervention and admission avoidance
- Active monitoring of patient lists electronically at regional, PCT and practice-level to aid case management

Mental Health

- Mental health self care
- Mental health remote monitoring
- Address the mental health needs of people with physical illnesses or medically unexplained symptoms

Staying Healthy

- Promoting healthy living – exercise and diet
- Reduce smoking
- Deliver high impact changes in alcohol advice and guidance

Other considerations

All proposals need to demonstrate that they will be contributing to the SHA's 'green agenda'. Innovations which reduce waste and increase efficiency will be welcomed.

Opportunities for sharing intelligence and working across sectors (especially health, social care and the 3rd sector) will be particularly welcomed

Intellectual property

Where relevant suppliers / innovators will retain intellectual property generated from the project, with certain rights of use retained by SC NHS.

Scope

This Challenge will commit a total of £800k and is open to all comers. Funding within the identified envelope will be provided to support development up to proof of concept stage (for inventions) or the gathering of local evidence where appropriate in the first instance (phase one – see below).

Activity Data

See appendix 1 below

Application Process

This challenge is intended to reach individuals, organisations and companies that the SHA has not reached thus far in seeking innovations and improvements that will help it to deliver its objectives. The aim is to generate novel solutions or novel ways of using existing solutions. This will provide an opportunity for new engagement with the NHS in a pre-procurement environment.

The process will be phased:

Phase 1 is intended to show proof of concept, and the contracts in this phase will be for a maximum of 4 months and £50,000 per project.

Phase 2. Will be to support the further development and / or roll out of successful phase 1 projects. Funding for phase two projects is limited to a maximum of £150,000 per project.

Applications should be submitted on the Innovation Challenge application form available from the SHA Innovation Challenge Website

Evaluation criteria

This Challenge is a competition.
Proposals will be judged against the following criteria.
Part of the selection process for shortlisted proposals will be interview and presentation to a panel.

Criteria:

Quality gain

- Genuine reductions in demand for acute services (applicants must demonstrate they will not simply displace patients).
- The prevention of the escalation of a condition.
- The appropriate use and increased uptake of services closer to home.
- Improved health outcomes for a population
- Improved feedback from patients and the population

- Improved patient experience including meeting their choice over place of care
- Improved access to services (reduced travel or waiting)
- Improved equity (services more uniformly available, ‘levelling up’ of outcomes)
- Improved efficiency of service (reduced staffing needs or increased capacity without increasing staffing)
- Improved efficacy (faster responses to treatment, more complete recovery leading to reduced demand for care ‘downstream’)
- Improved acceptability (care closer to home, less invasive care, self care)

Productivity gains
- Reduced cost of care across the local health system
- Reduced demand for staff time

Percentage of population impacted
- The bigger the impact the more likely an application is to be successful
- The scale of impact is not just about total numbers - proposals will be judged against the cohort of individuals to which it applies – i.e. if a proposal is likely to impact positively on all individuals in a minority group this may be favourably received

Scale of impact
- How big a difference is the proposal likely to make

Pace of impact
- Proposals that can make an impact quickly will be favourably received

Return on investment
- The ratio of costs of verses benefit. In general a financial return of greater than 400% in less than two years is a minimum return anticipated
- Value for money

Link to a priority
- Proposals must address one or more SHA / Health economy priorities (see above)

Ease of implementation
- Those proposals that lend themselves to easy implementation will be favoured

Staff benefits
- Proposals that ‘make life easier’ for staff and / or increase their job satisfaction will be favoured

Evidence base
- Evidence is important although it is expected that this challenge exercise will build the evidence base in some cases where technology or practice proposals are leading edge - In these instances, applicants will need to explain their hypotheses and assumptions and support projected gains.
- Track record of delivery - evidence of the bidder having successfully delivered innovation in the past

Activity Data

2008-09 activity data sorted by bed days

HRG	HRG Title	Admissions	Bed Days	Average LoS (Days)
D99	Complex Elderly with a Respiratory System Primary Diagnosis	4,463	55,020	12.94
NO3	Neonates with one Minor Diagnosis	32,207	46,355	1.46
L09	Kidney or Urinary Tract Infections >69 or w cc	3,979	41,733	10.67
A22	Non-Transient Stroke or Cerebrovascular Accident >69 or w cc	2,385	38,754	16.49
H99	Complex Elderly with a Musculoskeletal System Primary Diagnosis	1,363	28,443	20.98
D41	Unspecified Acute Lower Respiratory Infection	3,884	24,424	6.30
D13	Lobar, Atypical or Viral Pneumonia w cc	2,336	20,000	11.43
F46	General Abdominal Disorders >69 or w cc	4,702	15,797	3.39
D40	Chronic Obstructive Pulmonary Disease or Bronchitis w/o cc	4,078	14,630	4.46
N11	Caesarean Section w/o cc	3,886	13,992	3.61
A99	Complex Elderly with a Nervous System Primary Diagnosis	569	12,309	21.63
D14	Lobar, Atypical or Viral Pneumonia w/o cc	2,059	11,220	5.45
E29	Arrhythmia or Conduction Disorders >69 or w cc	3,039	11,121	3.69
E31	Syncope or Collapse >69 or w cc	2,932	10,177	4.08
F47	General Abdominal Disorders <70 w/o cc	7,820	9,925	1.35
E99	Complex Elderly with a Cardiac Primary Diagnosis	725	8,765	12.15
F36	Large Intestinal Disorders >69 or w cc	1,329	8,652	6.62
S31	Admission for Unexplained Symptons	1,364	7,801	6.05
S19	Complications of Procedures	2,494	6,826	3.08
S16	Poisoning, Toxic, Environmental and Unspecified Effects	6,267	6,268	1.27
S99	Complex Elderly with a Haematology, Infectious Disease, Poisoning, or Non-specific Primary Diagnosis	470	5,811	12.36
E35	Chest Pain >69 or w cc	3,908	5,755	1.38
P06	Minor Infections (including Immune Disorders)	5,040	5,278	1.07
F36	Large Intestinal Disorders >69 or w cc	778	5,065	6.50
E18	Heart Failure or Shock >69 or w cc	633	4,974	7.85