COMPETITION FOR DEVELOPMENT CONTRACTS

URGENT AND EMERGENCY CARE

NHS ENGLAND AND NHS IMPROVEMENT
SBRI HEALTHCARE

JULY 2020

SBRI HEALTHCARE

The AHSN Network

NHS

Contents

Executive Summary

The ever increasing pressures on hospital emergency departments (EDs) are well documented globally and not just in the NHS and, despite many years of innovation, growth in numbers arriving at the doors of the ED continues. The reasons for this growth are multifactorial and some demographics show particular issues: children and young people have a significantly higher inappropriate/non-urgent attendance at ED than adults and the proportion of those of all ages with respiratory conditions has grown rapidly over the past few years.

There are some signs of ability to reduce this growth significantly from the work done in the Vanguards, which recognise the need to address the wider system and not simply provide point solutions. This is referenced in the NHS Long Term Plan that has very ambitious targets for reducing hospital admissions.

This competition seeks to address two primary issues, taking into account the systemic complexity and recognising some of the key demographic differences. So the request is for solutions that will:

1. **Reduce demand**
    a. Recognising differences for adults *vs* children and young people
    b. Recognising that respiratory conditions in all ages account for a rapidly growing proportion of attendances
2. **Reduce the length of stay in the Emergency Department**
    a. By more efficient triage, streaming and treatment
    b. By more efficient discharge or admission to the hospital

Applicants are asked to consider the impact of their innovation on the whole system and to be aware of the competitive environment, even considering working together with other companies to bring forward solutions that can make a real difference.

The COVID-19 emergency has forced changes already and there are some innovations being implemented and tested. Applicants should consider that the baseline they need to innovate from may be different already from that in January 2020. This competition is open to supporting the further development and evaluation of technologies already used experimentally to help in this crisis.

Urgent and Emergency Care

The global challenge[1]

More connected and consumer-oriented than ever before, the world's health systems are challenged to build resilience in times of change. Traditionally viewed as a fragmented industry with hyperlocal challenges and solutions, healthcare faces near universal forces of rapid digitisation, increasing demands and expectations from informed and connected consumers, and shrinking resources to fuel innovation and build infrastructure. The world population is expected to increase by 1 billion people by the year 2025; almost one-third will be age 65 or older. Healthcare organisations should solve today's pressing problems with a mindset of the future rather than relying on past assumptions.

Health systems face universal megatrends:

- ***Declining trust*** in institutions leading to swelling numbers of sceptical consumers expecting more from their providers and asking for more convenient healthcare experiences
- ***Population ageing*** placing more pressure on local healthcare and community infrastructure to deliver care and services
- Global populations also are threatened with ***pandemics***. Global healthcare systems are pressured on improving their readiness by having quarantine and contamination procedures and equipment, assessing supply chain, stockpiling drugs and considering other logistical challenges
- ***New ways of delivering care***
- ***Increasing wealth disparity.***

Source: PwC Health Research Institute analysis

Global spending on healthcare is projected to increase from US$9.7trillion in 2015 to US$18.28trillion by 2040 with a projected worldwide shortage of 12.9million healthcare professionals by 2035. These global trends will continue to drive health system strategies in the short and long term.

Urgent and emergency care is disproportionately impacted by these changes and is under immense pressure on a global basis. However, it stands to benefit hugely from the promise of new technologies that support the population and clinicians in the community thus reducing the initial demand and allowing earlier discharge.

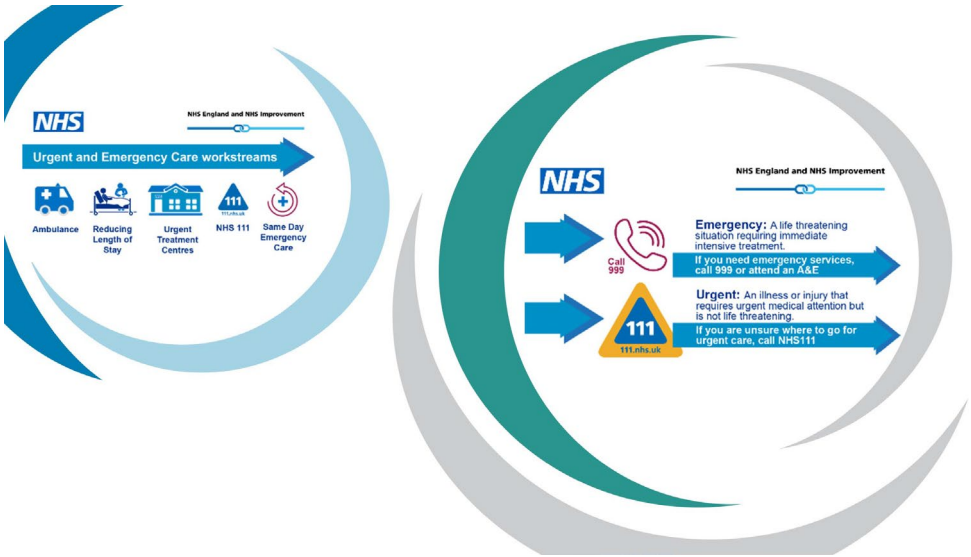
[1] PwC "Global top health industry issues" - 2018

Urgent and Emergency Care in England

In 2019, an average of 70,231 people attended emergency departments (EDs) each day in England. This is 4.8% higher than in 2018[2]. At 'Type 1' EDs – i.e. major hospital Emergency Departments offering a 24-hour service – the increase was similar, at 4.9%.

Over the last five years, attendances at Type 1 EDs have risen 10.6%, which amounts to over 4,000 extra people attending each day. When Type 3 facilities such as minor injury units and urgent care centres are included, the increase is almost 9,000 extra attendances per day across England.

A systematic review in the British Journal of General Practice[3] showed that inappropriate attendances may account for between 24% and 40% of presentations at EDs. The latter review has been well cited and similar issues identified around the world. For example, a recent systematic review from James Cook University in Australia identifies the mean proportion of non-urgent paediatric presentations at ED to be 41.06 ± 15.16%[4].



NHS strategy - The NHS Long Term Plan targets

The NHS Long Term Plan (LTP) notably starts with a section that outlines the NHS' ambitious commitment to continue the transformation of urgent and emergency care services.

Over the next 10 years, NHS organisations will work together to ensure patients get the right care, in the right place and at the right time[5].

[2] Carl Baker, NHS Key Statistics England, February 2020
[3] Reducing inappropriate accident and emergency department attendances:: a systematic review of primary care service interventions
[4] Non-urgent paediatric emergency department presentation: A systematic review
[5] National Clinical Director for Emergency and Elective Care Blog post

Operationally, the system faces a number of challenges (including: higher demand and an ageing population with increasingly complex health needs) demanding innovative approaches to reduce pressure on hospital emergency services[6].

Below are listed the priorities identified in order to translate NHS LTP vision into practice:

- Boost out-of-hospital care, maximising the number of patients who can be treated without being admitted to hospital
- Redesign and reduce pressure on emergency hospital services and working with ambulance and out-of-hospital services to safely reduce the number of patients who call 999 and don't need to be taken to the ED
- Provide more personalised care when it's needed and continue to stream patients to the most appropriate service at the front door of emergency departments to ensure patients are managed by the correct service
- Digitally enable primary, community and out-patient care services to ensure an integrated and responsive healthcare service helping people stay well longer and receive preventive or primary treatment before it becomes an emergency
- Prevention through a focus on population health

In the medium term, the NHS vision for transforming care asks that local urgent and emergency care services increasingly operate as an integrated network of community and hospital-based care, hand in hand with primary care services[5].

Specific targets include:

- Improving the responsiveness of community crisis response services to deliver services within 2 hours in line with NICE guidelines
- England-wide reablement care delivered within 2 days of referral for those judged to need it

The thrust of the effort is to reduce demand and shorten the length of stay in ED.

These pressures on the system have been highlighted all the more by the COVID-19 pandemic.

Snapshot: Pressures on England's NHS in 2019

In 2019, demand for NHS hospital services in England continued to rise. At the same time, performance on many of the waiting time measures fell.

Emergency Admissions - In 2019, an average of 13,448 people were admitted to hospital via the ED each day. This is up 4.8% on 2018 and 22.7% on five years ago. This amounts to an extra 2,500 emergency admissions in England each day.

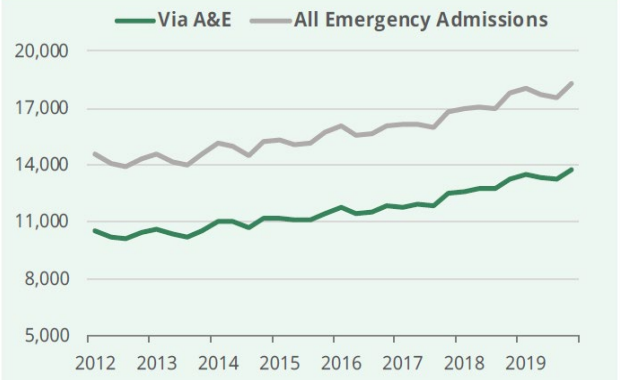
[6] NHS Long Term Plan

Emergency admissions via A&E rose by almost 5% in 2019

Emergency admissions per day

Year	Admissions via A&E	All Emergency Admissions
2013	10,416	14,310
2014	10,963	14,969
2015	11,212	15,314
2016	11,651	15,826
2017	12,029	16,267
2018	12,835	17,187
2019	13,448	17,899
1-year change	*+4.8%*	*+4.1%*
5-year change	*+22.7%*	*+19.6%*

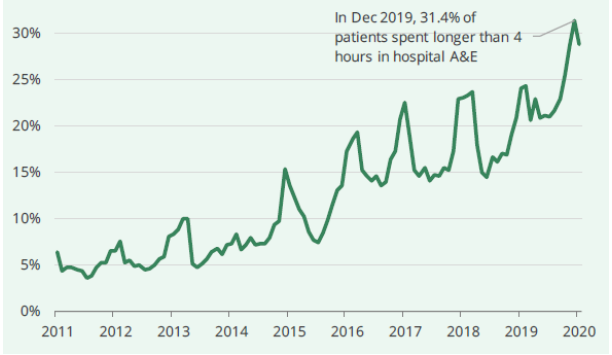
In 2019 there were 2,486 more admissions via A&E each day than in 2014



Waiting times - The proportion of patients spending over 4 hours in the ED has risen in recent years with 2019 (there were 855,000 cases where a patient waited longer than 4 hours for admission) seeing the worst annual performance on record, with 15.3% of patients spending over 4 hours in the ED compared with 11.9% a year earlier and 5.5% five years earlier.

Four-hour waits in hospital A&E have become more common

Type 1 departments only. Excludes sites field testing new standards



At 80% of NHS trusts, more than 1 in 5 patients spent more than 4 hours in Type1 EDs in the last quarter. The number of 12-hour waits for admission doubled in 2019 compared to 2018. There seem to be a number of factors at work resulting in significant 'trolley waits', which tend to peak in winter, with over 330,000 spending over 12 hours in the ED in 2018-19[7].

Times for consultant-led treatment - The NHS constitution states that patients referred by their GP of consultant-led treatment should start treatment within 18 weeks (this should cover, for example, people referred to hospital for an operation). The waiting time target is that 92% of those on the waiting list at any given time

[7] NHS England, ED Attendances and Emergency Admissions

should have been waiting for less than than 18 weeks. There is also a "zero tolerance" policy on patients waiting longer than 52 weeks.

The number of people on the waiting list for treatment has risen by 44% in the last five years. The target of 92% to have been waiting for less than 18 weeks has not been met since March 2016, and performance has continued to decline in 2019. As of December 2019, 92% of those on the list have been waiting for less than 24.9 weeks- almost seven weeks longer than the target.

Ambulance response times - There are four categories of severity for ambulance calls which have different response time standards:

Category 1: an immediate response for a life-threatening condition, such as cardiac or respiratory arrest. The average response time should be under 7 minutes and 90% of ambulance should arrive within 15 minutes.

Category 2: serious condition, such as stroke or chest pain, which may require rapid assessment and/or urgent transport. The average response time should be under 18 minutes and 90% of ambulance should arrive within 40 minutes.

Category 3: an urgent problem, such as an uncomplicated diabetic issue, which requires treatment and transport to an acute setting. 90% of ambulances should arrive within 2 hours.

Category 4: a non-urgent problem, such as stable clinical cases, which requires transportation to a hospital ward or clinic. 90% of ambulances should arrive within 3 hours.

Ambulance performance: average response times- the target for category 1 hasn't been met in most months. However, performance is usually only a few seconds outside the target. For category 2, the national performance has yet to be under 20 minutes.

Non-Urgent Attendance - A significant proportion of those arriving at the ED are subsequently found to be there unnecessarily, which is to say that their health and care needs could be better met by alternative services.

There is significant variation between different EDs even within one area and a paper based on 3 years of data from the Yorkshire and Humber (Y&H) region[8] identified a significant variation between adults and children, which is also seen in a more recent study covering the period Feb-Sept 2016[9], and shows that:

- Overall rates of non-urgent attendance were 23% for adults and 31% for children
- 50% of patients indicated they were advised to attend by a health professional

[8] O'Keeffe, C., Mason, S., Jacques, R. M., & Nicholl, J. (2018). Characterising non-urgent users of the emergency department (ED): A retrospective analysis of routine ED data. PLoS ONE, 13(2). doi:10.1371/journal.pone.0192855

[9] Perspectives on the reasons for ED attendances across Y&H

- Awareness of alternative urgent services among patients was 29% for Urgent Care Centres to 89% for NHS 111
- Staff interviews indicated elderly people living with frailty and the 'worried well' caused most impact on demand.

Staff also noted increased expectation on the service, especially from younger generations. A number of interventions were identified to help address the issues found, which might lead to ideas for supportive innovations:

- Upstream interventions (before patient presents at ED)
    - Public education
    - Training GPs to be more confident in paediatric assessment and teatment
    - Empowering paramedics to make clinical decisions not to transport and deal *in situ*
- In-house interventions (when patient is in ED)
    - GP co-location
    - Patient streaming
    - ED Hubs
    - Progress chasers
- Downstream interventions (after patient has left ED)
    - Fast response teams to facilitate discharge
    - Services to settle and monitor and support patients when home from ED.

Respiratory disease also plays a key role in increasing pressure on ED services.

The poor management of chronic conditions (e.g. COPD and asthma) are responsible for visits to emergency services that could be avoided.

COPD is responsible for almost 150,000 hospital admissions and over one million bed days each year across the UK, and 97% of these are made through emergency care[10].

Exacerbations could be minimised through better control and management of the disease. In addition pneumonia still remains a consistent burden for hospital admissions, especially in winter times.

The current COVID-19 emergency has uncovered additional challenges associated with the lack of resources to manage unexpected high demand of emergency services.

There is an urgent need for systems that can allow the effective triage, streaming and management of patients outside the hospital, to free clinician's time for the individuals that need them the most.

[10] The battle for breath British Lung Foundation, 2016

Costs:

What's the cost of going to the ED?

The cost of going to the ED varies depending on the type of ED an individual attends – from a major, consultant-led department to an urgent care centre or walk-in clinic – and the type of treatment they receive.

For someone who attends an urgent care centre and receives the lowest level of investigation and treatment the average cost is around £45.

For an individual at a major ED department who receives more complex investigation and treatment the average cost is around £400.

What's the cost of an ambulance trip to the ED?

In 2017/18, the average cost of a patient being taken to the ED by ambulance was £252.

Ambulance call-outs that didn't result in a trip to the ED cost an average of £192.

What's the cost of a GP appointment?

A recent study estimated that, in 2017/18, the average 9-minute GP consultation costs £37.40.

It is clear that the reasons for someone's arrival at the ED are complex and preventing these patients arriving in the first place is a multifactorial problem and one that could save significant costs and deliver a better patient experience.

Paediatric non-urgent attendance: increasing demand on the ED is not a new problem and a 2013 study published in BMC Medicine[1] showed a peak in inappropriate attendance in early childhood, under 2s and younger adults, with young adults with non-urgent needs having a propensity for attendance out of hours – likely for convenience.

What can be done to release pressure on the system and improve quality of health and care?

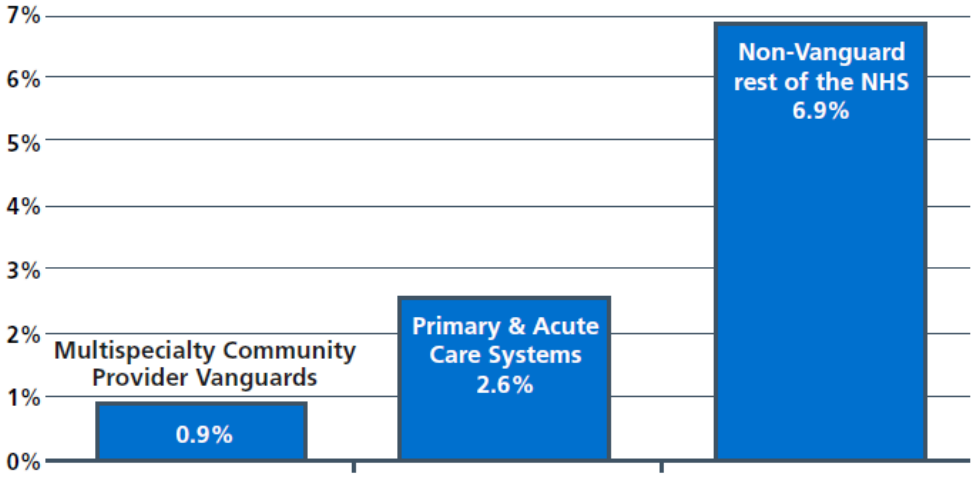
The problems identified above are not new and continue to receive a great deal of thought and action.

Evidence from performance differences between Vanguard and non-Vanguard sites, reported in the LTP, demonstrates what can be achieved. The Vanguards received less than one tenth of one percent of NHS funding, but made a positive impact on emergency admissions, and demonstrated the benefits of proactively identifying, assessing and supporting patients at higher risk to help them stay independent for longer.

What this strongly indicates is that solutions need to be thought through for their impact on the whole system and that moving activity to more appropriate parts of the system (called channel shifting) can both improve patient experience and reduce cost.

Indeed, a guide to this channel shifting model has been published[11]. It states that "many UEC interventions designed in local health economies are also intended to improve the quality of care through a shift in activity. A local health economy might implement a number of UEC interventions; there is no single point solution to ease the pressure on UEC services; it is the combined effect of a number of interventions that makes the difference."

Figure 1: Growth in emergency admissions per capita 2014/15 to 2017/18: MCP and PACS Vanguards vs. the rest of the NHS.

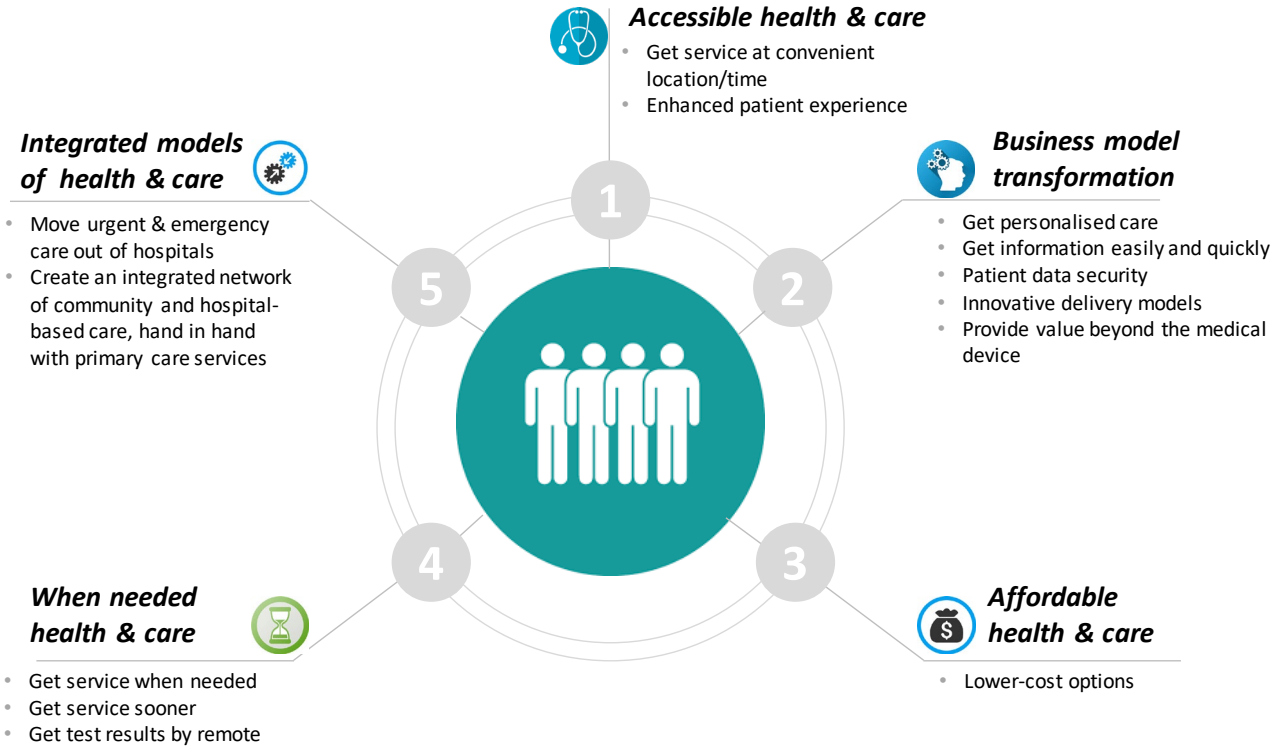


Note: The MCP and PACS combined emergency growth rate is 1.6% which is statistically significantly lower than the rest of the NHS with 95% CI (the upper limit for a significant value is 3.1%).

Source: NHS England analysis of Secondary Uses Service (SUS) data.

[11] Urgent & Emergency Care Consolidated Channel Shift Model User Guide

So, solutions that will be likely to make the most impact will need to take account of multiple factors which go way beyond the functionality of a medical device or software app. The diagram below is indicative of some of these factors that should be considered,:



The Categories

Under the overall theme of 'Urgent and Emergency Care', two categories have been identified *via* consultation with clinicians and other stakeholders working in provision of care across the spectrum.

Applicants are expected to respond to one of the two categories and, in both **Categories**, should consider if their solution is specific to, or can be tailored to, one of the sub-categories, whilst being mindful of the broader impact on the urgent and emergency care system.

Sub-Categories

Given the higher numbers of unnecessary ED attendances for children, there are likely to be some specific approaches to address this issue that may not be generalisable to adults. So these two groups may be considered as sub-categories and solutions developed for adults should not be assumed to work equally well for children and *vice-versa*. Any evaluation of a solution to this challenge should be designed to take into account the differences and studies powered accordingly.

Those submitting applications are also asked to consider:

- How will the proposed solution impact on the care system and how will the system need to be changed (including people, processes and culture) in order to deliver system-wide benefits?
- How will you ensure that the innovation will be acceptable to patients (and their families and wider support network) and to health and social care workers? How could these groups be involved in the design of a solution and its development?
- How will you ensure that the innovation is affordable to the NHS and wider system such as Integrated Care Systems (ICSs) both immediately and throughout the life of the product? What evidence, both health economics and delivery of true impact will the NHS and wider system require before the technology can be adopted?
- How will you ensure that the innovation enhances equity of access (e.g. takes account of underserved ethnic or economic groups) and helps the NHS towards its target to reach net zero carbon.

Category 1: Reducing demand

Background

There are significant increases in ED demand[1-7] with evidence to suggest that significant proportions of patients present to the ED with less urgent needs. These patients are often younger adults and are more likely to present out of hours[3]. Patients that present with less urgent needs could be treated by other services such as primary care, pharmacies or through self-care. By definition, in order to reduce the number of people arriving at the front door, innovations are required that intervene at the incident, in the community, at home, through primary care or NHS 111.

Challenges

Potential solutions to this challenge should be able to work across metropolitan, urban and rural settings, be scalable and, if necessary, configurable to the range of local services. Solutions may be related to pathway redesign and management, self-care, monitoring or diagnosis and intervention.

Potential solutions to this challenge include strategies that support:

1. Redesign of care pathways to provide urgent and emergency care outside of the ED setting
2. Reducing delays in assessment (triage) in out-of-hospital settings to ensure that early intervention out-of-hospital is more often an option
3. Improved confidence and capacity in emergency care outside the ED
    a. By better education of care home staff and primary care clinicians (especially with assessment of children)
    b. Better triage and assessment in the community (primary care, home, care home etc)
    c. New tools to deliver care at the point of need
    d. Tools to increase confidence in safe diagnosis and provision of treatment/watchful waiting
4. Early identification of deterioration of at risk patients with long term conditions (LTCs), to allow early interventions prior to ED, who otherwise are highly likely to arrive at the ED
    a. In particular, a focus on reducing the number of attendees with exacerbations of respiratory LTCs, who make up a steeply increasing percentage of ED admissions[12] – note adult and paediatric differences may be important
    b. Enabling confident self-care for patients with long term conditions
    c. Tools for home and self-care for adults and children with LTCs that that provide confidence and are configured for available local urgent and emergency services
5. Reduce overnight 999 overnight calls from community hospitals and care homes while still providing correct patient care
6. Specific interventions applicable to children and their carers
    a. Educational tools for parents and carers
    b. Tools that support GPs and other community clinicians to more confidently triage children
    c. Out of hospital monitoring solutions
7. Specific interventions related to young people
8. Proofs of concept that have been developed as part of the response to the COVID-19 pandemic that need further development and supporting evidence to enable wider rollout
    a. Non-invasive wearable devices could support acquisition of real-world data. By monitoring patients remotely and continuously, exacerbations could be predicted and data could be used to determine the progress of disease in a timely manner

[12] British Thoracic Society data review on ED attendance - Dec 2018

b. Alternative and creative solutions to deliver pulmonary rehabilitation, allowing professionals to remotely monitor and advise patients while they perform these exercises. Coupled with remote monitoring, this could allow early discharge or avoid hospital admittance.

The following "what ifs" are some examples of scenarios that have the potential to reduce ED demand. The statements are intended as examples only.

What if the number of unnecessary attendances at the ED could be reduced by 25%?

What if clinical staff in primary and community care and carers were more confident in their triage of children?

What if patients with poorly controlled long term conditions could receive intervention before a crisis event?

What if children's carers had more confidence in their primary and community paediatric care services?

What if care home staff were better equipped to intervene before the deterioration required ED care?

What if technology could predict exacerbations, to improve patients' quality of life and reduce ED visits?

Category 2: Reducing the length of stay in the Emergency Department

Background

When urgent or emergency care is required there are often delays within the pathway, these may be in Primary Care (see **Category 1**), assessment areas, inpatient wards or prior to discharge.

Delays in accessing timely care and treatment often mean an extended stay in the ED and possibly in hospital. Their journey through the ED may be delayed by slow assessment and treatment and/or by slow discharge either home or to other health and care settings, such as hospital wards or care homes.

Innovations that give enhanced confidence to patients and carers in home, primary and community care management and in early intervention could enable early discharge and a reduction in admissions to hospital from the ED. This may be particularly true in both children and in elderly patients with complex conditions.

Additionally, effective triage and streaming to identify those non-essential attendees at the ED, so they can be directed to more appropriate care, will free up resources to deliver care to those patients who need to be in the ED.

Challenges

Potential solutions to this challenge include system and technological innovations (digital, diagnostic and device) that:

1. Enhance the quality and safety of care by reducing delays to diagnosis
    a. Rapid turnaround of laboratory diagnostic tests
    b. More point-of-care tests
2. Address access issues to other, non-ED services to enable prompt care and assessment; right time, right place, right staff
3. Reduce pressure on a stretched workforce, while ensuring care is
    a. Better for patients
    b. Easier for staff to deliver
4. Enabling safe and efficient discharge from the ED
    a. Providing confidence in home or community management
    b. Integrating all the appropriate patient and resource information to allow more rapid decisions to discharge
5. Enabling self care as early in the pathway as possible

The following "what ifs" are some examples of scenarios that have the potential to help meet unmet needs in this "Improve the flow of patients" challenge. The statements are intended as examples only.

What if clinical staff were enabled to reliably make more rapid decisions on patient management and treatment?

What if all the information to enable an effective discharge plan was available in the ED?

What if 80% of diagnostic tests were available at the ED bedside?

What if tools for effective self-care were prescribed by ED clinicians?

What if the current availability of other urgent care services for adults and children were visible to ED clinicians?

Useful Information for Applicants

Innovations on the radar

Given the importance and long term nature of this challenge, there are many products already in the market or in later development. It is important that potential applications for this competition carefully consider the competitive landscape.

It may even be appropriate to consider partnering with another solution provider to generate something even more compelling that addresses the challenge systematically.

The list below illustrates some examples of innovations that have been funded by national programmes with the potential for addressing emergency care issues (it is not intended to be exhaustive):

- Nesta and Big Lottery Fund through the Accelerating Ideas programme supported **GoodSAM** (Smartphone Activated Medics), an advanced alerting / dispatching system with a community of highly governed, trained and trusted cardiac responders and currently integrated with CAD services across the UK, Australia and New Zealand.
- The NHS Innovation Accelerator include technologies like **Catch** (Addressing the inappropriate use of NHS services when self-care would be more appropriate for children) and **Waitless** (Free, patient-facing app which shows patients the fastest place to access urgent care services for minor emergencies, which has reached over 125,000 uses in 2018).
- The Innovation Agency (NWC AHSN) is supporting a 'Care home tele-triage' programme in Wirral (76 care homes), that has reduced ED attendances.
- Wave 1 of the NHSE Testbeds supported the 'Integrated mental health urgent care test bed', involving 8 organisations in the development of a demand and capacity tool that shows patient flow in real-time and a predictive algorithm to identify when people are going to experience a mental health crisis, and covering a population of 1.3m.
- SBRI Healthcare supported **365 Response** to develop Healthcab for Healthcare Professionals - a system flow that can modify the way emergency care transport is delivered, and **Snap40** (now **Current Health**) that developed Senda – a pro-active patient health monitoring platform AI-Powered, with the aim to reduce risk and readmissions.
- The latest NHSX report[13] flagged two promising AI based technologies that can reduce burden on emergency health services through remote monitoring of patients: **Storm ID,** a technology that uses predictive analytics in order to stratify patients at highest risk of COPD exacerbation to prioritise interventions and prevent emergency hospital admission; **Sentinel,** a continuous wearable monitor looking at known patterns in the patient's vital-signs every 60 seconds, in

[13] Artificial Intelligence: How to get it right, NHSX, October 2019

order to detect signs of deterioration before emergency admissions are needed.

- The NIHR funds large numbers of studies and people to develop evidence to support effective changes of practice. Examples include: Alder Hey Children's NHS Foundation Trust developing the DETECT system to reduce critical care transfers; Yorkshire Ambulance Service NHS Trust looking at managing breathlessness by paramedics rather than automatic transfer to hospital and Northumbria Healthcare NHS Foundation Trust investigating outcomes for managing acute exacerbations of COPD at home. In addition, many UEC-related studies are being led and supported by NIHR infrastructure including the NIHR Trauma MIC (Medtech and IVD Co-operative) at Queen Elizabeth Hospital Birmingham, and the NIHR Clinical Research Network have supported more than 530 trials associated with trauma and emergency care in the last 20 years.
- **COVID-19**: there are examples of the implementation of new technologies, particularly digital healthcare technologies, on a wider scale in order to manage more effectively during the COVID-19 pandemic. For instance, there are several examples of increased use of telemedicine with video consultation by GPs and wider adoption of remote monitoring to support those discharged earlier to free hospital beds for virus patients.

Technologies excluded from this competition

There are a number of technologies or types of solution which are already available, sometimes from multiple suppliers, these are listed below. Any technologies that negatively impact staff workloads will also be excluded.

- Bed capacity monitoring systems
- New social networking, messaging or imaging apps
- New telehealth systems (incorporation of existing tools as part of a solution is acceptable)
- Patient tracking systems
- Task lists
- Development of new wearables

Additional considerations

Given the rural nature of many places with the largest need, an over-reliance on home and community interventions needing to be permanently online should be considered (Wi-Fi and phone signals in rural locations may be weak or unreliable).

For any digital intervention, the NICE Digital Health Technology Framework should be consulted and your application should evidence your plan to meet the appropriate evidence guidelines. This comprises both clinical effectiveness and economic evaluation.

In addition, please consult the NHSX guidelines for "Designing and building products and services," which includes the latest links to all relevant standards, guidelines and consultations.

SBRI Healthcare Programme

A new national Small Business Research Initiative (SBRI) Healthcare competition is being launched by NHS England and NHS Improvement in partnership with the Academic Health Science Networks (AHSNs) to identify innovative new products and services. The projects will be selected primarily on their potential value to the health service and social care system and on the improved outcomes delivered for those in receipt of care.

The competition is open to single companies or organisations from the private, public and third sectors, including charities. The competition runs in two phases (subject to availability of budget in 2021):

- 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.

The competition opens on **15 July 2020**. The deadline for applications is **1pm 27 August 2020.**

Application process

This competition is part of the Small Business Research Initiative (SBRI) programme which aims to bring novel solutions to Government department 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 and Social Care.

The application process is managed on behalf of NHS England and NHS Improvement by LGC Group. All applications should be made using the application portal which can be accessed through the Research Management System. Applicants are invited to consult the Invitation to Tender and the Portal Guidance; a template Application Form and Frequent Asked Questions are also accessible. All documents are available on the SBRI Healthcare website to help prepare your proposal.

An online briefing event for businesses interested in finding out more about these competitions will be held on 15 July. Please check the SBRI Healthcare website for confirmation of dates for this and any further events, information on how to register and details of the challenges that will be presented at the event.

Please complete your application using the online portal and submit all relevant forms by **1pm 27 August 2020.**

Key dates

Competition launch	15 July 2020
Briefing event	15 July, Online
Deadline for applications	27 August 2020 (1:00pm)
Assessment	Sept/October 2020
Interview Panels	21 October 2020
Contracts awarded	November/December 2020

More information

For more information on this competition, visit: https://sbrihealthcare.co.uk/

For any enquiries e-mail: sbri@LGCGroup.com

For more information about the SBRI programme, visit:

https://www.gov.uk/government/collections/sbri-the-small-business-research-initiative

SBRI HEALTHCARE

The AHSN Network

NHS