

Planning to Safely Reduce Avoidable Conveyance

Ambulance Improvement Programme

NHS England and NHS Improvement



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Foreword

To: All Ambulance Chief Executives, Sustainability and Transformation Partnerships (STPs)/ Integrated Care System (ICS) Leads and Ambulance Lead Commissioners

Dear Colleagues

Planning to Safely Reduce Avoidable Conveyance

Over the past 12 months several national policy developments and publications have emphasised the importance of ensuring that ambulance staff convey patients to an Emergency Department (ED) only if this is clinically appropriate for the patient's needs, or where no alternative exists for the patient's safe ongoing treatment and care.

The NHS Long Term Plan (LTP) includes the ambition to deliver the opportunities for safe reductions in avoidable conveyance highlighted in the Lord Carter Review. This review detailed the variation in conveyance to EDs by individual ambulance services and recommended that NHS England, working with lead commissioners, ambulance services and STPs/ICSs, develops a long-term plan to safely reduce avoidable conveyance by 2023.

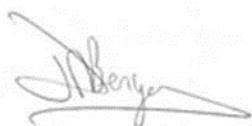
The components set out in this document are intended to support the continued commitment to ensuring patients receive the 'right care', in the 'right place', at the 'right time' with improved clinical outcomes and patient experience as a result.

Safe reduction in avoidable conveyance is a system-wide responsibility and challenge; it cannot be achieved by ambulance services working in isolation. We therefore strongly recommend that Ambulance Trust Boards, STPs/ICSs and Lead Ambulance Commissioners consider the components of this document when developing local commissioning and transformation priorities to safely reduce avoidable conveyance.

This document supports system delivery as set out in the National Assurance Statements and the requirement to develop trajectories for a safe reduction in avoidable conveyance which are to be agreed and included in operational plans for 2019/20. Throughout the lifecycle of this plan, the Central NHS England and NHS Improvement teams will continue to work with system wide stakeholders to model the evidence-based interventions covered in this document. This work will estimate the potential impact on activity and finance if interventions were adopted across the country.

We would like to extend our thanks to the National Ambulance Commissioners Network (NACN), Association of Ambulance Chief Executives (AACE) and other key stakeholders for the support that has been provided during the development of this document.

Yours faithfully



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Executive Summary

The recent Lord Carter review of operational productivity and performance in ambulance trusts highlighted the opportunity to reduce unnecessary pressures on the urgent and emergency¹ care (UEC) system by ensuring that ambulance services can offer the most clinically and operationally effective response to each patient contacting the 999 service in England.

The NHS Long Term Plan (LTP)² places ambulance services at the heart of the UEC system and commits to implementing Lord Carter's recommendations, putting in place timely responses so patients can be treated by skilled clinicians at home or in the most appropriate setting outside hospital whenever it is safe to do so.

Ambulance services cannot achieve these improvements in isolation. Safe reduction in avoidable conveyance requires a whole system approach to transformation, delivering the improvements needed to provide alternatives for patients when hospital is not the optimal pathway.

This document aims to support ambulance services, lead commissioners and Sustainability & Transformation Partnerships (STPs) / Integrated Care Systems (ICSs) to safely reduce the number of patients conveyed to an Accident & Emergency Departments (A&E):

- using an evidence based approach to identifying effective interventions already in use across the ambulance system;
- evaluating new opportunities for safely reducing conveyance;
- developing an accessible repository of interventions to inform and support local transformation;
- exploring the appropriate levers and incentives that are needed to enable the required changes.

Whilst not exhaustive, the following should be considered as an aide memoire for system leaders:

1. **STPs** and **ICSs** should work with their **ambulance services** and **lead commissioners** to develop a local health economy plan to safely reduce conveyance, building on the elements within this plan.
2. **STPs** and **ICSs** should seek to align pathways for urgent care across primary and community care settings, including the Clinical Assessment Service (CAS) that supports integrated urgent care (NHS 111), crisis response, urgent treatment centres, ambulance services, mental health and social care.
3. **STPs** and **ICSs** should ensure that locally commissioned single multidisciplinary CAS are rolled out within integrated NHS111, ambulance dispatch and GP out of hours services from 2019/20.

¹[Operational productivity and performance in English NHS Ambulance Trusts](#)

²[The NHS Long Term Plan](#)

4. **Ambulance services** should maximise opportunities to provide “Hear & Treat” and “See & Treat” services to callers when safe to do so, building on the developing evidence base of effective interventions ensuring agreed pathways to services for onward referral.
5. **STPs** and **ICSs** should work with **ambulance services, ambulance lead commissioners and NHS Digital regional leads** to improve the digital maturity of ambulance services.
6. **Ambulance services**, working with **STPs** and **ICSs**, should enable improved on scene support and immediate access to clinical advice (i.e. through the CAS) to give paramedics the confidence to “See & Treat” patients without conveyance.
7. **Ambulance services** should enable improved access to critical information for clinicians (inc. Summary Care Records and Directory of Services).
8. **STPs** and **ICSs** should ensure **ambulance services** are involved in the development of effective pathways to support patients experiencing Mental Health crisis or falls.
9. **STPs and ICSs** should work with ambulance services to develop differentiated responses that could be provided to care home residents to ensure consistent pathways across the whole patient journey building on the enhanced health in care homes framework.
10. **STPs** and **ICSs** should work with ambulance services to develop a sustainable workforce model and support improvements in the clinical skills of staff to optimise the response to the patient.
11. **STPs** and **ICSs** should work with ambulance services to ensure they are involved in links to the development of the ageing well programme and primary care networks to maximise opportunities to avoid unnecessary ambulance conveyance.

1. Introduction

1.1. Overview

The first stage report of Professor Sir Bruce Keogh’s review of Urgent and Emergency Care (UEC) (2013) described the untapped potential of English ambulance services, and the need to expedite the ongoing transformation of these services from a transport to a treatment role. The report suggested that the ambulance service should become a community-based provider of mobile urgent and emergency healthcare, fully integrated within a networked model of urgent and emergency care.

Lord Carter’s report “Operational productivity and performance in English NHS Ambulance Trusts: Unwarranted variations” was published on 27 September 2018. The report highlights that tackling avoidable conveyances to hospital, particularly for older people, supports delivery of care closer to home, reduces unnecessary pressures on our Accident and Emergency departments (A&Es) and hospital wards and could release capacity equivalent to £300 million in the acute sector.

In response to these reports and the goals set out in the LTP (2019), the joint NHS England and NHS Improvement (NHSE/I) Ambulance Improvement Programme (AIP) Board commissioned an Avoidable Conveyance Steering Group. The group comprises

system wider stakeholders and has been established to support long term planning and implementation of system interventions that will safely and sustainably reduce avoidable conveyance by the ambulance services in England.

An avoidable conveyance occurs when a patient, whose health and social care needs could be effectively and safely met in a community setting, within or close to their own home. The Avoidable Conveyance Programme will support ambulance services and commissioners to make a series of improvements such as: standardisation of the clinical assessment offer in control centres; enabling access to patient information; empowering staff to make clinically appropriate decisions; utilising a consistent workforce skill mix.

Ambulance services are not able to make these improvements in isolation. This should be a whole system transformation approach, drawing on improvements across primary and community care, integrated urgent care and the wider social care environment, which is able to provide alternatives to A&E for those patients for whom hospital is not the optimal pathway.

1.2. Purpose

This document will focus on chapter 3 of Lord Carter's report which suggests delivering the best outcome for patients and helping them stay at home can be achieved by safely reducing avoidable conveyance which will also enable productivity improvements.

Recommendation 2 of the report commissions NHS England to accelerate work to support reduction of avoidable conveyance to hospital by developing a long-term plan to safely reduce avoidable conveyance by 2023 (this document). Annual delivery plans will be developed to support implementation of this planning document.

1.3. Governance

The Avoidable Conveyance Steering Group was established in August 2018 with the following aims:

- Provide subject matter, operational and clinical oversight to shape the creation of a long-term plan to safely reduce avoidable conveyance.
- Share known initiatives and examples of good practice that can support a safe reduction in avoidable conveyance for evaluation and modelling.
- Receive and comment on recommendations for change at scale.
- Ratify the components of the plan to safely reduce avoidable conveyance for approval by the AIP Board.

This group consists of representatives from the NHSE/I Acute Care team, NHSE/I Integrated Urgent Care Team, the Association of Ambulance Chief Executives, the National Ambulance Commissioners Network, NHSE/I Workforce Team, Health Education England (HEE), the NHSE/I Chief Allied Health Professions Office and the NHSE/I Digital Transformation team.

The group is chaired by the Senior Programme Manager of Acute Care at NHS England and reports into the NHSE/I Joint Ambulance Improvement Programme Board.

The group works in close collaboration across a matrix of stakeholders to ensure the deliverables described in this document are aligned with associated work programmes. These include colleagues in:

- Ambulance Services.
- NHS Horizons #ProjectA.
- NACN/AACE Mental Health Programme.
- Integrated Urgent Care.
- RightCare.
- The Allied Health Professionals office.
- Ageing Well Programme.
- The National Institute for Health and Care Excellence (NICE).
- Health Education England.

1.4 Equality Statement

Promoting equality and addressing health inequalities are at the heart of our values. Throughout the development of the policies and processes cited in this document, we have:

- Given due regard to the need to eliminate discrimination, harassment and victimisation, to advance equality of opportunity, and to foster good relations between people who share a relevant protected characteristic (as cited under the Equality Act 2010) and those who do not share it; and
- Given regard to the need to reduce inequalities between patients in access to, and outcomes from healthcare services and to ensure services are provided in an integrated way where this might reduce health inequalities.

2. Safely Reducing Avoidable Conveyance

2.1. Background

Demand for ambulance services continues to grow rapidly. Between 2009-10 and 2016-17, the number of ambulance calls and NHS 111 transfers increased from 7.9 million to 11.3 million; an average year-on-year increase of 6%. Current demand is 11.7 million contacts in 2018-19.

Contributing factors to this rising demand include: increasing numbers of people living with frailty and/or multiple conditions; an increasing number of mental health-driven issues; the availability of primary care services in the community; the way that patients choose to seek help.

On 13 July 2017 NHS England announced a new set of performance targets for ambulance services in England which saw standards applied to every 999 call for the first

time. This move was made as a result of the findings of the Ambulance Response Programme (ARP)³.

The review of the old system followed calls from paramedics for the modernisation of an approach to ambulance response that was developed and introduced in 1974, as well as criticism from the National Audit Office and Health Select Committee.

This was the biggest change in ambulance operating practice in England for 40 years and required enormous effort from ambulance services to operationalise the new system. It involved not only the complex technical challenges required to support new call triage and dispatch processes but also the wider organisational challenges of new working practices for staff, wholesale review of fleet configurations and staff rostering.

Whilst the ARP has ensured improvements for those patients conveyed to hospital, we know that many callers do not require transportation; instead their needs are best met through a “See and Treat” or a “Hear and Treat” approach in, or close to, their own home that avoids the need for conveyance to a hospital (referred to as A&E throughout this document).

In his 2018 publication “Operational Productivity and Performance in NHS Ambulance Trusts”⁴, Lord Carter states that reducing avoidable conveyances to hospital can have a wide range of benefits, including reduced costs for ambulance services and the wider healthcare system, whilst supporting the aim of delivering services closer to home for patients.

As Lord Carter’s review noted, we have previously estimated that savings equivalent to over £300 million could be realised if overall conveyances were reduced to 50%. These are due mainly to reduced A&E attendance and subsequent admissions. During Lord Carter’s review, ambulance services said they are working to reduce avoidable conveyance but require a system wide approach to enable better access to more appropriate services.

The National Audit Office (NAO) report ‘NHS Ambulance Services’ (2017)⁵, stated that ambulance services can help to manage the demand for urgent and emergency services and provide care as ‘close to home’ as possible by utilising new models of care. The report illustrated that between 2011-12 and 2015-16:

- the proportion of calls resolved over the phone increased from 5.2% to 10.2%;
- the ‘re-contact rate’ for calls resolved over the phone, in which the caller calls back for further assistance within 24 hours, decreased from 13.3% to 6.3%, indicating that performance in resolving calls over the phone had improved;
- the proportion of calls resolved at the scene increased from 27.7% to 29.6% (the number of incidents resolved at the scene increased from 1.8 million to just under 2 million);

³ <https://www.england.nhs.uk/urgent-emergency-care/arp/>

⁴ https://improvement.nhs.uk/documents/3271/Operational_productivity_and_performance_NHS_Ambulance_Trusts_final.pdf

⁵ <https://www.nao.org.uk/report/nhs-ambulance-services/>

- the re-contact rate for those treated at the scene has remained stable at about 5.5%;
- the proportion of incidents resolved through treatment at the scene or through conveyance to a non-hospital location increased from 33.9% to 37.9% (the actual number of incidents resolved in this way has increased from 2.0 million to 2.5 million).

We do, however, know that there is considerable variation in the proportions of “Hear and Treat” and “See and Treat” utilisation across English ambulance services.

Sheffield University’s “Understanding Variation in Ambulance Service Non-Conveyance Rates: A Mixed Methods Study” (2018)⁶, concluded that variation in non-conveyance rates between ambulance services in England could be reduced by addressing variation in the types of paramedics attending calls, variation in how advanced paramedics are used and variation in perceptions of the risk associated with non-conveyance within ambulance service management. The study recommended that linking routine ambulance data with emergency department attendance, hospital admission and mortality data for all ambulance services in the UK would allow comparison of the safety and appropriateness of their different non-conveyance rates.

Questions have been raised regarding the safety of non-conveyance initiatives and calls made for a robust evidence base that demonstrates patient safety. A further paper from Sheffield University: “Outcomes for Patients Who Contact the Emergency Ambulance Service and Are Not Transported to the Emergency Department: A Data Linkage Study” (2018)⁷, found that most non-transported patients receiving a “Hear and Treat” intervention from the ambulance service did not have subsequent health events related to their 999 call complaint.

2.2. Avoidable Conveyance Programme

In January 2019 the LTP set out the ambition for pre-hospital urgent care including the national rollout of Urgent Treatment Centres (UTC) working alongside other parts of the urgent care network including primary care, community pharmacists, ambulance and other community-based services to provide a locally accessible and convenient alternative to A&E for patients who do not need to attend hospital.

The LTP sets ambulance services at the heart of the urgent and emergency care system and outlines how the NHS will work with commissioners to put in place timely responses so patients can be treated by skilled paramedics at home or in a more appropriate setting outside of hospital. The LTP commits to implementation of the recommendations from Lord Carter’s report ensuring that ambulance services can offer the most clinically and operationally effective response.

To specifically support and enable a reduction in conveyance to hospital, the LTP sets the ambition to develop an ambulance data set, equivalent to the emergency care data set, that

⁶ https://www.sheffield.ac.uk/polopoly_fs/1.786478!/.../summary.pdf

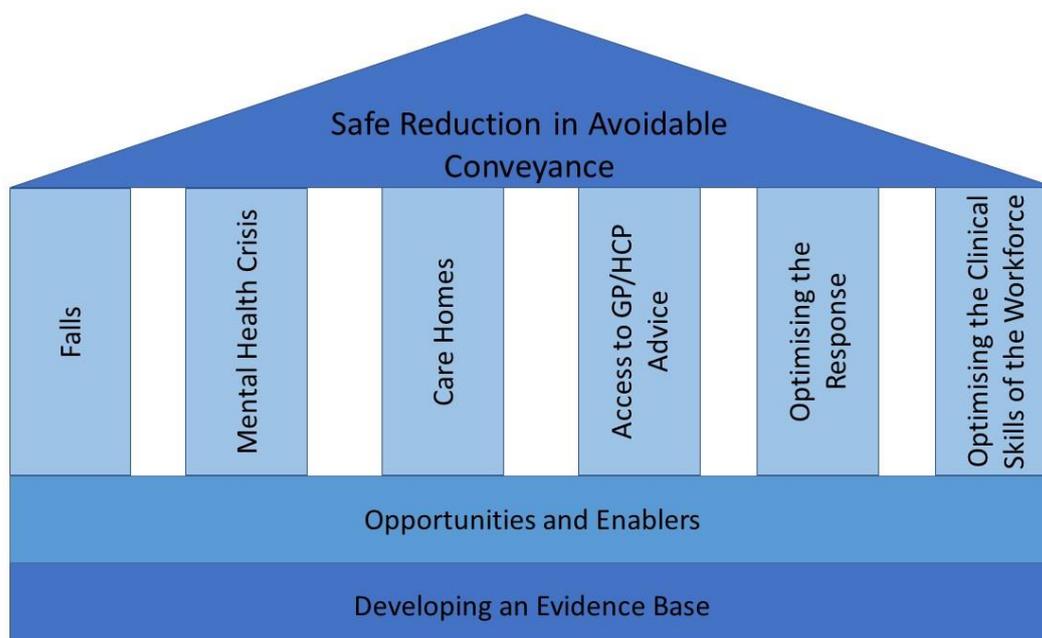
⁷ <https://www.tandfonline.com/loi/ipec20>

will, for the first time, bring together data from all ambulance services nationally to follow and understand patient journeys from the ambulance service into other urgent and emergency healthcare settings.

The LTP sets out an ambition that, by 2023/24, ambulance staff will be trained and equipped to respond effectively to patients experiencing a mental health crisis or emotional distress. Ambulance services may form a major part of the support patients receive in a mental health emergency. For example, South Western Ambulance Service NHS Foundation Trust reports that at least 10-15% of all calls are related to mental health. New mental health transport vehicles will be introduced to reduce inappropriate ambulance conveyance or police conveyance to A&E. Mental health nurses will be introduced into ambulance control rooms to improve triage and response to mental health calls, and there are plans to increase the mental health competency of ambulance staff through an education and training programme. A six-month pilot in the Yorkshire Ambulance Service NHS Trust reported that 48% of mental health calls were usually conveyed to A&E, but only 18% when triaged by a mental health nurse.

NHSE/I Care team's response to the LTP and Lord Carter's review is the development of a long-term plan to safely reduce avoidable conveyance. Through an evidence-based approach we aim to identify interventions already used across the ambulance system and explore and evaluate new opportunities for safely reducing conveyance. The approach includes opportunities and enablers and a set of pillars that support a safe reduction in conveyance.

Through discussion with stakeholders, and in consultation with the Avoidable Conveyance Steering Group and the National Ambulance Commissioners Network (NACN), the agreed components of reducing conveyance are as follows:



It is intended that interventions will be tested through a collaborative approach with piloting of ideas where applicable through the Avoidable Conveyance Steering Group.

2.3. Scope

The programme aims to support ambulance services, commissioners and STP/ICSs to deliver the right model of care and safely reduce avoidable conveyance to A&E by 2023. This will be achieved through the development of an evidence base, exploration of appropriate levers and incentives to enable the required changes and a repository of interventions which commissioners, ambulance services and STP/ICS leaders can consider for local implementation to reduce the number of patients taken to A&E for whom this is not the optimal pathway. It will also include the development of a monitoring process which will report through the Ambulance Improvement Programme Board every quarter.

2.4. Developing an Evidence Base

Objective

The programme will utilise and spread evidence-based exemplar practice, operational models, tools, protocols and procedures already in situ within Ambulance Services in the UK and to promote and support local innovation and adoption at scale.

It is essential to patient safety that we build an evidence base and sound methodology that can be combined with clinical expertise and patient experience to take incremental steps towards the goal of an improved system and enhanced patient care.

The result will be an ambulance service that has safety at its core, is more responsive and efficient in resource use, is better integrated to secure optimal dispositions and is effective in delivering the best possible patient care and outcomes.

Deliverables

- A repository of evidence-based exemplar practice, operational models, tools, evaluations, protocols and procedures already embedded within Ambulance Services supported by an accessible digital platform.
- Promotion of the repository and support to implement local innovation and adoption at scale.
- Development of an annual reducing avoidable conveyance implementation plan to 2023.

2.5. Enablers

Many of the building blocks required to safely reduce avoidable conveyance are already in place, however other key enablers are proposed to support the widespread implementation of safe avoidable conveyances initiatives. These include:

- Exploration of incentives and levers that can be added to the national contract.
- Working with pricing colleagues to explore a recommended tariff / price for ambulance service currencies to incentivise the right behaviours.
- Extending the availability of Urgent Treatment Centres (UTCs).
- Enabling access to patient information.
- Enabling access to an easily navigable electronic Directory of Services (DoS) which provide reliable and up-to-date information.

The NHS Ambulance Services in England are late adopters of digital technologies when compared with community and acute trusts and primary care. Some are still either partially or entirely reliant on paper-based records.

Access to patient information such as medications, allergies, medical history, care and crisis plans are critical information for clinicians who usually respond to patients with no prior knowledge of their condition or medical history. We know that currently 7 of the 10 ambulance services have access to Summary Care Records (SCR). NHS England incentivised services to access these records as part of their 2017-19 Commissioning for Quality and Innovation (CQUIN) framework improvements goals, and we need to expedite this work further.

To safely reduce avoidable conveyance, ambulance staff need to know the other services that are available to the patient. All paramedics should have access to an easily navigable electronic DoS which provides reliable and up-to-date information.

Most ambulance services do have a well-developed vision of how ambulance digitisation can further support efficiency, patient flows and clinical outcomes. Supplementing the local resources that are needed to deliver IT-supported change and a joint working approach across multiple ambulance services at scale would greatly increase the capability and capacity to deliver some initiatives.

The LTP commits to ensuring ambulance services have access to the digital tools that they need to safely reduce avoidable conveyance to A&E. The implementation and increased use of these digital tools helps services to identify patient details, and therefore supports clinical decision making. They will also further support electronic collection of patient level data within ambulance services to aid data collection and create information feedback loops that will improve patient outcomes in line with Ambulance Data Set (ADS) requirements.

The Global Digital Exemplar (GDE) Programme, and subsequent expansion, aim to support ambulance services to work together collaboratively to deliver a programme of digital developments which will increase digital maturity and lead to improved patient outcomes. There are opportunities to improve the ambulance service readiness to implement the ADS by aligning these programmes.

Lord Carter recommends a set of national, evidence based protocols be developed that support frontline and control centre staff to safely reduce avoidable conveyance and improve patient outcomes, aligned with, and supported by, effective clinical support arrangements.

The National Ambulance Urgent and Emergency Care Group (NAUECG), a sub-group of the Association of Ambulance Chief Executives (AAACE), has recently undertaken a review of available protocols. This has shown that ambulance services are already working to support operational clinicians in making safe decisions on non-conveyance, considering specific patient groups that may either increase risk through non-conveyance or require special considerations if not conveyed. There was evidence of services having access to locally commissioned alternatives to A&E and other clinical pathways that support patients

to receive safer care closer to home. However, it was noted that there is limited information about overall non-conveyance patient profiles, with current knowledge about these profiles and perceived risk around those higher risk/complex patient groups shaping how policies are structured currently.

Equally, for safe avoidable conveyance protocols to be used with confidence, ambulance clinicians need to understand the management of risk and risk enablement. Support is available through training, clinical supervision and Health and Care Professions Council (HCPC) Professional Standards⁸. Other HCPC Colleges have developed specific guidance⁹ to promote a positive approach to risk.

The challenges associated with consistently identifying which 999 (or NHS 111 ambulance disposition) patients are within a safe avoidable conveyance category is a barrier to supporting safer increases in non-conveyance. We will support the progress of work to ensure a more consistent set of protocols is available to support clinicians in their current workplace as well as making it easier for them to transfer care to more appropriate health and care services.

2.6. Interventions

The best solutions often come from practitioners themselves, so NHS England is working collaboratively with #ProjectA, a staff-led engagement exercise with 2,000 staff across all 10 ambulance services in England. Teams of ambulance staff and patients have identified the following priorities to be implemented across the country:

1. To create a broader improvement movement within the ambulance service that contributes to an improved staff survey finding (KF7). Specifics within this include:
 - a. Investigation and curation of an ambulance improvement faculty that is owned by all services.
 - b. Encouragement, support and facilitation to the emerging Quality Improvement network for ambulance services (#AmbulanceQ).
2. To deliver improvement and sharing of practice across three improvement collaboratives:
 - a. Falls
 - b. Mental Health & Emotional Distress
 - c. Staff Wellbeing
3. To update the ambulance DoS improvement and spotlight good practice.
4. To build the capability of the ambulance workforce to collaborate virtually; reducing time away from work and abstraction; increasing opportunities for sharing, learning and speeding up change.

We will include several of these when developing the evidence base and interventions to support adoption of the six pillars identified in 2.2.

⁸ <https://www.hcpc-uk.org/standards/standards-of-proficiency/paramedics/>

⁹ (2018) Embracing Risk; enabling choice, Guidance for occupational therapists. Royal College of Occupational Therapists

2.6.1 Falls

Objective

Falls in older people represent a major public health challenge with significant implications for Health and Social Care services. Annually, falls affect around 35% of people aged over 65 years, and 45% of those over 80 years. Providing timely care at the scene for older people who fall offers opportunities to improve health outcomes, prevent further falls and avoid unnecessary ambulance journeys to A&E and hospital admissions.

This pillar seeks to collate the various initiatives in use across ambulance services that support patients who have fallen. It aims to identify those initiatives with the biggest impact on patient outcome and reduction in conveyance, gather intelligence, review the evidence to determine national best practice and to identify what impact any proposed change could make.

The NHSE/I Acute Care team is working with NHS Horizons using the #ProjectA Falls Collaborative to develop and implement a falls response framework that will be relevant to every ambulance service and that will lead to better, more appropriate services for people who fall, reduce conveyance and prevent people from falling a first or subsequent time.

Following the Falls Accelerated Design Event in January 2019, it was determined that #ProjectA would support the spread of the Welsh Ambulance Service (WAS) Falls Framework into a national framework that can be used by all services. The framework was made available to all services on 20 May 2019. The intention is for ambulance services to map their current falls interventions to the framework in order to understand and improve their own falls response.

Work is underway between NHS England and the National Ambulance Service Medical Directors Group (NASMeD) to clearly identify a cohort of 'falls' patients so that we can introduce an Ambulance Clinical Quality Indicator (CQI) which monitors and measures the interventions for this vulnerable group, thereby promoting the right response to individuals' needs in the right timeframe. This will be completed before winter 2019.

We will also collaborate with National Institute for Health and Care Excellence (NICE) to ensure the pre-hospital ambulance pathway is recognised and referenced in the revised guidance due late 2019.

Deliverables

- Repository of collated initiatives in current use across the ambulance system.
- Evaluation of good practice examples to determine national best practice.
- A nationally agreed framework approach based on the WAS model.
- Ambulance services start to map their current interventions to the national framework.
- Collaboration with NICE to revise national guidance for falls in older people;
- A dataset to support a new Ambulance CQI.
- Analytical and financial modelling to determine the impact of the proposed initiatives.

2.6.2 Patients Experiencing Mental Health Crisis

Objective

There is considerable evidence to suggest that the pathway for patients experiencing an episode of mental health crisis can be improved to ensure they receive care from the right service in a timely way, and are not conveyed to an A&E when this is not the best place to meet their needs.

South Western Ambulance Service Trust recorded around 70,000 Mental Health related calls last year. This is almost certainly an undercount as many calls will have been triaged and coded as trauma or medical incidents.

To add context:

- Only around 500 of these 70,000 calls were section 136 calls.
- Mental Health calls represented 10% of the overall call volume.

Over the same period East Midlands Ambulance Service estimated that 20% of their calls were Mental Health related. AACE suggests that on this basis 10-15% is a reasonable national estimate for Mental Health calls as a proportion of all ambulance 999 calls, although it is recognised that these figures vary across ambulance trusts and more work is needed to improve data quality.

Older people's mental health crisis commonly involves responding to delirium and behavioural and psychological symptoms of dementia, but it can also include 'functional' presentations such as severe depression, self-harm and psychotic illnesses. The responses often lead to conveyance to hospital but can be safely managed in the older person's home or care home in some cases, once the diagnosis, history and level of risk are understood, and bearing in mind the needs of family carers.

It is important to understand the complexity of older people's presentations in a mental health crisis, which may involve a complex interplay of physical and mental health symptoms, often compounded by social care needs. This often requires a different response compared to general adults where perhaps the use of the Mental Health Act is more common.

There is clearly a requirement to focus on all Mental Health crises, not just section 136 requests.

Despite this large volume of work, there has historically been relatively little focus on Mental Health response in terms of national policy, priority or training. For example, typically there is only up to two days of training within the paramedic curriculum dedicated to mental health, despite it making up a large proportion of ambulance work.

This pillar seeks to address the needs of patients experiencing Mental Health crisis by facilitating access to Mental Health services and professionals. In line with the parity of esteem agenda, NHS England's Mental Health team, #ProjectA and NACN Mental Health

project will make recommendations on how to improve the onward referral of this patient group to the services most appropriate to their needs.

Work is underway between NHS England and NASMeD to better identify the cohort of patients with mental health problems or those in emotional distress who come into contact with 999 ambulance services.

Before winter 2019 we will have designed and trialled a new Ambulance CQI which monitors and measures the interventions for this vulnerable group, so promoting the right response to an individual's needs in the right time frame.

The following models will be explored:

- Dedicated mental health provision which could be in the form of a mental health specific vehicle with appropriate staff skill mix.
- Access to a local 'place of safety'.
- The optimum staff training requirement.
- Mental health workers within a call centre / CAS.

The development work above will inform specific new investment from 2020/21 to ambulance trusts to increase their capacity to respond to mental health calls.

This will be in a context of significant investment over the next 5 years (starting in 2019/20) in mental health crisis services in every STP, including crisis alternatives, which will increase the options for conveyance that are available to ambulance services.

Deliverables

- A collated directory of initiatives in current use across the ambulance system.
- Sharing and testing of approaches to support patients in mental health crisis and emotional distress.
- Evaluation of good practice examples to determine national best practice.
- Introduction of an Ambulance CQI to measure and monitor an optimal response and care bundle.
- Analytical and financial modelling to determine the impact any proposed initiatives could make.
- An actionable "knowledge bank" for use by frontline ambulance staff.

2.6.3 Care Homes

Objective

There are upwards of 330,000 people over 65 living in a care home in England at any time, which is nearly three times the number of people in hospital and around 3.5% of the 65+ population in England.

It is estimated that in 2017, older care home residents in England had around 250,000 emergency admissions, equating to around 10% of the total number of emergency admissions for the 65+ population or around 4% of all emergency admissions.

Emergency admission rates for care home residents are around 50% higher than would be expected based on the rates for the overall older population. Analysis suggests that just under 40% of these emergency admissions for older care home residents could be potentially avoidable. Conditions resulting in admission were found to be often manageable, treatable or preventable in community settings without the need to attend hospital.

This pillar will explore the differentiated responses that could be provided to care home residents. It is recognised that there will be a breadth of work ongoing between care homes and ambulance services and this work will establish what is happening already, gather intelligence, review the evidence to determine national best practice and identify what impact any proposed changes could make.

The Ageing Well programme is rolling out the enhanced health (including End of Life Care) in care homes framework which has opportunities to support the unnecessary conveyance of people living in care homes to hospital.

Ambulance services have shared with us some of their innovative approaches which have been locally identified as reducing conveyance from care home settings.

- ❖ In 2017, North West Ambulance Service NHS Trust identified that some care homes were calling 999 for health conditions that could be better cared for in alternative health services. They built an evidence-based model with clinicians for care home staff to identify which service should be contacted depending on the patient's condition. This assessment model is now being used in over 200 care homes with the Trust reporting that there has been a 30% reduction in the number of times they call 999.
- ❖ The East of England Ambulance Service (EEAST) Early Intervention Vehicle (EIV) provides an immediate response to people aged over 65, operating twelve hours a day, seven days a week. The EIV typically responds to people who have fallen, or those otherwise deemed appropriate for intervention with a view to safely assess, treat and discharge their care within their current place of residence.

The primary role of the scheme is to provide holistic assessments to reduce hospital admissions, helping older people to live independently. The service is offered as a partnership between EEAST and local Community Health and Social Care providers. The EIV generally incorporates an Occupational or Physiotherapist working alongside an EEAST Intermediate Ambulance Practitioner (IAP) or Ambulance Practitioner (qualified Paramedic).

Whilst at the outset this is primarily an admission avoidance initiative, the personal interaction soon creates an appropriate (frequent) call avoidance scheme and reduces the longer-term impact on health systems overall.

- ❖ Within one East of England CCG locality, EEAST also has a scheme that includes the use of a Specialist Paramedic to ensure that the number of attendances to A&E, specifically from Care Homes settings across the CCG footprint, is reduced.

On arrival at the Care Home, the Specialist Paramedic will make a clinical assessment of the resident and a joint decision between EEAST and care home staff will be made as to the best course of action for that patient. Historically, ambulance crews in similar circumstances would convey to A&E. However, many residents can be left in the care of the home until the next day with a transitional care package until the person can be assessed more appropriately by their GP.

Data from the Care Home scheme has demonstrated system wide benefits including:

- Reduction in ambulance conveyance to A&E from Care Homes.
- Reduction in unplanned admissions for Care Home residents.
- Reduction in known frequent users of urgent and emergency services.
- Improved patient experience and outcomes.
- Improved education, experience and support for Care Home staff.

Deliverables

- Created a collated directory of initiatives in current use across the ambulance system.
- Evaluated good practice examples to determine national best practice.
- Collaborated with Right Care and Ageing Well Programme teams.
- Undertaken analytical and financial modelling to determine the impact any proposed initiatives could make.

NHSE/I will continue to collaborate with the RightCare and Hospital to Home teams to ensure consistent pathways across the whole patient journey.

2.6.4 Access to GP / Healthcare Professional Advice

Objective

Front line ambulance staff at the scene with a patient have told us that they have trouble contacting GPs and other Healthcare Professionals to discuss the patient's condition and possible treatment options, and often resort to taking the patient to A&E rather than remain on scene awaiting a call back. This pillar will therefore explore the requirement for paramedics on the front line to have immediate access to additional clinical advice.

The NHS LTP supports the development of a single multidisciplinary CAS within integrated NHS111, ambulance dispatch and GP out of hours services from 2019/20. The CAS will provide specialist advice, treatment and referral from a wide array of healthcare professionals, encompassing both physical and mental health. The CAS will also support paramedics at the scene of an incident to make the best possible decision about how to manage patients closer to home and potentially avoid conveyance to A&E.

It is imperative that this includes access to electronic patient records to support paramedics to "See & Treat" patients close to home.

We are working with our IUC colleagues to support commissioners to enable improved on scene support for frontline staff through use of the *5 initiative. In London, from May 2017 to May 2018, there were over 15,000 calls to the *5 line from ambulance staff. We recommend that services should work with commissioners and clinical assessment providers to ensure this service is available locally to support their staff as part of the National Service Specification.

Other initiatives include an East of England pilot across Ipswich and East Suffolk for patients who have had a suspected stroke. These patients can now be assessed by a specialist consultant in their own home using software already well-established in the Eastern Region, and which has been used to support the out-of-hours stroke telemedicine service for the past 8 years.

Specially-trained paramedics from EEAST are using a secure video conferencing app to liaise with an expert stroke consultant from Ipswich Hospital in cases where a diagnosis is not clear. The consultant can then see the patient, ask them and those with them questions about their history and symptoms, and discuss the case with the paramedic before deciding whether they need to be taken to A&E or can receive more appropriate care elsewhere, such as their GP surgery.

If the consultant does feel the patient has had a stroke, they can arrange for the ambulance crew to bypass A&E and head straight to a specialist stroke unit. It means patients can have specialist tests and scans immediately and treatment can begin sooner.

Deliverables

- A collated directory of initiatives in current use across the ambulance system.
- Evaluation of good practice examples to determine national best practice
- Support to the development of local CAS
- Liaison with IUC colleagues to ensure successful implementation of the *5 line.
- Analytical and financial modelling to determine the impact any proposed initiatives could make.

2.6.5 Optimising the Response to the Patient

Lord Carter reports that some services are working towards having a paramedic on every vehicle. However, this is unlikely to be universally achievable given financial and workforce constraints. We therefore recommend that ambulance services should ensure that they deploy paramedics as effectively as possible within their operating model and suggest that further research is required to understand the relationship between the deployment of paramedics, advanced practice clinicians or specialist practitioners and a safe reduction in avoidable conveyance.

Calls from telecare organisations represent a proportion of the 999 calls received for patients in the “falls” and “unknown problem” protocols within Ambulance Medical Priority Dispatch System (AMPDS). The term “telecare” is poorly understood but is known to represent organisations that provide & supply technologies such as telehealth and

telemedicine services. Discussions between the Telecare Services Association (TSA) and AACE over the last 12 months have explored four key areas for collaboration, one of which includes how telecare providers can share information to inform better coding of requests for response by Ambulance Services. Early data from Yorkshire Ambulance Service suggests they received 13,806 calls over seven months, equating to approximately 23667 calls per year, with approximately 47% as Category 1 & Category 2 responses. This is approximately 3 calls per hour averaged across a year. Legacy sample data has also identified that approximately 49% of those patients attended are not conveyed.

A decision support tool has been developed to assist telecare service providers when a service user requires assistance, helps them to decide when to transfer the call to the local ambulance service, the type of information needed and when to refer their service users into locally agreed pathways of care.

Objective

This pillar will review the different operational, workforce models and skill mix across ambulance services and explore how we can further build on the success of the ARP. The pillar will also support the development of local CAS so that paramedics on scene are able to ensure the optimal treatment or onward referral for patients at scene, and a response to telehealth and telemedicine provider calls.

This will include:

- Exploration of the feasibility of having a paramedic on every ambulance.
- A review of methods to allocate more advanced practice clinicians or specialist practitioners to calls that are unlikely to require conveyance (so that specialist practitioners in cars both stop the clock and avoid conveyance).
- Support to the development of local CAS to simplify the process for paramedics to make referrals via a single point of access for an urgent response from community health services.
- Investigate use of a decision support tool to assist telecare service providers when they identify that a service user requires an ambulance response.
- A review of EOC practices so that the Pre-Determined Allocation (PDA) may be to dispatch to other services/non ambulance clinicians.
- Investigation of the impact of PDA.

Deliverables

- A collated directory of initiatives in current use across the ambulance system.
- Evaluation of good practice examples to determine national best practice.
- Support the development of local CAS.
- Review the use and impact of PDA.
- Review the evaluation of the AACE telecare pilots and consider next steps.
- Analytical and financial modelling to determine the impact any proposed initiatives could make.

2.6.6 Optimising the Clinical Skills of the Workforce

The AIP Workforce and Leadership workstream was established to support development of a sustainable workforce for ambulance services in response to the recommendations of the NHSI Ambulance Trust Sustainability Review. This programme of work has allowed for partnership working between national and local stakeholders on leadership, engagement and implementation activities required in addition to local action to optimising workforce within ambulance trusts.

Included in this pillar will be an evaluation of the use of PDA. PDA is the assignment of a specific skill mix and/or clinician to respond to sub-groups of 999 calls. This approach has been introduced into some ambulance services, though not consistently and across the same category determinate coding. There is a potential opportunity to nationally map codes to a specific skill mix, with the intention that sending the right clinical staff in the right vehicle to calls will enable an increase in the ability to treat and discharge patients on scene, thereby reducing avoidable conveyance.

Ambulance Services will be approached for examples of clinical protocols and decision-making tools that determine if it is safe to leave a patient at the scene and support a safe reduction in avoidable conveyance. These will be reviewed to identify best practice and develop an evidence base for wider dissemination of tools to Ambulance Services.

The Paramedic Evidence-based Education Project (PEEP) commissioned by the Department of Health's (DH) National Allied Health Professional Advisory Board and funded by the College of Paramedics, delivered its report in August 2013. Amongst the recommendations were:

- An evaluation of education and development opportunities for the existing workforce and the embedding of a whole systems approach to enhance the learning environment for the student paramedic.
- An enhancement of clinical skills and clinical decision making developed through the College of Paramedics curricula.
- Closer engagement of the paramedic workforce with pre-hospital urgent care, and prevention of hospital admission, to benefit the wider community.

As an outcome of the project, on completion of a preceptorship period, post-graduate paramedics are eligible for Band 6 NHS employment. The assumption is that with an enhanced learning environment, standardised curricula and closer working across the pre-hospital setting today's paramedics are able to employ enhanced clinical decision-making skills to avoid conveyance to hospital for those patients for whom other and more appropriate pathways are available.

To support the development of the paramedic workforce, by the end of 2020, we will have:

- Created a collated directory of initiatives in current use across the ambulance system.
- Evaluated good practice examples to determine national guidance.
- Evaluated the Advanced Paramedic Practitioner (APP) and PDA models.

- Promoted the use of rotational roles.
- Reviewed the impact of the new GP contract and how we can work together to ensure recruitment of 'community paramedics' with the shared aim of reduced A&E attendance and hospital admission.
- Undertaken analytical and financial modelling to determine the impact any proposed initiatives could make.

The Rotating Paramedic Programme is a Health Education England funded programme building on the foundations of Health Education England's Paramedic Evidence-based Education Project (PEEP).

The programme explores the feasibility of a rotational model of paramedics in primary care. It aims to maximise the unique skill set of paramedics to improve patient care and relieve pressures on primary care, ambulance services and other parts of the NHS in a sustainable way. In line with Lord Carter's recommendations, this work intends to deliver a standardised framework for clinical supervision to ensure an educational underpinning to the project.

The model was piloted in collaboration with four ambulance services between December 2017 and March 2018. The final report¹⁰, written by the Universities of Sheffield and Hertfordshire, suggests there are several anticipated benefits to introducing the model, including reducing A&E attendances and unplanned admissions, reducing HCP 999 demand, reducing resource allocation for 999 calls and handover delays at hospital, as well as improving patient outcomes and staff recruitment, retention and satisfaction.

In December 2018, the AIP Board established the 'Developing the Culture of the Workforce' workstream to consider learning from the first phase of the work to achieve the objectives of the Lord Carter recommendations and align workforce strategies. This piece of work is currently under development with NHSE/I engaging with stakeholders to scope the requirements and deliverables in 2019.

2.7 Additional Opportunities

Further opportunities for reducing conveyance which sit outside of the six pillars are being identified and evaluated as discussions with stakeholders continue.

We know that respiratory problems are amongst the highest category of calls for ambulance services. The table below is a snapshot of one day's call volumes by chief complaint.

¹⁰<https://www.hee.nhs.uk/sites/default/files/documents/Feasibility%20Study%20of%20the%20Rotating%20Paramedics%20Pilot%20-%20Final.pdf>

Top 5 Chief Complaints for CAT 1 Details

| Chief Complaint | Count | % | ✓ |
|-----------------------------------|-------|-------|---|
| Convulsions/Fitting | 43 | 25.7% | |
| Breathing Problems | 22 | 13.2% | |
| Haemorrhage/Lacerations | 21 | 12.6% | |
| Cardiac/Respiratory Arrest | 20 | 12.0% | |
| Allergies/Rash/Med Reaction/St... | 15 | 9.0% | |

We also know that 10 - 30% of patients with asthma, Chronic Obstructive Pulmonary Disease (COPD) exacerbation or community acquired pneumonia (CAP) have the potential to be treated via ambulatory emergency care led by non-medical practitioners with advanced clinical skills and relevant training rather than A&E attendance.

We have not included this group of patients as a specific pillar in this document as we know there are numerous schemes cutting across sectors and pathways, including differently commissioned schemes with complex inclusion and exclusion criteria across single ambulance providers. However, we do know that NHS North Transformation North Region Respiratory Programme produced a useful delivery pack in October 2018 offering practical suggestions taken from expert clinical advice and available evidence that may help reduce non-elective admissions and bed days, improving patient outcomes. The Programme team aims to update the data behind the pack to support local delivery. We will continue to work together with NHS RightCare to ensure a joined-up approach to this group of patients.

Ambulatory Emergency Care (AEC, also known as Same Day Emergency Care (SDEC), is a method of managing some emergency patients on the same day without admission to a hospital bed (NHS Improvement, 2018)¹¹. Ambulatory emergency care is an emerging, streamlined way of managing patients presenting to hospital who would traditionally be admitted (Royal College of Physicians)¹². These patients are typically cared for in a unit that offers timely and clinically appropriate access to diagnostics & assessment. Access to AEC provides greater scope for management of patient flow, improved patient experience and a reduction in acute admissions.

AEC pathways offer an opportunity to streamline the way that patients requiring conveyance by ambulance services are managed. There is positive evidence that some services have either developed pathways with secondary care providers or are using existing pathways. Further work is needed by NAUECG to explore the detail of these pathways with a view to identifying which pathways could be reproduced across other ambulance services to promote use of A&E alternatives.

3 Analytical and Financial Impact Modelling

Modelling will be undertaken on a number of evidence-based interventions across the areas covered by this document. This work will estimate the potential impact on activity and finance if interventions were adopted across the country. Modelling assumptions will be informed by evaluation and other evidence which will be captured by the NHSE/I ambulance

¹¹ https://improvement.nhs.uk/documents/2984/AEC_Same_day_acute_frailty_services_June2018.pdf

¹² <https://www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-10-ambulatory-emergency-care>

team over the course of the programme. It is expected evidence will largely come from ambulance trusts and systems that have already tested and adopted the interventions.

Key variables in the models are likely to include:

- Costs to deliver the intervention.
- The cohort the intervention might apply to (taking into account levels of current adoption).
- Changes in activity within the ambulance sector and across the wider system likely to result from the intervention, along with related unit costs. This will include efficiency opportunities identified.
- Key enablers needed to support implementation, and related costs.

It is anticipated that modelling will be at national level and will therefore not necessarily reflect local circumstances. The work will aim to estimate impacts at system level and as such may not accurately reflect commissioner or provider costs and savings as these will vary depending on local contractual arrangements and what is already being commissioned. Each system should review modelling assumptions and adapt these to take into account local circumstances, including the make-up of their population and the services already in place.

4 Incentives and Levers

NHS England has used the following incentives and levers over the last 2 years to support a safe reduction in avoidable conveyance:

1. Implementation of the 2017/19 National Ambulance CQUIN which incentivised ambulance services to collect the NHS number at point of call, view the Summary Care Record and access the Directory of Services within the Emergency Operations Centre.
2. Implementation of a further National Ambulance CQUIN in 2019/20 to incentivise access to patient information for front line clinicians at scene. Access to patient information will support clinical decision making.
3. Inclusion of guidance within the National Tariff Payment System setting out the requirements when considering local prices and variations for ambulance services. The guidance includes considerations for both providers and commissioners in setting local prices and variations, including how to support a safe reduction in avoidable conveyance through incentivising “Hear and Treat” and “See and Treat”.
4. Specific levers incorporated within the 2019/20 NHS Standard Contract, including:
 - a. A requirement for a national Data Quality Improvement Plan (DQIP) item to improve collection of the NHS number. The DQIP should set out what actions the provider will take to improve collection of the NHS number at the point of the emergency (999) call.

- b. A requirement for a national Service Development and Improvement plan to set out how commissioners and providers will jointly deliver the recommendations of the Lord Carter report. This includes a focus on a safe reduction in avoidable conveyance and providing care closer to home through “Hear and Treat” and “See and Treat” initiatives, processes and systems to support clinical decision making. A key enabler will be the adoption of technology that provides greater access to patient records on a read and write basis, along with the full rollout of electronic patient records.
5. Delivery of a safe reduction in avoidable conveyance to A&E, with trajectories to be agreed between providers and lead commissioners (National Assurance Statements).

Before the end of 2019 we will have explored and made recommendations on future incentives and levers. Those which could be developed are:

1. Providing paramedics at scene with access to advice from general practitioners and other clinicians for decision support via the CAS:
 - a. ‘Rapid access to clinical advice’ is a requirement in the 2017 IUC Service Specification.
 - b. Functionality is already available across England on the telephony platform to enable this and is used in some areas.
 - c. Further guidance on implementation will be developed, drawing on service experience, as part of our work programme to reduce conveyance.
2. Increasing “Hear and Treat” and “See and Treat” through the introduction of alternative pathways of care, and protocols for non-conveyance:
 - a. A new pathway, aligned to the development of new Clinical Quality Indicators, has been developed for falls in older people. Further pathways, including mental health, will be developed through 2019 according to clinical need.
3. Further exploration of the National Tariff Payment System to explore the introduction of recommended weighted prices for ambulance trust currencies, reflecting the additional time on scene and costs incurred by ambulance services when supporting patients to stay at home.

5 Development of the Repository

A key output of the Avoidable Conveyance Programme will be the development of a repository of information to support ambulance services, commissioners and STP/ICSs to deliver the right model of care and safely reduce avoidable conveyance by 2023.

It is anticipated that the repository will be an accessible and interactive online resource which holds operational, analytical and financial information on those evidence based interventions which the system can consider for local implementation.

There are several platforms which could be suitable to host the repository and scoping work to determine the most appropriate option will begin during in 2019.

The proposed project plan is:

| 2019 | Work package |
|--------------------|--------------------------------------|
| May – June 2019 | Consultation exercise |
| June - July 2019 | Procurement of repository solution |
| July – August 2019 | Set up and configuration |
| September 2019 | Incorporation of legacy publications |
| October 2019 | Repository Launched |

6 High level timescales for deliverables

| Milestone | 2019-2020 | | | | 2020-2021 | | | | 2021-2022 | | | |
|---------------------------------------|-----------|---|---|---|-----------|--|--|--|-----------|--|--|--|
| Plan development | | | | | | | | | | | | |
| Sign off agreed at AIP | █ | | | | | | | | | | | |
| Establish Implementation Group | █ | | | | | | | | | | | |
| Development of implementation plan | █ | █ | | | | | | | | | | |
| Development of tracker | █ | █ | | | | | | | | | | |
| Falls | | | | | | | | | | | | |
| Agree national framework | █ | | | | | | | | | | | |
| Support services to map interventions | █ | █ | █ | | | | | | | | | |
| Collaborate re NICE guidance | █ | █ | █ | █ | | | | | | | | |
| Mental Health Crisis | | | | | | | | | | | | |
| Support testing of approaches | █ | █ | █ | | | | | | | | | |
| Evaluate good practice examples | █ | █ | █ | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|
| Develop "knowledge bank" | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | |
| Support NACN/AACE work plan | | | | | | | | | | | | | | | | | | | |
| Care Homes | | | | | | | | | | | | | | | | | | | |
| Evaluate good practice examples | ■ | ■ | ■ | | | | | | | | | | | | | | | | |
| Collaborate with system to develop pathways | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | |
| Access to GP / HCP Advice | | | | | | | | | | | | | | | | | | | |
| Liaison with IUC colleagues | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | |
| Evaluate good practice examples | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | |
| Optimising the Response | | | | | | | | | | | | | | | | | | | |
| Evaluate vehicle skill mix models | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | |
| Evaluate specialist practitioner models | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | |
| Evaluate the impact of PDA | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | |
| Review the evaluation of the AACE telecare pilots | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | |
| Optimising clinical skills | | | | | | | | | | | | | | | | | | | |
| Evaluation of the APP model | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | |
| Promote the implementation of the rotational paramedic model | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | |
| Levers & incentives | | | | | | | | | | | | | | | | | | | |
| Work with system to develop levers | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | |
| Modelling | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Develop financial and analytical modelling | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | |
| Repository | | | | | | | | | | | | | | | | | | | |
| Consultation exercise | ■ | ■ | | | | | | | | | | | | | | | | | |
| Procurement | ■ | ■ | ■ | | | | | | | | | | | | | | | | |
| Repository development | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | |
| Monitoring & Continuous Improvement | | | | | | | | | | | | | | | | | | | |
| Performance tracking | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Benefits tracking | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Ongoing programme management | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Continued support to the system | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

7 Appendices

7.1 Examples of interventions

As described in section 3, modelling will be undertaken on a number of evidence-based interventions across the areas covered by this document.

Ambulance services have already shared with us some of their innovative approaches which have been identified locally to support a safe reduction in avoidable conveyance.

7.1.1 Falls

| | | |
|---|---|--------|
| Raiser chairs in solo responder vehicles | Single lift chairs are being integrated into Specialist Paramedic vehicles; this is alongside 'see & treat' on scene skills to reduce avoidable conveyance | YAS |
| Advice for fallers: EOC clinician flowchart | Introduction of a flow chart for Emergency Operations Centre (EOC) nurse/paramedic clinicians, supporting them to undertake an early review/risk assessment of 999 calls for people who have fallen. The flowchart highlights risk factors and prompts consideration of actions to mitigate harm; e.g. self-mobilisation, hydration, medications and analgesia. | SECamb |
| Falls decision tree | Decision making tool to support clinician face to face assessment decision making. Aim is to provide a safe method of referral, where relevant, to other pathways for management. | LAS |
| Minimal lifting policy | An escalation process, with assistance given, for care providers who request an ambulance purely for assistance with lifting a patient. | SWASFT |
| CFR activation | Enabling volunteer Community First Responders to lift uninjured patients using the Raiser Lifting Chair with associated governance, a falls decision checklist and remote clinical support. | SWASFT |
| Paramedic/OT response model | The falls response team respond to all falls within the Reading and West Berkshire area. The vehicle carries medical equipment along with OT equipment such as walking aids and home equipment to enable the OT to make an immediate intervention. Scheme operates 2 days per week. | SCAS |

7.1.2 Mental Health Crisis

| | | |
|----------------------------|--|--------|
| Street triage | A dedicated car operating every day throughout the Birmingham and Solihull area with police officers, nurses and paramedics working together to ensure patients who need mental health care get the right support and at the same time reduce demand on the emergency services. | WMAS |
| Mental health response car | Scheme whereby police, AMHP and paramedic respond to calls. These schemes are not everywhere nor are they 24/7; a number are CQUIN or shorter term funded, some linked to winter. Consideration is also being given to upskilling the internal clinical advice line to have advanced practitioners available | EEAST |
| EOC skills mix | Recruitment of Registered Mental Health Professionals into EOC/ IUC CAS and working collaboratively with CCG and mental health leads. These professionals will provide advice to call takers, road crews and police re Section 136, take calls, and have access to host systems re patient information | SECamb |

7.1.3 Care Homes

| | | |
|-----------------------------|---|------|
| Raiser chairs in care homes | The top 10 care home users of 999/NHS 111 have been identified. A range of interventions have been identified and are being tested. A twelve month pilot finishes Sept 2019 | YAS |
| Care home training | Introduction of falls response training to care homes as a means of reducing overall pressure on healthcare services, especially in the acute and secondary care sector. There were 51 courses delivered to care home staff, with 414 delegates attending. As well as the potential tangible monetary savings in terms of a reduction of calls, the training has contributed to a 32% reduction in volume, enabling resource to be diverted to other areas of emergency care. | NEAS |

| | | |
|---------------------|--|-------|
| Information sharing | Information sharing regarding frequent callers – focus on non-injury falls along with confirmation of death. | EEAST |
|---------------------|--|-------|

7.1.4 Access to GP/HCP advice

| | | |
|--|---|--------|
| GP/AVS scheme | The scheme covers 28 CCGs in the North West, and is predominately available 24/7. On average 6,000 to 8,000 patients are referred through the scheme every month, with 89% not conveyed to the ED. To date 338,746 patients have passed through the scheme with 303,285 maintained at home. | NWAS |
| Single point of access (SPA) | Internal patient care plan system which links to incoming calls. This relies on GPs/HCPs uploading care plans for their patients onto the SECamb system so allowing clinicians access to patient information on scene This also gives contact numbers for healthcare teams who are already familiar with the patient. | SECamb |
| Single point of access (SPA) | Multidisciplinary clinician teams available to receive referrals from ambulance clinicians on scene or from the EOC clinical hub. They can provide advice and make recommendations on appropriate clinician as well as taking over the care of patients and arranging follow up. These SPAs can include respiratory, community and district nursing, community therapists and are available in many areas of South Yorkshire. | YAS |
| Clinical advice from hospitals | Access to advice from the cardiac catheterisation lab following transmission of a patient's ECG. | SECamb |
| Community response teams (CRT referral scheme) | This is a 7-day service running from 8am until 8pm, averaging in total 539 patients a month. In some cases 98% of referred patients do not need to attend A&E. | NWAS |

8 Glossary

| | |
|--------|--|
| AACE | Association of Ambulance Chief Executives |
| ADS | Ambulance Data Set |
| A&E | Accident and Emergency Department (Type 1 & Type 2 Acute Trusts) |
| AEC | Ambulatory Emergency Care |
| AMPDS | Ambulance Medical Priority Dispatch System |
| APP | Advanced Paramedic Practitioner |
| AQI | Ambulance Quality Indicator |
| CAP | Community Acquired Pneumonia |
| CAS | Clinical Assessment Service |
| CFR | Community First Responder |
| COPD | Chronic Obstructive Pulmonary Disease |
| CQI | Clinical Quality Indicator |
| CQUIN | Commissioning for Quality and Innovation |
| DH | Department of Health (now Department of Health and Social Care) |
| DoS | Directory of Services |
| DQIP | Data Quality Improvement Plan |
| ECP | Emergency Care Practitioner |
| EEAST | East of England Ambulance Service |
| EMAS | East Midlands Ambulance Service |
| EOC | Emergency Operations Centre |
| GDE | Global Digital Exemplar |
| HEE | Health Education England |
| HCPC | Healthcare Professionals Council |
| ICS | Integrated Care Systems |
| IUC | Integrated Urgent Care |
| LAS | London Ambulance Service |
| LTP | The NHS Long Term Plan |
| NACN | National Ambulance Commissioners Network |
| NAO | National Audit Office |
| NASMeD | National Ambulance Service Medical Directors Group |
| NAUECG | National Ambulance Urgent and Emergency Care Group |
| NEAS | North East Ambulance Service |
| NICE | National Institute for Health and Care Excellence |
| NWAS | North West Ambulance Service |
| PDA | Pre-Determined Allocation |
| PEEP | Paramedic Evidence-Based Education Project |
| SCAS | South Central Ambulance Service |
| SCR | Summary Care Record |
| SECAmb | South Coast Ambulance Service |
| SPA | Single Point of Access |
| STP | Sustainability and Transformation Partnerships |
| SWAST | South Western Ambulance Service Trust |

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| UTC | Urgent Treatment Centres |
| WAS | Welsh Ambulance Service |
| WMAS | West Midlands Ambulance Service |
| YAS | Yorkshire Ambulance Service |

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