



One Team, Best Care

Clinical Strategy

Person-centred, Evidence-based Care

2019-24



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Introduction

Yorkshire Ambulance Service provides urgent and emergency care services for 5.5 million people across Yorkshire and the Humber. From initial contact via NHS 111 or 999 to non-emergency patient transport through to critical care response, our vision is to be trusted as the best urgent and emergency care provider, with the best people and partnerships, delivering the best outcomes for patients. To enable us to deliver the best outcome for patients, we need to ensure that they receive consistently high standards of safe and effective clinical care that is constantly innovating and improving.

We are committed to providing high quality urgent and emergency care across Yorkshire and the Humber, and providing greater equality for our communities ensuring that everyone has access to the healthcare they need, at the right time, in the right place. We are committed to improving the health and wellbeing of our patients, focusing on a preventative approach, supporting them to keep mentally and physically well and to stay as well as they can until the end of their lives.

The NHS Long Term Plan puts ambulance services at the heart of the urgent and emergency system and to achieve this we need to become fully embedded within integrated systems of care to provide seamless, effective and high quality treatment for our patients.

New solutions are required to reshape our care delivery, harness technology and drive down variations in quality and safety of care, otherwise we will not meet patients' changing needs, people will be harmed who should have been cured and unacceptable variations in outcomes will exist.¹ The challenges faced by the NHS, including an ageing workforce, rise in chronic conditions and complex comorbidities, recruitment difficulties, financial pressures, all combined with a rise in patient expectations require new models of healthcare provision and a flexible workforce. As well as building capacity in our workforce, this includes the development of new and advanced roles and innovative attitudes toward the mix of skills in teams.²

This strategy for *Person-centred, Evidence-based Care* puts the patient and clinician at the heart of the organisation, demonstrates our ambition for the future and provides the road map to support our ambition to become an integrated urgent and emergency care provider, driving improvements in patient outcomes, patient safety and clinical quality.

“If there is one lesson to be learnt I suggest it is that people must always come before numbers.”

Sir Robert Francis QC, 2010

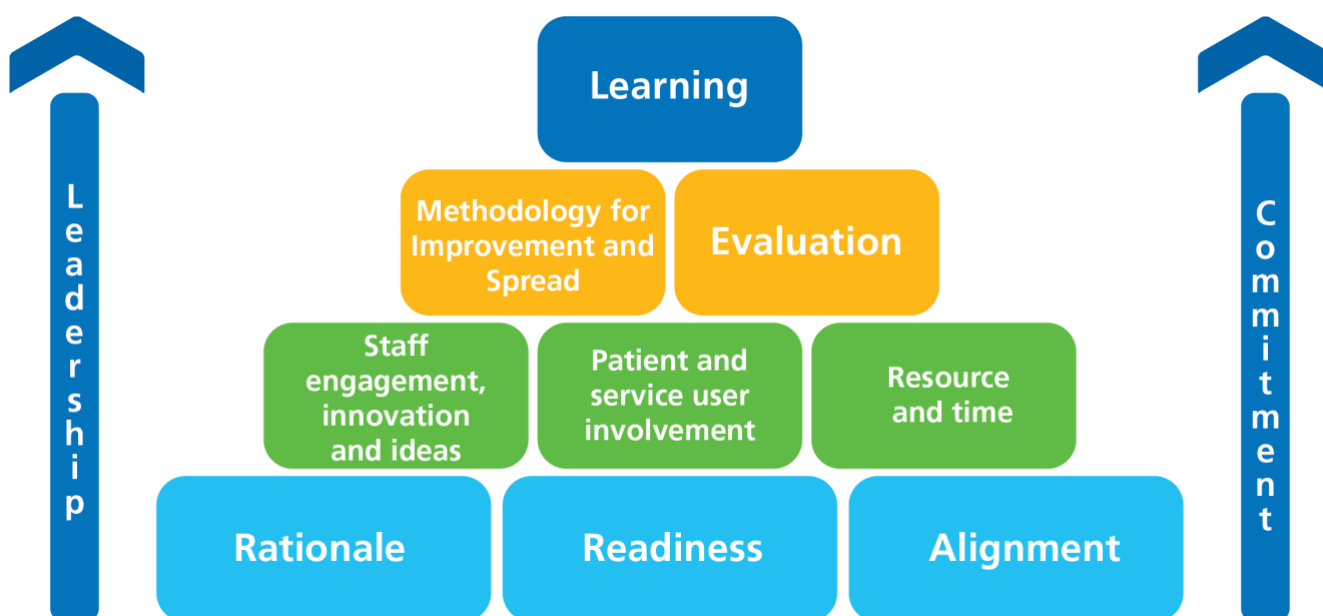
Clinical Strategy Aims

The Clinical Strategy will support the delivery of an integrated urgent and emergency care service which will save lives and ensure everyone in our communities receives the right care, whenever and wherever they need it, and will put the patient and clinician at the heart of the organisation through three core aims:

- Continuous improvement and innovation of clinical care,
- Enabling our multidisciplinary team to deliver high quality, person-centred, Evidence-based care, and
- Ensuring that patients experience a consistently safe, compassionate, high standard of care.

To achieve these aims we need to foster a culture of person-centred, evidence-based care and quality improvement. Quality Improvement (QI) is a systematic approach to continually improving an organisation by focusing on the organisation's culture. It is driven by staff in their own work areas and has a strong focus on the experience of patients and other users of the service.

Figure 1 - The QI Strategy



Empowering Our Patients – Person-centred Care

If the Trust is to offer the highest quality care it is important that we work in partnership with patients, families and carers to ensure that people's preferences, needs and values guide clinical decisions that are respectful and responsive to the individual. Health and wellbeing outcomes need to be co-produced by individuals and members of the workforce working in partnership, with evidence suggesting that this provides better patient outcomes and costs less to health and care systems. This includes gaining a better understanding of the priorities and concerns of those who use our services by involving them in our work, including our policy and planning (co-production).

Person-centered coordinated care emphasises the importance of coordinating care between and across services and is vital for patients with long term conditions who receive care and treatment from numerous health and social care services. Our clinical teams will deliver a person-centred approach to clinical care which considers the biological, behavioural, psychosocial and socio-economic determinants of health that operate across the lifespan, and support the patient to stay as well as they can until the end of their life.

Empowering and developing our clinical teams

Person-centred care also has a focus on the clinical teams. To succeed, a person-centred approach should also address the experiences of our clinical teams and volunteers, because their ability and inclination to care effectively for patients is compromised if they do not feel cared for themselves.³ It is vital that volunteers and staff caring for patients have the knowledge and skills they need to do a good job, and we want to improve how we support all our clinicians to develop. This strategy describes the Trust's approach to supporting clinicians with the right knowledge and skills, adopting the 'no decision in isolation' culture, and multi-disciplinary working. Evidence consistently shows that multi-professional team working delivers better outcomes for patients and more effective and satisfying work for clinicians.⁴

Improving outcomes – Evidence-based

Evidence-based medicine is the integration of individual clinical expertise with the best available research evidence from systematic research and the patient's values and expectations.⁵ Evidence shows that research-active organisations can deliver better outcomes for patients, with quicker access to the latest treatments than those who are not research-active.⁶

Optimal clinical care requires that clinicians apply the best available evidence to clinical decision making. This strategy will demonstrate not only how our clinicians use available evidence, but are also actively engaged in generating our own, and describes the road to becoming a research-driven organisation and the desire to be an Academic Research Unit, the out-of-hospital equivalent of a teaching hospital.

National Drivers

- The NHS constitution – The NHS belongs to us all
- Taking Healthcare to the Patient: Transforming NHS Ambulance Services – *Department of Health* – 2005
- Taking Healthcare to the Patient 2 – A review of 6 years' progress. *Association of Ambulance Chief Executives*. 2011.
- High Quality Care for All - *Department of Health* – 2008
- Transforming urgent and emergency care services in England: Urgent & Emergency Care Review Phase 1 Report – *NHS England*. November 2013
- Five Year Forward View – *NHS England*. October 2014
- Safer, faster, better: good practice in delivering urgent and emergency care – *Emergency Care Improvement Programme*. August 2015
- Clinical models for ambulance services – *NHS England*. November 2015
- Improving referral pathways between urgent and emergency services in England – *NHS England*. November 2015
- Vision for the ambulance service: 2020 and beyond - *Association of Ambulance Chief Executives (AACE)* – September 2015
- NHS Ambulance Services - Leading the way to care – *AACE* – October 2015
- Supporting NHS providers to deliver the right staff, with the right skills, in the right place at the right time (National Quality Board 2016)
- Working together with ambulance services to improve public health and wellbeing – *A consensus statement developed by NHS England, Public Health England, Health Education England, the Association of Ambulance Chief Executives and other partners* – February 2017
- Integrated Urgent Care Service Specification August 2017 NHS England
- National Confidential Enquiry into Patient Outcome and Death 2007 Trauma who cares
- National Audit Office 2010 Trauma Care in England
- NHS RightCare Pathways – Falls and Fragility Fractures, Stroke, COPD
- NHS Long Term Plan 2019

#Hellomynameis is a campaign co-founded by the late Dr. Kate Granger MBE and her husband Chris. Kate had end-stage cancer and called for more compassionate care. She made the stark observation that many staff looking after her did not introduce themselves before delivering her care:



“Introductions are about making a human connection between one human being who is suffering and vulnerable, and another human being who wishes to help. They begin therapeutic relationships and can instantly build trust in difficult circumstances. In my mind **#hellomynameis** is the first rung on the ladder to providing truly person-centred, compassionate care”

Dr. Kate Granger MBE

The NHS Long Term Plan

The NHS Long Term Plan will make the NHS fit for the future

- ✓ **We'll help give everyone the best start in life**
- ✓ **We'll offer treatment that helps people to live well with lifelong illnesses**
- ✓ **We'll support people to age well, helping older people stay independent and healthier for longer**

As medicine advances, health needs change and society develops, the NHS has to continually move forward. The NHS Long Term Plan provides the framework to move to a new service model that is:

- **more joined-up and coordinated in its care.** Breaking down traditional barriers between care institutions, teams and funding streams so as to support the increasing number of people with long-term health conditions, rather than viewing each encounter with the health service as a single, unconnected 'episode' of care. YAS will have integrated at a Primary Care network and Integrated Care System level to enable coordinated and integrated care for patients.
- **more proactive in the services it provides.** The majority of initial medical contacts with the NHS occur when a patient calls NHS 111 or 999, or visits their pharmacist, GP practice, A&E or Urgent Treatment Centre (UTC). At that point the NHS response kicks into action. But increasingly we are supplementing that with the move to 'population health management', using predictive prevention (linked to new opportunities for tailored screening, case finding and early diagnosis) to better support people to stay healthy and avoid illness complications.
- **more differentiated in its support offer to individuals.** This is necessary if the NHS is to make further progress on prevention, on inequalities' reduction, and on responsiveness to the diverse people who use and fund our health service. Individual preferences on type and location of care differ quite widely – as for example with end of life choices, or on use of 'multi-channel' digital services. More fundamentally, with the right support, people of all ages can and want to take more control of how they manage their physical and mental wellbeing. There is no contradiction between wider collective action on health determinants, and a recognition that different individuals will benefit differently from tailored prevention. Indeed, one-size-fits-all statutory services have often failed to engage with the people most in need, leading to inequalities in access and outcome.

“Ambulance services are at the heart of the urgent and emergency care system. We 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 Trust Vision - One Team, Best Care

Our purpose, vision and values are the fundamental building blocks which shape our approach and ways of working: our culture (Figure 2)

Figure 2 – Our strategy on a page



The Clinical Strategy

The strategy will be delivered through our Integrated Urgent and Emergency Care service, providing seamless, safe, high quality, person-centred, evidence-based care for our patients, however and whenever they choose to seek help through NHS 111, 999 or non-emergency Patient Transport Service (PTS). Figure 3 demonstrates the integrated, co-ordinated approach to patient journeys within the Trust and with external partners to achieve:

- Seamless re-direction of the patient to the most appropriate service, regardless of the initial number called. This provides a consistent response and allows a more efficient use of resources;
- More effective feedback and enhanced learning between the services, building mutual trust and reducing the number of unnecessary ambulance responses
- Sharing of resources (for example call handling and clinical advice) to more effectively manage peaks in demand, whilst improving consistency and efficiency.

Figure 3

Integrated Urgent and Emergency Care Clinical Operational Model



Clinical Effectiveness and Assurance

Clinical Effectiveness and Assurance is the framework through which healthcare organisations are accountable for continuously improving the quality of patient care. Clinical governance is important to reassure patients that the care they receive is of the highest standards. It requires the development of a culture where healthcare professionals are motivated to routinely think “Am I doing it right?” and “How can I do it better?”

- We will equip and empower individual clinicians to deliver safe, high quality, evidence-based, person-centred care.
- We will deliver zero-avoidable harm care by 2024, by focusing on human factors and high quality education.
- We will audit whole patient journeys, throughout the health and social care system, utilising the end-to-end approach, with a focus on outcome and experience, and provide feedback to clinicians to enable continuous professional development.
- We will audit and address any inequalities of care due to a protected characteristic.
- We will enable this through the digital strategy, integrated clinical systems and a single patient record.

Clinical Leadership and Supervision

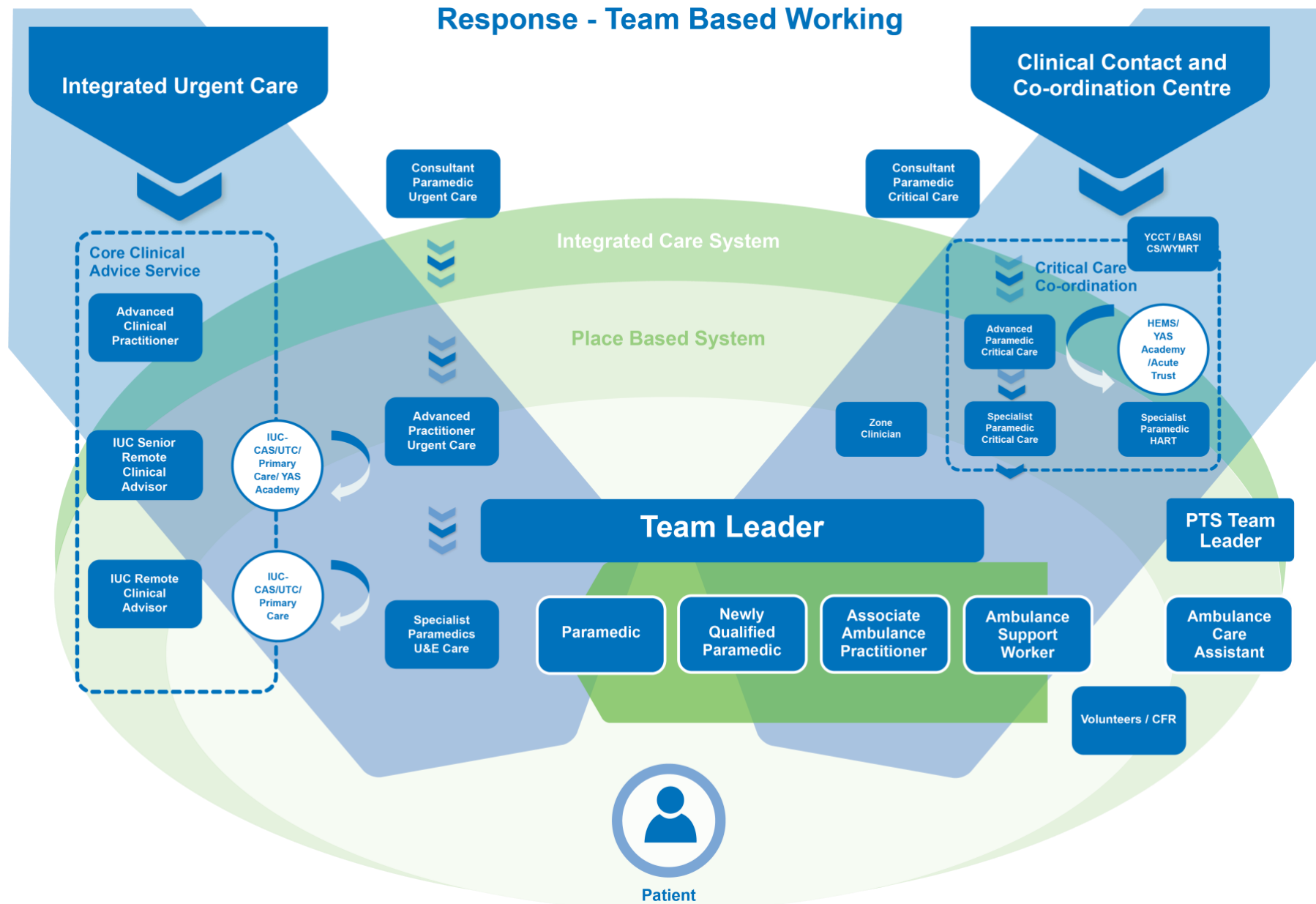
The best clinical leaders strive to do the right thing, to ensure their staff and support services always do the right thing for patients, but go further and look for a better way. Studies in many industries, including healthcare, suggest that leadership is a critical element in organisational performance. Effective clinical leadership is vital in ensuring high quality healthcare that consistently provides safe and efficient care.

- We will support the recruitment and development of a flexible, diverse, multi-professional, multi-skilled workforce, and develop the skills and systems required for non-medical prescribing.
- We will maximise clinical experience through the development of internal and external rotational posts, and we will strengthen our clinical supervision and leadership framework ensuring the organisation is clinically led and delivered.
- We will provide a clear career pathway within the organisation that supports professional development and a flexible approach to career progression.
- We will identify future clinical leaders and provide the best support to fulfil their potential.

Figure 4 demonstrates the organisational framework for enabling career progression, clinical supervision and leadership in a team based approach and the development of the specialist and advanced clinical role to provide the best care for patients

Figure 4

Response - Team Based Working



Clinical Development and Research

New ways of working and delivering healthcare requires employers to ensure that clinicians have the professional development they need to adapt to changing circumstances.

- We will develop an Academic Research Unit, providing an environment to support continued professional development and research.
- We will maximise the role of the workforce to develop the public health role of the ambulance services at both a national and regional level and develop a person-centred care skills framework taking a tiered approach across the integrated urgent and emergency care workforce to better support people to stay healthy and avoid illness complications.
- We will ensure that the latest evidence is used to develop guidelines and pathways to ensure the patient gets the right care, at the right time in the right place, utilising the latest digital systems to support safe clinical decision making.
- We will develop greater system intelligence through the use of public health data to inform population health management and the development of urgent and emergency care services.
- We will develop an integrated system with a focus on a multi-disciplinary clinical assessment service and a 'complete and consult' model where patients are given advice to care for themselves at home, a direct booking or a prescription.

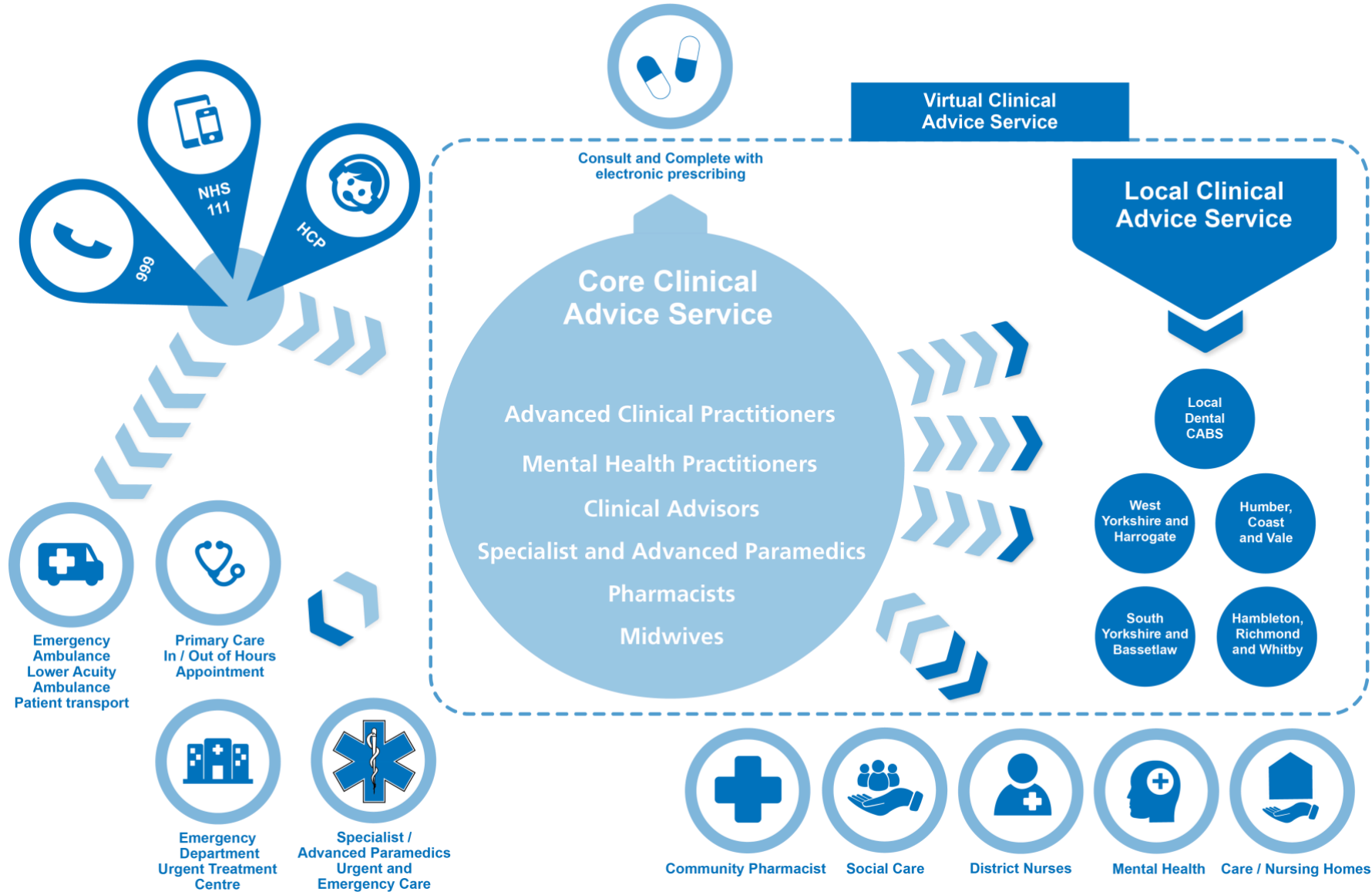
Figure 5 demonstrates the role of the virtual Clinical Advice Service, maximising the utility of the "clinical hub" and offering patient access to a wide range of clinicians, both experienced generalists and specialists. It will also offer advice to health professionals in the community so that no decision needs to be taken in isolation. The Clinical Advice Service offers a transformational opportunity to support delivery of a model of urgent care access that will streamline and improve patient care across the urgent care community, through the implementation of a "consult and complete" model.

The Core CAS clinical assessment will result in any one of a variety of clinical outcomes. These outcomes include:

- Ambulance is required and dispatched.
- Face to face consultation is required (could be at UTC, own GP, Primary Care etc.) which will be arranged to take place in the most appropriate place by the most appropriate clinician.
- Referral to another appropriate health or social care services:
- Prescription raised electronically
- Self-care advice, signposting, reassurance and information over the telephone

Figure 5

Integrated Urgent and Emergency Care



Clinical Priorities

We will ensure that the sickest patients get the best treatment on scene and are taken to the most appropriate facility fast, and that those patients with less severe illness and injury are treated as close to home as possible, reducing the demand on emergency departments.

For patients with non-life-threatening conditions we will deliver personalised care through our Integrated Urgent Care model providing a Core Clinical Advice Service (consult and complete), and linking with local systems where they exist, to ensure continuity of care by local clinicians. We will optimise our service to deliver electronic prescribing to enable Care Closer to Home

Working with the Integrated Care Systems we will explore how we better coordinate the flow of patients across the urgent and emergency system. We will develop greater system intelligence through the use of public health data to inform population health management and the development of urgent and emergency care services, and become key stakeholders in the development of population health management.

Cardiac Arrest

Ensuring that patients who suffer from an out-of-hospital cardiac arrest get the right treatment fast is vital for their long-term survival and quality of life. The chain of survival is still a key element of our strategy and we will continue to improve our response to peri-arrest and cardiac arrest. The chance of survival from a cardiac arrest that occurs out of hospital doubles if someone receives immediate resuscitation (CPR) or a high energy electric shock to the heart (defibrillation). We will enhance the resuscitation team with senior clinical leadership, enhancing training, and concentrating on human factors, complex decision making and simulation.

Collapsed patient in the street

A 62 year-old lady collapses in town, and bystanders call 999. A community first responder (CFR) from the same street is dispatched using an automated alerting app, and the dispatcher sends an ambulance and a Specialist Paramedic (Critical Care). The CFR arrives on scene first and takes over BLS from the bystanders. The CFR uses an AED, and the ambulance arrives a few minutes later. The team led by the SP provides advanced post-ROSC* critical care and is transported to the cardiac centre directly.

*ROSC – Return of Spontaneous Circulation
i.e. a pulse, the first step towards the goal of complete recovery from a cardiac arrest

The *chain of survival* is a vital part of ensuring patients who suffer from an out of hospital cardiac arrest have the best possible chance of a full recovery. Early recognition of cardiac arrest and early Basic Life Support (BLS) including AED are key components that need to be delivered by communities and volunteers.

We will enhance our approach to cardiac arrest management through the concept of resuscitation teams, with senior clinical leadership, enhanced training and concentrating on *human factors*, complex decision making and simulation. The SP in critical care will be a development post into advanced practice.

Acute Stroke

Stroke, a preventable disease, is the fourth single leading cause of death in the UK and the single largest cause of complex disability. Stroke mortality has halved in the last two decades. However, without further action, due to changing demographics, the number of people having a stroke will increase by almost half, and the number of stroke survivors living with disability will increase by a third by 2035.⁷ The timely identification of FAST-positive patients is important in reducing the long term effects of a stroke. Stroke care is becoming increasingly complex with a concentration of Hyper Acute Stroke Units and the emerging treatment options of thrombectomy. We will continue to improve our response to suspected stroke patients, reduce our stroke mimics and work with the Stroke reconfigurations to ensure the right patients get to the right place, first time. We will explore the use of telemedicine to support frontline clinicians in the decision making and assessment of patients.

Coronary Care

Heart and circulatory disease, also known as cardiovascular disease (CVD), causes a quarter of all deaths in the UK and is the largest cause of premature mortality in deprived areas. This is the single biggest area where the NHS can save lives over the next 10 years.⁷ We will build on our excellent work improving the heart attack pathway, including posterior heart attacks, and improve the resilience and coordination of the pathways; ensuring patients get timely access to expert cardiology assessment and intervention. We will develop remote support for frontline clinicians using telemetry and cardiac monitoring. We will develop the pathways for patients with acute coronary syndrome, heart failure and cardiac arrhythmias, who are not eligible the heart attack pathway, ensuring they receive the best care possible, and explore the use of near patient testing. We will improve the audit of patient outcomes through the use of national audit databases and improve the feedback to frontline clinicians.

Patient with Chest Pain – (NSTeMI*)

A 58 year-old man with chest pain phones NHS 111, and following assessment, an ambulance is immediately dispatched. The Paramedic performs an ECG and blood test, and the results are sent to a cardiology team in the Heart Attack Centre via the electronic patient record. The Paramedic attempts to administer cardiac medications, but the point of care scanning system alerts them to the possibility of an interaction, and they administer an alternative drug. The patient bypasses local hospitals and is taken directly to the Heart Attack Centre.

Core emergency 999 response is an ambulance with a paramedic and clinical support. Working in a *team-based approach*, supported by specialist and advanced Paramedics, and the IUC Clinical Advisory Service ensuring there is '*no decision in isolation*'.

*Non ST elevation Myocardial Infarction is a type of heart attack currently transported to a local hospital. Near Patient Testing (a blood sample tested at scene) Troponin can detect heart attacks not seen on a ECG and could potentially allow patients to be taken to a cardiac centre, rather than the local hospital.

Sepsis

Sepsis is a deadly condition and early recognition is key to improving survival. We will continue to develop our detection of sepsis at the point of contact with 999 or NHS 111, and ensure they receive the most appropriate response. We have worked with all the emergency departments across the region to improve the integrated approach to the management of sepsis patients. We will continue this work and refine the processes using the latest evidence, explore the use of near patient testing and the introduction of the latest early warning systems across all age groups.

A patient with possible sepsis

A patient with COPD in a nursing home deteriorates and develops a urinary tract infection, the nurse in charge calls the IUC CAS for advice and speaks to a pharmacist. The nursing home provide a recent set of physiological observations and a NEWS2 score and sepsis is ruled out by the pharmacist. The pharmacist accesses the patient care record and notes a recent blood test showing renal problems and the results of a urine sample, and using this information electronically prescribes appropriate antibiotics. A plan is agreed to monitor the patients NEWS2 score over the weekend, and follow up is arranged if no improvement.

Antimicrobial stewardship is the effective use of antibiotics to help slow the emergence of antimicrobial resistance, and ensure that antimicrobials remain an effective treatment for infection. Accessing the patient record allows for greater accuracy in targeting antimicrobials.

Major Trauma

Working with the major trauma networks we will continue to develop close working relationships, improve patient flow and respond to the latest research to ensure the best outcomes for patient. We will develop our critical care model, working with the Yorkshire Air Ambulance, Yorkshire Critical Care Team, the Hazardous Area Response Team (HART), West Yorkshire Medic Response Team and BASICS teams to ensure the delivery of high quality, seamless care. We will ensure that in a major incident patients still receive the best care and are taken to the most appropriate hospital for their needs.

Patient with Major Trauma

A multi-vehicle road traffic collision is reported in a 999 call. The call taker processes the information and sends link to the caller mobile phone and images of the scene are sent to the Critical Care Advanced Paramedic* in the Critical Care Hub. From the images and information received an air ambulance, two DCAs and a Specialist Paramedic (Critical Care) are dispatched. The patients are stabilised, given advanced analgesics, packaged and, following a discussion with the advanced paramedic, bypass the local hospitals and are taken directly to the Major Trauma Centre. The electronic Patient Record automatically notifies the receiving hospital of the patient details and also the national trauma database. All the clinicians get notified the next day of the patients condition, and clinical findings. The feedback is then used as part of their annual clinical appraisal.

*Critical Care Advanced Paramedics have a vital role in supporting and developing specialist paramedics and co-ordinating the *critical care response*. They rotate between EOC, HEMS, HART and the YAS Academy.

Maternity Care

Working to the Better Births vision for maternity services to be more personalised, safer, kinder, professional and more family friendly, and for care to be women-centred, in organisations which are well-led and in cultures which promote innovation, continuous learning and break down organisational and professional boundaries. We will explore the use of midwives in the Clinical Advice Service to provide a single point of access for women and health care professionals seeking advice and support, and to better coordinate the care provided to women in labour.

Pregnant woman in labour

A woman phones the Labour Line* reporting that she is 40 weeks' pregnant and is experiencing labour pains. The midwife accesses the patient's medical records and assesses the patient over the phone. The patient has a complex obstetric history, and needs immediate admission to a Delivery Suite. The midwife notes that the booked Delivery Suite is very busy and unable to take the patient and therefore locates the next nearest Delivery Suite to arrange admission. The midwife arranges for an ambulance to be dispatched and when the Paramedic arrives on scene finds the patient is in advanced labour and the baby is stuck. The Paramedic provides immediate intervention and, with remote support from the midwife, successfully delivers the baby.

*Labour Line is a dedicated team of midwives, as part of the IUC Clinical Advice Service, providing triage services to labouring women, supporting other HCPs including Paramedics and community midwives, co-ordinating Delivery Suite activity and flow, and arranging ambulances when necessary. A dedicated triage service has been shown to improve support to women and their partners in early labour, and improve satisfaction of mothers accessing the maternity service.

Respiratory Care

Lung conditions, including lung cancer, are estimated to cost wider society around £9.9 billion each year. Respiratory disease affects one in five people in England, and is the third biggest cause of death. Hospital admissions for lung disease have risen over the past seven years at three times the rate of all admissions generally and remain a major factor in the winter pressures faced by the NHS.⁷ The case for taking action to improve outcomes for Chronic Obstructive Pulmonary Disease (COPD) and asthma is clear. Premature mortality from COPD in the UK was almost twice as high as the European average and premature mortality for asthma was over 1.5 times higher. Around 90% of deaths from asthma each year could have been prevented.⁸ We will ensure all staff have the knowledge and skills to assess and treat patients who present with respiratory symptoms, provide the right equipment and medicines to manage the emergency and appropriately titrate oxygen.

A patient with COPD

A patient with COPD deteriorates and develops a chest infection, the patient calls 999 and an ambulance is dispatched. The Paramedic crew assess the patient and then phone the IUC CAS for advice and speak to a pharmacist. The pharmacist accesses the patient care record and notes a recent blood test showing renal problems and the results of a sputum sample, and using this information electronically prescribes appropriate antibiotics. The Paramedic mentions that the patient has a large number of medicines in their home, and the Pharmacist arranges a routine follow-up by the local Pharmacy team for a medicines' review. The patient is also noted to be still smoking and the Paramedic talks about smoking cessation services, and the patient agrees to a referral.

Making Every Contact Count (MECC) is an approach to behaviour change that utilises day to day interactions that organisations and individuals have with other people to support them in making positive changes to their physical and mental health and wellbeing.

Medicines Optimisation is an integral part of clinical care and includes the safe, appropriate administration of medicines and supporting people to take their medicines correctly. The term medicines optimisation is now used to encompass a more person-centred approach.

Learning Disabilities

A person-centred approach is essential to the delivery of high quality care for patients with learning disabilities. Many people with learning disabilities have greater health needs than the rest of the population. They are more likely to experience mental illness and are more prone to chronic health problems, epilepsy, and physical and sensory disabilities. We will work with people with learning disabilities, their families and carers to ensure our services meet their needs, and ensure our staff have the necessary skills and knowledge to care for patients with learning disabilities. We will ensure that patients are not taken to hospital when there are better alternatives in the community.

Paediatric Care

Children and young people have distinctive needs within emergency and urgent care. Clinical presentations can often be confusing with non-specific symptoms and numerous potential diagnoses which may require a variety of assessment, management and treatment strategies. Supporting our clinicians and providing the right medicines and equipment to deliver the best possible care is the priority. We will explore the use of specialist clinicians in paediatric care within the IUC CAS. Paediatric pain management is a complicated issue and various legal barriers and operational challenges exist which prevent paediatric patients receiving optimal pre-hospital analgesia. We will explore the issues and generate the options to resolve this issue.

Child with chest infection

The benefits of participating in clinical research to healthcare organisations are well documented. Improvement in patient outcomes, quality and experience has all been evidenced to enhance standards of patient care. As an **Academic Unit of Pre-Hospital Care**, we will join up research across emergency and urgent care.

The ICU CAS will provide a clinical led service and deliver a **Consult and Complete** model which will mean patients receive a complete episode of care concluding with either: advice, a prescription, or an appointment for further treatment.

A worried mum uses the NHS 111 online assessment app and an Urgent and Emergency Specialist Paramedic is dispatched to assess a 5 year-old boy with a cough and difficulty in breathing, and commences initial treatment. The SP discusses the patient with the CAS, who arrange a video consultation with a Paediatric Nurse Specialist, who makes an assessment and a diagnosis of a chest infection. She recommends antibiotics and makes the parent aware of a research trial regarding a novel antibiotic. An appointment is made with the GP later that day, who completes an online prescription for the antibiotics. CAS arranges follow up care with the Hospital at Home scheme.

Emergency Vascular

Patients with vascular emergencies (including leaking or ruptured abdominal aortic aneurysms and ischaemic limbs) need a fast response with a quick transfer to a vascular surgeon. We will build on our work with the vascular network, identifying the best approach to patients with vascular emergencies ensuring they are taken to the most appropriate facility where they can receive timely surgery.

End of Life and Palliative Care

Everyone approaching the end of life should receive high quality care that reflects their individual needs, choices and preferences. Everyone, including children, should be able to be involved in decisions about their own care and develop care plans, together with those important to them and the health and care professionals responsible for their care.⁹ We will ensure our clinicians have the right knowledge and skills to provide personalised care in the right place, and work with health and social care partners to deliver co-ordinated high quality care.

Patient with end-stage lung cancer

Family phone NHS 111 about their mum with end stage cancer who is experiencing severe pain, the patient is flagged on the LHCRE* record as being a palliative care patient, and the call is directed to a palliative care nurse in the CAS. Immediate reassurance and advice is given to manage the pain. Following a teleconference between the palliative care nurse, the patients own GP and the hospice consultant, admission to the local hospice is agreed, and the nurse dispatches the Palliative Care LAT Ambulance to transport the patient.

**LHCRE – Local Health and Care Record Exemplar – The Yorkshire and Humber integrated care record. Our Digital Strategy will support fully integrated solutions both within YAS and with external partners improving seamless patient care.*

Lower Acuity Transport (LAT) enables the transportation of patients who do not need a Paramedic or a fully equipped ambulance. The LAT is a more flexible resource managing same-day requests from Health Care Professionals.

Falls and Frailty

Frailty is not an illness, but a syndrome that combines the effects of natural ageing with the outcomes of multiple long-term conditions, a loss of fitness and reserves (Lyndon 2014). Research suggests that changes in the immune system, longstanding inflammation, and decline of the musculoskeletal and endocrine systems all contribute to the onset of frailty. Frailty occurs more often as people become older. Of people over 85 years of age about one in four is living with frailty and increasingly it is suggested that frailty needs to be thought of as a long-term condition. We will prevent unnecessary conveyance to the emergency department, support recovery and return to independent living following illness or a fall, and reduce risk of further falls. Working with health and social care partners we will develop integrated pathways for frailty and patients who have fallen.

Frail, elderly patient who has fallen

Telecare pendant is activated, the call is assessed and found to be a 87 year old lady who has fallen. A CFR volunteer is dispatched and assesses the patient, and following a video consultation with an Advanced Paramedic (Urgent Care) in the CAS, the patient is lifted off the floor. A Specialist Paramedic (Urgent Care) working in a rotational primary care post is dispatched to close a skin tear and the AP makes a referral to the local CAS for ongoing health and social care.

We will prevent unnecessary conveyance to the emergency department, support recovery and return to independent living following illness or a fall, and reduce risk of further falls. Working with health and social care partners we will develop integrated pathways for frailty and patients who have fallen.

The IUC CAS is an umbrella system working closely with local CAS and Out-of-Hours primary care services to provide seamless care.

Mental Health

The life expectancy of people with severe mental illnesses can be up to 20 years less than the general population.⁷ Patients in a mental health crisis are frequently seen by NHS 111 and 999, and often present with complex physical, mental and social problems. YAS has responded by implementing a mental health team in the Emergency Operations Centre to support and coordinate care for these patients. We will continue to work with community and local teams to ensure we have access to patient information, that care is coordinated, and that referral pathways are seamless and effective. We will continue to work with local police forces to ensure that patients get the right care, first time, and that patients are managed in the most appropriate place to meet their needs. We will become a dementia friendly organisation.

Patient feeling suicidal

A 22 year-old man experiencing a mental health crisis feeling suicidal phones 999. The call is transferred to a mental health nurses in the CAS. An immediate risk assessment is performed, and discovers the patient has taken an overdose. Working with a pharmacist in the CAS, the overdose is assessed as non-life-threatening and de-escalation of the crisis is achieved. The Mental Health Nurse electronically books an urgent follow up with the patients own crisis team later that same evening.

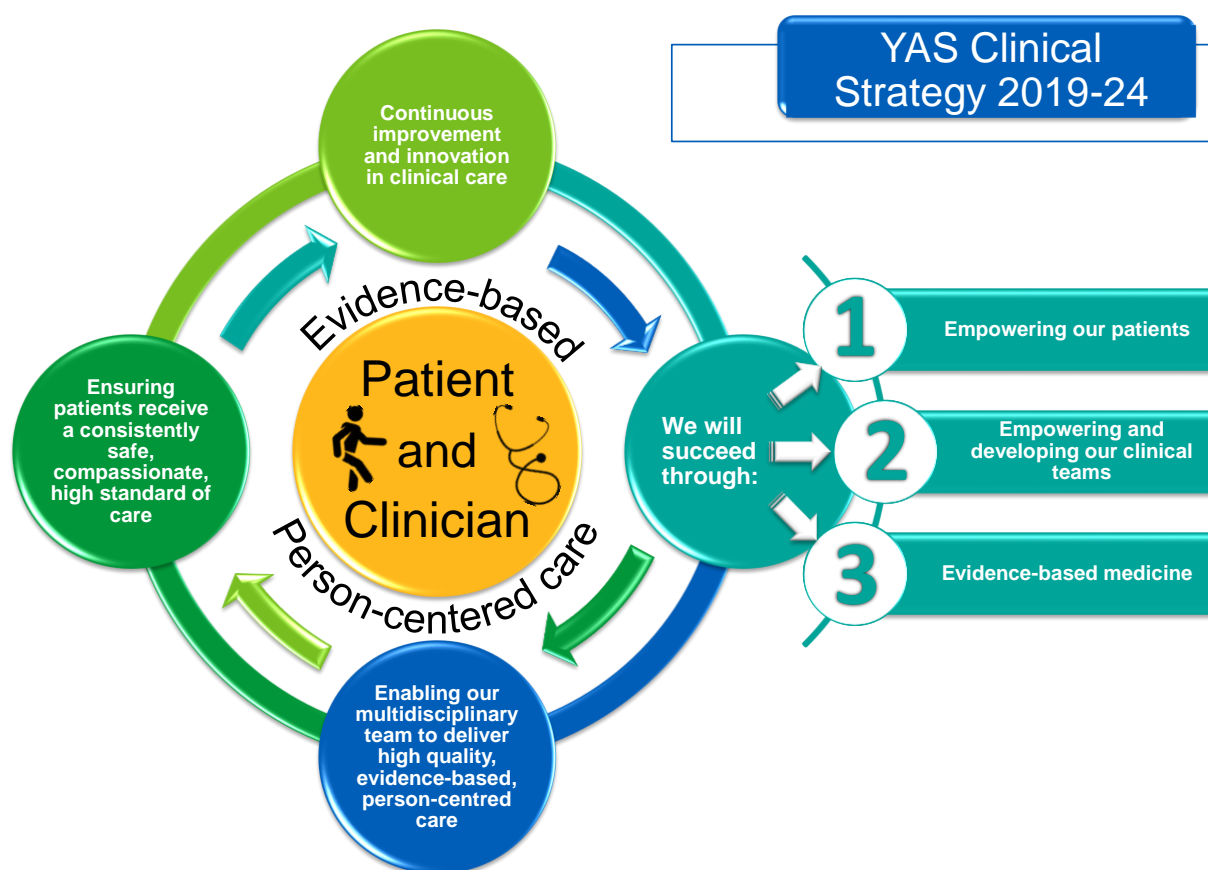
The IUC Clinical Advice Service is central to the Integrated Urgent Care service and offers patient access to *multi- professional clinicians*, both experienced generalists and specialists, such as mental health nurses. These clinicians are available to support clinicians in the community such as paramedics and nurses in nursing homes.

The Mental Health Team will work as one team with Pharmacists and Paramedics in the Clinical Advice Service and as part of the response team, assessing the patients needs, and providing the *right care, at the right time in the right place*.

Summary

“I want to be treated with dignity and respect. I want my care and support to be coordinated so I only have to tell my story once. I want to be treated as an individual - not as a bag of body parts or problems. I want to talk about my priorities; not necessarily yours. I want to plan my care with people who understand me and my carers, allow me control, and bring together services to achieve the outcomes important to me.”

This strategy for Person-centred, Evidence-based Care puts the patient and clinician at the heart of the organisation, demonstrates our ambition for the future and provides the road map to support our ambition to become an integrated urgent and emergency care provider, driving improvements in patient outcomes, patient safety and clinical quality.



Appendix 1 - Responsibilities

Trust Board

The Trust Board is responsible for ensuring that the Trust delivers high quality, safe clinical care as part of an integrated governance approach.

Chief Executive

The Chief Executive has overall accountability and responsibility for ensuring the Trust meets its statutory and legal requirements and adheres to guidance issued by the Department of Health.

Executive Medical Director

The Executive Medical Director has executive accountability for clinical effectiveness, development and leadership and is responsible for providing assurance to the Board on the implementation of this strategy via the Quality Committee.

Executive Director for Quality, Governance and Performance Assurance

The Executive Director for Quality, Governance and Performance Assurance is accountable for leading on compliance with regulatory quality standards, development and delivery of the Quality Improvement Strategy. The Director has responsibility for ensuring effective learning from complaints and incidents to support the provision of high quality of patient care, and continual improvement initiatives.

Senior Clinical Team

The senior multi-disciplinary clinical team is responsible for the operational delivery of the strategy and leading by example in the delivery of safe, high quality, evidence-based, compassionate, person-centred care.

Frontline Clinical Team

All clinicians and healthcare professionals are responsible for providing clinically effective and safe care and treatment, which is supported through active participation in clinical audit, clinical development and research, they should:

- Strive for continuous quality improvement to patient services and the provision of high quality, safe, accountable care.
- Have a person-centred approach that includes treating patients courteously, involving them in decisions about their care and keeping them informed, wherever possible supporting a positive patient experience.
- Have a commitment to quality, which ensures that health professionals are up to date in their practices and properly supervised where necessary.
- Prevent patient harm, with a commitment to learn from mistakes and share that learning with others.
- Report clinical and other incidents, including verbal complaints.
- Discuss and support improvements in patient care and standards of service (e.g. taking part in clinical audit, making suggestions for improvement, discussing and identifying patient safety risks).

Appendix 2 - References

1. Five Year Forward View, October 2014
2. Multi-professional framework for advanced clinical practice in England, Health Education England
3. The patient centred care improvement guide: The Planetree Association and the Picker Institute 2008
4. Multi-professional framework for advanced clinical practice in England, Health Education England
5. What Is Evidence-Based Medicine and Why Should I Care? Dean R Hess- Respiratory care • July 2004 vol. 49 no. 7
6. National Institute of Health Research <http://www.nihr.ac.uk/news/research-active-trusts-have-betterpatient-outcomes-study-shows/2715>, Health Service Journal <https://www.hsj.co.uk/Uploads/y/r/i/Research--Impact-supplement-18th-Nov-2015.pdf>
7. The NHS Long Term Plan
8. An Outcomes Strategy for COPD and Asthma: *NHS Companion Document*
9. Our Commitment to you for end of life care The Government Response to the Review of Choice in End of Life Care 2016

Appendix 3 - Glossary

AP	Advanced Paramedic - An experienced paramedic who has undertaken, or is working towards a master's degree in a subject relevant to their practice. They will have acquired and continue to demonstrate an expert knowledge base, complex decision-making skills, competence and judgement in their area of advanced practice.
ALS	Advanced Life Support - standardised national course teaching evidence-based resuscitation guidelines and skills to healthcare professionals in the United Kingdom.
BASICS	British Association for Immediate Care – A network of volunteer emergency doctors who provide immediate access to specialist medical care.
CAS	Core Clinical Advice Service – Multi-professional team of generalists and specialist clinicians providing remote clinical assessment and support to patients and other Health Care Professionals, such as Paramedics and nurses in Nursing Homes.
CFR	Community First Responder – Volunteers who respond to local emergency calls and provide life-saving first aid.
COPD	Chronic Obstructive Pulmonary Disease - the name for a group of lung conditions that cause breathing difficulties. It includes emphysema (damage to the air sacs in the lungs) and chronic bronchitis (long-term inflammation of the airways).
DCA	Double Crewed Ambulance
ED	Emergency Department - The emergency department assesses and treats people with major trauma, serious injuries and those in need of emergency treatment.
ELS	Essential Life Support – the provision of high quality chest compressions and the use of an Automated External Defibrillator previously known as Basic Life Support.
EOC	Emergency Operations Centre – Central 999 call centre, dispatch, command and control facility.
FAST	Face, Arms, Speech Test - FAST is an easy way to remember and identify the most common symptoms of a stroke.
HART	Hazardous Area Response Team - specially recruited and trained Paramedics who provide the ambulance response to major incidents involving hazardous materials, or which present hazardous environments, that have occurred as a result of an accident or incident.
HASU	Hyper Acute Stroke Unit – Provide initial investigation, treatment and care immediately following a stroke.

HCP	Health Care Professional – e.g. General Practitioner, Paramedic, Nurse
HEMS	Helicopter Emergency Medical Service
ICS	Integrated Care System - Integrated care systems (ICSs) have evolved from STPs and take the lead in planning and commissioning care for their populations and providing system leadership. They bring together NHS providers and commissioners and local authorities to work in partnership in improving health and care in their area.
IUC	Integrated Urgent Care - builds upon the success of NHS 111 in simplifying access for patients and in which organisations collaborate to deliver high quality, clinical assessment, advice and treatment and to shared standards and processes and with clear accountability and leadership.
LAT	Lower Acuity Transport
LHCRE	Local Health and Care Record Exemplar - is a regional collaboration across health, care and local authorities to develop shared health and care records for the people in their region.
MECC	Making Every Contact Count - is an evidence-based approach to improving people's health and wellbeing by helping them change their behaviour. The MECC approach enables health and care workers to engage people in conversations about improving their health by addressing risk factors such as alcohol, diet, physical activity, smoking and mental wellbeing.
MTC	Major Trauma Centre - is part of a major trauma network. It is a specialist hospital responsible for the care of the most severely injured patients involved in major trauma. It provides 24/7 emergency access to consultant-delivered care for a wide range of specialist clinical services and expertise.
NEWS2	National Early Warning Score - is based on a simple scoring system in which a score is allocated to six physiological measurements already taken – respiratory rate, oxygen saturations, temperature, systolic blood pressure, pulse rate and level of consciousness. The NEWS has been shown to be a highly effective system for detecting patients at risk of clinical deterioration or death, prompting a more timely clinical response, with the aim of improving patient outcomes in the NHS.
PCN	Primary Care Network - A primary care network consists of groups of general practices working together with a range of local providers, including across primary care, community services, social care and the voluntary sector, to offer more personalised, coordinated health and social care to their local populations. Networks would normally be based around natural local communities typically serving populations of at least 30,000 and not tending to exceed 50,000. They should be small enough to maintain the traditional strengths of general practice but at the same time large enough to provide resilience and support the development of integrated teams.

RRV	Rapid Response Vehicle
ROSC	Return of Spontaneous Circulation - is resumption of sustained perfusing cardiac activity associated with significant respiratory effort after cardiac arrest. Signs of ROSC include breathing, coughing, or movement and a palpable pulse or a measurable blood pressure. Cardiopulmonary resuscitation and defibrillation increase the chances of ROSC.
SP	Specialist Paramedic - a paramedic who has undertaken, or is working towards a postgraduate diploma (PGDip) in a subject relevant to their practice. They will have acquired and continue to demonstrate an enhanced knowledge base, complex decision-making skills, competence and judgement in their area of specialist practice.
STeMI	ST elevation Myocardial Infarction - a STeMI is the most serious type of heart attack, where there is a long interruption to the blood supply. This is caused by a total blockage of the coronary artery, which can cause extensive damage to a large area of the heart.
TL	Team Leader
UTC/UCC	Urgent Treatment Centre/Urgent Care Centre - are GP-led, open at least 12 hours a day, every day, offer appointments that can be booked through NHS 111 or through a GP referral, and are equipped to diagnose and deal with many of the most common ailments people attend A&E for.
YAA	Yorkshire Air Ambulance
YAS ePR	YAS electronic Patient Record - designed and developed by our staff for our staff, the intuitive and easy-to-use YAS ePR electronically captures assessment and interaction information about our patients. This enables us to accurately share relevant and timely information with other healthcare providers involved in their care, leading to improved quality, clinical safety, audit and patient experience.
YCCT	Yorkshire Critical Care Team - Yorkshire Ambulance Service NHS Trust (YAS) has worked with the Yorkshire Air Ambulance (YAA) and commissioners to launch a new Yorkshire Critical Care Team which will see 11 consultants in emergency medicine and anaesthesia working on the life-saving helicopter 12 hours a day, every day of the year.
YHCR	Yorkshire and Humber Care Record - The Yorkshire and Humber Care Record is a shared system developed through the LHCRE that allows Healthcare staff within the Yorkshire and Humber Health and Social Care community to appropriately access the most up-to-date and correct information about patients, to deliver the best possible care.
WYMRT	West Yorkshire Medic Response Team - West Yorkshire Medic Response Team is a registered charity that provides a trauma team to deliver prehospital care within West Yorkshire.