Version Six Updated February 2018, with 2017/19 HRG4+ Codes

Ambulatory Emergency Care Network

Contains updated surgical section with new clinical scenarios

Directory of Ambulatory Emergency Care for Adults

Click here to get started

Previous version August 2016

Ambulatory Emergency Care Network
NHS Elect
Suite 2 Adam House
7-10 Adam Street
LONDON
WC2N 6AA

This is the sixth edition
published in February 2018.

© Copyright NHS Elect 2018

Directory of Ambulatory Emergency Care for Adults is published by NHS Elect, Suite 2 Adam House, 7-10 Adam Street, London, WC2N 6AA.

The Directory of Ambulatory Emergency Care for Adults, belongs to NHS Elect. Any third party concepts and trademarked devices have been reproduced in this document with the permission of the respective copyright/IP owners. All rights reserved.

This publication may be reproduced and circulated by and between NHS England staff, related networks and officially contracted third parties only.

This includes transmission in any form or by any means, including email, photocopying, microfilming, and recording. All copies of this publication must incorporate this Copyright Notice.

Outside of NHS England staff, related networks and officially contracted third parties, this publication may not be reproduced, or stored in any electronic form or transmitted in any form or by any means, either in whole or in part, including email, photocopying, microfilming, and recording, without the prior written permission of NHS Elect, application for which should be in writing and addressed to: **info@nhselect.org.uk** (and marked 're. permissions'). Such written permission must always be obtained before any part of this publication is stored in a retrieval system of any nature, or electronically.

Any unauthorised copying, storage, reproduction or other use of this publication or any part of it is strictly prohibited and may give rise to civil liabilities and criminal prosecution.

Contents

Directory User Guide 4
Foreword by Jim Mackey 5
Foreword by Dr Vincent Connolly 6

Section 1 An Introduction to Ambulatory Emergency Care (AEC)

Introduction to AEC

Who is the Directory of AEC for? 8
Context 8
What is Ambulatory Emergency Care? 9
Principles of AEC 11

Developing AEC Services

Team Working 12
Environment and Facilities 14
Patient Selection 15
Surgical Specialties 17
Nursing Practice in AEC 20
Pitfalls 22
Commissioning for AEC 23
Case Management Plans 24
Patient Information and Experience 25
Measurement and AEC 27
Tariff and AEC 31
Using the ICD-10 Codes in the Directory 32
Methodology Used to Develop New Clinical Scenarios 34

Section 2 Directory of Clinical Conditions

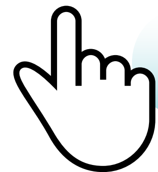
Specialties

General Medicine 36
Trauma and Orthopaedics 54
General Surgery 58
Urology 65
Obstetrics and Gynaecology 69

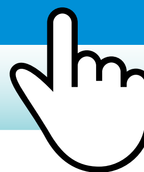
Section 3 Further Information and Support for Implementing AEC

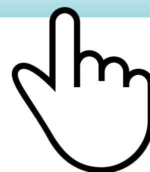
Ambulatory Emergency Care Website 73
Acknowledgements 75

© NHS Elect



The home button returns you to the main contents page.

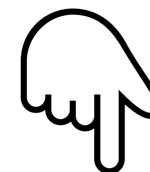




You can navigate to sections and sub-sections within this Directory by clicking either the section header or the sub-section heading.

Directory User Guide

The left and right circle buttons take you to the previous or following page respectively.



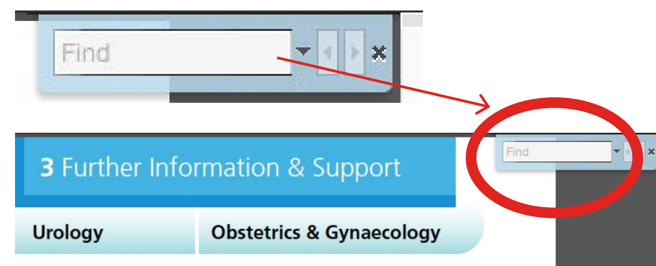
Please view this Directory pdf in **Adobe Acrobat Reader** or **Adobe Acrobat Professional** in order for the internal interactive elements to function.

You can download for free Adobe Acrobat Reader by clicking the icon below.

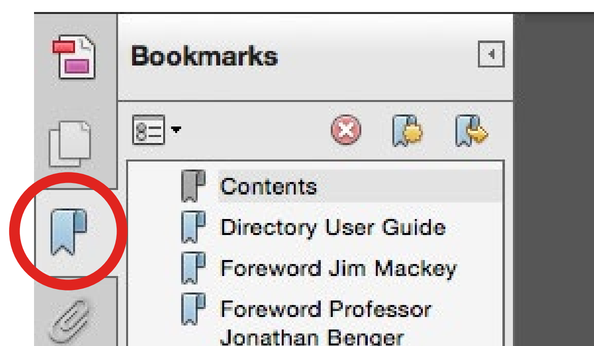
Or visit: https://get.adobe.com/uk/reader

Search Facility

Once the pdf is opened via Adobe Acrobat you will notice a search bar in the top left hand corner. This is a useful tool for searching specific conditions/codes/keywords etc.

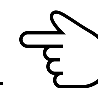


Bookmarks have also been added to the pdf file to help with locating specific information.



Hyperlinks

All underlined copy within the Directory (including content pages) are clickable hyperlinks to either external websites, pdf downloads or internal page links.

There are also clickable image links in the Directory, look for the hand icon. 

ICD-10 codes

To view the ICD-10 codes click the Show ICD-10 button.

Note: If you wish to print out a copy of the Directory with all the ICD-10 codes visable, open the pdf and print, but **do not** click any of the Show/Hide ICD-10 buttons before printing.

© NHS Elect

Foreword

One of the key pressures in emergency services is managing increasing demand. Traditionally once a quick assessment is made emergency patients are admitted to hospital to receive diagnostics and treatment.

The Ambulatory Emergency Care approach explained in this guide describes a model where systems are redesigned to provide same day emergency care. This means about a third of admitted patients are seen, diagnosed, treated and discharged same day to continue their treatment at home or in a community setting, leaving admission to a hospital bed reserved only for very sick patients.

As part of the A&E Plan, we are mandating a number of priorities to enhance the quality of patient care; a key element of the plan is the implementation of ambulatory emergency care. A requirement of the plan is that all acute hospitals must have a consultant led AEC service operating at least 12 hours each weekday.

Physicians and clinical teams currently providing this model of care agree that by implementing the key principles of AEC, we can start to address issues in managing emergency care pathways, whilst significantly improving patient experience. AEC is a cost effective, high-quality, patient-focused service that delivers senior review for effective care. Hence our move to make sure that these principles are rapidly operating at scale and systematically across all trusts.

We know that ambulatory emergency care is a key component of delivering safe, effective, high-quality care for patients, and as such should be an integral part of any urgent and emergency care system.

We have already seen the positive impact that a similar approach has had in improving elective care with the adoption of day surgery and know that AEC can do the same for emergency care. The challenge is to use the principles described in this Directory to establish an AEC service that works within your local system.

Jim Mackey
Chief Executive
NHS Improvement

© NHS Elect

Foreword

In the last 12 months there has been a step change in AEC activity, this year's Society for Acute Medicine Benchmarking Audit described a 60% increase in reported AEC activity in acute medicine. It also showed enormous variation across the country with 10% of sites managing over 30% of acute medicine through AEC and 10% reporting zero AEC activity. What does this tell us? My interpretation is that AEC is still evolving, organisations and clinical leaders are still developing their thinking and models. This takes us to the need to develop a common understanding and principles that underpin high quality AEC. Through the AEC Network there has been a reworking of the definition of AEC to take into account that AEC is focussed on delivering care to patients who would otherwise be admitted to an in-patient bed and also takes account of the large amount of work associated with discharging in-patients safely by offering an assured follow up process. There is very little data to indicate the direct impact of this element of AEC activity.

Surgical AEC is becoming a movement and developing momentum. The model builds on eliminating unnecessary steps, front loading senior decision making and co-ordinating the system to ensure investigation capacity and theatre availability are synchronised. For both medicine and surgery AEC has challenged the way that senior doctors work and many have embraced this, recognising the benefits of early involvement in patient care, alongside access to diagnostics.

AEC developed from the grassroots of the Health Service, an approach born of necessity to address the challenges of rising emergency admissions and hospital crowding. There have been and remain many challenges, in particular, measurement of AEC activity, the financial model, staffing arrangements, location and environment for AEC services and access to the service. Some of these can be resolved locally but others require intervention from NHS bodies to shape the system so that providing AEC services is made easier. Recently there has been the best practice tariff, support from colleges and incorporation into national policy but it still isn't easy as there are still many acute medicine services reporting zero or very low levels of AEC activity.

The Directory serves as a blueprint to support the development of AEC both locally and nationally. It sets out the principles of what a good service should look like, it offers guidance on setting up and improving services. It has evolved over the years based on innovations developed by colleagues which we hope it will continue to do.

The challenge for us now is how far can AEC services develop? The SAMBA17 data showed that the vast majority of emergency admissions had a NEWS of 2 or less. How many of these patients could be offered AEC with the benefit of reduced in-patient stays, reduced crowding and better patient experience?

Best wishes

Dr Vincent Connolly
Regional Medical Director
North Region, NHS Improvement
President of the British Association of Ambulatory Emergency Care

© NHS Elect

1 An Introduction to Ambulatory Emergency Care (AEC)

Introduction to AEC

Who is the Directory of AEC for? 8
Context 8
What is Ambulatory Emergency Care? 9
Principles of AEC 11

Developing AEC Services

Team Working 12
Environment and Facilities 14
Patient Selection 15
Surgical Specialties 17
Nursing Practice in AEC 20
Pitfalls 22
Commissioning for AEC 23
Case Management Plans 24
Patient Information and Experience 25
Measurement and AEC 27
Tariff and AEC 31
Using the ICD-10 Codes in the Directory 32
Methodology Used to Develop New Clinical Scenarios 34

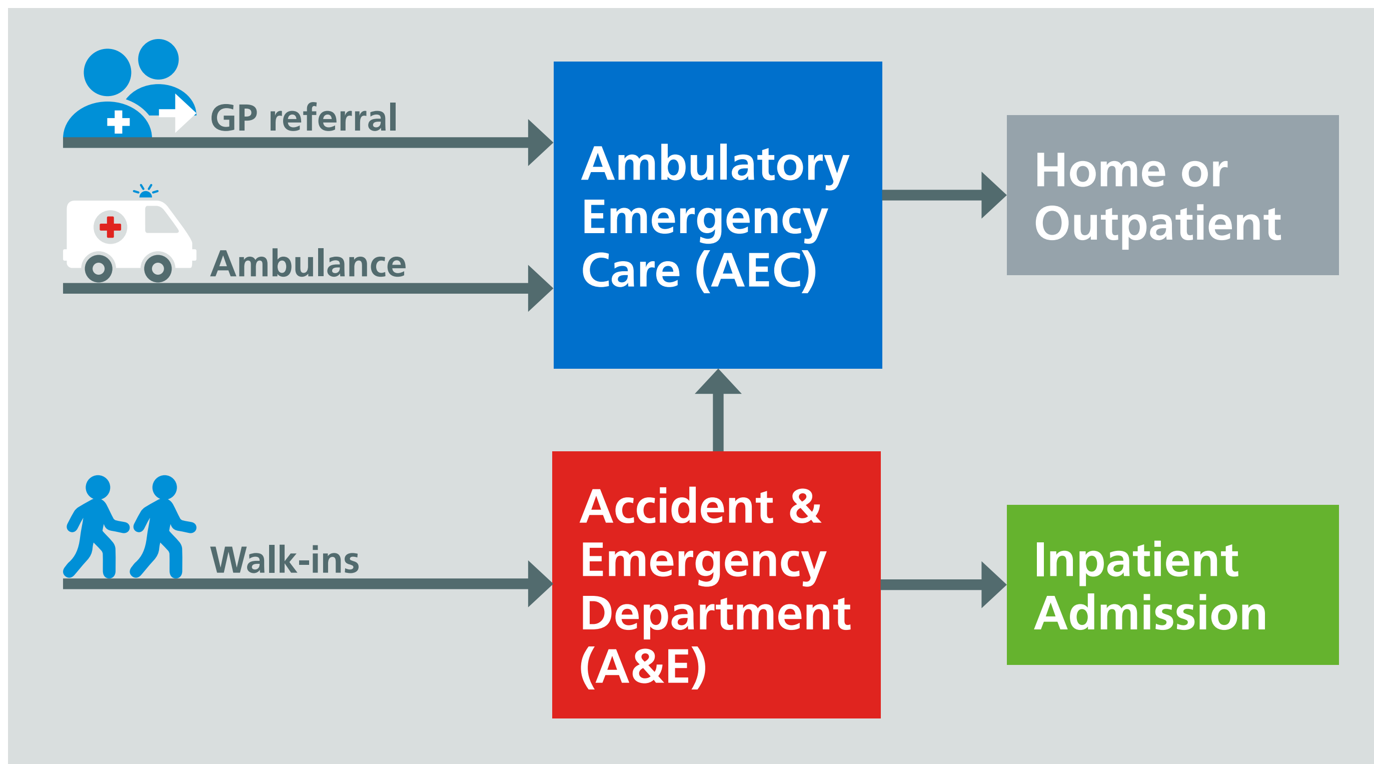
© NHS Elect

Who is the Directory of AEC for?

This guide is for anyone involved in the design or delivery of emergency care services, both in and outside of a hospital setting, including ambulance and community services. You will find the guide useful if you are a clinician, manager, GP, commissioner, information analyst or healthcare student.

If you would like to find out more about AEC, visit our website at: **www.ambulatoryemergencycare.org.uk**

In this edition of the Directory we aim to update the list of conditions and ICD-10 codes as well as providing operational guidance on maximising AEC.

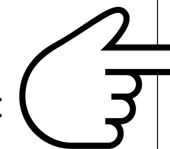


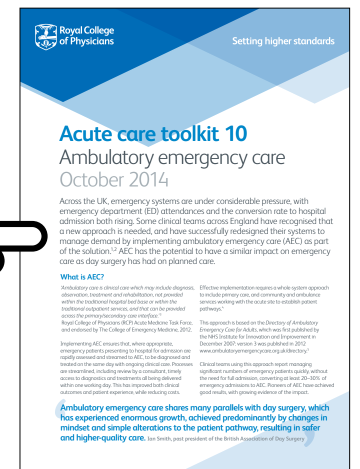
Context

The underlying principle of Ambulatory Emergency Care (AEC) is that a significant proportion of adult patients requiring emergency care can be managed safely and appropriately on the same day, either without admission to a hospital bed at all, or admission for only a number of hours. This is achieved by streamlining access to diagnostic services and reorganising the working patterns of emergency care clinicians to be able to provide early decision making and treatment. There is also a need for immediate access to support services in the community to provide robust safety net systems and optimise integrated care. This is particularly important for managing the frail elderly on an AEC Pathway.

Over recent years AEC has become an accepted and recognised treatment modality and has led to the Royal College of Physicians producing the "Acute care toolkit 10: Ambulatory Emergency Care" (2014) which lists the principles needed within a system to maximise AEC.

You can access the toolkit here:





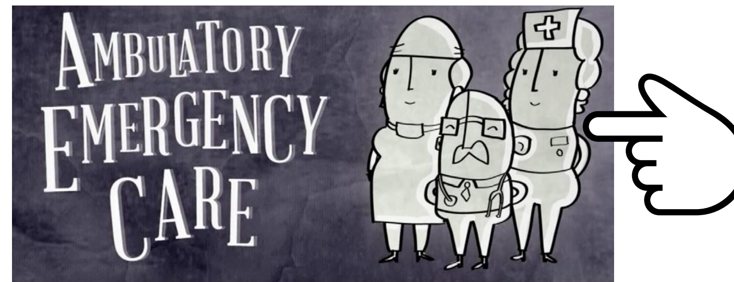
What is Ambulatory Emergency Care?

NHS England recognises the need to make AEC services an integral part of emergency care. With this in mind acute hospitals are required to have AEC services in place 14 hours a day, seven days a week as part of the front door model for emergency care.

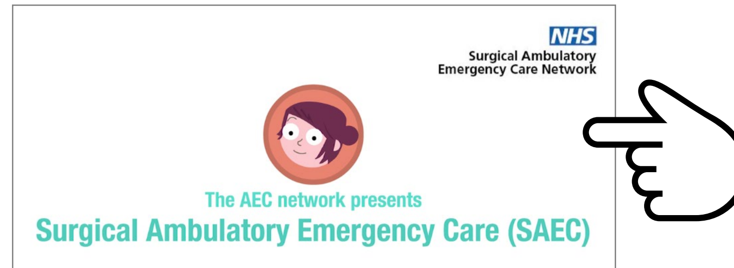
Increased adoption in Acute Medicine has led to developments in Surgery and within subspecialties leading to a mind shift in patient care and a social movement to convert as much emergency care as possible to same day care.

To understand more about the social movement driving the adoption of AEC view our short film **here**.

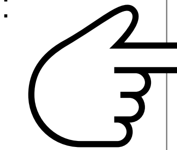
This model of care is explained in a short film created for patients and clinicians alike, you can view it at:

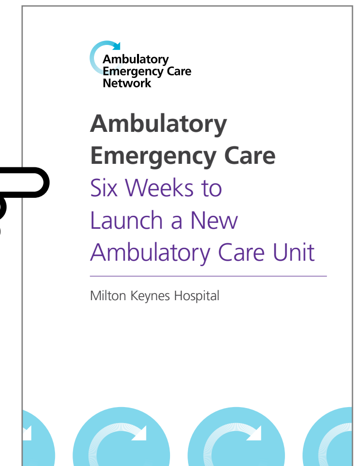


You can view a short film about SAEC at:



Where AEC has been successfully implemented, it has led to a change in mindset; with AEC becoming the default position for emergency patients unless admission is clinically indicated. The change in mindset for AEC has been likened to the development of Day Surgery. The team at Milton Keynes NHS FT describe how they implemented AEC in a six week period. You can read their story here:





Definition of AEC

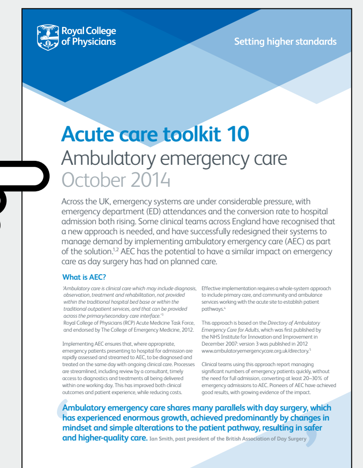
AEC is defined as the provision of same day emergency care for patients being considered for emergency admission.

The Royal College of Physicians define AEC as:

"Ambulatory Care is clinical care which may include diagnosis, observation, treatment and rehabilitation, not provided within the traditional hospital bed base or within the traditional outpatient services, that can be provided across the primary/secondary care interface."

The Royal College of Physicians – Acute Medicine Task Force and endorsed by The Royal College of Emergency Medicine.

You can access the toolkit here:



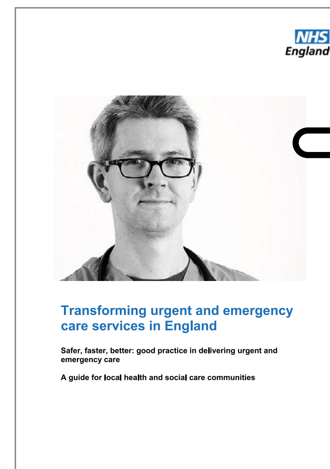
© NHS Elect

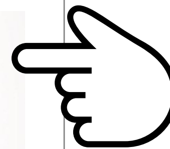
The impact of AEC on the urgent and emergency care system has also been recognised by NHS England in the document Safer, faster, better: good practice in delivering urgent and emergency care (2015), where AEC is seen as a key component of a well-resourced system. Included in the recommendations is that *"Each acute site should consider establishing an AEC facility that is resourced to offer emergency care to patients in a non-bedded setting"* (NHS England, 2015). Evidence from this review highlights areas where AEC can impact and make the case for implementation compelling, these are:

- Preventing crowding in emergency departments improves patient outcomes and experience and reduces inpatient length of stay.
- Getting patients into the right ward first time reduces mortality, harm and length of stay.
- Patients on the urgent and emergency care pathway should be seen by a senior clinical decision maker as soon as possible, whether this is in the setting of primary or secondary care. This improves outcomes and reduces length of stay, hospitalisation rates and cost.
- Frail and vulnerable patients, including those with disabilities and mental health problems of all ages, should be managed assertively but holistically (to cover medical, psychological, social and functional domains) and their care transferred back into the community as soon as they are medically fit, to avoid them losing their ability to self-care.
- Ambulatory emergency care is clinically safe, reduces unnecessary overnight hospital stays and hospital inpatient bed days.

(NHS England, 2015)

It is recommended that you use 'Safer, faster, better' as a basis to inform the design of your system for emergency care. To learn more:



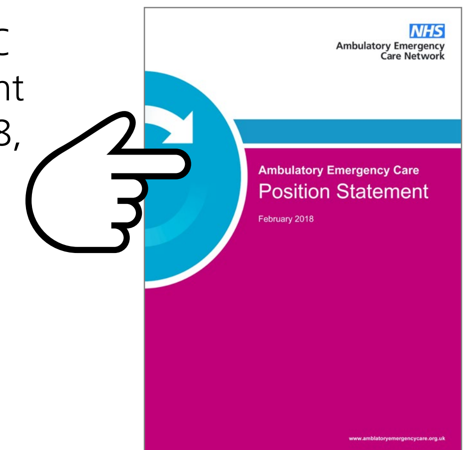


Uptake of AEC as a clinical model has rapidly accelerated in the last five to ten years, with ambulatory care now a widely recognised and respected treatment modality, delivered in the majority of acute trusts. Initially adopted within Emergency Departments (EDs) and acute medicine, the model is now spreading to surgery and some sub-specialties.

The aim of AEC is to convert non-elective bedded care to same day ambulatory care at every opportunity. This will reduce emergency admissions, reduce the need for a short stay admission, whilst improving patient and staff experience. The hypothesis behind AEC is that a significant proportion of adult patients requiring emergency care can be managed safely and appropriately on the same day, either without admission to a hospital bed at all, or with admission for a minimal period not extending into an overnight stay. Same day emergency care can be successfully achieved by:

- streamlining access to diagnostic services
- reorganising the working patterns of clinical teams to provide early senior decision making and rapid treatment; and
- collaborative working with support services in the community to provide robust safety net systems and optimise integrated care.

To access the AEC Position Statement published in 2018, please click here:

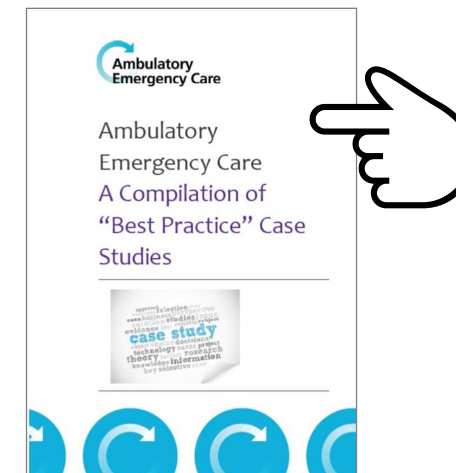


Principles of AEC

The overarching principle of AEC is that all emergency patients should be considered ambulatory until proven otherwise. Principles listed in the RCP toolkit (2014) are:

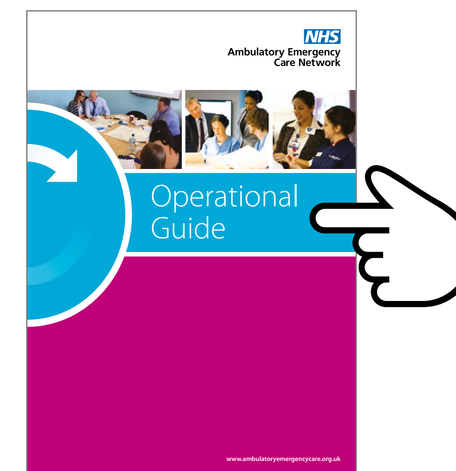
1. Senior clinical input is needed at the point of referral to redirect suitable patients to ambulatory care
2. Clear exclusion criteria based on the NHS early warning score (NEWS) should be developed to maximise patient flow to ambulatory care
3. Where possible the ambulatory emergency care service should be closely located to A&E
4. Staffing and resources should be organised to provide rapid assessment, diagnosis and treatment on the same day
5. The time standards in AEC should match the Clinical Quality Indicators for A&E i.e. time to initial assessment: 15 minutes, time to medical assessment; 60 minutes
6. Patients should be informed early in their journey (ideally in A&E or by the GP) that they are likely to receive treatment that day and are unlikely to be admitted overnight to manage their expectations and those of their family
7. Secondary and primary care services should be geared around patient needs and work together to provide ongoing care outside of hospital to avoid a full admission
8. Staff training is needed across the local healthcare system to ensure appropriate patients are streamed to ambulatory care
9. Comprehensive records must be kept and discharge summaries sent to primary care within 24 hours
10. Providers must work with commissioners to agree how AEC activity will be recorded, reported and funded
11. Clear measures must be adopted and monitored to assess the impact, quality and efficiency of AEC

To understand how this might work in practice you can access a compilation of case studies here:



Advice on the design and development of your AEC service is described in the following sections.

An operational handbook is available, please click the image below:



© NHS Elect

Team Working

Clinical leadership to develop Ambulatory Emergency Care is crucial for its safe and effective design and delivery. Senior clinical personnel with expertise in illness severity, co-morbidity and functional assessment with the experience to make balanced risk decisions are required. AEC can be delivered in a range of locations and it is for each local healthcare system to decide on the appropriate configuration of facilities to develop and continue to improve services. Many AEC pioneers started from very humble beginnings, including corridors and cupboards, but, driven by the passion and determination of clinicians, as the case for service expansion became evident, they were able to progress to more appropriate facilities.

The configuration of your AEC team should be guided by the aims of the service and the identified potential activity and case mix. The underlying principle of early access to a senior decision maker is key to ensuring the capability to process patients at pace and scale. Consultations with senor clinicians result in more streamlined assessments, fewer investigations and fewer hand-offs in care. “A Senior Decision Maker” is usually a Consultant level doctor but can be experienced middle grade doctors or ANPs, provided they are empowered to complete the patient episode in a similarly efficient manner.

Having allocated medical and nurse staffing is essential to maximise an AEC service. Where clinical staff are expected to cover an area in addition to AEC it is unlikely that sufficient pace will be maintained with either workload. A further problem that can arise when AEC is mixed with other patient streams is gravitation of staff to the sickest patient, which although understandable, will take focus away from the high turnover AEC stream. Non-clinical time should also be built into job plans, especially where the AEC is undergoing active development work, to allow adequate capacity to deliver all aspects of the role and ensure consistent clinical cover.

Typical Team Composition:

- **Medical Staff** – Should be senior and experienced working in a focused assessment manner. An AEC mindset is more important than whether the staff come from ED, AMU or General Medicine and there are good examples in the Network of all of these models. Some organisations have had great success with bringing GPs in to AEC with the wealth of knowledge of community services they bring. Bringing in staff from other specialties can further expand the range of patients managed via AEC.

- **Advanced Nurse Practitioners** – ANPs can be a highly valuable resource to AEC and provide a seamless combination of medical and nursing care. Nursing roles in AEC are discussed in the section “Nursing Practice in AEC”.

- **Registered Nurses** – Nurses are the component of the team that makes the service cohesive and who navigate the patient through a complex and unfamiliar system of care. Nurses who have experience of working in an assessment environment and good knowledge of the services available hospital and community wide will be invaluable as the backbone of the nursing workforce.

© NHS Elect

- **Healthcare Support Workers** – These roles free up Registered Nurses to stay on the unit and provide the clinical care required as AEC treatment can often mean moving patients through different diagnostic departments. These workers can undertake tasks such as phlebotomy, basic health assessments and point of care testing when they have undergone appropriate training, releasing RNs to deal with more complex processes. There is also the option of combining some admin functions to the role depending on local needs.

- **Therapists** – The input of therapists cannot be underestimated especially where the service is also seeing a cohort of patients with frailty. Access to therapies will allow AEC to manage patients with a much wider range of mobility and avoid admission of those who are most at risk of deconditioning during an inpatient spell. Some organisations have secured their own therapists while others have set up access agreements with MAU or ED based therapy teams. Ensure internal professional standards support and appropriate response time and cover can be provided into the evenings and at weekends.

- **Pharmacy** – Dedicated pharmacy support will help with medication reconciliation for polypharmacy patients and ensure minimal delays in obtaining discharge medications. It is also helpful to identify commonly used discharge medicines and consider having a stock of pre-packed meds to speed up discharge processes.

- **Admin Staff** – Staff to register patients and handle as many admin tasks as possible to free up clinical time are essential. IT processes for AEC in patient administration systems can often be complicated and non-intuitive so experienced admin staff or appropriate support should be available.

AEC presents a good environment for learning and development of junior staff and students with a broad case mix and high turnover of patients. This must be balanced against the need to process patients in a timely manner without creating steps in the journey that do not add value. AEC staffing should not be based on high proportions of junior staff "doing the work" as this can lead to extended assessments, unnecessary investigation and risk aversion in management plans.

Beyond the internal AEC team there are a number of other professions and departments where close working is needed to ensure operation is as smooth as possible and these relationships should be cultivated and formalised through internal professional standards. There will be some local variation but at a minimum these would include:

- Emergency Department
- Urgent Care Centre/Walk in Centre/Minor Injuries Unit
- Acute Assessment Unit
- Local GP forum
- Radiology
- Pathology
- Pharmacy
- Therapies
- Discharge Lounge
- Patient Transport
- Ambulance Service
- PALS
- Outpatients Manager
- Bed Manager

© NHS Elect

Environment and Facilities

AEC Units should be designed in such a way that the aims of the service can be met whilst maintaining privacy and dignity of patients. Consideration will need to be given to the case mix and demand. It is likely that as the service embeds demand will increase so plans will need to take into account early expansion to meet this growth.

Units have been developed by taking ward space from AMUs, using outpatient areas and collocating with ED. All options will have advantages and disadvantages. One of the main pitfalls to avoid is bedding of the AEC area as this is counter productive and will have a significant negative impact on patient experience and flow. It leads to variation in capacity and can take days to recover from; Network members have access to our guide on preventing bedding of AEC units. There are some basic principles that we know from experience can maximise success:

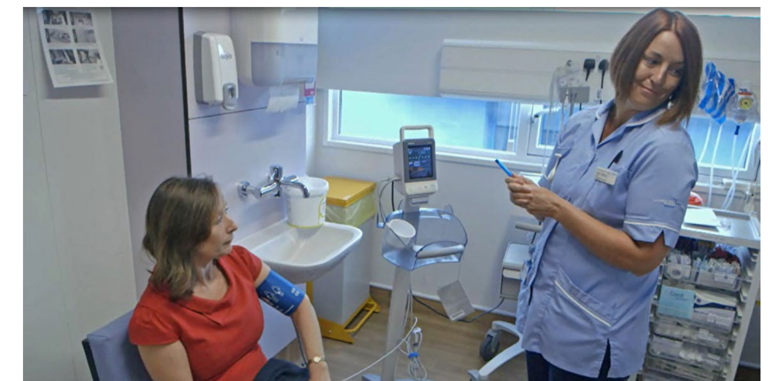
- **Using treatment chairs rather than trolleys, and trolleys rather than beds** – This reinforces a discharge mindset and avoids the temptation of bedding the AEC area. Some trolleys will be needed for patients who need to lie down.

- **Avoid making the area look like an inpatient ward** – If AEC looks like a ward it will be treated like a ward and bedding is highly likely.

- **Avoid making the area look like an outpatient clinic** – In this situation a misunderstanding can be created that AEC simply provides urgent outpatient management. This can attract activity that is low acuity, low complexity and often elective meaning that impact on emergency inpatient flow will be reduced.

- **An appropriate waiting area** – "hot-seating" patients so that they are only in a treatment chair/trolley while receiving a clinical contact reinforces the discharge mindset and allows greater numbers to be managed in the unit. The waiting area also allows management of peaks and troughs of arrival. The waiting area will need to be designed in such a way that patients are comfortable, have some form of entertainment and can have access to refreshments.

- **A treatment room or dedicated area for performing invasive procedures** – This will allow a greater range of patients to be processed and reduces unnecessary handoffs of care to other departments.



- **Dedicated initial assessment area** – AEC should maintain time standards similar to Emergency Departments in terms of time to assessments to ensure safety and efficiency.

© NHS Elect

- **Use methods to enable remote management where appropriate** – Many patients may be able to leave the unit during wait times and return when the next stage of treatment is ready. Calling a patient on their mobile phone or giving them a pager may facilitate this. There may also be opportunities to manage patients by phone especially when discussing results that are not available on the day of test to remove the need to return to hospital.

- **Proximity to the Emergency Department and Acute Assessment Units** – There will be a flow of patients between ED, AEC and Acute Assessment Units, this will be more efficient where the physical distance is reduced. Co-location can also foster an environment of shared learning.

- **Good access to diagnostic departments** – AEC management often involves multiple diagnostic services. An easy route to these departments can enable patients to make their own way when appropriate, and where an escort is required will minimise staff time off the unit.

For a virtual tour of an AEC Unit click here.

Patient Selection

Selecting the right patients for AEC is essential to maintain safety and maximise the impact on emergency flows. Remember the underlying principle of AEC is to convert traditional inpatient care into same day emergency care.

A process based model is recommended to maximise AEC. This means the system is designed for all patients to be streamed through AEC unless clinically unstable. With this approach you might expect to convert around 10% of AEC patients to inpatient admission. It is important that this is not seen as failure provided that: at the point of selection, there was a reasonable expectation of safe discharge and the patient has received maximal management. Taking this level of clinical challenge generally produces the most positive impacts on emergency flows. Bed management teams should take into account this potential stream of patients.

It is important that patients who are better served by existing alternative services and pathways are not disadvantaged by transit through AEC as an additional step. An important example of this are patients with suspected cancer. They should continue to be referred directly on a cancer pathway but may be referred **concurrently** to AEC for emergency **symptom management** e.g. a blood transfusion for patients with anaemia.

Diagram 1 below should be used to monitor the case mix of patients treated in an AEC environment to help understand how effective your patient selection is. Where patients are not being managed via the intended pathways, it is important to understand the root cause and manage this. The patient selection matrix below illustrates how analysis of patient selection might be undertaken.

Diagram 1

	Suitable for AEC	Unsuitable for AEC
Seen in AEC	Success (expect about 10% conversion rate)	Risk (patient too sick/complex at time of selection)
		Waste (patient could be managed in other outpatient service)
Not seen in AEC	Missed opportunity	Success (appropriate inpatient care)

© NHS Elect

A key component of the AEC pathway is the clinical conversation at the point of patient referral. This is an ideal opportunity to identify the best environment for the patient to be managed in, and offers real alternatives to transfer to secondary care and to initiate processes to prepare for patient arrival. This applies to internal and external referrals.
We advocate these calls being handled by a dedicated senior decision maker to ensure the quality of response and facilitate a degree of clinical challenge with the referral. Out of hours, robust processes should be in place to allow patients to be booked to attend AEC at the next available opportunity with holding management initiated by the referrer where appropriate.

We have developed four key questions (see opposite) for determining patient suitability for AEC and these can be used to structure the clinical conversation at referral, as a checklist and as an audit tool. These questions require a good understanding of the local system and AEC aims/capabilities.

These questions reflect the needs of the patients but also the capabilities of the AEC service. It is important to reflect on whether the design of your service is limiting the type of patient that can be managed and in turn limiting the impact of AEC on the system.

It is important you work closely with ED staff to maximise the flow of patients to AEC. The following processes can be effective:

- redirecting appropriate patients following triage
- undertaking regular board rounds with ED staff to identify patients
- displaying a list of common AEC conditions to help identify patients
- giving the AEC team access to the ED board to spot patients
- allowing automatic referral from ED for appropriate patients

Key Questions

Is the patient sufficiently stable to be managed in AEC (usually NEWS <=4?)

Is the patient functionally capable of being managed in AEC whilst maintaining their safety, privacy and dignity?

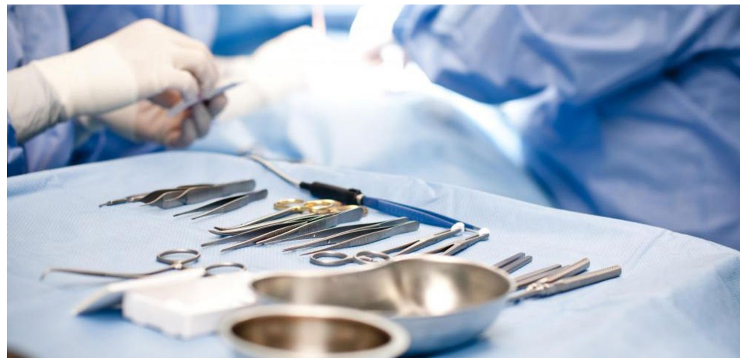
Is there an existing outpatient or community service that could more appropriately meet the patients needs?

Would the patient have been admitted if AEC was not available?

© NHS Elect

Surgical Specialties

A number of units are developing Surgical AEC (SAEC) pathways and this has recently become an area of great interest. Teams have approached this in a variety of ways, some units have integrated surgery and medicine in AEC whilst others have developed an AEC stream as part of an existing Surgical Assessment or Triage Unit. As medical AEC originated with the development of pathways for DVT, surgical AEC has evolved from abscess pathways.



SAEC has also been shown to provide safe, effective and patient-centred care for many adult surgical conditions. These include (but are not restricted to) peri-anal conditions, painful non-obstructed hernia, right iliac fossa pain (mild appendicitis, non-specific abdominal pain and pelvic conditions), right upper quadrant pain (symptomatic gallstones), post-operative /wound issues and mild diverticulitis. Well-established SAEC units report seeing at least 30% of patients referred urgently from General Practitioners or the Emergency Department.

The SAEC pathway should provide streamlined efficient assessment, investigation and treatment (including surgery) avoiding delays in the patient journey through the hospital system (figure 1). The expectation is a good service should avoid unnecessary steps, delays and duplication that add no value to patient care. The SAEC pathway must be safe with robust mechanisms where failure of ambulant care is rapidly recognised and patient care converted to traditional in-patient management as needed. A conversion rate from SAEC management to admission is seen in approximately 10-15% of patients and is considered illustrative of an SAEC that is safe with robust systems in place. Where possible minimal access surgical techniques are encouraged.

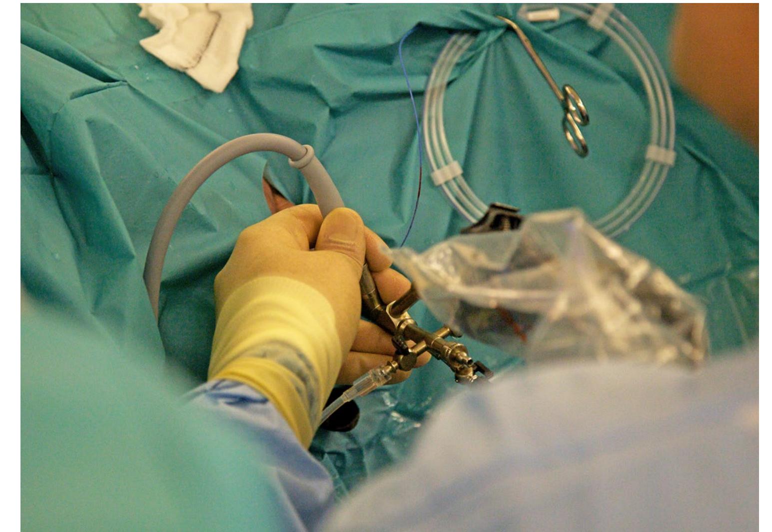
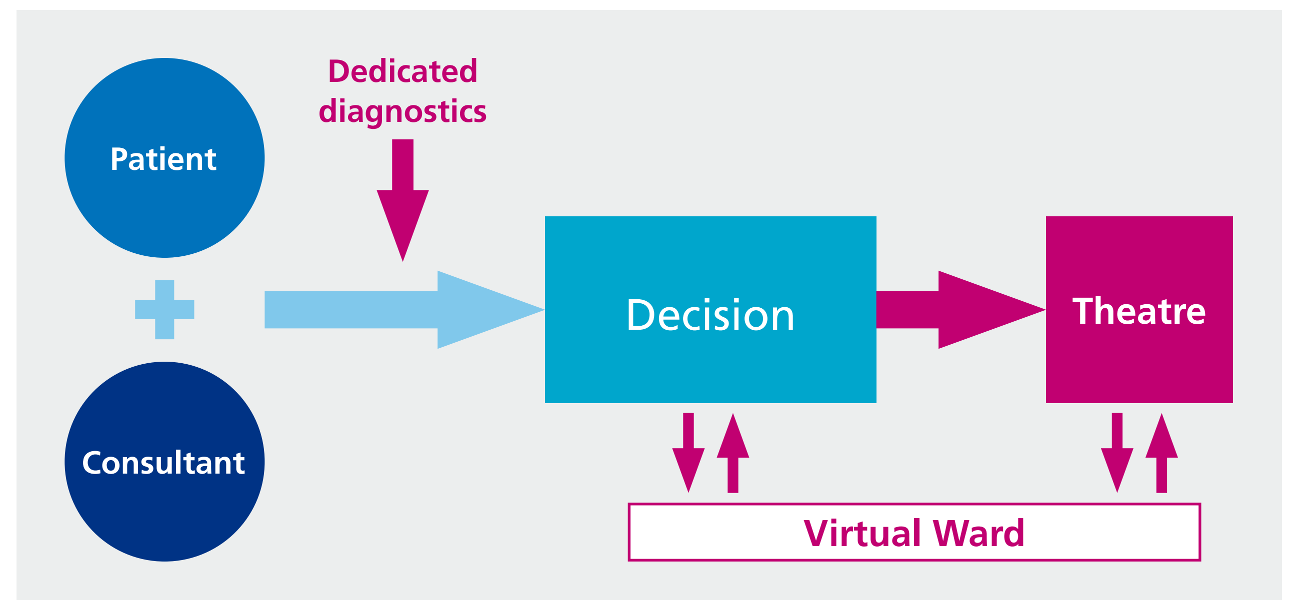


Figure 1
SAEC Model of Care



© NHS Elect

The following are key principles of Surgical Ambulatory Emergency Care approach:

Referrals should be process driven
Referrals to SAEC should ideally avoid restrictive protocols. Within reason, all adult referrals to the 'on-call' surgical team should be directed to SAEC from a single point of access if patients are well enough to wait for this. This should be determined after a clinical conversation with the referring healthcare professional (usually GP, ED doctor or a member of the surgical team). However, inevitably there are 'high volume' conditions that are better suited to ambulatory care as suggested above.

Consultant-led and delivered
Ideally SAEC should be led and delivered by a Consultant Surgeon. There is evidence that initiatives led by Senior Clinicians are more likely to succeed and the more senior the clinician the more likely they are to take clinical risk and manage patients on ambulant pathways.

Rapid access to diagnostics
Successful SAECs will have rapid access to dedicated ultrasound (current figures from fully functioning SAECs suggest up to 65% of patients will require an abdominal or pelvic US reflecting pathology). The gold standard is an ultra-sonographer co-located on the SAEC or Surgical Assessment Unit, but ring-fenced slots for SAEC patients are also acceptable. It is also advisable for SAECs to have rapid access to CT and MRI (expect 8% of SAEC to require cross-sectional imaging). These scans should be given the same scheduling priority as ED scans and some successful units' ring-fence a single CT or MR slot for use each day.

Rapid access to theatre
Patients seen in SAEC requiring urgent surgery can still be managed on ambulant/ day-case pathways if there is a mechanism to provide timely access to theatre slots. The gold standard is a dedicated day case list for these patients that run with frequency sufficient to meet demand. Other centres ring-fence slots on the NCEPOD lists or elective lists but this is often less reliable. Expect only 10% of patients seen in SAEC to require same day surgery.

Early supported discharges
As SAEC has developed, it has become clear that the service can also support the early discharge of patients who have been managed on a traditional in-patient pathway (both emergency and elective). Centres with a robust SAEC report a reduced length of stay for patients as they are discharged earlier with appropriate SAEC follow up. Examples include those with wound/VAC issues, complex colorectal issues, drains in situ, grumbling inflammatory markers and high output stomas.

The virtual ward
Patients seen in SAEC should be supported by a virtual ward where required. These patients may include those awaiting urgent surgery, awaiting results or those that have had a recent SAEC review. Using a virtual ward, there should be processes in place to allow patients to rapidly return to SAEC if they clinically deteriorate. Nurse practitioners (see below) should be responsible for overseeing the ward and seeking Consultant input when needed.

© NHS Elect

Documentation and safety-netting
Leaflets, documentation and telephone numbers should be given to patients at the first point of contact to ensure they know how to access medical support if they deteriorate whilst either in the virtual ward or awaiting SAEC review. Information should be given to the patient when an SAEC appointment is generated explaining what to expect from the appointment and any fasting requirements. Following SAEC review the GP and patient should ideally receive a clinical letter within 48 hours; this will detail their presenting problem, investigation, any further management and relevant safety-netting precautions.

The SAEC unit should be run from a designated, protected area
Ideally this would be trolley based and co-located with a Surgical Assessment Unit. The area must categorically not be used for in-patients in times of escalation.

Mechanisms are needed to avoid unnecessary referrals to SAEC
Patients seen in SAEC should be admission avoidance or early facilitated discharge patients and not patients who would normally be seen on a 2-week wait basis or managed by other outpatient pathways.

Nurse Practitioners and other healthcare professionals with extended skills
The role of the Emergency Surgical Nurse Practitioner (ESNP) is crucial in supporting the virtual ward and providing continuity of care. In forward thinking SAECs the ESNPs are undertaking local anaesthetic incision and drainage of non-perineal abscesses. ESNPs can also run independent nurse led clinics reviewing early supported discharge patients. They are also crucial in complex wound management, IV therapies and maintaining continuity of care.

Patient experience data and feedback
This should be collected and used to inform service improvements and baseline metrics established by the project team before implementing SAEC to allow the impact of improvements to be assessed. This should include baseline referral numbers, referral source, non-elective length of stay, non-elective pre-operative length of stay and number of occupied bed days used. It is also helpful to have knowledge of outcomes and diagnoses to identify patient cohorts which may be suitable for SAEC.

Tariff can be an issue and we recommend commissioners are involved early in your project setup to inform and agree financial flows for the service. Best practice day-case tariffs can be negotiated for qualifying surgical patients.

Ultimately a fully resourced and staffed SAEC encourages the ethos of rapid patient assessment rather than admission for surgical patients. These units are also able to give rapid advice to other healthcare professionals based in the community. SAEC units are now highly skilled in the ambulant management of patients with a host of surgical conditions but particularly abscess, acute biliary conditions, painful hernia, appendicitis, diverticulitis and post-operative complications. Minimal access laparoscopic techniques are used extensively to reduce recovery times. However, the scope of SAEC is going through a period of rapid development and as such the clinical scenarios and coding listed in this Directory will be updated as evidence becomes available.

© NHS Elect

Nursing Practice in AEC

The nursing workforce is key to developing and delivering an efficient, high quality AEC service. In particular, the nurses more functional assessment of patient needs and familiarity with services available in both Primary and Secondary care can provide a highly comprehensive and holistic management plan. Nurses tend to provide a more stable and consistent workforce than doctors in training posts and so represent a huge resource in terms of organisation knowledge and continuity of service development plans.

AEC represents a perfect opportunity for nurses to develop their skills and advance their scope of practice and there are many examples from UK sites of nursing staff rising to the challenge and pushing boundaries. This applies equally to unregistered nursing staff where we have seen the development of a number of interesting roles.

The development of clinical nursing roles in AEC can be broadly organised into the following levels with management responsibilities running in parallel:

Non-Registered Nurse Roles

- **Healthcare Assistant (HCA)** – comparable role to ward based staff attending to personal care needs, escorting patients to diagnostics, vital signs monitoring etc under the direction of a Registered Nurse.
- **Combined Admin and HCA roles** – able to work flexibly as required between a ward clerk/receptionist function and patient care duties. This can offer advantages in managing variations in activity levels and rostering.
- **Advanced HCA** – having established competency in the basics, the HCA role has now taken on additional skills that are traditionally considered to belong to RNs e.g. Phlebotomy, canulation, medication administration and basic health assessments. It is important to remember that these tasks are delegated appropriately by a RN who remains accountable for the care. More information can be found using the links below.

  RCN (HCA and AP roles and competencies)

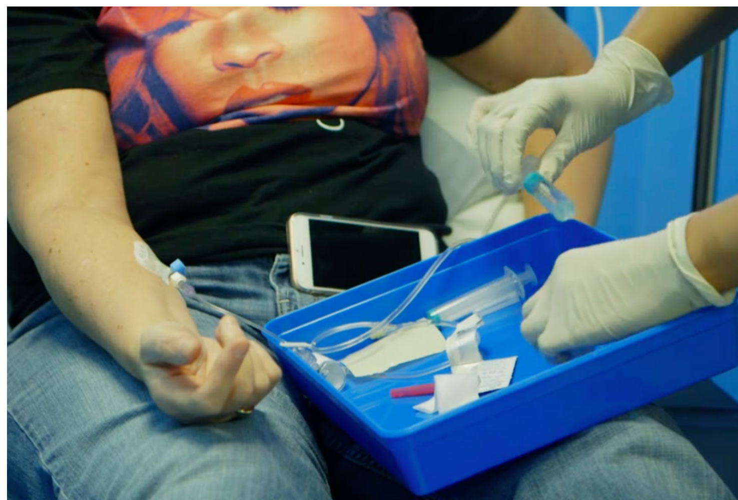
  Health Education England (developing educational programmes)

Registered Nurse Clinical Roles

- **Registered Nurse** – practicing competently at the levels expected commonly throughout the health economy.
- **Registered Nurse initiating additional skills** – certain process steps are initiated by appropriately trained nurses in accordance with a clear policy e.g. defined basic radiology requests, predefined pathology request panels, and analgesia given under Patient Group Direction (PGD).

© NHS Elect

- **Registered Nurse operating a care pathway** – an appropriately trained nurse completes a defined series of actions representing a patient journey in accordance with a policy; in some cases this may include discharge against set criteria. Patients have been differentiated prior to entering the pathway. Freedom to act is constrained by the pathway and a Dr or ANP handles any co-morbidity or deviation from expected pathway. Medication is usually handled by Patient Group Directive rather than non-medical prescribing. This can be seen in some examples of DVT and cellulitis services.



- **Clinical Nurse Specialist** – significant clinical experience and further training has been undertaken, often at Masters level, to manage a group of patients within a defined clinical field. There is freedom to act outside of a formalised pathway including investigation, diagnosis and treatment, but only in relation to the specialist area of practice. Patients have usually been differentiated prior to CNS management. Medication is usually handled by non-medical prescribing. The CNS will act as a learning and development resource to other nurses and healthcare professionals and contribute to practice and service development. Some DVT services use this model and many subspecialty services use CNSs who may offer in-reach into AEC.

- **Advance Nurse Practitioner** – significant clinical experience and extensive further training has been undertaken at Masters level in a specified programme to enable generalist, whole management of an undifferentiated patient's episode. This will usually include the authority to request appropriate advanced radiology, make a final diagnosis, prescribe medications, undertake technical clinical procedures, refer to specialists for further management, and discharge the patient. In some organisations ANPs clerk patients and present to a senior doctor for direction on management; while this may be useful while newly qualified, long-term it fails to realise the potential of an expensive and highly skilled resource. ANPs will act as a learning and development resource to other nurses and healthcare professionals and contribute to practice and service development.

  RCN (ANP Competencies)

  NMC prescribers standards

  Health Education England (developing educational programmes)

Some examples of job descriptions can be seen here.

All registered nurses are bound by their code of conduct to practice within their own scope of professional practice recognising their limitations and development needs.

© NHS Elect

In developing your service be clear about your aim and how team roles can contribute to effective delivery of the service.

The Society of Acute Medicine has produced guidance on workforce planning for Acute Medical Units and the underlying principles can be easily translated to AEC which can be found **here**.

NICE have also produced general nurse staffing guidance that contains useful prompts on which to base your planning discussions which can be found **here**.

In this Directory clinical scenarios that are felt to be particularly amenable to nurse management have been highlighted in blue, this list is not exhaustive or intended to be taken as a limitation. The highlighted examples could be appropriate for nurses at levels able to initiate significant process steps, operate a clinical pathway or practice as CNS. ANPs practice as generalists and providing the appropriate competency has been demonstrated could potentially expect to practice across all scenarios described in the Directory.

Pitfalls

Operational teams often report difficulties when AEC services are used in escalation, this means patients are bedded in the area preventing treatment of AEC patients. Escalation plans should be designed to avoid this, when the system is under pressure AEC is a key component of the response. Action should be taken to enhance AEC i.e. provide resources to process more patients same day or lengthen the hours of operation to increase capacity for more patients. If AEC is unable to operate this will have a negative effect downstream prolonging escalation.

Design tips to reduce the risk of AEC units being used for temporary bedded accommodation can be seen **here**.

© NHS Elect

Commissioning for AEC

In December 2014 NHS England published planning guidance for CCGs and healthcare staff identifying models of care that will apply in 2018 and the steps needed to achieve the vision. Many of the steps described apply to AEC such as:

'Reducing the amount of time people spend avoidably in hospital through better and more integrated care in the community, outside of hospital'.

'Increasing the number of people with mental and physical health conditions having a positive experience of hospital care'.

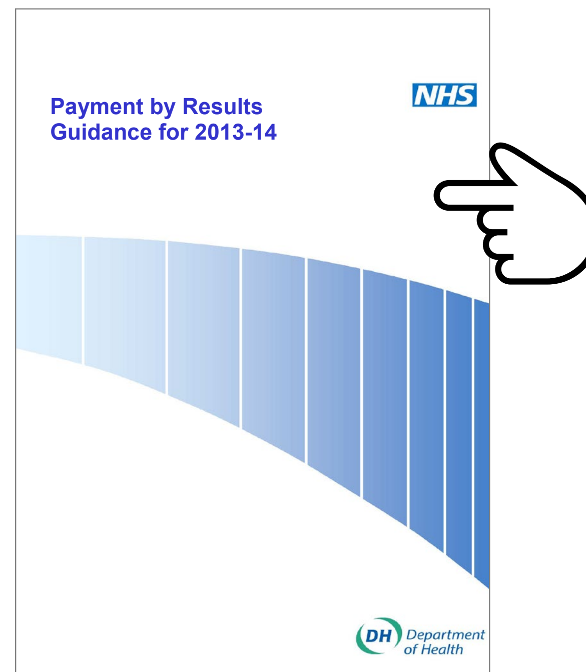
The report shares examples of patient feedback and states:

'Our patients have consistently told us how important it is that they don't have to wait for treatment. They tell us that waiting can be the most distressing part of their illness. And we know that waiting can make clinical outcomes worse and can even make services unsafe. We also know that our services can only improve outcomes for patients if they are available to them and they receive those services quickly, when they need them, and in a way which is convenient for them and fits with their daily lives'.

We know through participating sites who measure patient experience, that patients have a very positive experience whilst in AEC and that this model of care has many of the elements needed to meet the ambitions set out in the NHS planning guidance.

Best practice tariffs have been designed for AEC as a lever to promote the management of some high volume conditions on a same-day basis using an ambulatory emergency care model.

Guidance that explains the pricing methodology for the Same Day Emergency Care or AEC Best Practice Tariff can be found **here**.



Best Practice Clinical Scenarios (BPT)

There are a number of conditions where BPT is applied in Emergency Care. These are:

- Abdominal Pain
- Acute Headache
- Anaemia
- Appendicular Fracture
- Asthma
- Bladder Outflow Obstruction
- Cellulitis
- Chest Pain
- Community Acquired Pneumonia
- Deliberate Self Harm
- DVT
- Epileptic Seizure
- Fall, including Syncope/Collapse
- Low Risk Pubic Rami fracture
- LRTI without COPD
- Minor Head Injury
- PE
- Renal/Ureteric Stones
- SVT including AF

© NHS Elect

Case Management Plans

It will be the responsibility of the senior clinical team members to ensure that well documented, case management plans with transparent lines of clinical responsibility are developed. Managing these could include monitoring the patients' condition by either telephone consultation, electronic communication, at home by the community healthcare team, attendance at primary care, a day treatment unit or an outpatient clinic, depending on the clinical situation and local service configuration. An example of an AEC medical clerking sheet can be seen **here**.

Specific pathway documents for high volume clinical presentations, for example DVT, can be helpful with a more generic document to accommodate the others. Ideally a document should be developed that supports the patient's care throughout the pathway and can be initiated wherever the patient presents and wherever they receive their ongoing care. An example of a DVT and PE pathway can be seen **here**.

The case management plan should be communicated with all parties involved in managing the patient's care and of course the patient. The case management plan should include:

- Diagnosis
- Relevant diagnostic results
- Treatment plan
- Referrals made
- Actions required from other clinicians
- Contact in the event of clinical deterioration or non-response to treatment
- Contact details for enquiries

© NHS Elect

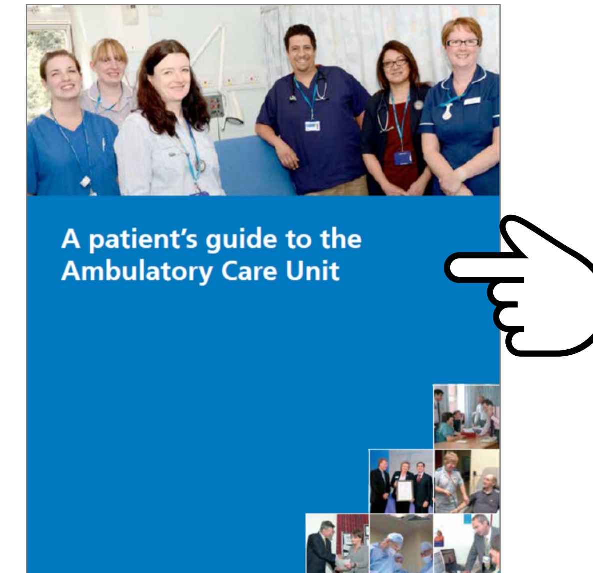
Patient Information and Experience

Undertaking patient experience studies with teams across the Network has highlighted the importance of providing information to patients in the pre-arrival stage of the AEC pathway. Patients have explained that they are not used to the term 'ambulatory' and because of this they describe feelings of worry and anxiety before attending the service. Having negative feelings before attending AEC can colour the whole experience for patients and it is important that information is provided at the first contact, either with the GP or referrer.

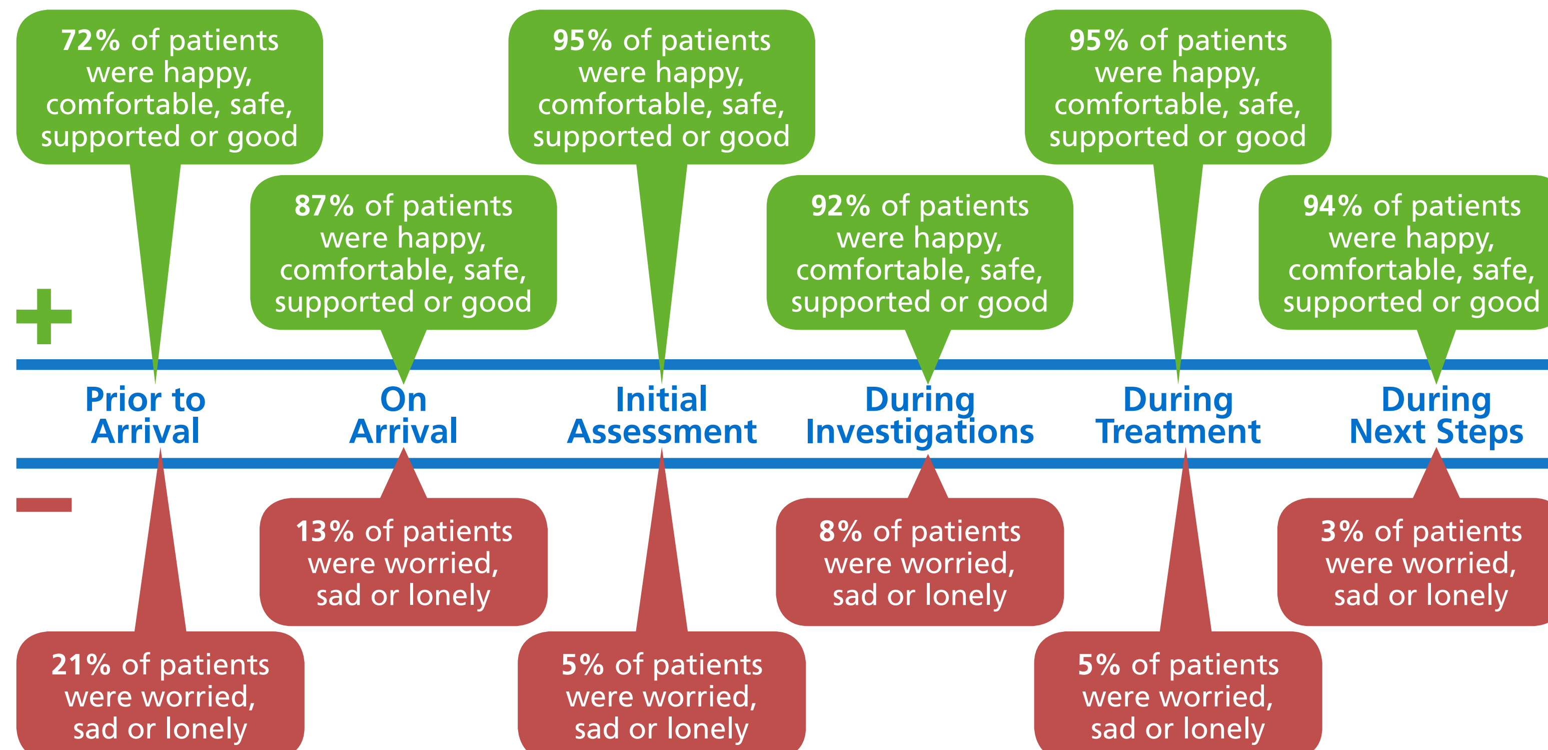
We know that it makes all the difference to patients by providing them with clear, concise, easy to read information explaining:

1. What is ambulatory emergency care
2. Their condition
3. The case management plan
4. What to look out for suggesting any deterioration
5. The monitoring process
6. A specific contact point if there are any concerns

An example of a patient information leaflet can be seen here:



Emotional Map



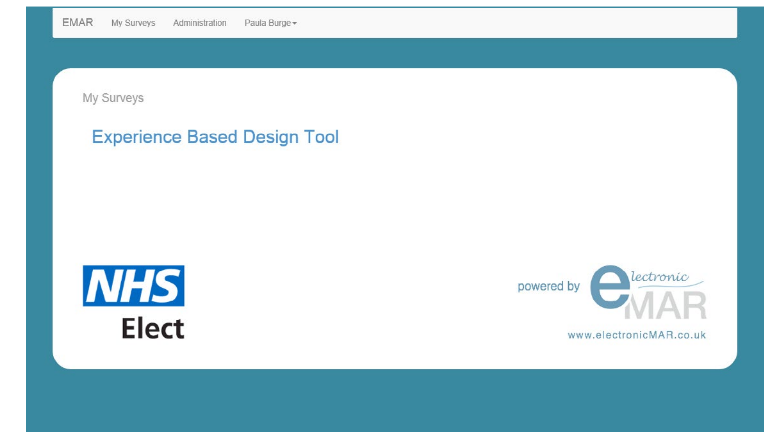
© NHS Elect

Undertaking a study of patient experience should be an essential part of your project, as understanding how patients experience our services is critical if organisations are to be able to design services that meet patient's needs. Through the Network staff receive training about patient experience, and project teams are supported to work with patients to agree improvements to local services. This approach ensures that there are no gaps between staff and patients on the perceived actions/resources needed to improve patient experience.

When patients are involved in improving services their needs are often very simple and not costly e.g. provision of refreshments, clear signs directing patients to the services etc.

Following attendance at AEC patients should be provided with a copy of their plan and treatment; this should also be sent to their GP e.g. e-discharge. Information should include 'contact numbers' and guidance on who to contact if they are worried. Having a contact point is important to ensure that patients feel confident that they are being managed safely. Local implementation teams will need to consider how best to set up this important process 24 hours a day, 7 days a week.

Depending on service delivery this could be the A&E or AMU; other options to consider might be integration of this contact point with the Out of Hours Services, NHS 111, or with the Ambulance Services. Shared decision making, involving patients fully in their own care, with decisions made in partnerships with clinicians should be the norm in AEC.



We have commissioned the development of a new app to help organisations collect and report on patient experience of their services. The app allows real-time collation of a patient's experience on a laptop, tablet or smart phone. It is quick and easy to use and will provide teams with real-time feedback that can be used to shape services and improve the experience that patients have within their organisation.

© NHS Elect

Measurement and AEC

In order to demonstrate the impact of AEC it is essential to ensure that you have a clear aim and an understanding of your baseline position.

For example, your aim may be to avoid admissions, reduce emergency bed days, improve performance of the 4 hour standard, improve clinical outcomes or improve patient experience. Your outcome measures should reflect this aim: for example, emergency bed day usage of patients who meet the clinical scenarios in this Directory.

Being clear about current emergency and urgent care patient flows at baseline and measuring those that are important to demonstrate impact or monitor potential unintended consequences (balancing measures) is a useful starting point.

The number of new patients who receive the service is a process measure and not an outcome measure. Additional process measures that demonstrate the AEC service is operating well should include the right patients, receiving the right care in AEC services, at the right time. Combining outcome and process measures will help you to answer the question: has developing AEC services enabled an improvement (see figure 2).

Figure 2 Has developing AEC services enabled an improvement?

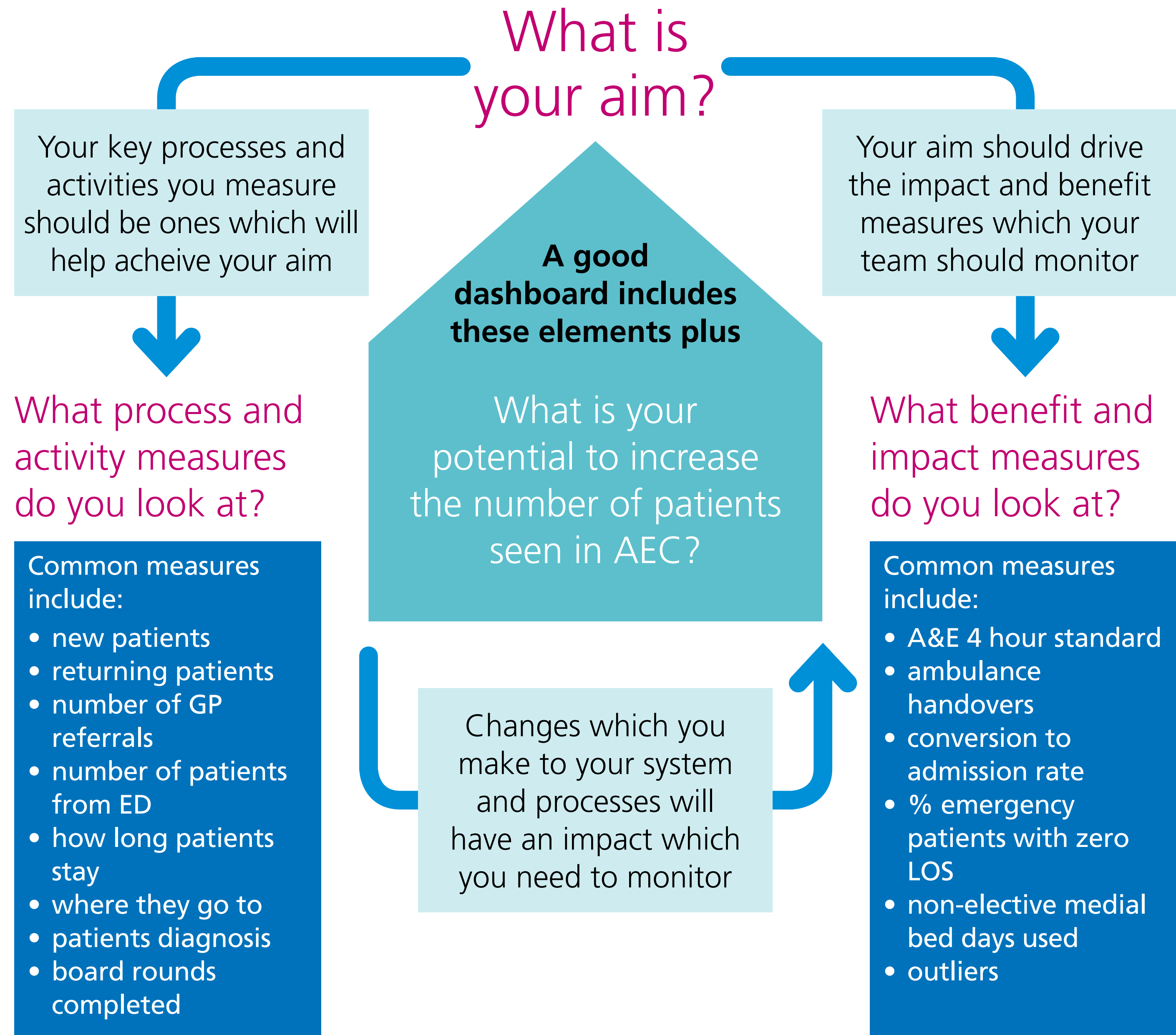


Figure 3 highlights this for new AEC patients. It shows that there are two groups of patients who may not be appropriate for AEC services – patients who should have been admitted directly to a specialty base ward for example as they are clinically unstable and those that could have been managed in another setting (e.g. outpatients/ED).

Having clear thresholds for the service that are shared and agreed by the clinical team will help define the measures. A regular casefile review will support the assessment of this aspect of clinical decision-making and ensure patients are receiving care in the most appropriate setting.

Figure 3 2x2 matrix illustrating "right patient, right place" is it effective?

	Managed in AEC	Not managed in AEC
	conversion	
Appropriate in AEC	**Box 1: Success** % conversion from AEC service to admission Clinical outcomes/experience	**Box 2: Missed opportunity** % HRG/ICD-10 clinical scenarios Casefile review
Not appropriate in AEC	**Box 3a: Wasted capacity** Some HRGs may indicate Low conversion rates Casefile review	**Box 4: Appropriate** Emergency inpatient/outpatient care
	Box 3b: Potential clinical risk Patients NEWs score High conversion rates Casefile review	

Other measures may indicate the need for a casefile and/or clinical review:

- **Wasted capacity:** A relatively high proportion of some Healthcare Resource Groups (HRGs) or unexpected changes in proportion may indicate a need to review thresholds and check if patients could have been managed in a less urgent setting, and/or highlight a need to improve clinical information for coding. It is a marker for a quality review for improvement and should not be used for performance, especially in process models as some HRGs may be appropriate. Some examples include: high proportions of patients receiving blood transfusions, generic "catch all codes" such as those HRGs that include the term "other" and/or codes reflecting elective follow-up appointments. All of these codes may reflect patients that receive care in the right place at the right time.

- **Potential clinical risk:** A high conversion rate to admission and/or patients with an aggregate NEWs score above 4 may indicate patients who are too acute or too complex to be managed in AEC.

© NHS Elect

Reviews of HRGs and ICD-10 codes are indicative not definitive. They can act as a trigger to ask further questions but in themselves cannot answer the question if a patient is in the right place at the right time when they receive AEC services. It is essential that reviews include clinical input as the clinical presentation and decision making may differ from the final HRG/ICD-10 code, and that there is clarity on the aim of the service.

A one-off review can identify patients that are admitted but could have been seen in AEC i.e. those that are in the **"missed opportunity" box**:

- First by reviewing the casemix of patients being admitted (particularly those with a 0,1 or 2 day length of stay) compared with those receiving AEC using this Directory.
- A second approach is a clinical assessment of patients admitted to short stay wards/Acute Medical Unit the previous day to understand which patients could be managed through AEC and why this did not occur.

These two approaches can complement each other – the first may identify clinical areas to target and the second provides insights to changes required in clinical processes and resource for the AEC service to effect change.

Activity

You also need to decide how to capture your AEC activity. As AEC patients can legitimately span inpatient, outpatient (new and follow-up) and ward attendance it is important to agree your approach with commissioners and understand any implications to national measures. For more information see Factsheet 2 here:

AEC Network Measurement Team Fact Sheets
2 - Recording AEC Activity

Ambulatory Emergency Care

What is the purpose of this factsheet?
A common question amongst people starting out on their AEC Journey is 'how should we record AEC activity?

Background and context to this fact sheet
AEC does not fit neatly into the current guidance on how to record patient activity. The current NHS data model sees patients treated in secondary care only in one of three ways: as an inpatient, as an outpatient or as an A&E attender. None of these descriptions completely covers what AEC units are providing. However we are left with a choice of these three existing datasets until the Data Standards that govern practice provides us with a way of identifying ambulatory emergency care patients.

Option 1: A&E Attender
To qualify as an A&E attender, the treatment has to take place within the department (ref: http://www.datadictionary.nhs.uk/data_dictionary/nhs_business_definitions/a/accident_and_emergency_attendance_de.asp?query=Aqccident%20and%20Emergency%20attendance&rank=100&shownav=1). We cannot therefore recommend recording AEC activity as an A&E attender because commonly the activity does not take place within the A&E department.

Option 2: Inpatient
To be correctly classified as an inpatient, patients must require and make use of a bed as a result of their condition. Historically guidance has been given to enable a distinction between elective day cases and outpatient attendances (ref: http://systems.hscis.gov.uk/data/nhsdmds/faqs/cds/admitpat/daycase). This makes it clear that if a patient is using a hospital bed because of the active intervention rather than because of the patient's condition this activity is not counted as an admission but as an outpatient attendance—consultant. There is also similar guidance within the PbR material (ref: http://systems.hscic.gov.uk/data/nhsdmds/faqs/pbr/guidance-for-pbr). AEC patients are therefore not officially inpatients and if the decision is made to record them in this way to ensure that clinical coding takes place, they should be removed from reports of inpatient activity so as not to mislead.

Option 3: Outpatient
AEC patients are not a traditional outpatient either because they are not planned in advance. The definition of what constitutes an outpatient appointment is not absolutely specific on this point but the inference is clear (ref: http://www.datadictionary.nhs.uk/data_dictionary/classes/a/appointment_de.asp?shownav=1). However this is an alternative option where doctors are involved in the care of the AEC patient. If the AEC unit is run by nurses alone, the guidance on how to record the activity is less clear. The reference above refers to an appointment with a care professional and the list of approved professionals includes nurses. However the PbR guidance referenced under option 2 when referring to attendances on a ward states that those patients seen by a nurse should be recorded as ward attenders. However the same guidance does also support the use of the outpatient route for emergency cases.

On balance therefore this option is acceptable. The issues here are twofold: (a) is clinical coding willing to code what is being recorded an outpatient activity and (b) BPT assumes inpatient activity. It is important therefore to have discussions with your commissioners about reimbursing AEC activity.

Recording follow up activity
The recording of patients who come back to the AEC unit for a second or further visit also needs some consideration. Should they be a follow-up outpatient attendance, a ward attender or a re-admission? The guidance given above applies equally to subsequent attendances as it does to the first. Thus there is a case for any of these options.

If you have chosen to record first attendances as an inpatient, you have a choice that is determined by why you chose the inpatient recording route. If your AEC patients don't meet the inpatient criteria (the most common situation) but it is convenient for you to record them as such, then the follow-up patients are not inpatients either. These should be recorded as either a follow-up outpatient attendance or ward attender. The majority of sites capture their data like this.
However, if your AEC patients **do** meet the inpatient criteria and if the re-attendance also qualifies as an inpatient, they should be a re-admission. If the re-attendance does not require a bed then they should be recorded as a follow-up outpatient attendance or a ward attender.

These solutions work best where there is a clear agreement on the definition of AEC activity between commissioners and providers.

The following steps will help:

- Ensure AEC activity can be separately identified from other emergency care activity e.g. by specifying a particular location code
- Ensure it is possible to differentiate between new and follow-up activity, how the patient accessed the service and the outcome (e.g. discharge, follow-up, admission)
- Decide which hospital information system will be used to capture AEC activity: e.g. systems used in ED, inpatient or outpatient
- Decide how the activity will be returned to national datasets with commissioners
- Clinically code all AEC activity so that major diagnostic groups can be identified and comparisons made with the pre-AEC developments position
- Capture telephone activity and outcomes

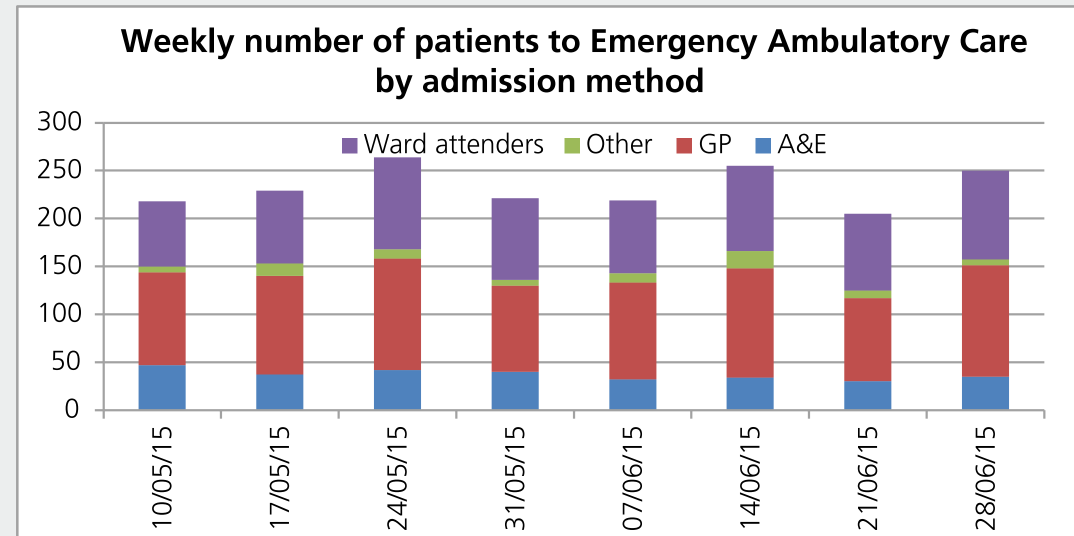
Experience from the AEC Network has shown that it is crucial to work out how to effectively capture the right data early on in planning for AEC services and developments.

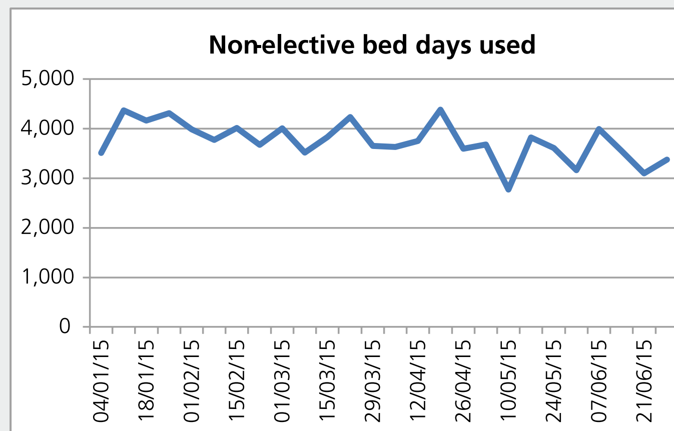
© NHS Elect

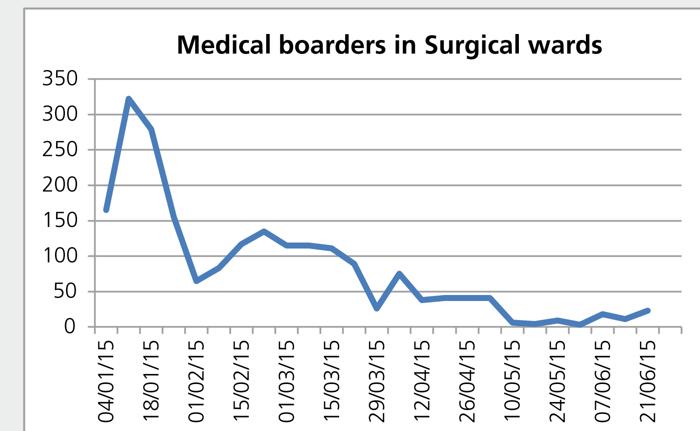
AEC Dashboards

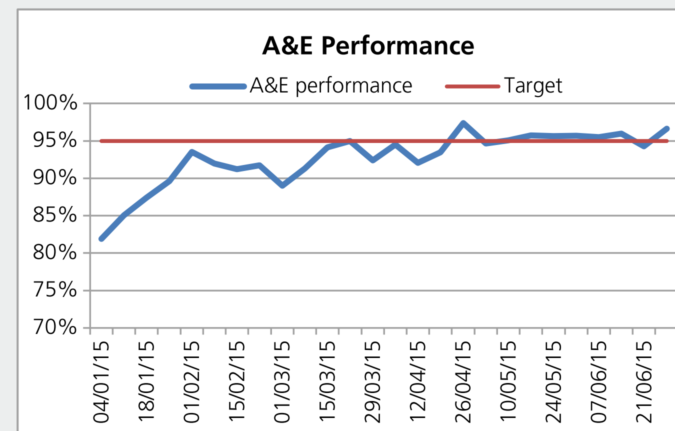
A useful approach to measurement in AEC is to produce a dashboard of measures based on the aim of your service as this will provide rapid and visible feedback that can shape further development. This dashboard should include outcome measures, process measures and some balancing measures i.e. have there been any unintended consequences from implementing the service. An illustration of measures used in an AEC dashboard is provided in figure 4 opposite.

Figure 4









© NHS Elect

Tariff and AEC

Across the AEC Network commissioners and providers have adopted different approaches to agreeing an appropriate tariff for ambulatory patients. Some health economies employ a mixed approach while others opt for one of the following:

- Payment by Results national inpatient tariffs
- Payment by Results national outpatient tariffs
- Local tariffs agreed between provider and commissioner
- Block contracts

Payment by Results (PbR) national inpatient tariff have scenarios identified for Best Practice Tariffs (BPT) that have been designed for AEC as a lever to promote the management of some high volume applicable conditions on a same-day basis using an ambulatory emergency care model.

Quote from 2017/18 and 2018/19 National Tariff Payment System Annex F: Guidance on Best Practice Tariffs (NHSE and NHSI, 2016):

"As a first step towards realising the potential of ambulatory emergency care, the initial aim of the same-day emergency care BPT is to promote ambulatory care management of patients who are currently admitted and stay overnight. The expected outcome is therefore a shift in the proportion of admitted patients from stays of one or two nights to same-day discharges. In the future, once datasets in the non-admitted setting become rich enough to capture the activity of ambulatory emergency care, there is the potential for nationally mandated prices to be developed to encourage further shifts from the admitted setting."

Guidance that explains the pricing methodology for the Same Day Emergency Care or AEC BPT can be found **here**.

BPT Clinical Scenarios

There are a number of conditions where BPT is applied in Emergency Care. These are:

- Abdominal Pain
- Acute Headache
- Anaemia
- Appendicular Fracture
- Asthma
- Bladder Outflow Obstruction
- Cellulitis
- Chest Pain
- Community Acquired Pneumonia
- Deliberate Self Harm
- DVT
- Epileptic Seizure
- Fall, including Syncope/Collapse
- Low Risk Pubic Rami fracture
- LRTI without COPD
- Minor Head Injury
- PE
- Renal/Ureteric Stones
- SVT including AF

Proposed clinical scenarios to be introduced in the 2017/19 commissioning period:

- Abnormal liver function
- Acutely hot painful joint
- Chronic indwelling catheter problems
- Gastroenteritis
- Transient ischaemic attack
- Urinary tract infection
- Upper gastro-intestinal haemorrhage

Successful local approaches to setting local tariffs include:

- shared understanding of the aim of the service between commissioners and providers
- shared understanding of the cost of providing the services and expected levels of activity
- ability to share any anticipated financial risk with a shared ambition that there are "no winners or losers"
- agreed measurement and checks to ensure there is no double counting and no financial winners or losers
- understanding of the cost of providing the services compared to traditional inpatient care and application of relevant national reference cost to inform local tariff developments
- agreement around any incentives required to support the developments

Using the ICD-10 Codes in the Directory

You can use the ICD-10 codes to help discussions in planning service developments. The approach below should include operational and clinical discussion and take into account the thresholds being used in practice to stream patients to AEC services. The underlying principle is that we would not expect the total activity along clinical scenarios to increase (AEC activity plus emergency admissions) with AEC developments.

We recommend using ICD-10 codes rather than HRGs as these are more clinically specific. Some HRGs are very broad and therefore cannot offer the same clinical focus as ICD-10 codes.

From an AEC perspective, ICD-10s are indicative and not an absolute measures. Clinical decision-making that results in a patient being seen in AEC rather than other settings is based on the information available at the time a patient presents in hospital. Whereas clinical coding occurs after a patient is discharged from hospital with available diagnosis. For example, a patient appropriately seen in AEC for DVT, who does not have a DVT will have another ICD-10 code.

Not all AEC activity will match to a clinical scenario (around 60% to 80% may match). It would not be expected or desirable. In particular process based AEC models of care will capture a broader range of clinical conditions.

Analysis

Analyse current AEC activity (include patients that are admitted from AEC in this group). Calculate the % of patients seen in AEC as a total of AEC and admitted patient activity for a clinical scenario.

Calculate the potential volume of activity that could be converted to AEC if the lower range shown in the Directory is applied, the upper range and with the assumption that all 0 to 1 LOS could be converted to AEC.

Review these figures and if it makes sense to do so, calculate the average volume of activity. Order by potential volume and discuss this clinically and operationally.

Surgical AEC

In additional to the short LOS analysis, include patients who have surgery and a short post-operative LOS as potential activity that could be converted to AEC. For this sub-group consider a suitable maximum total LOS, a starter for 10 is 7 days.

It is possible to refine this approach to ensure that patients who are unlikely to be considered suitable for AEC are excluded over and above LOS criteria used above. Examples include: discharge destination (e.g. exclude patients transferred to another hospital or patients who died). Other refinements include a specific focus on a known area of interest such as surgical AEC developments by using discharge specialty.

JD07J	Skin Disorders without Interventions, with CC Score 2-5		
JD07K	Skin Disorders without Interventions, with CC Score 0-1		
% potential ambulatory care (primary ICD-10 coded admissions)			
Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%
Specific Safety Issues (not Exhaustive)			
Exclude necrotising fasciitis. Class III and IV require admission. Ambulatory IV antibiotic policy with review of IV access site (OPCS 4.3 X28.1).			

© NHS Elect

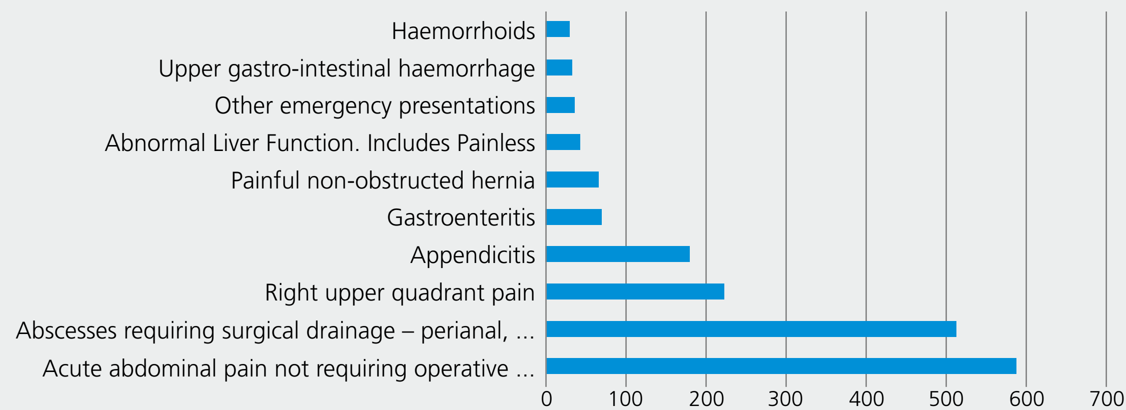
The following is an example of an analysis a Trust carried out before developing surgical AEC services. In this example, an additional criteria based on a clinical casefile review was applied to establish the potential proportion of activity that could be managed as surgical AEC.

Another consideration is that HRGs are developed to ensure that providers are paid appropriately for patient care. Some HRGs are very broad in their focus, and cross a number of clinical scenarios and as a result it is more useful to use ICD-10 codes to understand the potential to convert admitted patients to AEC care.

Example

Clinical scenario	% patients currently seen in sAEC	Directory	Potential **additional** AEC activity lower level	Potential **additional** AEC activity higher level	**Converting** 0+ 1 day LOS admitted	**Converting** 69% AEC criteria	**Average**
Total			**1691**	**2800**	**1818**	**1797**	**2027**
Acute abdominal pain not requiring opera	0%	Moderate: 30-60%	360	719	665	615	590
Abscesses requiring surgical drainage – pe	0%	High: 60-90%	413	620	562	446	510
Right upper quadrant pain	0%	High: 60-90%	279	419	89	111	224
Appendicitis	0%	Moderate: 30-60%	134	268	83	239	181
Gastroenteritis	0%	High: 60-90%	73	110	47	41	68
Painful non-obstructed hernia	0%	High: 60-90%	59	88	58	61	66
Abnormal Liver Function. Includes Painless	0%	High: 60-90%	52	77	22	21	43
Other emergency presentations	0%	Moderate: 30-60%	20	40	46	39	36
Upper gastro-intestinal haemorrhage	0%	Low: 10-30%	13	39	44	44	35
Haemorrhoids	0%	Very high: >90%	37	37	26	21	30

Top 10 clinical scenarios: potential additional AEC activity – indicative ICD-10 analysis



Finally, the clinical scenarios and associated codes have been developed to support service development and should not be used to monitor performance. We expect a diverse range of ICD-10 codes for process-based models of care. Patients may present with a more complex ranges of clinical conditions and risk factors than their primary ICD-10 code.

Some of the ICD-10 codes in this Directory may cross specialty groups in particular between general medicine and surgery and these are indicated by *.

© NHS Elect

Methodology Used to Develop New Clinical Scenarios

This section describes the approach that was used to identify seven new clinical scenarios for the 2016 Directory. Initially five clinical areas were highlighted for consideration by national clinical leads, these were:

Low risk acute kidney injury – stage 2

Haemorrhoids

Electrolyte disturbance

Right upper quadrant pain

Painful non-obstructed hernia

These scenarios were reviewed in turn to identify relevant ICD-10 codes and HRG4 codes with an additional analysis to understand current unplanned activity using the HRG4+ activity data.

The national reference costs data associated with HRG4+ provides useful but not specific unplanned activity data supplied by hospitals across the English NHS. The complication is that HRG4+ differs from HRG4 which is part of the national "payment by results" and the coding we supply in the AEC Directory. If the first four codes of an HRG are the same between HRG4+ and HRG4 it has been assumed that these HRGs are similar enough with some assumptions based around the impact of the construction of "with and without cc" or co-morbidities.

The national data we looked at provides us with unplanned activity split by:

- 0-2 day LOS
- 3 day LOS+

for all HRG4+ codes.

There were 2,756 HRG4+ codes in total. This included HRGs for children and trauma; some HRGs reflect planned inpatient activity and as a result will have 0 activity for unplanned care.

Using these data we are able to:

- identify potential HRGs and review associated ICD-10 codes for new clinical areas identified by national clinical leads
- highlight new clinical areas for consideration by national clinical leads

In order to support this decision making process we carried out the following analysis of HRG4+ activity. This analysis comprised of two assessments:

1. **specificity** which assessed if the proportion of 0-2 LOS of stay unplanned activity is high enough for the HRG to be an indicator of potential for AEC care. The cut-off point was 45%.
2. **substantial** which assessed if the volume of 0-2 LOS of stay activity was high enough to be considered.

There are two groups of HRGs – those associated with ICD-10 codes and those associated with OPCS codes. We considered those with ICD-10 codes only. Furthermore we did not consider those HRG4+s that did not match readily to current HRG payment system. An additional two clinical areas were identified through this process:

Other respiratory conditions

Inflammatory bowel disease

The new clinical scenarios in the 2018 Directory were developed with clinical consultation. We carried out an ICD-10 analysis similar to the HRG analyses described above.

We have also refined the description of the surgical clinical scenarios and allocation of clinical scenarios to a specialty. Some ICD-10 codes have been reallocated scenarios as a result.

The new clinical scenarios are:

Ascites

Other anorectal issues

Right iliac fossa pain

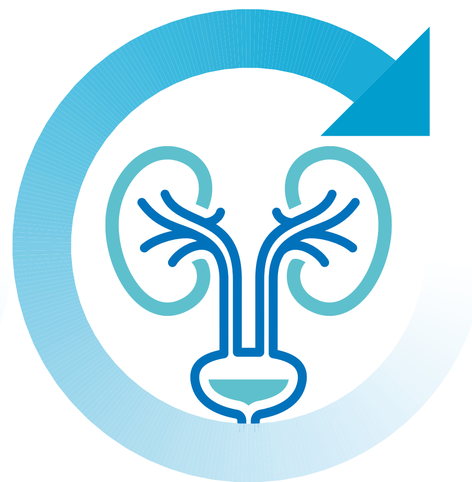
Left Iliac fossa pain

© NHS Elect

2 Directory of Clinical Conditions

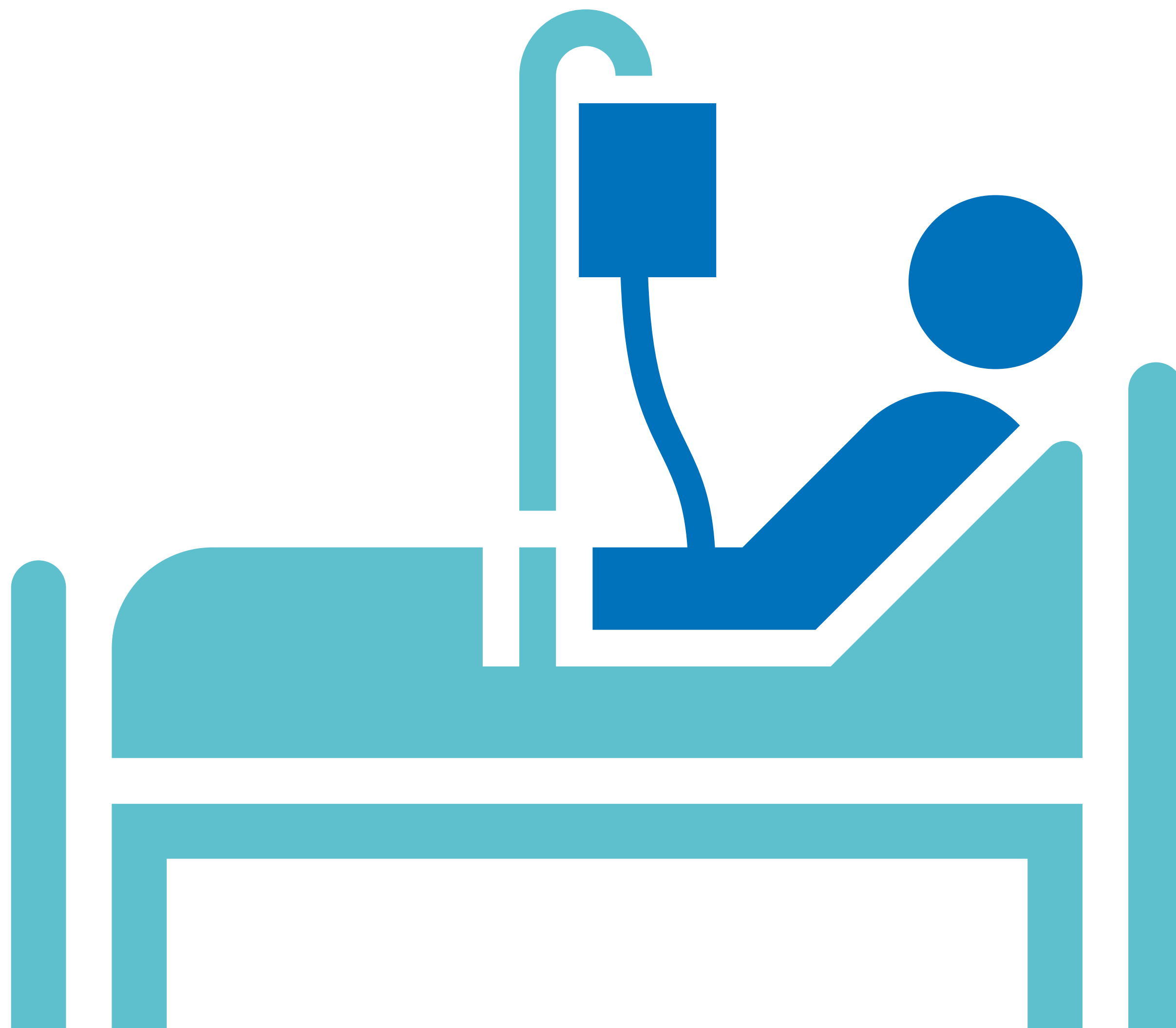
Specialties

General Medicine	36
Trauma and Orthopaedics	54
General Surgery	58
Urology	65
Obstetrics and Gynaecology	69



© NHS Elect

General Medicine



Abnormal liver function	46
Acute admissions from care homes/ non-acute NHS Beds	50
Acute headache	44
Anaemia	47
Ascites	53
Asthma	39
Cellulitis of limb	48
Chronic obstructive pulmonary disease (COPD)	39
Community-acquired pneumonia	40
Congestive cardiac failure	41
Deep vein thrombosis	37
Diabetes	48
Electrolyte disturbance	52
End of life care	51
Falls including syncope or collapse	51
First seizure	43
Gastroenteritis	45
Hypoglycaemia	47
Inflammatory bowel disease	46
Known oesophageal stenosis (stented/unstented)	49
Low risk acute kidney injury	53
Low risk chest pain	42
Lower respiratory tract infections without COPD	40
Other respiratory conditions	41
PEG related complications	49
Pleural effusions	38
Pneumothorax	38
Pulmonary embolism	37
Seizure in known epileptic	44
Self-harm and accidental overdose	50
Supraventricular tachycardias and other unspecified tachycardias	42
Transient ischaemic attack	43
Upper gastro-intestinal haemorrhage	45
Urinary tract infections	52

© NHS Elect

General Medicine

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Deep vein thrombosis

HRG4+ Codes and Detail	
YQ51C	Deep Vein Thrombosis with CC Score 6-8
YQ51D	Deep Vein Thrombosis with CC Score 3-5
YQ51E	Deep Vein Thrombosis with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	High: 60–90%	**Very High: >90%**

Specific Safety Issues (not Exhaustive)

Thrombophilia or possible malignancy.

Evidence

NICE: Venous thromboembolism:
http://bit.ly/1Uz4AhK

Pulmonary embolism

HRG4+ Codes and Detail	
DZ09N	Pulmonary Embolus without Interventions, with CC Score 6-8
DZ09P	Pulmonary Embolus without Interventions, with CC Score 3-5
DZ09Q	Pulmonary Embolus without Interventions, with CC Score 0-2
DZ28A	Pleurisy with CC Score 3+
DZ28B	Pleurisy with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Massive vs non-massive pulmonary embolism.
Thrombophilia or possible malignancy.

Evidence

NICE: Venous thromboembolism:
http://bit.ly/1Uz4AhK

© NHS Elect

General Medicine

Pneumothorax *

HRG4+ Codes and Detail	
DZ26N	Pneumothorax or Intrathoracic Injuries, without Interventions, with CC Score 3-5
DZ26P	Pneumothorax or Intrathoracic Injuries, without Interventions, with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Primary pneumothorax only.
Clarity of success of aspiration.

Evidence

BTS: Pleural Disease Guideline:
http://bit.ly/1G0WFUh

Pleural effusions

HRG4+ Codes and Detail	
DZ16Q	Pleural Effusion without Interventions, with CC Score 6-10
DZ16R	Pleural Effusion without Interventions, with CC Score 0-5

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Transudate vs exudate.
Para-pneumonic effusions.

Evidence

BTS: Pleural Disease Guideline:
http://bit.ly/1G0WFUh

© NHS Elect

General Medicine

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Asthma			
HRG4+ Codes and Detail			
DZ15P	Asthma without Interventions, with CC Score 6-8		
DZ15Q	Asthma without Interventions, with CC Score 3-5		
DZ15R	Asthma without Interventions, with CC Score 0-2		
% potential ambulatory care (primary ICD-10 coded admissions)			
Low: 10–30%	Moderate: 30–60%	High: 60–90%	Very High: >90%
Specific Safety Issues (not Exhaustive)			
Assessment of illness severity using BTS asthma guidelines and response to initial treatment.			
Evidence			
NICE: Asthma: **http://bit.ly/1WNxWiu**			

Chronic obstructive pulmonary disease (COPD)			
HRG4+ Codes and Detail			
DZ65F	Chronic Obstructive Pulmonary Disease or Bronchitis, without Interventions, with CC Score 13+		
DZ65G	Chronic Obstructive Pulmonary Disease or Bronchitis, without Interventions, with CC Score 9-12		
DZ65H	Chronic Obstructive Pulmonary Disease or Bronchitis, without Interventions, with CC Score 5-8		
DZ65J	Chronic Obstructive Pulmonary Disease or Bronchitis, without Interventions, with CC Score 0-4		
DZ65K	Chronic Obstructive Pulmonary Disease or Bronchitis, with length of stay 1 day or less, discharged home		
% potential ambulatory care (primary ICD-10 coded admissions)			
Low: 10–30%	Moderate: 30–60%	High: 60–90%	Very High: >90%
Specific Safety Issues (not Exhaustive)			
See Table 8 NICE COPD Guideline.			
Evidence			
NICE: Managing exacerbations of COPD: **http://bit.ly/1UuDTPm**			

© NHS Elect

General Medicine

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Community-acquired pneumonia

HRG4+ Codes and Detail	
DZ11T	Lobar, Atypical or Viral Pneumonia, without Interventions, with CC Score 7-9
DZ11U	Lobar, Atypical or Viral Pneumonia, without Interventions, with CC Score 4-6
DZ11V	Lobar, Atypical or Viral Pneumonia, without Interventions, with CC Score 0-3
DZ23M	Bronchopneumonia without Interventions, with CC Score 6-10
DZ23N	Bronchopneumonia without Interventions, with CC Score 0-5

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Clinical assessment and CURB-65 score – CURB-65 score of 0 or 1 suggests suitable for home treatment. BTS guidance suggests that a CURB-65 score of 2 be managed through short stay acute care or hospital supervised outpatient care. This decision is a matter for clinical judgement.

Evidence

NICE: Pneumonia: **http://bit.ly/1S5jgTY**

Lower respiratory tract infections without COPD

HRG4+ Codes and Detail	
DZ22P	Unspecified Acute Lower Respiratory Infection, without Interventions, with CC Score 5-8
DZ22Q	Unspecified Acute Lower Respiratory Infection, without Interventions, with CC Score 0-4

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

See Table 8 NICE COPD Guideline.

Evidence

NICE: Pneumonia: **http://bit.ly/1S5jgTY**
BTS: Cough in adults: **http://bit.ly/1OoRXJE**

© NHS Elect

General Medicine

Other respiratory conditions

HRG4+ Codes and Detail	
DZ19L	Other Respiratory Disorders without Interventions, with CC Score 11+
DZ19M	Other Respiratory Disorders without Interventions, with CC Score 5-10
DZ19N	Other Respiratory Disorders without Interventions, with CC Score 0-4
DZ25K	Fibrosis or Pneumoconiosis, without Interventions, with CC Score 7-9
DZ25L	Fibrosis or Pneumoconiosis, without Interventions, with CC Score 4-6
DZ25M	Fibrosis or Pneumoconiosis, without Interventions, with CC Score 0-3
DZ27T	Respiratory Failure without Interventions, with CC Score 6-10
DZ27U	Respiratory Failure without Interventions, with CC Score 0-5

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Assess for respiratory failure.

Evidence

BTS: Guidelines and Quality Standards: **http://bit.ly/2agyClm**

Congestive cardiac failure

HRG4+ Codes and Detail	
EB03D	Heart Failure or Shock, with CC Score 4-7
EB03E	Heart Failure or Shock, with CC Score 0-3

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	**Moderate: 30–60%**	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Reason for ecompensation.
Weight, renal and electrolyte monitoring.

Evidence

NICE: Acute heart failure: **http://bit.ly/1OoSeMN**

ESC: Acute and Chronic Heart Failure: **http://bit.ly/1OoSeMN**

© NHS Elect

General Medicine

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Supraventricular tachycardias & other unspecified tachycardias

HRG4+ Codes and Detail	
EB07B	Arrhythmia or Conduction Disorders, with CC Score 10-12
EB07C	Arrhythmia or Conduction Disorders, with CC Score 7-9
EB07D	Arrhythmia or Conduction Disorders, with CC Score 4-6
EB07E	Arrhythmia or Conduction Disorders, with CC Score 0-3

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	**Moderate: 30–60%**	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Cardiac and non-cardiac aetiology. Electrolyte and thyroid function. Underlying LV function. Pre-arrest criteria. Rate and/or rhythm control achieved before discharge.

Evidence

NICE: Atrial fibrillation: **http://bit.ly/1ZQPrwv**

ACC/AHA/ESC: Guidelines for the Management of Patients with Supraventricular Arrhythmias: **http://bit.ly/239VMVI**

Low risk chest pain

HRG4+ Codes and Detail	
EB14C	Other Acquired Cardiac Conditions with CC Score 6-8
EB14D	Other Acquired Cardiac Conditions with CC Score 3-5
EB14E	Other Acquired Cardiac Conditions with CC Score 0-2
EB10C	Actual or Suspected Myocardial Infarction, with CC Score 7-9
EB10D	Actual or Suspected Myocardial Infarction, with CC Score 4-6
EB10E	Actual or Suspected Myocardial Infarction, with CC Score 0-3
EB12A	Unspecified Chest Pain with CC Score 11+
EB12B	Unspecified Chest Pain with CC Score 5-10
EB12C	Unspecified Chest Pain with CC Score 0-4
EB13A	Angina with CC Score 12+
EB13B	Angina with CC Score 8-11
EB13C	Angina with CC Score 4-7
EB13D	Angina with CC Score 0-3
DZ28A	Pleurisy with CC Score 3+
DZ28B	Pleurisy with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	**Moderate: 30–60%**	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Early risk stratification and streaming.

Evidence

NICE: Acute coronary syndromes: **http://bit.ly/1UP4eWY**

© NHS Elect

General Medicine

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Transient ischaemic attack

HRG4+ Codes and Detail	
AA29C	Transient Ischaemic Attack with CC Score 11+
AA29D	Transient Ischaemic Attack with CC Score 8-10
AA29E	Transient Ischaemic Attack with CC Score 5-7
AA29F	Transient Ischaemic Attack with CC Score 0-4

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

ABCD score 'Crescendo TIAs', ie more than one TIA in a week. Aetiology. 2° prophylaxis. Timeliness of accessto Carotid Doppler and neurovascular service.

Evidence

NICE: Stroke: **http://bit.ly/1XWWO8v**

Recommendation is for all suspected stroke to go to HASU.

First seizure

HRG4+ Codes and Detail	
AA26E	Muscular, Balance, Cranial or Peripheral Nerve Disorders, Epilepsy or Head Injury, with CC Score 9-11
AA26F	Muscular, Balance, Cranial or Peripheral Nerve Disorders, Epilepsy or Head Injury, with CC Score 6-8
AA26G	Muscular, Balance, Cranial or Peripheral Nerve Disorders, Epilepsy or Head Injury, with CC Score 3-5
AA26H	Muscular, Balance, Cranial or Peripheral Nerve Disorders, Epilepsy or Head Injury, with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Full recovery and no atypical features. Screening tests (glucose, sodium, calcium) stable. Neuro-imaging for focal seizure Appropriate specialty follow up. Driving advice.

Evidence

NICE: Epilepsy: **http://bit.ly/1QwpeOP**

© NHS Elect

General Medicine

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Seizure in known epileptic

HRG4+ Codes and Detail	
AA26E	Muscular, Balance, Cranial or Peripheral Nerve Disorders, Epilepsy or Head Injury, with CC Score 9-11
AA26F	Muscular, Balance, Cranial or Peripheral Nerve Disorders, Epilepsy or Head Injury, with CC Score 6-8
AA26G	Muscular, Balance, Cranial or Peripheral Nerve Disorders, Epilepsy or Head Injury, with CC Score 3-5
AA26H	Muscular, Balance, Cranial or Peripheral Nerve Disorders, Epilepsy or Head Injury, with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Seizure pattern.
Trigger factors.
Drug review.

Evidence

NICE: Epilepsy: **http://bit.ly/1QwpeOP**

Acute headache

HRG4+ Codes and Detail	
AA31C	Headache, Migraine or Cerebrospinal Fluid Leak, with CC Score 11+
AA31D	Headache, Migraine or Cerebrospinal Fluid Leak, with CC Score 7-10
AA31E	Headache, Migraine or Cerebrospinal Fluid Leak, with CC Score 0-6

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	**Moderate: 30–60%**	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Glasgow Coma Scale and focal signs.
If sub-arachnoid haemorrhage suspected CT (OPCS 4.3 U05.1) +/- lumbar puncture (OPCS 4.3 A55.9).

Evidence

NICE: Headaches: **http://bit.ly/1XWXXwX**

© NHS Elect

General Medicine

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Upper gastro-intestinal haemorrhage

HRG4+ Codes and Detail	
FZ38M	Gastrointestinal Bleed without Interventions, with CC Score 9+
FZ38N	Gastrointestinal Bleed without Interventions, with CC Score 5-8
FZ38P	Gastrointestinal Bleed without Interventions, with CC Score 0-4

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Haemodynamic assessment.Transfusion criteria.
Risk assessment using the postendoscopy Rockall Score or Blatchford Score.

Evidence

NICE: Acute upper gastrointestinal bleeding: **http://bit.ly/1XWXUB8**

Gastroenteritis *

HRG4+ Codes and Detail	
FZ36N	Gastrointestinal Infections without Interventions, with CC Score 5-7
FZ36P	Gastrointestinal Infections without Interventions, with CC Score 2-4
FZ36Q	Gastrointestinal Infections without Interventions, with CC Score 0-1

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Haemodynamic, renal and electrolyte assessment.
Consider the possibility of inflammatory bowel disease and pseudomembranous colitis.
Consider use of ambulatory IV hydration.
Immediate triage and transfer to isolation cubicle, assessed by a Senior Doctor and admission avoided where clinically appropriate.

Evidence

CKS NICE: Gastroenteritis: **http://bit.ly/1S5pF1D**

© NHS Elect

General Medicine

Inflammatory bowel disease *	
HRG4+ Codes and Detail	
FZ37Q	Inflammatory Bowel Disease without Interventions, with CC Score 3-4
FZ37R	Inflammatory Bowel Disease without Interventions, with CC Score 1-2
FZ37S	Inflammatory Bowel Disease without Interventions, with CC Score 0

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Patients with abdominal pain, vomiting, fever and more severe symptoms will require in-patient care.

Evidence

NICE Quality Standard (QS81): Inflammatory Bowel Disease: **http://bit.ly/2aCXFa3**

Abnormal liver function *	
HRG4+ Codes and Detail	
GC12J	Malignant, Hepatobiliary or Pancreatic Disorders, without Interventions, with CC Score 1-2
GC12K	Malignant, Hepatobiliary or Pancreatic Disorders, without Interventions, with CC Score 0
GC17J	Non-Malignant, Hepatobiliary or Pancreatic Disorders, without Interventions, with CC Score 2-4
GC17K	Non-Malignant, Hepatobiliary or Pancreatic Disorders, without Interventions, with CC Score 0-1
GC01F	Liver Failure Disorders without Interventions, with CC Score 0-4

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Consider risk of ascending cholangitis. Coagulation status. Access to ultrasound/ CT scanning.

Evidence

CKS NICE: Hepatitis A: **http://bit.ly/25XE1ye**

NICE: Liver conditions: **http://bit.ly/1PtOcxA**

© NHS Elect

General Medicine

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Anaemia

HRG4+ Codes and Detail

Code	Detail
SA01H	Acquired Pure Red Cell Aplasia or Other Aplastic Anaemia, with CC Score 5-7
SA01J	Acquired Pure Red Cell Aplasia or Other Aplastic Anaemia, with CC Score 2-4
SA01K	Acquired Pure Red Cell Aplasia or Other Aplastic Anaemia, with CC Score 0-1
SA03H	Haemolytic Anaemia with CC Score 0-2
SA04H	Iron Deficiency Anaemia with CC Score 10-13
SA04J	Iron Deficiency Anaemia with CC Score 6-9
SA04K	Iron Deficiency Anaemia with CC Score 2-5
SA04L	Iron Deficiency Anaemia with CC Score 0-1
SA05H	Megaloblastic Anaemia with CC Score 4-7
SA05J	Megaloblastic Anaemia with CC Score 0-3
SA06H	Myelodysplastic Syndrome with CC Score 5-7
SA06J	Myelodysplastic Syndrome with CC Score 2-4
SA06K	Myelodysplastic Syndrome with CC Score 0-1
SA09H	Other Red Blood Cell Disorders with CC Score 10-13
SA09J	Other Red Blood Cell Disorders with CC Score 6-9
SA09K	Other Red Blood Cell Disorders with CC Score 2-5
SA09L	Other Red Blood Cell Disorders with CC Score 0-1

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Aetiology. Transfusion need is based on haemodynamic impact not on haemoglobin level.

Evidence

CKS NICE: Anaemia – iron deficiency: **http://bit.ly/1XprY7w**
CKS NICE: Anaemia – B12 and folate deficiency: **http://bit.ly/24QMuxa**
JPAC: Transfusion Handbook: **http://bit.ly/1sGph55**

Hypoglycaemia

HRG4+ Codes and Detail

Code	Detail
KB01C	Diabetes with Hypoglycaemic Disorders, with CC Score 8+
KB01D	Diabetes with Hypoglycaemic Disorders, with CC Score 5-7
KB01E	Diabetes with Hypoglycaemic Disorders, with CC Score 3-4
KB01F	Diabetes with Hypoglycaemic Disorders, with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Applies only in patients with diabetes receiving hypoglycaemic agents. Review of cause and education of patient required. More caution with sulphonylurea associated/long-acting insulin induced hypoglycaemia.

Evidence

NICE: Diabetes: **http://bit.ly/1ZR8HtG**

© NHS Elect

General Medicine

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Diabetes

HRG4+ Codes and Detail	
KB01C	Diabetes with Hypoglycaemic Disorders, with CC Score 8+
KB01D	Diabetes with Hypoglycaemic Disorders, with CC Score 5-7
KB01E	Diabetes with Hypoglycaemic Disorders, with CC Score 3-4
KB01F	Diabetes with Hypoglycaemic Disorders, with CC Score 0-2
KB02H	Diabetes with Hyperglycaemic Disorders, with CC Score 5-7
KB02J	Diabetes with Hyperglycaemic Disorders, with CC Score 2-4
KB02K	Diabetes with Hyperglycaemic Disorders, with CC Score 0-1
KB03D	Diabetes with Lower Limb Complications, with CC Score 5-8
KB03E	Diabetes with Lower Limb Complications, with CC Score 0-4

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Symptom severity assessment. Haemodynamic, renal and electrolyte status.

Evidence

NICE: Diabetes:
http://bit.ly/1ZR8HtG

Cellulitis of limb

HRG4+ Codes and Detail	
JD07H	Skin Disorders without Interventions, with CC Score 6-9
JD07J	Skin Disorders without Interventions, with CC Score 2-5
JD07K	Skin Disorders without Interventions, with CC Score 0-1

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Exclude necrotising fasciitis. Class III and IV require admission. Ambulatory IV antibiotic policy with review of IV access site (OPCS 4.3 X28.1).

Evidence

CKS NICE: Cellulitis – acute: **http://bit.ly/1ye0qAx**

NICE: Antimicrobial stewardship: **http://bit.ly/1Q4J4FK**

© NHS Elect

General Medicine

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Known oesophageal stenosis (either stented or unstented)

HRG4+ Codes and Detail	
FZ91K	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 6-10
FZ91L	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 3-5
FZ91M	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 0-2
FZ92J	Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 3-4
FZ92K	Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Aspiration pneumonia.
Oesophageal rupture/perforation

Evidence

NICE: Gastrointestinal cancers: **http://bit.ly/23afwZt**
ASGE: The role of endoscopy in the evaluation and management of dysphagia: **http://bit.ly/1VZnCDb**

PEG related complications *

HRG4+ Codes and Detail	
FZ91K	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 6-10
FZ91L	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 3-5
FZ91M	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	High: 60–90%	**Very High: >90%**

Specific Safety Issues (not Exhaustive)

Local PEG re-insertion policy.
Maintenance of tract.

Evidence

NICE Guidelines (CG32): Nutrition support for adults: oral nutrition support, enteral tube feeding and parenteral nutrition:
http://bit.ly/1QlnzA1

© NHS Elect

General Medicine

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Acute admissions from care homes/non-acute NHS beds

HRG4+ Codes and Detail

No HRG codes	Use admission codes and/or postcode of residence for large care homes. The CQC website has a list of all registered care homes and number of beds: **www.cqc.org.uk/content/how-get-and-re-use-cqc-information-and-data#directory**

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	**Moderate: 30–60%**	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Scenario planning (eg advanced care directives including resuscitation) and review.

Rapid access to specialist multidisciplinary assessment. These include intermediate care beds, mental health beds and other community hospital beds.

In these situations, the principle should be to take the 'care to the patient and not the patient to the care' unless absolutely necessary.

Evidence

BGS: Medical care for older people: **http://bit.ly/1UcHvaA**
BGS: Acute medicine for older people: **http://bit.ly/1XpvQFI**
BGS: Silver Book: **http://bit.ly/1Hu4t3H**
NICE: Transition between inpatient hospital settings and community or care home settings for adults with social care needs overview: **http://bit.ly/1UPe1wd**

Self-harm and accidental overdose

HRG4+ Codes and Detail

WH04D	Poisoning Diagnosis without Interventions, with CC Score 2+
WH04E	Poisoning Diagnosis without Interventions, with CC Score 0-1

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Suicide risk assessment. Rapid access mental health response (not just assessment) if physical risk from DSH does not require admission to an acute bed and significant suicide risk.

Evidence

NICE: Self-harm: **http://bit.ly/1UdbajR**
NICE: Depression: **http://bit.ly/1UjJ43e**

© NHS Elect

General Medicine

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

End of life care

HRG4+ Codes and Detail

Code	Detail
No HRG codes	The General Medical Council (GMC) defines patients 'approaching the end of life' when they are likely to die within the next 12 months. There are no specific HRG/ICD-10 codes. Review against local Palliative Care Cordinating Systems, GP registers and/or hospital records for patient preferences for place of care in the event of deterioration in their health including symptom management.

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Prior planning of potential scenarios including patient, family and multidisciplinary team (ie advance care directives). Rapid access to specialist ambulatory multi-disciplinary care.

Evidence

NICE Quality Standards: End of life care for adults: **http://bit.ly/1Md6sbP**

Falls including syncope or collapse

HRG4+ Codes and Detail

Code	Detail
EB08A	Syncope or Collapse, with CC Score 13+
EB08B	Syncope or Collapse, with CC Score 10-12
EB08C	Syncope or Collapse, with CC Score 7-9
EB08D	Syncope or Collapse, with CC Score 4-6
EB08E	Syncope or Collapse, with CC Score 0-3
WH16A	Observation or Counselling, with CC Score 1+
WH16B	Observation or Counselling, with CC Score 0
WH09E	Tendency to Fall, Senility or Other Conditions Affecting Cognitive Functions, without Interventions, with CC Score 4-5
WH09F	Tendency to Fall, Senility or Other Conditions Affecting Cognitive Functions, without Interventions, with CC Score 2-3
WH09G	Tendency to Fall, Senility or Other Conditions Affecting Cognitive Functions, without Interventions, with CC Score 0-1

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Exclusion of significant cardiovascular risk – eg high-grade AV block or high risk dysrhythmia. Osteoporosis assessment. Access to specialist falls assessment.
If new onset of falls, consider acute illness as precipitant.

Evidence

NICE: Falls in older people: **http://bit.ly/1UPgmY7**

NICE: Osteoporosis: **http://bit.ly/1OpfLgF**

NICE: Transient loss of consciousness ('blackouts'): **http://bit.ly/1Uv7dVV**

© NHS Elect

General Medicine

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Urinary tract infections *

HRG4+ Codes and Detail

Code	Detail
LA04Q	Kidney or Urinary Tract Infections, without Interventions, with CC Score 4-7
LA04R	Kidney or Urinary Tract Infections, without Interventions, with CC Score 2-3
LA04S	Kidney or Urinary Tract Infections, without Interventions, with CC Score 0-1

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	**Moderate: 30–60%**	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Impaired renal function – renal imaging. Bladder outflow obstruction. Foreign body. Increasing prevalence of multiresistant organisms especially with indwelling urinary catheters. Consider use of ambulatory IV hydration if dehydrated (OPCS4.3 X28.1). Pregnancy related UTI.

Evidence

CKS NICE: Urinary tract infection (lower) – men: **http://bit.ly/1Yrwy4A**

CKS NICE: Urinary tract infection (lower) – women: **http://bit.ly/1Q4TDIP**

NICE: Antimicrobial stewardship: **http://bit.ly/1Q4J4FK**

Electrolyte disturbance

HRG4+ Codes and Detail

Code	Detail
KC05K	Fluid or Electrolyte Disorders, without Interventions, with CC Score 7-9
KC05L	Fluid or Electrolyte Disorders, without Interventions, with CC Score 4-6
KC05M	Fluid or Electrolyte Disorders, without Interventions, with CC Score 2-3
KC05N	Fluid or Electrolyte Disorders, without Interventions, with CC Score 0-1

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	**Moderate: 30–60%**	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Patients with severe electrolyte abnormalities will require cardiac monitoring.

Evidence

NICE Guidance: Intravenous fluid therapy in adults in hospital: **http://bit.ly/2aevei3**

Patient.info: Hypokalaemia: **http://bit.ly/1UAopte**

The Renal Association: Treatment of acute hyperkalaemia in adults: **http://bit.ly/261zlav**

The Renal Association: CKD-Mineral and bone disorders (CKD-MBD): **http://bit.ly/1UAqyVE**

© NHS Elect

General Medicine

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Low risk acute kidney injury

HRG4+ Codes and Detail

Code	Detail
LA07N	Acute Kidney Injury without Interventions, with CC Score 4-7
LA07P	Acute Kidney Injury without Interventions, with CC Score 0-3

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	**Moderate: 30–60%**	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Safety issues – monitor for signs of worsening AKI.

Evidence

NICE Guidelines (CG169): Acute kidney injury: prevention, detection and management: http://bit.ly/2aCZFiE

Ascites

HRG4+ Codes and Detail

Code	Detail
FZ13C	Minor Therapeutic or Diagnostic, General Abdominal Procedures, 19 years and over

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Suspected cancer.
Spontaneous bacterial peritonitis.
USS guidance of procedure.

Evidence

BSG: Guidelines on the management of ascites in cirrhosis: http://bit.ly/2FX2cli
NICE Ascites Pathway: http://bit.ly/2nKDm18
Royal College of Radiologists – Interventional Oncology: http://bit.ly/2nT7Jln
NICE: Suspected Cancer: http://bit.ly/1S82NPS
NICE: PleurX peritoneal catheter: http://bit.ly/2BNLl6w

© NHS Elect

Trauma and Orthopaedics

Acutely hot painful joint	55
Appendicular fractures not requiring immediate internal fixation	55–56
Hip pain secondary to a fall and non-weight bearing	57
Low risk pubic rami fractures	57
Non-traumatic vertebral fractures	56

© NHS Elect

Trauma and Orthopaedics

Acutely hot painful joint

HRG4+ Codes and Detail	
HD23F	Inflammatory, Spine, Joint or Connective Tissue Disorders, with CC Score 7-8
HD23G	Inflammatory, Spine, Joint or Connective Tissue Disorders, with CC Score 5-6
HD23H	Inflammatory, Spine, Joint or Connective Tissue Disorders, with CC Score 3-4
HD23J	Inflammatory, Spine, Joint or Connective Tissue Disorders, with CC Score 0-2
HD26D	Musculoskeletal Signs or Symptoms, with CC Score 12+
HD26E	Musculoskeletal Signs or Symptoms, with CC Score 8-11
HD26F	Musculoskeletal Signs or Symptoms, with CC Score 4-7
HD26G	Musculoskeletal Signs or Symptoms, with CC Score 0-3

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	**Moderate: 30–60%**	High: 60–90%	Very high: >90%

Specific Safety Issues (not Exhaustive)

Exclusion of septic arthritis.
Prosthetic joint sepsis.

Evidence

CKS NICE: Pre-patellar bursitis: **http://bit.ly/24VAQRS**
NICE: Arthritis: **http://bit.ly/1tAbCgC**
CKS NICE: Knee pain – assessment: **http://bit.ly/1WQPAlC**
BSR & BHPR, BOA, RCGP and BSAC: Guidelines for the management of the hot swollen joint in adults: **http://bit.ly/1XZciJ2**

Appendicular fractures not requiring immediate internal fixation

HRG4+ Codes and Detail	
HE21F	Knee Fracture without Interventions, with CC Score 2-4
HE21G	Knee Fracture without Interventions, with CC Score 0-1
HE22G	Other Injury of Knee without Interventions, with CC Score 9+
HE22H	Other Injury of Knee without Interventions, with CC Score 6-8
HE22J	Other Injury of Knee without Interventions, with CC Score 3-5
HE22K	Other Injury of Knee without Interventions, with CC Score 0-2
HE31E	Foot Fracture without Interventions, with CC Score 4-7
HE31F	Foot Fracture without Interventions, with CC Score 2-3
HE31G	Foot Fracture without Interventions, with CC Score 0-1
HE32C	Other Injury of Foot without Intervention, with CC Score 4+
HE32D	Other Injury of Foot without Interventions, with CC Score 2-3
HE32E	Other Injury of Foot without Interventions, with CC Score 0-1
HE51E	Arm Fracture without Interventions, with CC Score 6-8
HE51F	Arm Fracture without Interventions, with CC Score 4-5
HE51G	Arm Fracture without Interventions, with CC Score 2-3
HE51H	Arm Fracture without Interventions, with CC Score 0-1
HE52C	Other Injury of Arm without Interventions, with CC Score 7+
HE52D	Other Injury of Arm without Interventions, with CC Score 4-6
HE52E	Other Injury of Arm without Interventions, with CC Score 2-3
HE52F	Other Injury of Arm without Interventions, with CC Score 0-1
HE41B	Hand Fracture without Interventions, with CC Score 3+
HE41C	Hand Fracture without Interventions, with CC Score 1-2
HE41D	Hand Fracture without Interventions, with CC Score 0
HE42C	Other Injury of Hand without Interventions, with CC Score 4+
HE42D	Other Injury of Hand without Interventions, with CC Score 2-3
HE42E	Other Injury of Hand without Interventions, with CC Score 0-1

See following page for information and ICD-10 codes

© NHS Elect

Trauma and Orthopaedics

Appendicular fractures not requiring immediate internal fixation *continued*

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Neuro-vascular assessment.

A significant proportion of those currently admitted are frail older people who have fallen and sustained a fracture.

Consider acute illness precipitating the fall which resulted in the fracture.

Admission only required if the acute precipitating illness requires admission in its own right.

In those requiring internal fixation, consider the possibility of fast track day case surgery if feasible.

Osteoporosis assessment and falls assessment where appropriate.

Evidence

NICE: Trauma: **http://bit.ly/1S8X7nG**

NICE: Falls in older people: **http://bit.ly/1UPgmY7**

CKS NICE: Osteoporosis: **http://bit.ly/1OpfLgF**

Non-traumatic vertebral fractures

HRG4+ Codes and Detail

Code	Detail
HC27L	Degenerative Spinal Conditions without Interventions, with CC Score 6-8
HC27M	Degenerative Spinal Conditions without Interventions, with CC Score 3-5
HC27N	Degenerative Spinal Conditions without Interventions, with CC Score 0-2
HD39G	Pathological Fractures with CC Score 3-5
HD39H	Pathological Fractures with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	High: 60–90%	**Very High: >90%**

Specific Safety Issues (not Exhaustive)

Neuro-vascular assessment.
Consider metastatic disease or sepsis.
Osteoporosis assessment.

Evidence

NICE: Low back pain (early management): **http://bit.ly/23fYtp1**
NICE: Osteoarthritis: **http://bit.ly/23fY4CI**
NICE: Falls in older people: **http://bit.ly/1UPgmY7**
NICE: Osteoporosis: **http://bit.ly/1OpfLgF**
NICE: Suspected cancer recognition and referral: **http://bit.ly/1sGjufT**

© NHS Elect

Trauma and Orthopaedics

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Low risk pubic rami fractures

HRG4+ Codes and Detail	
HE11G	Hip Fracture without Interventions, with CC Score 4-7
HE11H	Hip Fracture without Interventions, with CC Score 0-3
HE12C	Other Injury of Hip without Interventions, with CC Score 6+
HE12D	Other Injury of Hip without Interventions, with CC Score 3-5
HE12E	Other Injury of Hip without Interventions, with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	High: 60–90%	**Very High: >90%**

Specific Safety Issues (not Exhaustive)

Low energy fall.
Consider visceral injury.
Osteoporosis assessment and falls assessment.

Evidence

NICE: Hip fracture: **http://bit.ly/1Qbp5oZ**
NICE: Falls in older people: **http://bit.ly/1UPgmY7**
NICE: Osteoporosis: **http://bit.ly/1OpfLgF**

Hip pain secondary to a fall and non-weight bearing

HRG4+ Codes and Detail	
HE11G	Hip Fracture without Interventions, with CC Score 4-7
HE11H	Hip Fracture without Interventions, with CC Score 0-3
HE12C	Other Injury of Hip without Interventions, with CC Score 6+
HE12D	Other Injury of Hip without Interventions, with CC Score 3-5
HE12E	Other Injury of Hip without Interventions, with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

These patients require same day MRI to exclude a fracture.
Once a fracture is excluded, admission for pain relief and mobilisation should not be required unless aspiration of the joint is necessary.

Evidence

NICE: Hip fracture: **http://bit.ly/1Qbp5oZ**
NICE: Falls in older people: **http://bit.ly/1UPgmY7**
NICE: Osteoporosis: **http://bit.ly/1OpfLgF**

© NHS Elect

General Surgery

Acute abdominal pain not requiring operative intervention	60
Cutaneous abscesses requiring surgical drainage	60
Haemorrhoids	62
Left iliac fossa pain	63
Lower gastro-intestinal haemorrhage	59
Minor head Injury	61
Obstructive jaundice	59
Other anorectal issues	64
Painful non-obstructed hernia	62
Right iliac fossa pain	63
Right upper quadrant pain	61

© NHS Elect

General Surgery

Lower gastro-intestinal haemorrhage

HRG4+ Codes and Detail	
FZ38M	Gastrointestinal Bleed without Interventions, with CC Score 9+
FZ38N	Gastrointestinal Bleed without Interventions, with CC Score 5-8
FZ38P	Gastrointestinal Bleed without Interventions, with CC Score 0-4

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Haemodynamic assessment.
Transfusion criteria.
Access to flexible sigmoidoscopy/colonoscopy (OPCS 4.3 H28.1 H28.8 H28.9 H25.1 H25.8 H25.9 H22.1 H22.8 H22.9).

Evidence

NICE: Suspected cancer recognition and referral: **http://bit.ly/1sGjufT**

SIGN: Management of acute upper and lower gastrointestinal bleeding: **http://bit.ly/1NRxU4H**

Obstructive jaundice *

HRG4+ Codes and Detail	
GC18A	Non-Obstructive Jaundice with CC Score 5+
GC18B	Non-Obstructive Jaundice with CC Score 0-4

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	**Moderate: 30–60%**	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Consider risk of ascending cholangitis.
Coagulation status.
Access to ultrasound/CT scanning.

Evidence

CKS NICE: Jaundice in adults: **http://bit.ly/1UjAPEz**

BSG: Pancreatitis: **http://bit.ly/1UjAzFx**

BSG: Pancreatic cancer: **http://bit.ly/1S5pVgZ**

NICE: Suspected cancer recognition and referral: **http://bit.ly/1sGjufT**

© NHS Elect

General Surgery

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Acute abdominal pain not requiring operative intervention *

HRG4+ Codes and Detail

Code	Detail
FZ90B	Abdominal Pain without Interventions

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	**Moderate: 30–60%**	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Rapid (same day) access to ultrasound/CT scanning.

Evidence

Health Technology Assessment: Systematic reviews of clinical decision tools for acute abdominal pain: **http://bit.ly/1Py9QRk**

Royal College of Surgeons: Emergency General Surgery commissioning guide: **http://bit.ly/1S9bzwd**

BADS: Ambulatory Emergency Care Handbook: **http://bit.ly/1QbP0wN**

Cutaneous abscesses requiring surgical drainage

HRG4+ Codes and Detail

Code	Detail
FZ91K	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 6-10
FZ91L	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 3-5
FZ91M	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 0-2
FZ22D	Intermediate Anal Procedures, 19 years and over, with CC Score 1-2
FZ22E	Intermediate Anal Procedures, 19 years and over, with CC Score 0
FZ23A	Minor Anal Procedures, 19 years and over
FZ21D	Major Anal Procedures, 19 years and over, with CC Score 0
JA13B	Non-Malignant Breast Disorders without Interventions, with CC Score 4+
JA13C	Non-Malignant Breast Disorders without Interventions, with CC Score 0-3
JA45Z	Unilateral Minor Breast Procedures
JA44Z	Bilateral Minor Breast Procedures

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Consider conversion to fast-track day case surgery if cannot be drained in outpatient assessment area setting.

Evidence

CKS NICE: Pilonidal sinus disease: **http://bit.ly/1UncltW**
CKS NICE: Mastitis and breast abscess: **http://bit.ly/1tu7DBv**
ASCRS: Management of Perianal Abscess and Fistula-in-Ano: **http://bit.ly/1Pyc1nY**
NICE: Antimicrobial stewardship: **http://bit.ly/1Q4J4FK**
BADS: Ambulatory Emergency Care Handbook: **http://bit.ly/1QbP0wN**

© NHS Elect

General Surgery

Minor head injury *

HRG4+ Codes and Detail	
AA26E	Muscular, Balance, Cranial or Peripheral Nerve Disorders, Epilepsy or Head Injury, with CC Score 9-11
AA26F	Muscular, Balance, Cranial or Peripheral Nerve Disorders, Epilepsy or Head Injury, with CC Score 6-8
AA26G	Muscular, Balance, Cranial or Peripheral Nerve Disorders, Epilepsy or Head Injury, with CC Score 3-5
AA26H	Muscular, Balance, Cranial or Peripheral Nerve Disorders, Epilepsy or Head Injury, with CC Score 0-2
CB02D	Non-Malignant, Ear, Nose, Mouth, Throat or Neck Disorders, without Interventions, with CC Score 5+
CB02E	Non-Malignant, Ear, Nose, Mouth, Throat or Neck Disorders, without Interventions, with CC Score 1-4
CB02F	Non-Malignant, Ear, Nose, Mouth, Throat or Neck Disorders, without Interventions, with CC Score 0

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

See NICE Guidelines.

Evidence

NICE: Head injury: **http://bit.ly/28KjcoN**

Right upper quadrant pain

HRG4+ Codes and Detail	
FZ91K	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 6-10
FZ91L	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 3-5
FZ91M	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Assess for acute cholecystits, cholangitis and pancreatitis which require in-patient care.

Evidence

AUGIS RCS: Commissioning Guide: Gallstone disease: **http://bit.ly/2avvN8g**

NICE: Gallstone disease: **http://bit.ly/28KCVF1**

© NHS Elect

General Surgery

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Painful non-obstructed hernia

HRG4+ Codes and Detail	
FZ91K	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 6-10
FZ91L	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 3-5
FZ91M	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 0-2
FZ18J	Inguinal, Umbilical or Femoral Hernia Procedures, 19 years and over, with CC Score 1-2
FZ18K	Inguinal, Umbilical or Femoral Hernia Procedures, 19 years and over, with CC Score 0

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Signs of strangulation or obstruction require emergency surgery.

Evidence

ASGBI, British Hernia Society, RCS: Commissioning Guide: Groin hernia: **http://bit.ly/2aD0KqE**

CKS NICE: Scrotal swellings: **http://bit.ly/1WRqflk**

Haemorrhoids

HRG4+ Codes and Detail	
FZ22D	Intermediate Anal Procedures, 19 years and over, with CC Score 1-2
FZ22E	Intermediate Anal Procedures, 19 years and over, with CC Score 0
FZ23A	Minor Anal Procedures, 19 years and over
FZ21D	Major Anal Procedures, 19 years and over, with CC Score 0

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	High: 60–90%	**Very High: >90%**

Specific Safety Issues (not Exhaustive)

Evidence

CKS NICE: Haemorrhoids: **http://bit.ly/28KDHln**

© NHS Elect

General Surgery

Right iliac fossa pain

HRG4+ Codes and Detail	
FZ91K	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 6-10
FZ91L	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 3-5
FZ91M	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 0-2
FZ20H	Appendicectomy Procedures, 19 years and over, with CC Score 1-2
FZ20J	Appendicectomy Procedures, 19 years and over, with CC Score 0

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	**Moderate: 30–60%**	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Sepsis, peritonitis and perforation. Suspected cancer.

Evidence

NICE: Appendicitis: **http://bit.ly/2EcMnGH**

The Association of Coloproctology of Great Britain and Northern Ireland – Management of acute appendicitis in ambulatory surgery: **http://bit.ly/2Eb4T6n**

NICE: Suspected Cancer: **http://bit.ly/1S82NPS**

Left iliac fossa pain

HRG4+ Codes and Detail	
FZ91K	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 6-10
FZ91L	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 3-5
FZ91M	Non-Malignant Gastrointestinal Tract Disorders without Interventions, with CC Score 0-2
MB09E	Non-Malignant Gynaecological Disorders without Interventions, with CC Score 3-5
MB09F	Non-Malignant Gynaecological Disorders without Interventions, with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	**Moderate: 30–60%**	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Sepsis, peritonitis and perforation. Suspected cancer.

Evidence

NICE: Inflammatory Bowel Disease: **http://bit.ly/2FXczWe**

NICE: Diverticular Disease: **http://bit.ly/2nI9Byk**

NICE: Suspected Cancer: **http://bit.ly/1S82NPS**

© NHS Elect

General Surgery

Other anorectal issues	
HRG4+ Codes and Detail	
FZ22D	Intermediate Anal Procedures, 19 years and over, with CC Score 1-2
FZ22E	Intermediate Anal Procedures, 19 years and over, with CC Score 0
FZ23A	Minor Anal Procedures, 19 years and over
FZ21D	Major Anal Procedures, 19 years and over, with CC Score 0

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

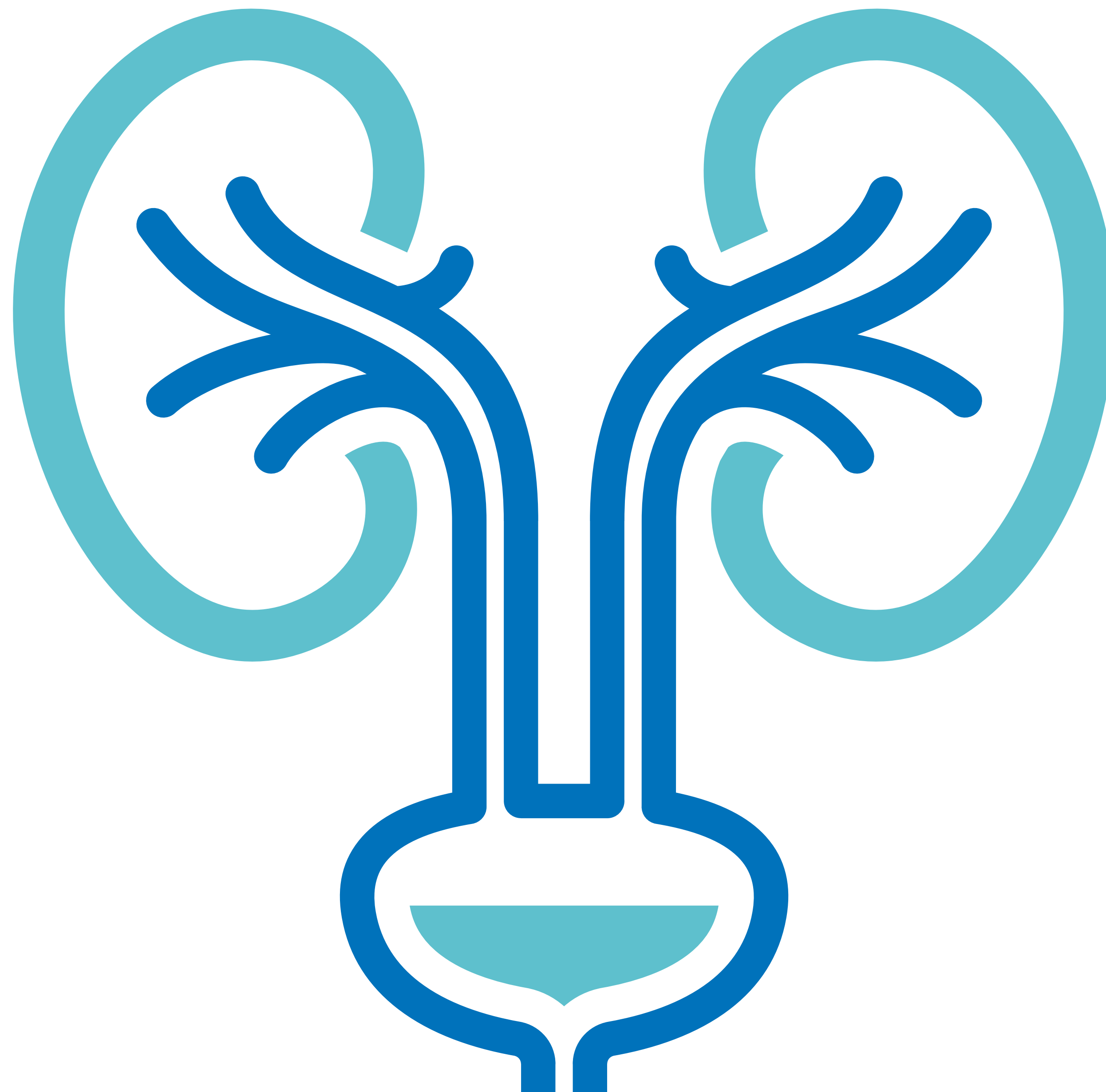
Specific Safety Issues (not Exhaustive)

Sepsis, peritonitis and perforation. Suspected cancer. Safeguarding issues.

Evidence

© NHS Elect

Urology



Acute painful bladder outflow obstruction	66
Acute scrotal pain	68
Chronic indwelling catheter related problems	67
Gross haematuria	67
Renal/ureteric Stones	66

© NHS Elect

Urology

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Acute painful bladder outflow obstruction

HRG4+ Codes and Detail	
LB16G	Urinary Incontinence or Other Urinary Problems, without Interventions, with CC Score 8+
LB16H	Urinary Incontinence or Other Urinary Problems, without Interventions, with CC Score 5-7
LB16J	Urinary Incontinence or Other Urinary Problems, without Interventions, with CC Score 2-4
LB16K	Urinary Incontinence or Other Urinary Problems, without Interventions, with CC Score 0-1
LB28E	Non-Malignant Prostate Disorders without Interventions, with CC Score 6+
LB28F	Non-Malignant Prostate Disorders without Interventions, with CC Score 3-5
LB28G	Non-Malignant Prostate Disorders without Interventions, with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Renal function. Beware acute retention without pain.

Evidence

NICE: Lower urinary tract symptoms in men: **http://bit.ly/23gdyGW**

Renal/ureteric stones *

HRG4+ Codes and Detail	
LB40E	Urinary Tract Stone Disease without Interventions, with CC Score 6+
LB40F	Urinary Tract Stone Disease without Interventions, with CC Score 3-5
LB40G	Urinary Tract Stone Disease without Interventions, with CC Score 0-2

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Beware single functioning kidney. Fever suggesting ascending sepsis.
Renal function. Persistent pain despite analgesia.

Evidence

CKS NICE: Renal or ureteric colic – acute: **http://bit.ly/1WReBx1**

© NHS Elect

Urology

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Gross haematuria

HRG4+ Codes and Detail	
LA09P	General Renal Disorders without Interventions, with CC Score 3-5
LA09Q	General Renal Disorders without Interventions, with CC Score 0-2
LB37C	Miscellaneous Urinary Tract Findings with CC Score 5+
LB37D	Miscellaneous Urinary Tract Findings with CC Score 2-4
LB37E	Miscellaneous Urinary Tract Findings with CC Score 0-1
LB38F	Unspecified Haematuria without Interventions, with CC Score 8+
LB38G	Unspecified Haematuria without Interventions, with CC Score 4-7
LB38H	Unspecified Haematuria without Interventions, with CC Score 0-3

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Acute renal failure. Sepsis. Clot retention.

Evidence

British Association of Urological Surgeons: Haematuria: **http://bit.ly/261oVI6**

NICE: Lower urinary tract symptoms in men overview: **http://bit.ly/23gdyGW**

CKS NICE: Urological cancers – recognition and referral: **http://bit.ly/1XZoqd0**

Chronic indwelling catheter related problems *

HRG4+ Codes and Detail	
LB15E	Minor Bladder Procedures, 19 years and over
LB20E	Infection or Mechanical Problems Related to Genito-Urinary Prostheses, Implants or Grafts, without Interventions, with CC Score 7+
LB20F	Infection or Mechanical Problems Related to Genito-Urinary Prostheses, Implants or Grafts, without Interventions, with CC Score 2-6
LB20G	Infection or Mechanical Problems Related to Genito-Urinary Prostheses, Implants or Grafts, without Interventions, with CC Score 0-1
LB18Z	Attention to Suprapubic Bladder Catheter

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%

Specific Safety Issues (not Exhaustive)

Sepsis. Acute renal impairment. HCAI risk.

Evidence

Healthcare Improvement Scotland: Urinary Catheterisation and Catheter Care: **http://bit.ly/1Zb2aeP**

RCN: Catheter care: **http://bit.ly/21qFTc7**

© NHS Elect

Urology

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Acute scrotal pain			
HRG4+ Codes and Detail			
LB35E	Scrotum, Testis or Vas Deferens Disorders, without Interventions, with CC Score 6+		
LB35F	Scrotum, Testis or Vas Deferens Disorders, without Interventions, with CC Score 3-5		
LB35G	Scrotum, Testis or Vas Deferens Disorders, without Interventions, with CC Score 1-2		
LB35H	Scrotum, Testis or Vas Deferens Disorders, without Interventions, with CC Score 0		
LB54A	Minor, Scrotum, Testis or Vas Deferens Procedures, 19 years and over		
% potential ambulatory care (primary ICD-10 coded admissions)			
Low: 10–30%	Moderate: 30–60%	**High: 60–90%**	Very High: >90%
Specific Safety Issues (not Exhaustive)			
US scan to assess risk of torsion.			
Evidence			
CKS NICE: Scrotal swellings: **http://bit.ly/21qG6vZ**			

© NHS Elect

Obstetrics and Gynaecology

Diseases of Bartholin's gland	71
Early pregnancy bleeding	70
Hyperemesis gravidarum	70

© NHS Elect

Obstetrics and Gynaecology

Blue shaded condition/scenario cells indicate where nurses have identified a pathway that has the potential to be nurse and/or non-medical practitioner led; given advanced clinical skills and relevant training.

Early pregnancy bleeding

HRG4+ Codes and Detail

Code	Detail
MB08B	Threatened or Spontaneous Miscarriage, without Interventions

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	Moderate: 30–60%	High: 60–90%	**Very High: >90%**

Specific Safety Issues (not Exhaustive)

Access to early pregnancy unit. Signs of sepsis or excessive bleeding.
ERPC can be performed as a fast-track day case.

Evidence

NICE: Ectopic pregnancy and miscarriage: **http://bit.ly/1WRhQEJ**

Hyperemesis gravidarum

HRG4+ Codes and Detail

Code	Detail
NZ18A	Ante-Natal Complex Disorders with CC Score 2+
NZ18B	Ante-Natal Complex Disorders with CC Score 0-1
NZ19A	Ante-Natal Major Disorders with CC Score 2+
NZ19B	Ante-Natal Major Disorders with CC Score 0-1
NZ20A	Ante-Natal Other Disorders with CC Score 2+
NZ20B	Ante-Natal Other Disorders with CC Score 0-1

% potential ambulatory care (primary ICD-10 coded admissions)

Low: 10–30%	**Moderate: 30–60%**	High: 60–90%	Very High: >90%

Specific Safety Issues (not Exhaustive)

Exclude other causes of vomiting. Frequency of review (possibly daily) in early pregnancy unit. Degree of ketonuria. Monitoring of electrolytes. Thiamine and folate supplementation. Consider use of ambulatory IV hydration.

Evidence

CKS NICE: Nausea/vomiting in pregnancy: **http://bit.ly/1UDMJXb**

© NHS Elect

Obstetrics and Gynaecology

Diseases of Bartholin's gland			
HRG4+ Codes and Detail			
MA22Z	Minor Lower Genital Tract Procedures		
MA23Z	Minimal Lower Genital Tract Procedures		
MB09D	Non-Malignant Gynaecological Disorders without Interventions, with CC Score 6+		
MB09E	Non-Malignant Gynaecological Disorders without Interventions, with CC Score 3-5		
MB09F	Non-Malignant Gynaecological Disorders without Interventions, with CC Score 0-2		
% potential ambulatory care (primary ICD-10 coded admissions)			
Low: 10–30%	Moderate: 30–60%	High: 60–90%	**Very High: >90%**
Specific Safety Issues (not Exhaustive)			
Fast-track day case surgery.			
Evidence			
NICE: Evidence search Bartholin Cyst **http://bit.ly/2aF0cCE**			

© NHS Elect

3 Further Information and Support for Implementing Ambulatory Emergency Care

© NHS Elect

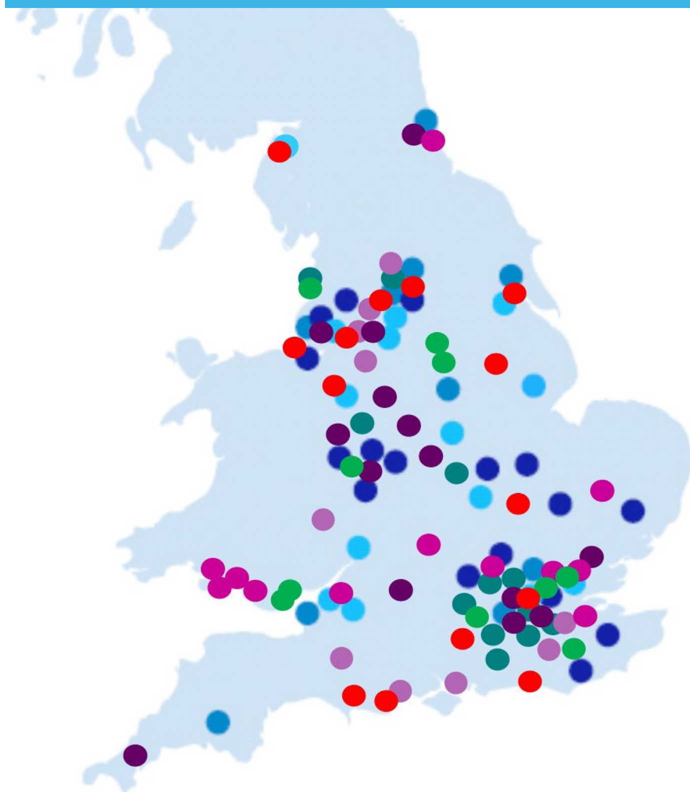
Ambulatory Emergency Care Website

The field of AEC is constantly evolving and we hope that this Directory will act as an initial guide point for you to learn more about this work.

Further information, support, tools and ideas to help you are available from the AEC website: **www.ambulatoryemergencycare.org.uk**

Please visit the website for the latest ideas on AEC, join the discussion forum and actively contribute to the continued evolution of Ambulatory Emergency Care!

© NHS Elect



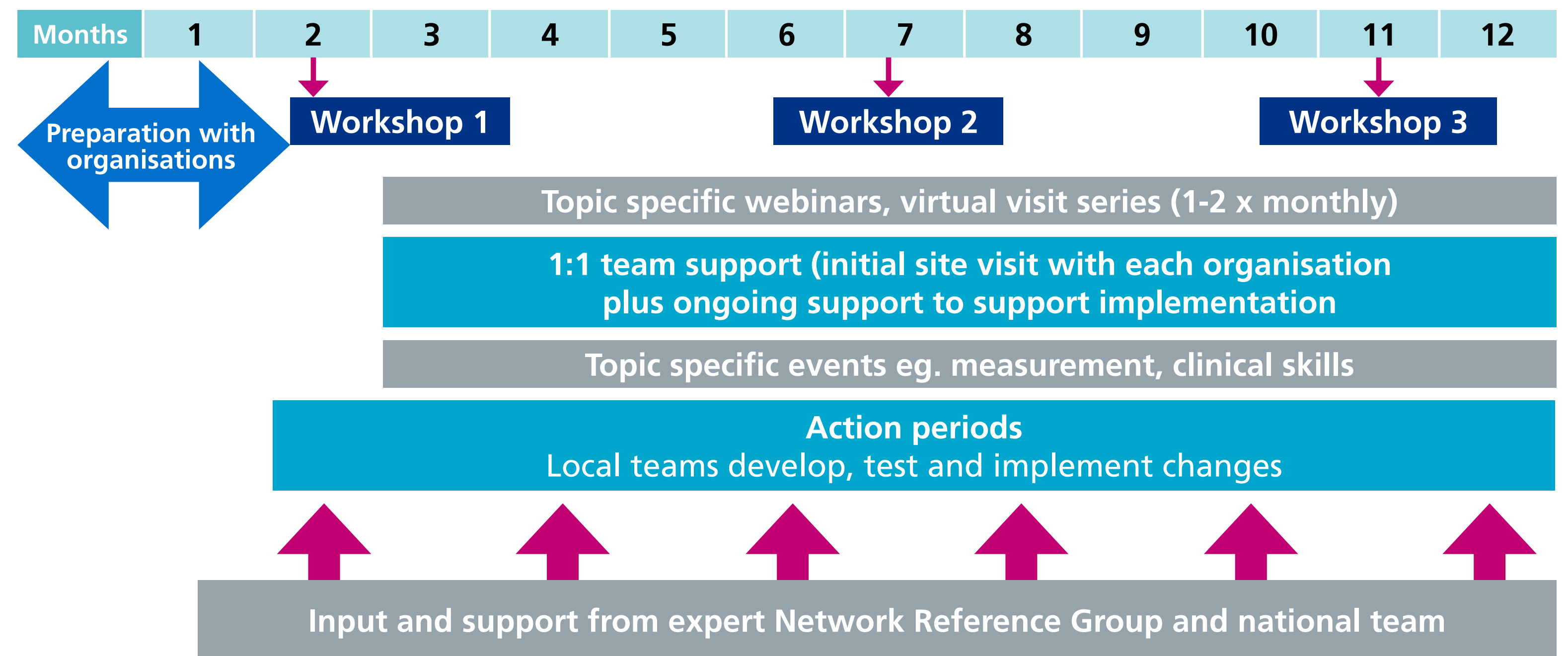
The Network has grown significantly since its inception in 2011. There are two waves of the programme in Spring and Autumn each year.

A significant network is emerging nationally with teams able to share best practice and support one another to implement proven changes quickly.

To Get Involved

If you would like to know more about AEC or participate in the next wave please contact us at **aec@nhselect.org.uk** or register your interest by going to our website **www.ambulatoryemergencycare.org.uk** and we will send you an information pack.

AEC Network Proposed Timeline 12 Month Programme



© NHS Elect

Acknowledgements

This Directory has been updated and remains true to the original design led by Dr Ian Sturgess.

For this edition we would like to thank the hard work of the review team, Dr Vincent Connolly, Deborah Thompson, Susanna Shouls, Cathy Pike and Andy Mitchell for undertaking this review and to Jim Mackey for his support in the foreword.

NHS Elect has provided the resources needed to make this edition possible.

© NHS Elect

Ambulatory Emergency Care Network

For further information contact:
020 8520 9088 or **aec@nhselect.org.uk**

www.ambulatoryemergencycare.org.uk

info@nhselect.org.uk
www.nhselect.nhs.uk

© Copyright NHS Elect 2018

Design by Sign