



# Ambulatory Emergency Care





# Background

Ambulatory Emergency Care is a way of managing a significant proportion of emergency patients on the same day without admission to a hospital bed

It is a transformational change in care delivery – AEC has the potential to be as significant to emergency care as day case surgery is to elective care



# Directory of AEC for adults

## Directory of Ambulatory Emergency Care for Adults

This third edition published in November 2012

Previous version October 2010



| Condition/ scenario  | HRG Codes 11/12                                      | HRG Codes 11/12 Detail   | % national ambulatory care (primary ICD-10 coded admissions) | Specific safety issues (not exhaustive)  | Evidence  |
|--|--|--|--|--|---|
| ICD-10<br>Cellulitis of limb                                       | E100-9, E110-9, E120-9, E130-9, E140-9               |  | High - 60-90%  | Exclude necrotising fasciitis. Class III and IV require admission. Ambulatory IV antibiotic policy with review of IV access site (DPCS 4.3 X28.1). | Guidelines on the management of cellulitis in adults: <a href="http://www.dcs.nhs.uk/cellulitis_acute">http://www.dcs.nhs.uk/cellulitis_acute</a>   |
|  | J003C  | Intermediate Skin disorders category 2 without CC                              |  |  |   |
|  | J004C  | Intermediate Skin disorders category 1 without CC                              |  |  |   |
|  | J005C  | Minor Skin disorders category 2 without CC                                     |  |  |   |
|  | J003B  | Intermediate Skin disorders category 2 with Intermediate CC                    |  |  |   |
|  | J004B  | Intermediate Skin disorders category 1 with Intermediate CC                    |  |  |   |
| J005B  | Minor Skin disorders category 2 with Intermediate CC |  |  |  |   |
| ICD-10<br>Known oesophageal stenosis (either stented or unstented) | L030, L031, L032, L033, L03B, L039, I891, L088, L089 |  | High - 80-90%  | Aspiration pneumonia. Oesophageal rupture/perforation.   | Guidelines for the management of oesophageal and gastric cancer: <a href="http://tinyurl.com/8ipqhua">http://tinyurl.com/8ipqhua</a><br>Guidelines on the use of oesophageal dilatation in clinical practice: <a href="http://tinyurl.com/94lqsd">http://tinyurl.com/94lqsd</a> |
|  | F231F  | Disorders of the Oesophagus with length of stay 0 days                         |  |  |   |
|  | F231E  | Disorders of the Oesophagus with length of stay 1 day or more without Major CC |  |  |   |



## What's in a name?

Ambulatory Emergency Care

Clinical Decisions Units

Same Day Emergency Care



"There's nothing wrong with you — you're a Picasso."



## What is AEC?

“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 out-patient services that can be provided across the primary/secondary care interface”.

The Royal College of Physicians – Acute Medicine Task Force & endorsed by the College of Emergency Medicine, 2012



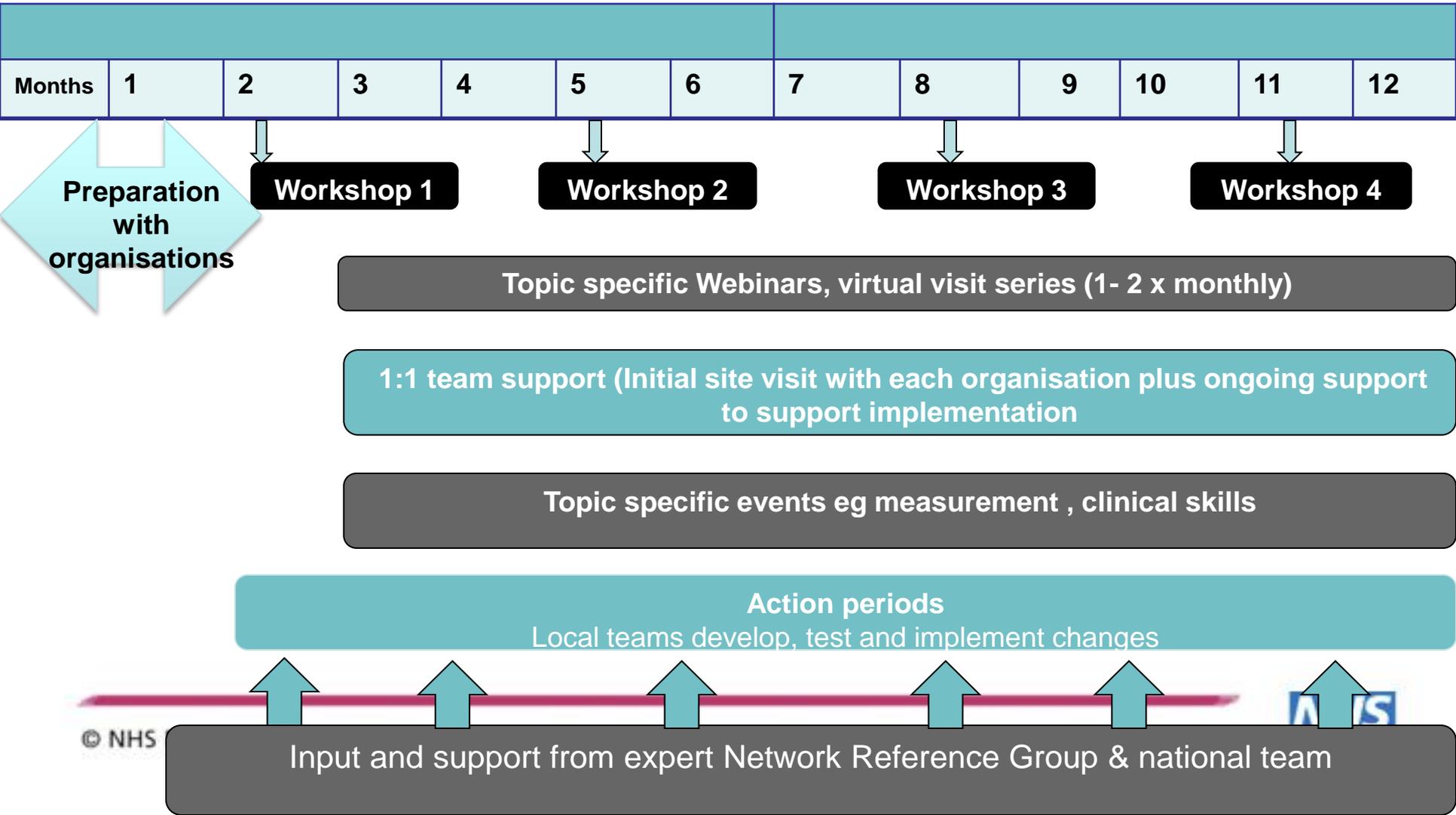
## ....What is it about?

- Improving patient experience
- Reducing waits for tests
- Early and frequent senior review
- Improving patient flow

And so better outcomes for patients



## AEC Delivery Network Proposed Timeline 12 Month Programme



## Cohort One

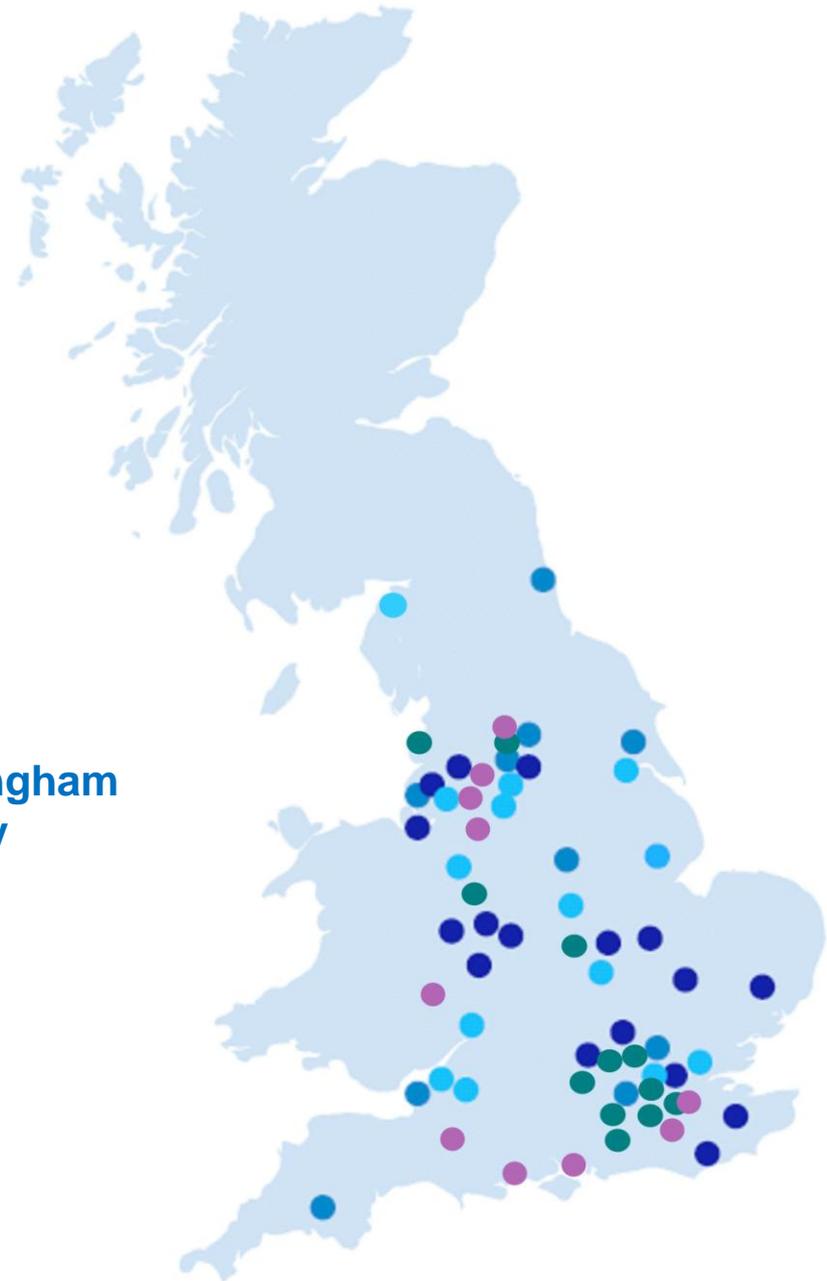
- Calderdale & Huddersfield
- Harrogate
- Hull
- Leeds
- Liverpool
- Nottingham
- Plymouth
- Tyne & Wear
- Weston
- Whittington

## Cohort Two

- Bath
- Bristol
- Gloucester
- Imperial
- Milton Keynes
- North Cumbria
- North Lincs
- Pennine
- Pilgrim
- Stockport
- Warrington

## Cohort Three

- Addenbrookes
- Ashford CCG
- Chester
- Dudley
- East Sussex
- Heart of England
- Kettering
- Peterborough
- Sandwell and West Birmingham
- St Helens and & Knowsley
- Worcester

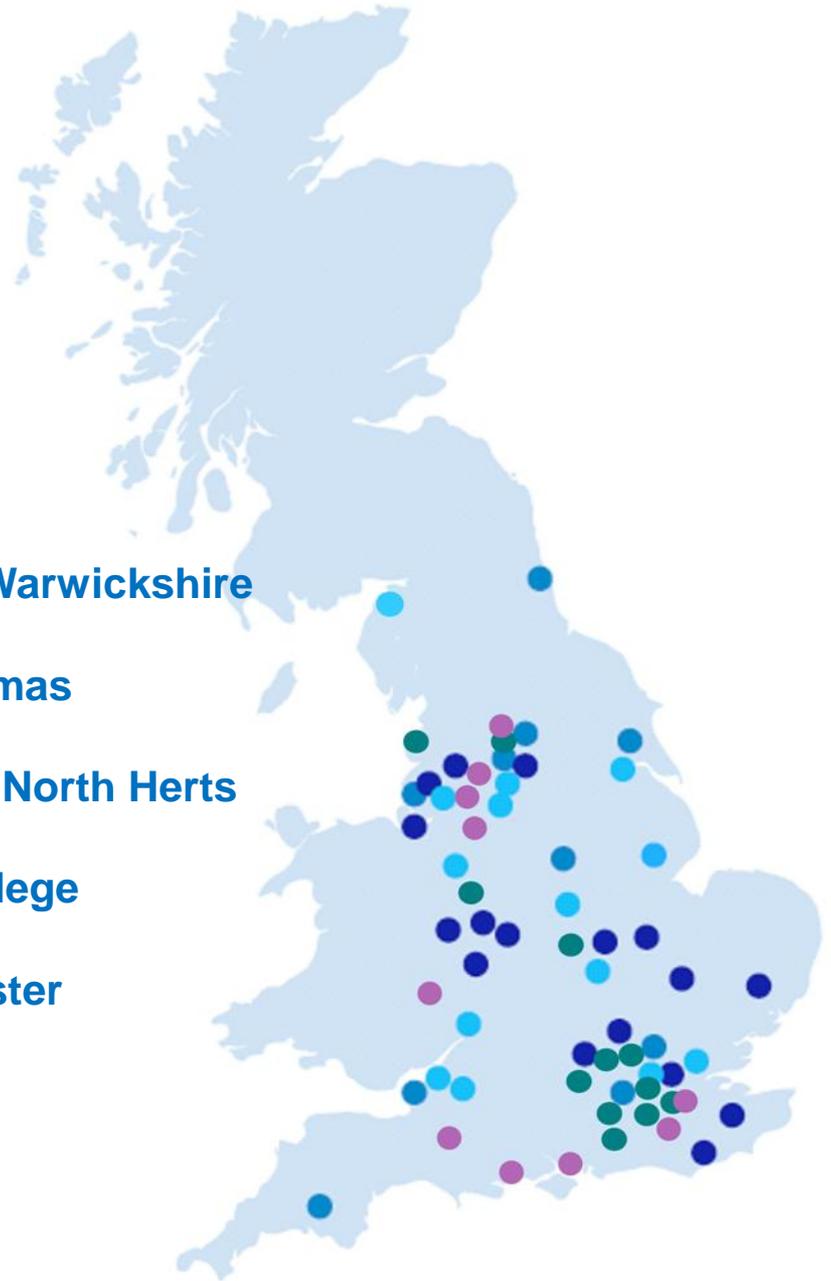


## Cohort Four

- **Barnsley**
- **Basildon**
- **Croydon**
- **Epsom**
- **Heatherwood & Wexham**
- **Herts Valleys CCG**
- **Ipswich**
- **Kingston**
- **Mid Staffs**
- **Northampton**
- **Northwick Park**
- **St Heliers**
- **St Georges**
- **Southport & Ormskirk**
- **UCLH**

## Cohort Five

- **Bournemouth**
- **Bradford**
- **Coventry and Warwickshire**
- **East Cheshire**
- **Guys & St Thomas**
- **Lewisham**
- **Lister – East & North Herts**
- **Portsmouth**
- **PRU Kings College**
- **Southend**
- **South Manchester**
- **Tameside**
- **West Sussex**
- **Wye Valley**
- **Yeovil**





## Clinical Leads



Dr Vince Connolly



Dr Taj Hassan



## Models of AEC - the 4Ps

### Passive

receive referrals

### Pathway driven

restricted to particular agreed pathways

### Pull

senior clinician takes calls for emergency referrals

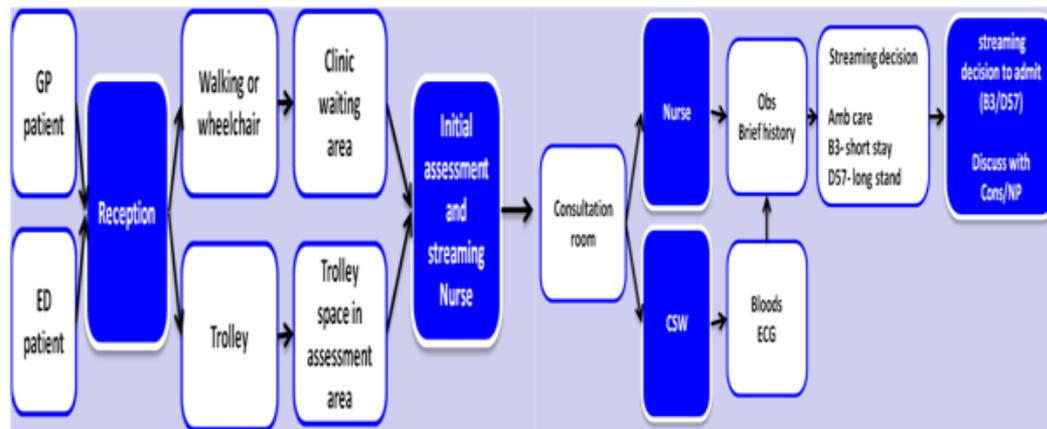
### Process driven

all patients considered for AEC

# New Process for GP Assessment and Ambulatory Care

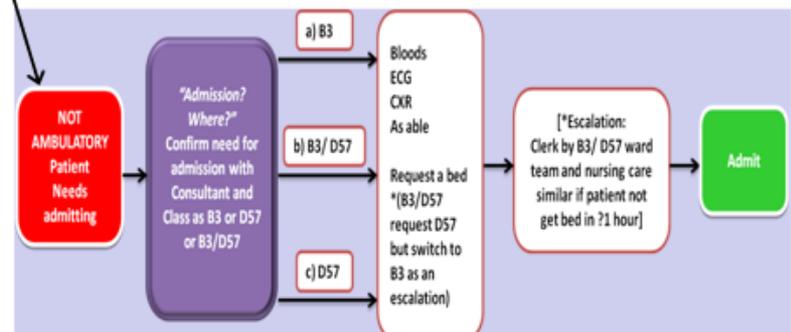
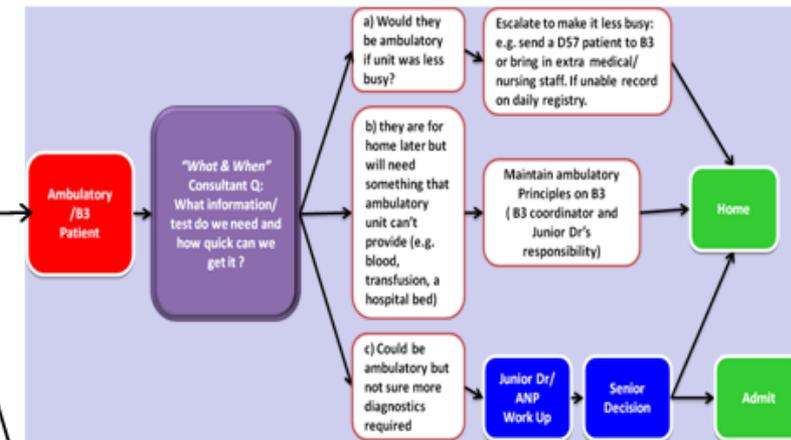
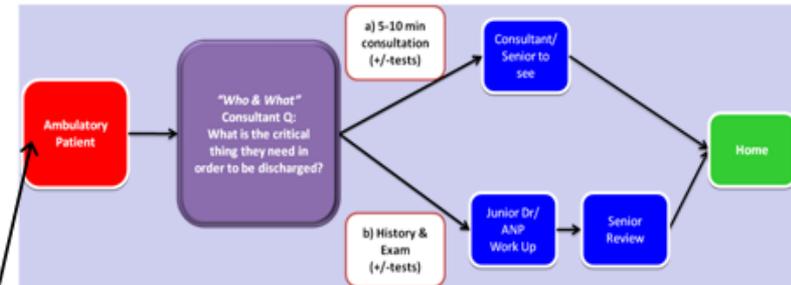
Overarching principle; *Treat all patients as Ambulatory until proven otherwise*

## Non-Condition Specific



Patients arrive (Mon-Fri 8am-10pm)

Rapid streaming process (All patients now seen within 15 minutes)





# The *Amb* Score\*

| If Score is high, consider re-direct to ambulatory care unit | FACTORS   | 1 if applicable<br>0 if not applicable |
|--|---|--|
|  | Female sex  |  |
|  | Age < 80 years  |  |
|  | Has access to personal / public transport                   |  |
|  | IV treatment <u>not</u> anticipated by referring doctor     |  |
|  | <u>Not</u> acutely confused                                 |  |
|  | MEWS score = 0  |  |
|  | <u>Not</u> discharged from hospital within previous 30 days |  |
|  | <b>TOTAL <i>Amb</i> Score (Maximum 7)</b>                   |  |

\* Ala L, Mack J, Shaw R, Gasson A. The Amb Score: A pilot study to develop a scoring system to identify which emergency medical referrals would be suitable for Ambulatory care management. *Acute Medicine* 2010; 9: 139 (Abstract)

## Ambulatory Unit

You are here: [CHFT Intranet](#) > [Divisions](#) > [Medical](#) > [Acute Medicine](#) > [Ambulatory Unit](#)

The ambulatory unit is an assessment area for patients referred from A&E or their GP who may be able to be discharged on the same day. Patients will be assessed by a nurse and senior doctor. Certain conditions may be amenable to referral on to a specialist team for treatment at home. Links to the protocols for managing certain conditions are shown below

Exclusion criteria for the ambulatory unit are:

1. Patients who are bed bound
2. MEWS > or = 4
3. Acute confusion
4. Cardiac sounding chest pain
5. Elevated Troponin I
6. Patients requiring oxygen

[Outpatient Clexane prescription pathway](#)

[Outpatient Vitamin K prescription pathway](#)

### Ambulatory care pathways for specific conditions

[Atrial fibrillation](#)

[Chest pain](#)- pathway for patients thought to be at low risk for ACS

[Headache](#)

[Pulmonary Embolism \(PE\)](#)

[Syncope](#)

[Upper GI bleed \(low risk\)](#)

### Home IV antibiotics

Pathways for arranging Home IV antibiotics are available for a number of conditions through the [OPAT service](#)

### Patient information leaflets

[Bronchiectasis](#)

[Cellulitis](#)

[Diabetic foot infection](#)



# Measurement and analysis support

## Workshops

- Measurement for improvement and return on investment workshop
- Tariff / coding (was requested in cohort 2)
- Webex / webinar
- E-mail / telephone calls
- Return on investment tool and support



# Five measurement challenges

1. Are you clear on your aim?
2. Have you selected the right measures to quantify the benefits?
3. Are you tracking the right patient groups - how do you identify these?
4. Can you map and quantify the flow of emergency patients through your system?
5. Will you be able to demonstrate return on investment?



## Programme measures - tips

Aim for standard cohort wide data collection

Suggested measures are in the guide including:

- Patient experience / staff experience
- Reduction in emergency bed day use, AEC activity; emergency readmissions to unit (7 day)
- Emergency patient flow

Use the 7 step model - *baseline, frequent measurement, review, use the 7 points rules*

Two stages assesses actual impact and future impact

A1

Return on Investment: Setup ©NHS Institute for Innovation and Improvement 2012 85% View

Navigation bar: [FAQ](#) [Setup Home](#) [Working Information](#) [Other Benefits](#) [Costs](#) [Calculated Information](#) [Dividend](#) [References](#)

Section navigation: [Setup](#) [Select HRGs](#) [Patient Flow Input](#)

**INTRODUCTION**  
This is the initial set-up sheet to support discussions on the actual or potential Return on Investment in Ambulatory Emergency Services. It is not intended to provide a single answer, but instead guide health economies on the types of analytical questions needed to demonstrate Return on Investment, the assumptions required and the potential range of benefits. It includes estimates of changes in tariff income alongside benefits. **Complete all data entry in set up before selecting the HRGs you wish to model.**

**Patient Flow Demonstrator: set up sheet**

Trust Name

Model year

|                      |      |      |   |                          |
|----------------------|------|------|---|--------------------------|
| Market forces factor | 1.00 | Year | 0 | <a href="#">Guidance</a> |
|----------------------|------|------|---|--------------------------|

**Emergency flow and income**

|  |  | Year    |  |                          |
|--|--|---------|--|--------------------------|
| 2008/2009 Emergency Admissions ceiling |  | 2008/09 |  | <a href="#">Guidance</a> |
| Total non-elective admissions          |  | 0       |  |                          |
| Total non-elective income              |  | 0       |  |                          |
| Bed occupancy levels                   |  | 0       |  |                          |

**Potential savings around closure**

|                          |  |   |  |                          |
|--------------------------|--|---|--|--------------------------|
| Savings for bay closure  |  | 0 |  |                          |
| Savings for ward closure |  | 0 |  | <a href="#">Guidance</a> |

Ready 85%

# Best Practice Tariff

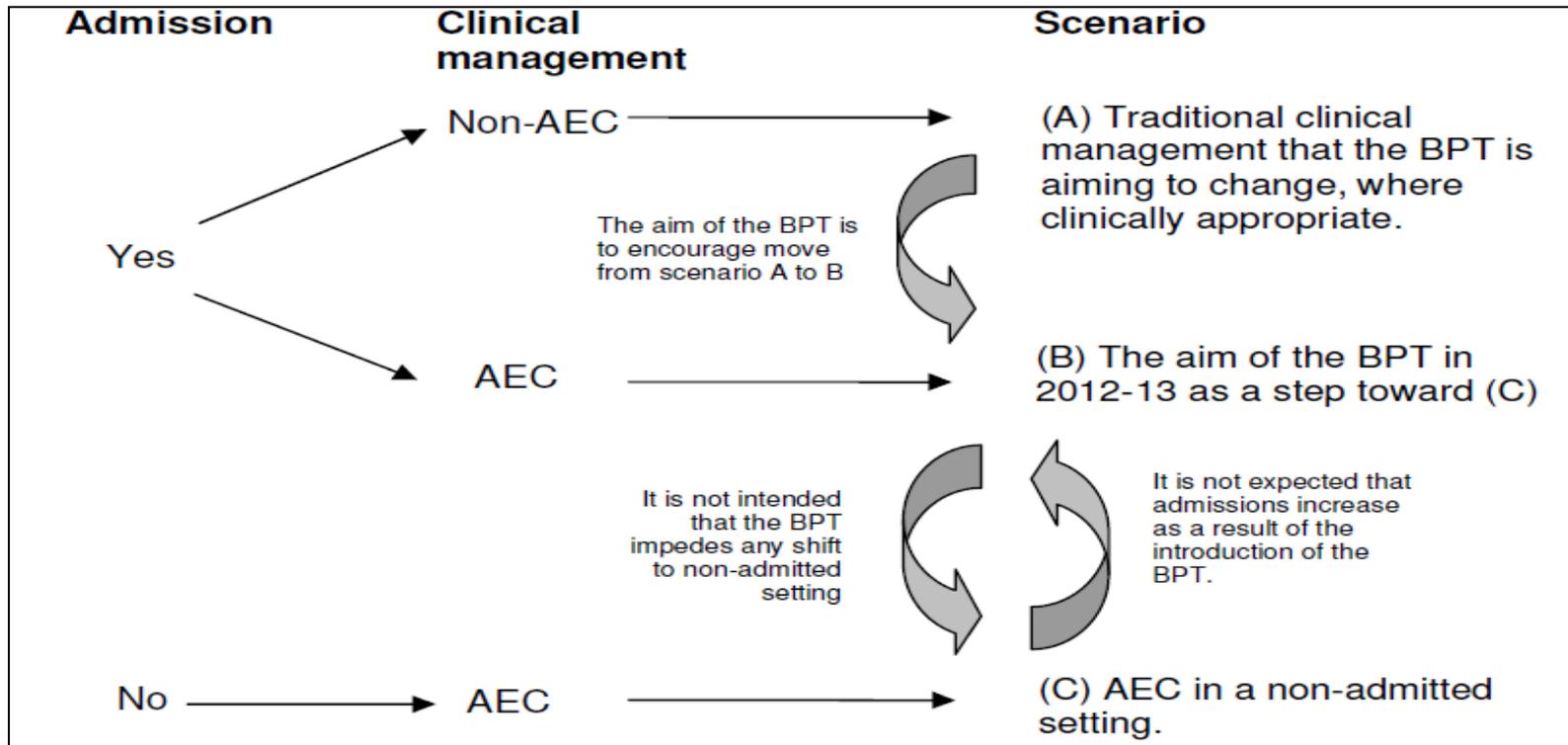
Each clinical scenario is made up of a pair of prices for each tariff

Same day emergency care

Zero day

Non-elective

>=1 day





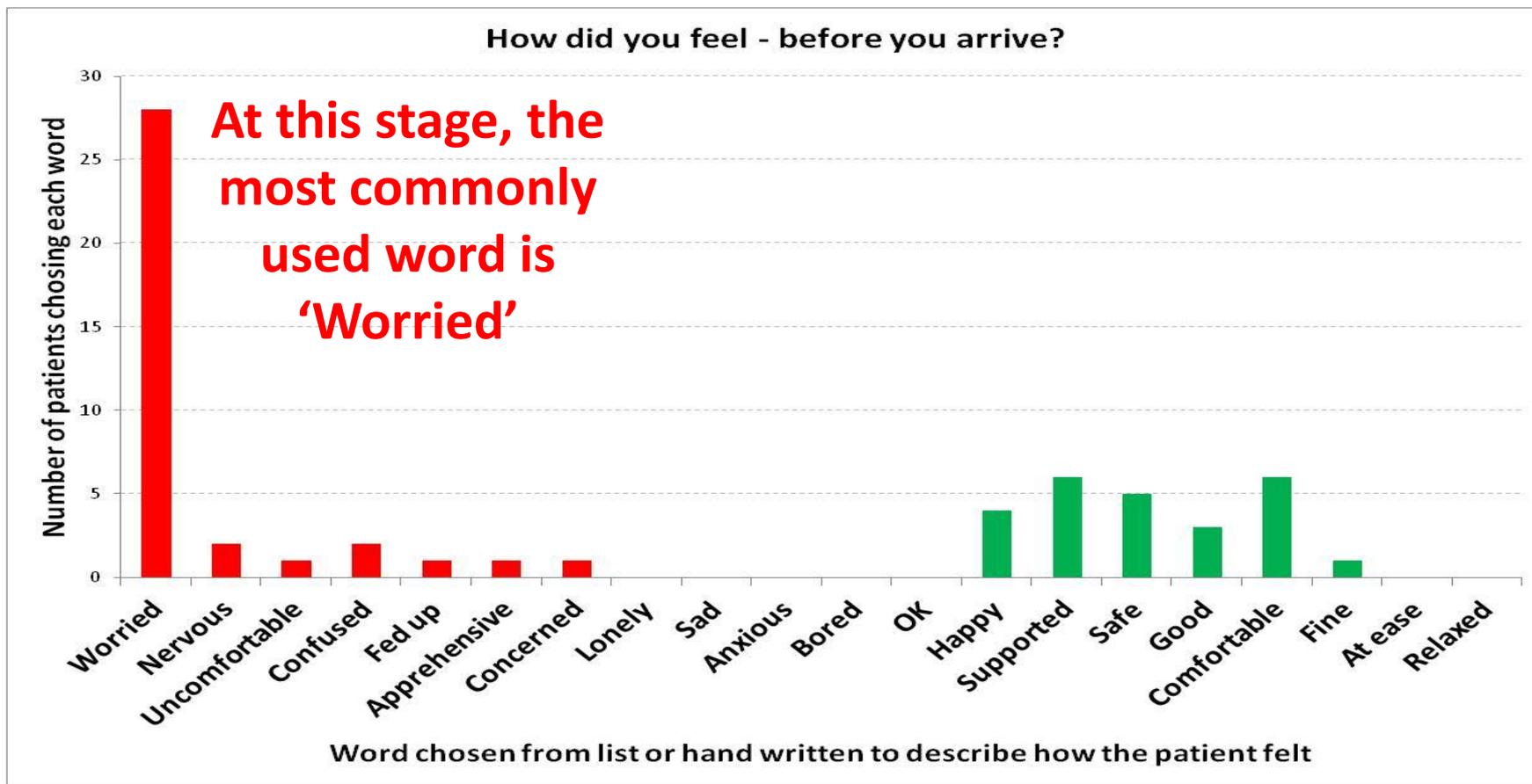
## Clinical Scenarios for BPT

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

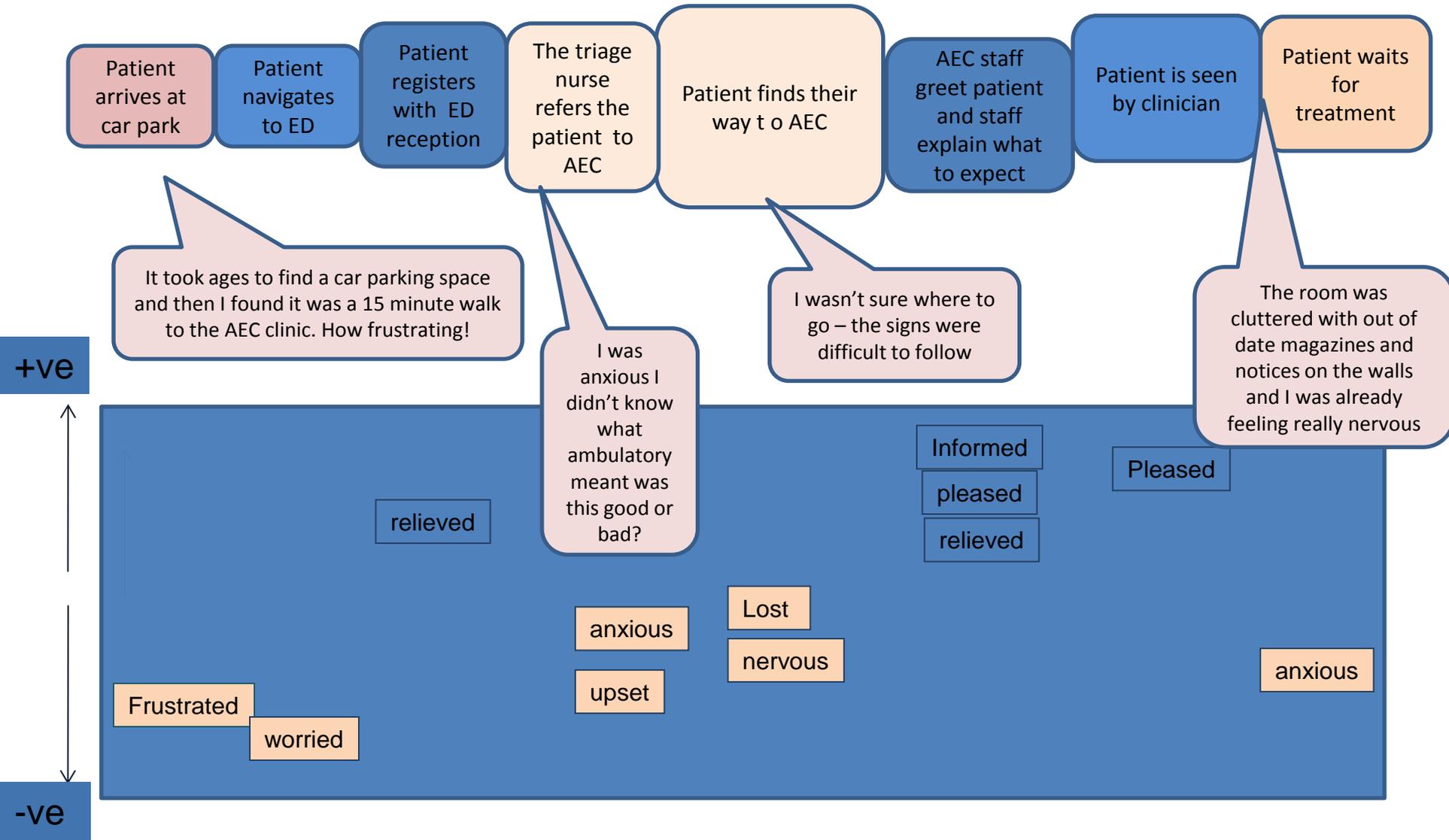


# The EBD Tool Kit

- Introducing the AEC Service - Patient Leaflet
- The Ambulatory Emergency Care Journey
- AEC Short Animated Film
- Using SMS Mobile Text Messaging Feedback
- Patient Experience Questionnaire
- Volunteer's Log Book
- A day in the life of... To capture staff experience
- Staff Perspective on patient journeys



# Emotional mapping





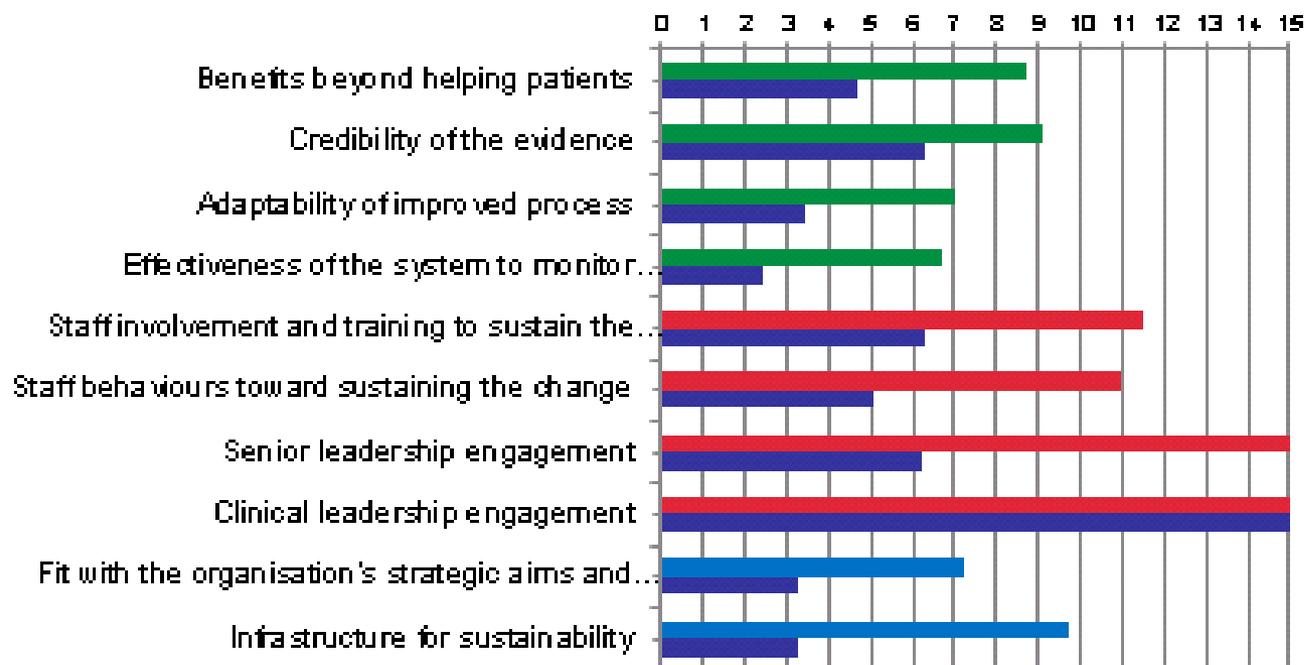
# How do we ensure sustainability?

- Undertake a sustainability assessment
- Involve the whole team
- Analyse the results
- Address the 3 lowest elements
- Reassess mid way through the project
- You will be surprised by the findings



# How do we ensure sustainability?

**An other results Total score = 56.0**



# The Benefits

## Value for money

*‘ Definitely good value for money’ for what we have paid we will definitely get ROI, 30 admissions saved = £20,000”*

*‘Would happily pay £20,000 to join the network again’ knowing what we know now.’*

## Improved service design

*“I love the web seminars - they're a great way of learning without travelling miles and I can get the messages to the rest of the team.”*

*“The network has ‘definitely and undoubtedly’ helped us move forward.”*

## Speed of service development

*”It has been very useful seeing what other organisations have done . The networking has given us examples to take back to our Trusts and get funding and sign off faster than usual”*

*“Ambulatory Care unit evolved even faster because of our involvement in Ambulatory Emergency Care Delivery Network”*



## Reported benefits of being in the Network

- Investment for a 2.9m bespoke AEC unit (Whittington)
- AEC has really helped patient flow and achieving the target
- 50% of our GP referrals are now managed in AEC (Notts)
- 83% of surgical patients processed via AEC are saved at least 1 night in hospital (Bath)
- 134 patients were seen during our pilot and all admissions avoided (Glos)

## Milton Keynes Hospital cuts A&E waiting times



7 June 2013 Last updated at 12:09

Milton Keynes Hospital has succeeded in reducing waiting times in its accident and emergency department.

Six months ago the hospital was rated among the worst for A&E waiting times in the country.

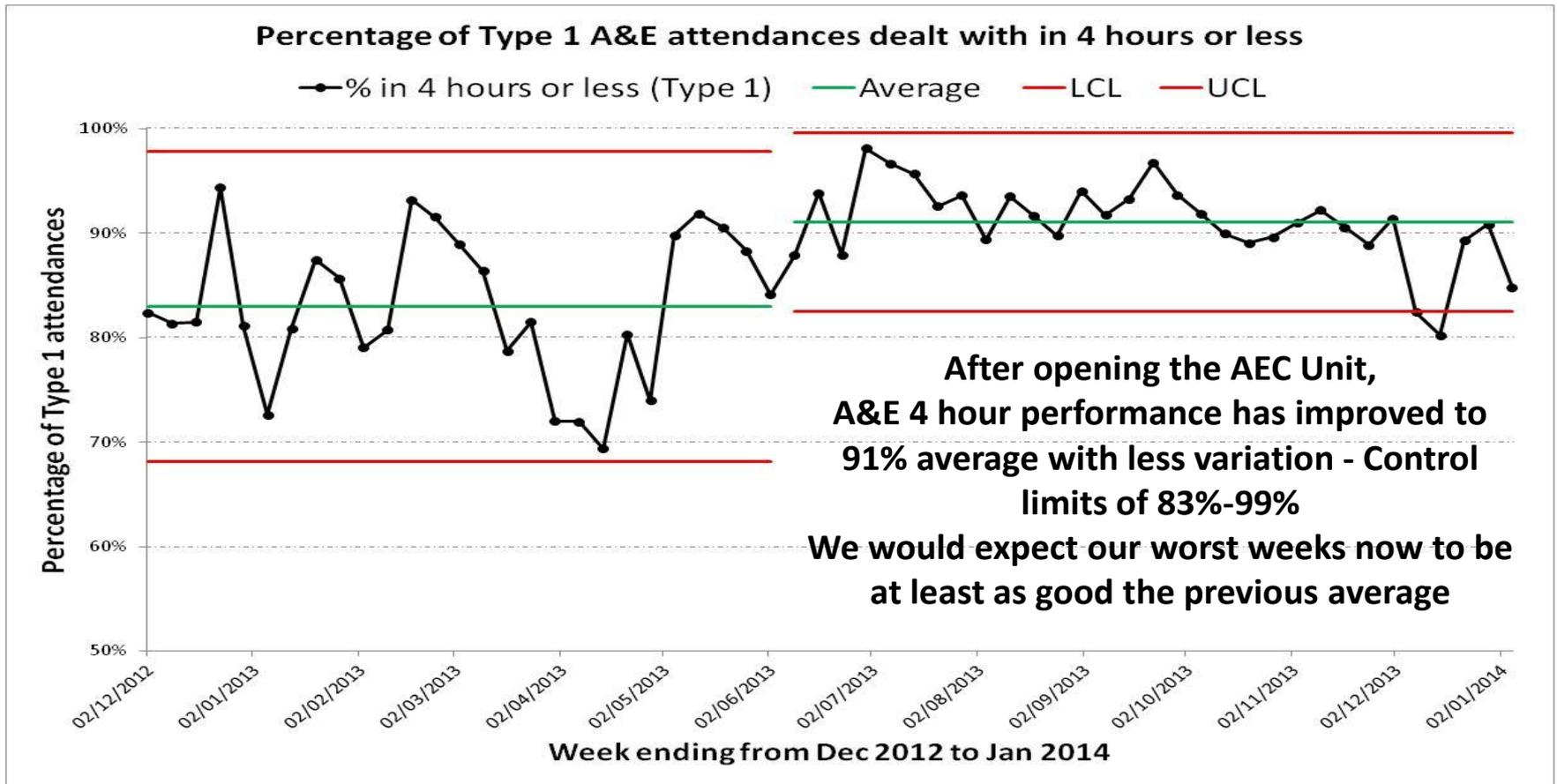
Shadow Health Secretary Andy Burnham visited the hospital to see how a new ambulatory care unit, giving patients a "short, sharp treatment", had helped turn around the department and to see if its success could be repeated elsewhere.

### Share this page

Share   

June 2013

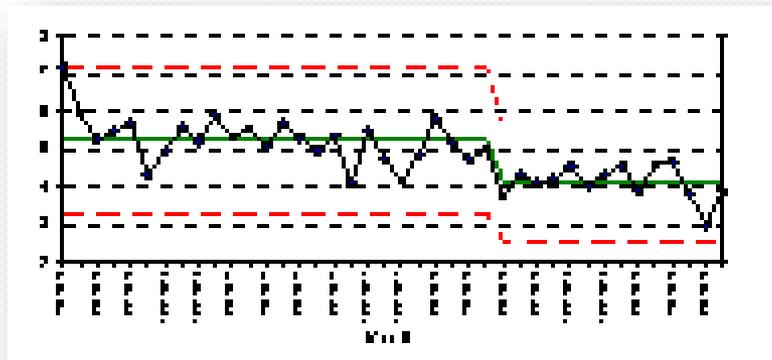
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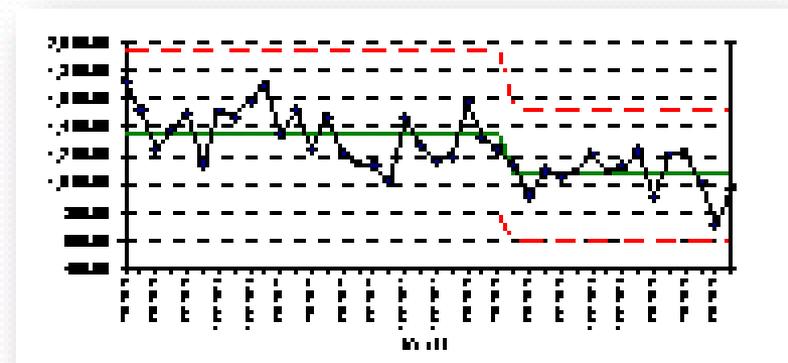


## *Impact so far*

### ■ Reduction in medical LOS

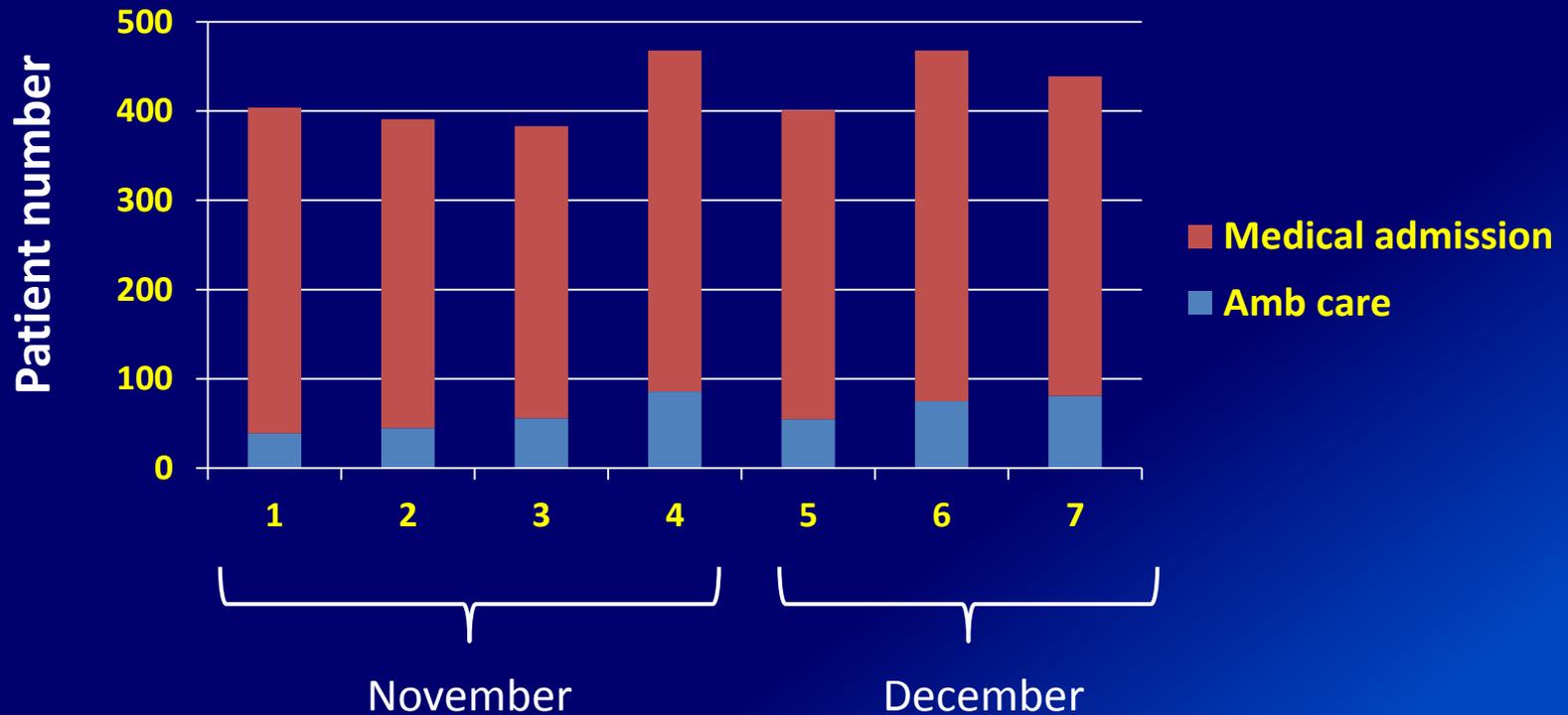


### ■ Reduction in hospital bed days

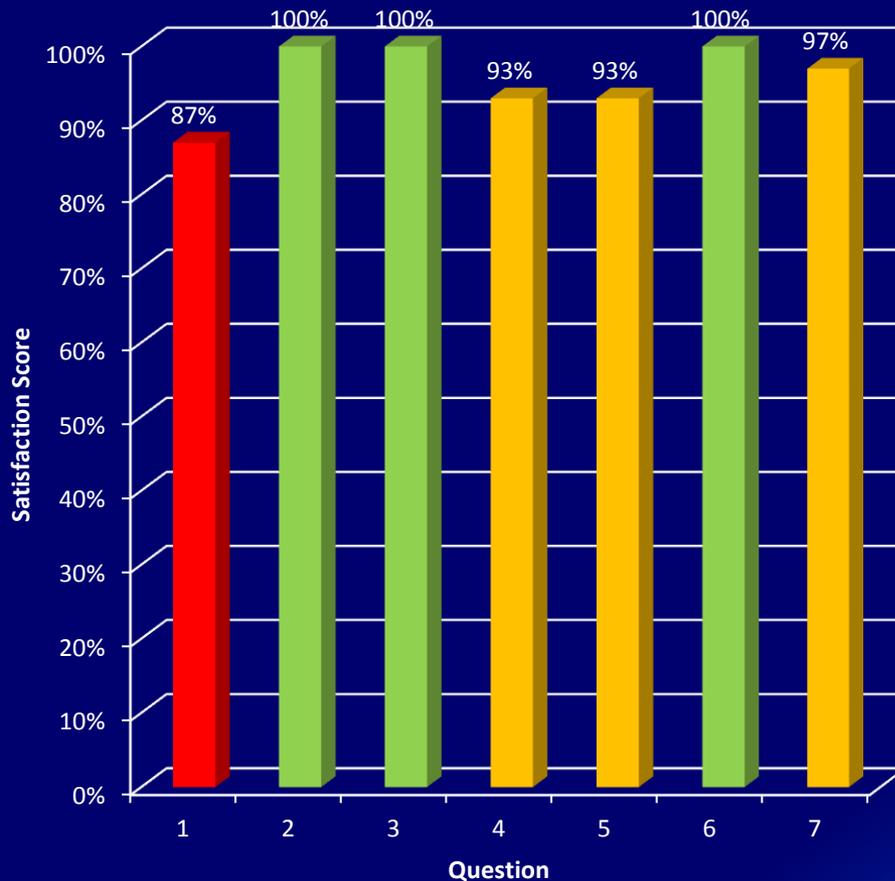


# Ambulatory care numbers

## Proportion of medical admissions



# Patient satisfaction

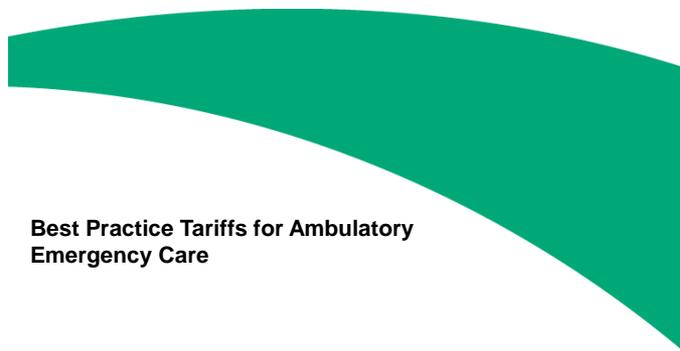


## Key:

1. Signage (87%)
2. Doctor/Nurse confidence (100%)
3. Doctor/Nurse listening skills (100%)
4. Patient understanding of information given to them (93%)
5. Next steps (93%)
6. Administration staff (100%)
7. Respect & dignity (97%)



# The bigger picture



Best Practice Tariffs for Ambulatory  
Emergency Care





## Contact details

If you have a query or want to access work shared by other organisations please use:

[aec@nhselect.org.uk](mailto:aec@nhselect.org.uk)

[deborahataec@nhselect.org.uk](mailto:deborahataec@nhselect.org.uk)

[www.ambulatoryemergencycare.org.uk](http://www.ambulatoryemergencycare.org.uk)