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**Urgent & Emergency Care**


**Improving & Sustaining Performance**

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David Eltringham - COO

July 2013

**Outline**

- National & local context
- The nature of the problem at UHCW
- Our approach to dealing with this
- Performance – Expected, Current & Risks to Delivery
- Questions



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## National & Local Context

## Regulatory Standards

### Two critical NHS National Contract Standards:

- 95% of patients attending the Emergency Dept (ED) are required to be seen, treated and either discharged, transferred or admitted within 4-hours
- Once a 'decision to admit' has been made no patient will wait for more than 12-hours to be admitted to an appropriate bed

### In addition there are other high profile NHS National Contract Standards we should meet:

- Zero tolerance of delays more than 1-hour to release ambulances after they arrive on site (£1000 fine & DH reporting of all such breaches)
- Minimizing delays of greater than 30-mins to release ambulances after they arrive on site (£200 fine for all such breaches)

## Context....

- UHCW have struggled to deliver the A&E target for 2 years (11/12 - 93.95%)
- 4hr performance was significantly below 95% for 2012/13 (91.46%). This continued into Q1 13/14 (90.12%)
- UHCW mirrored the National A&E performance picture but was worse
- UHCW recognise & are committed to achieving & stabilising performance this year
- UHCW are committed to working with Health Economy partners to deliver sustainable improvements over the next 18-months



HOME NEWS HSJ LOCAL LEADERSHIP RESOURCE CENTRE OPINION EVENTS AWARDS JOBS S1 FRANCIS REPORT IN THE MAGAZINE COMMISSIONING INNOVATION AND EFFICIENCY FREE FOR NON-SUBSCRIBERS

### LATEST NEWS



### NHS England area teams told to lead A&E recovery

3 MAY 2013 | BY SARAH CALKIN  
NHS England's local area teams have been given less than a month to develop accident and emergency "recovery plans" for their patch, the organisation's interim deputy chief executive has announced.

- Exclusive: A&E performance plummets as majority of trusts miss target
- Commissioners raise concerns over Caldicott recommendations
- Addressing hearing loss services 'could save £8m'
- Exclusive: Ministers want CCG toplice to fund health and social care integration
- Saville review seeks NHS staff views on celebrity fundraisers
- St George's breached six national standards, ...

### HSJ Live 3.5.2013: NHS England plans A&E recovery plan

Coverage of today's NHS England board meeting including plans for the commissioning board to lead a national A&E "recovery plan", and the latest on the NHS 111 debacle, and the rest of today's news.

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## National 4hr Performance – 2010 to April 2013

(Source Health Service Journal – May 2013)

### Exclusive: A&E performance plummets as majority of trusts miss target

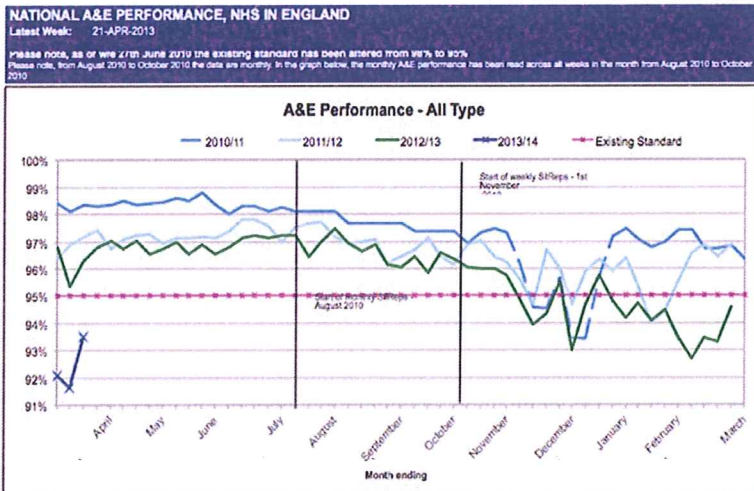
2 MAY, 2013 | BY BEN CLOVER

Proportion of patients seen, treated, admitted or discharged within four hours of attending English accident and emergency units



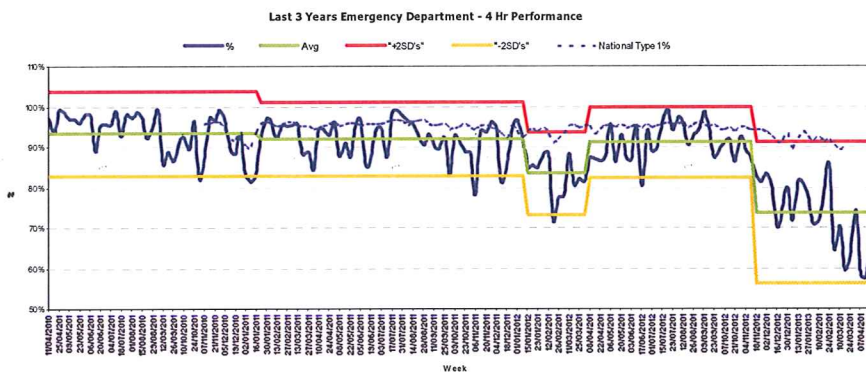
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## National 4hr Performance – 2010 to April 2013



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## Local UHCW 4hr Performance – 2010 to April 2013



The last two years there have been winter slumps, however this year the slump began in November and was more pronounced.

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## Context Summary

- UHCW has a history of performance challenge around the 4-hr Target
- Performance in the Coventry Urgent & Emergency Care system mirrors the National picture but is more pronounced
- The pattern of performance 'challenge' was is more acute in the Midlands e.g. those struggling to achieve the 4-hour standard include:
  - University Hospitals Leicester
  - South Warwickshire Foundation Trust
  - University Hospitals North Staffs
  - Shrewsbury & Telford Hospitals
  - Heart of England Foundation Trust

## Understanding the problem – UHCW Service Profile

### Activity:

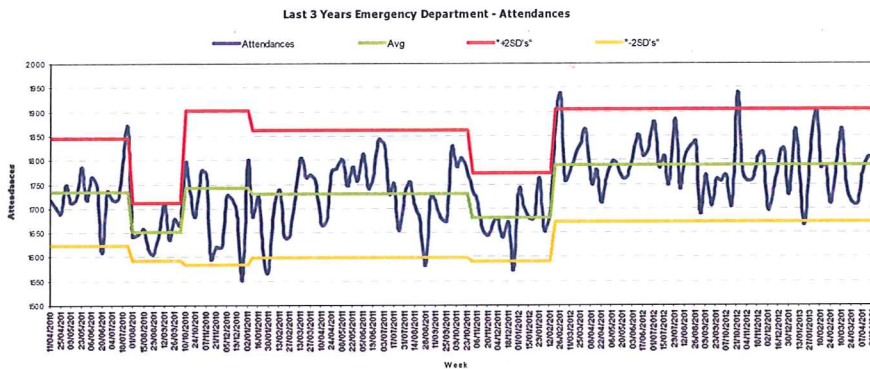
- Circa 174 000 attendances per year, comprising:
  - 91 000 ED attendances
  - 31 000 Children's ED attendances
  - 33 000 St Cross attendances
  - 14 000 Eye Casualty patients
  - 5 000 Gynecology unit direct emergencies
- Modern facilities – dedicated Children's ED & state of the art Resuscitation room
- Designated Regional Major Trauma Centre (supported by a Helipad)

## Understanding the problem

- To understand the nature of this complex problem at UHCW we have undertaken detailed analysis, specifically looking at:
  - Pressures arising from increasing or changing demand i.e. Has demand increased overall? Has it increased in specific area (e.g Ambulance Patients or the Elderly)
  - Problems arising from how we organise our services (supply side problems) i.e. do we have good Site Operations systems & processes? Do we have the correct number of beds per specialty? Are our discharge systems & processes working as well as they can?
- To test & validate our analysis we have obtained expert (National) support and advice
- To ensure we are doing all that we can we have benchmarking ourselves against best practice in the area of ED performance / Acute Care

## Demand Side Pressures?

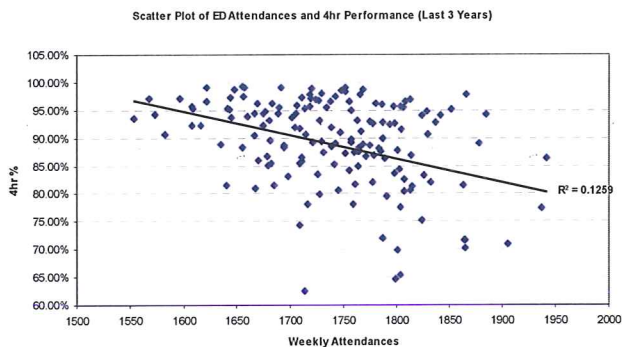
### Are the number of attendances the problem?



Attendance volume changes **do not** occur at the same point as 4hr performance deterioration.

(Although it should be noted that attendance levels are trending upwards in line with National data)

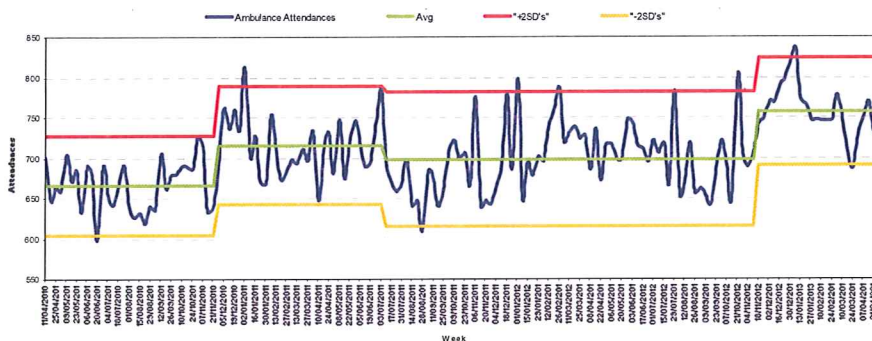
### Attendances contd.



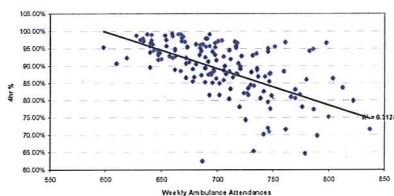
There is a **low correlation** between 4 hr performance and attendances ( $r = -0.35$ )

## Are Ambulance attendances an issue?

Last 3 Years Emergency Department - Ambulance Attendances



Scatter Plot of ED Ambulance Attendances and the Performance (Last 3 Years)



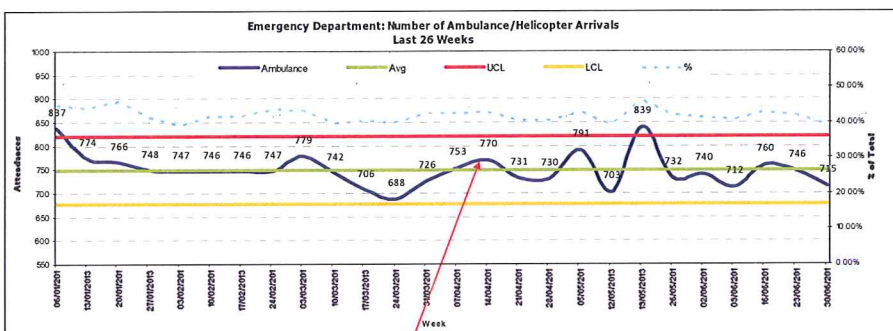
The Winter volume change in ambulance attendances (Nov 12 onwards) coincided with a drop in 4hr performance.  
Ambulance attendances are more greatly linked to performance than total attendances (perhaps reflecting a resource hungry and more complex cohort of patients)

$r = -0.59$

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## Ambulance Arrivals – a 111 effect?

Emergency Department: Number of Ambulance/Helicopter Arrivals Last 26 Weeks



111 Go-live

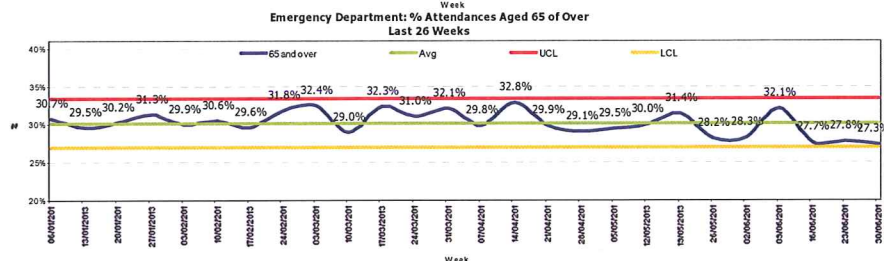
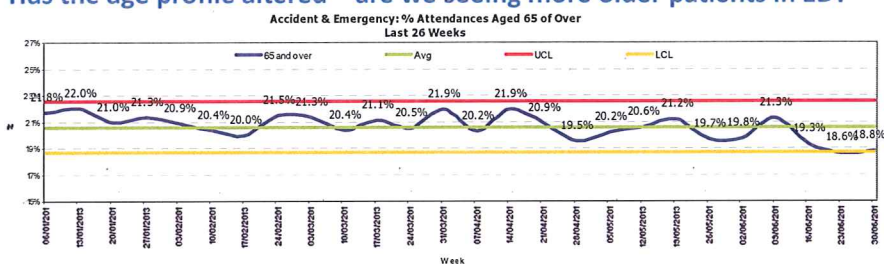
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## Ambulance attendances & 111 summary

- Overall UHCW has seen a rise in the number of patients brought-in-by ambulance
- This is generally seen as an indicator of patient acuity. Ambulance patients are often more acutely unwell & use more resource in the ED when being treated
- National data suggested 111 would create further pressure (& performance issues) for the ED – especially in the volumes of patients arriving by ambulance. Significant preparations were made to deal with any rise in attendances but this has not been an issue for UHCW

## Has the age profile altered – are we seeing more older patients in ED?



- There **is not** a significant increase in age 65 & over attendances


### Age profile

- The age profile of those patients attending the ED has not changed significantly & **is not** believed to be one of the main reasons for our performance
- Whilst we do not see a shifting age profile as a root-cause we are mindful that a relatively small number of complex elderly patients can occupy many bed days. We recognise the need to make sure we match best practice in this area to prevent problems in the future

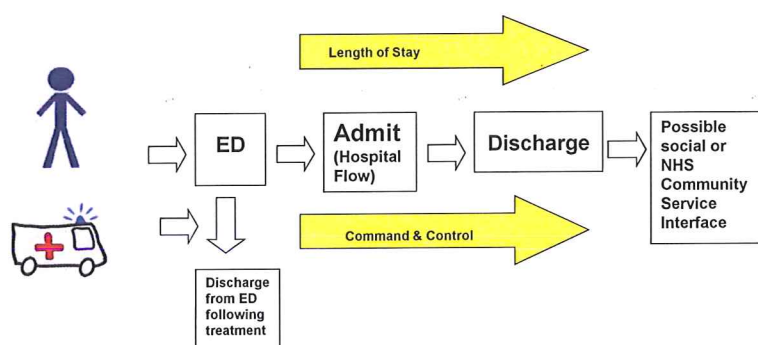
### Supply-Side Problems?

## Understanding the problem – Supply Side

- The complex nature of emergency activity requires all aspects of the hospital & local health economy to work well in order to avoid unnecessary waits & delays, specifically:
  - Flow & management of patients through ED (making sure all departments deliver support within the 4-hr timeframe e.g. x-ray, scans, blood tests etc)
  - Capacity & flow management across the hospital (ensuring the timing of patient discharge matches the demand for beds coming out of the ED / Acute Medical Unit)
  - Actively managing discharges to alleviate delays & unblock obstructions (ensuring medically fit patients waiting for discharge support are properly coordinated with partners in Social & Community Care)

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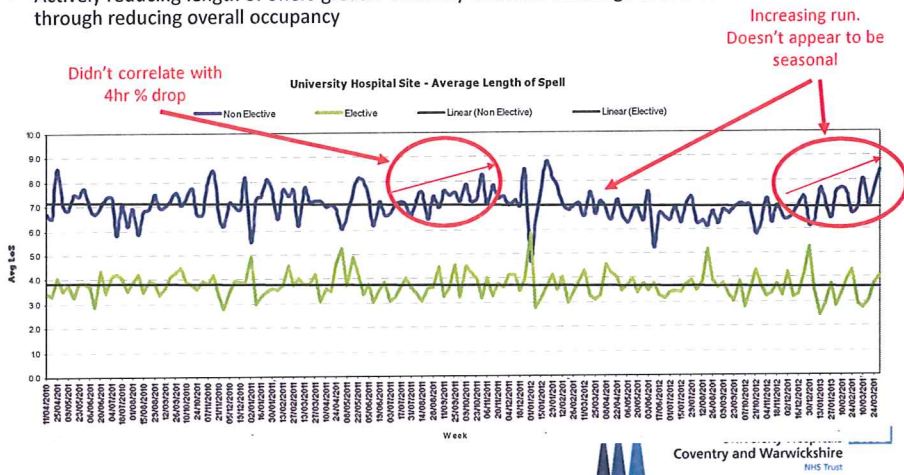
## Understanding the problem



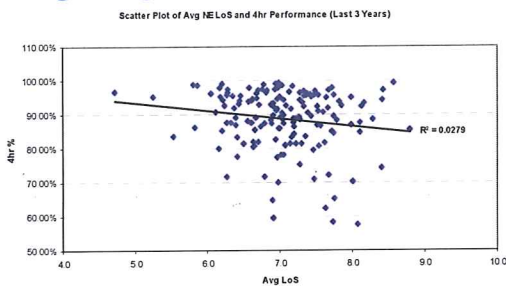
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### Supply side issues – length of stay

- Our in-patient length of stay is variable and relatively volatile. Whilst spikes in length of stay do not track directly to drops in ED performance, we recognise that the hospital is frequently 95%+ full of in-patients and this limits our ability to flex for peaks in activity
- Actively reducing length of offers greater flexibility to match discharge & admission times through reducing overall occupancy

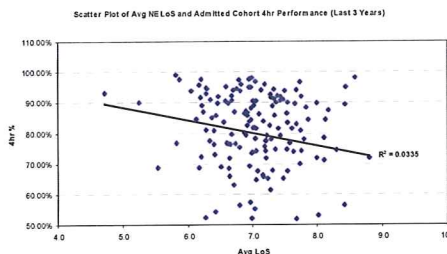


### Average Length-of-Stay (LoS): Trust (UH site)



The direct weekly relationship between avg LoS of discharged patients and 4hr % is relatively low  
 $r = -0.17$

This relationship increases when you compare to the 4hr % of the admitted cohort. But still remains low.  
 $r = -0.18$



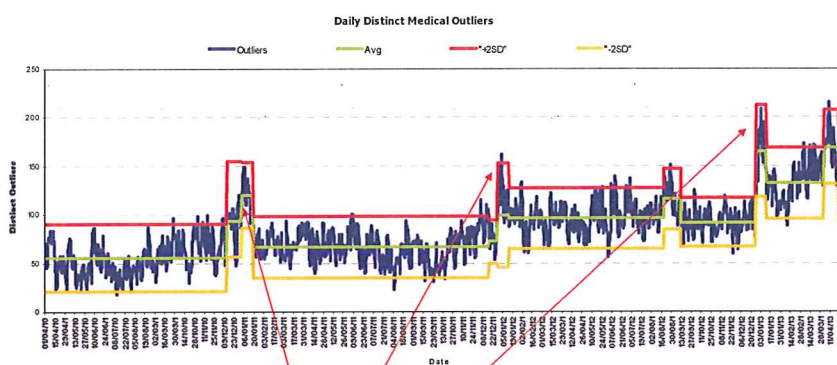
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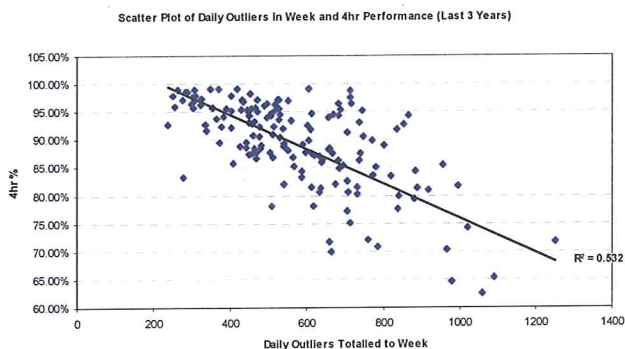
## Supply Side Problems - Medical Outliers

- 'Outliers' are patients being cared for in an inpatient bed but on a ward of the incorrect specialty e.g. medical patients being cared for on surgical wards
- Patients being looked after in the correct / designated specialty bed are known to have shorter, more appropriate lengths of stay. This usually relates to the staff on the ward (Dr's, nurses etc) being skilled in the management of the specific patient group e.g. Respiratory patients are best cared for on a respiratory ward
- UHCW has a mismatch of Surgical & Medical beds (circa 70-beds too few in medicine / too many in surgery)
- There is evidence to suggest this mismatch directly correlates to falling ED performance (a direct causative relationship is hard to prove however the issue contributes significantly to reducing patient flow / increasing length of stay)
- Outliers are created when other planned activity is reduced (at weekends / on Bank Holidays or in a deliberate way to accommodate high volumes of patients in the ED)

## Distinct Medical Outliers



## Distinct Medical Outliers



The correlation between outliers and 4hr performance is stronger than that of 4hrs and any of attendances, ambulance attendances, conversion, avg length of spell, Obs/CDU(AMU1) turnover, occupancy.

There is a -0.73 correlation coefficient and a 0.53  $r^2$  value.

Please note x axis shows total number of daily distinct outliers summed throughout the week. For example if there was 100 outliers per day (and that 100 could be the same 100 each day) over a 7 day week this would equal 700.

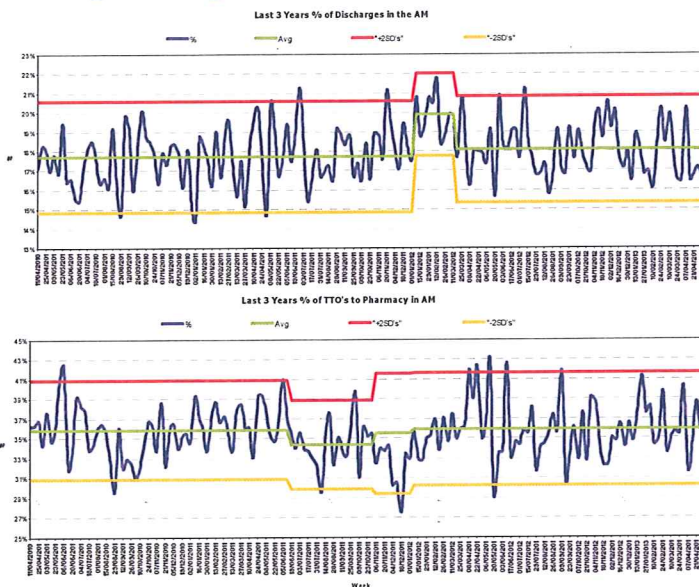
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## Supply Side Problems – Internal processes & timely discharge

- Best practice suggests that early / timely well managed patient discharge ensures that beds are available when they are most needed
- Usually this means a stock of beds being emptied early in the morning to accommodate the morning / early afternoon discharges & a further tranche in the late afternoon / early evening to ensure capacity for the night
- A sentinel indicator of good-practice is the early prescribing of discharge or take-home-medication (TTO's) to enable early / morning patient discharge
- Additional important indicators are weekend discharges (as a proportion of weekday discharges) – ensuring smooth 7-day discharge flow helps to prevent problems due to a lack of beds at the weekend (& helps reduce outliers by making sure sufficient 'correct' beds are available

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### Morning Discharges and take-home medication before mid-day



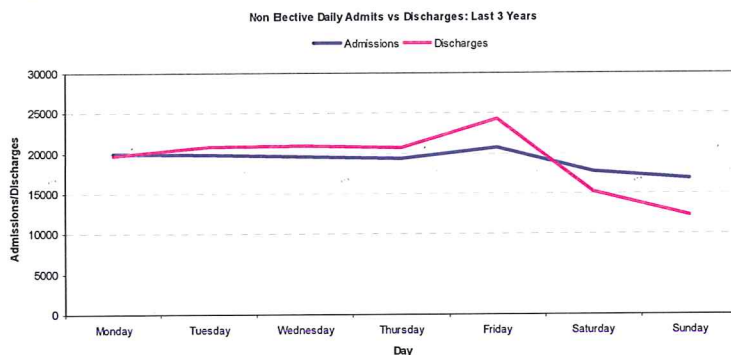
The % of discharges that occur in the morning are very stable apart from a 10 week period at the start of 2012 where a process improvement was seen

TTO's received before mid day are more variable

Whilst the lack of early discharge does not appear to have caused the ED performance problem, improving performance in this area offers an opportunity to support ED performance improvements

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### Weekday/Weekend Discharge to Admit Ratio



The above shows the profile of emergency admissions vs. discharges

This graph highlights a consistent pattern of 'filling up' at the weekends due to discharges falling (against lowered admissions) and then spending the week catching up with discharges (particularly on a Friday)

Again this is a consistent pattern over 3 years suggesting there is an opportunity to improve flow by improving 7-day working practices

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## Our approach to resolving the problem

## The principles underpinning our recovery plan

### Evidence

ECIST  
Best Practice  
SHA  
Local Evidence

### Actions

Agreed Themes  
Strong Program  
Governance  
Focus on local  
ownership, support,  
delivery &  
accountability

### Measurable Outcomes

On-track & on-time  
Achieving expected  
improvement  
Widely shared  
informatics  
Board level scrutiny

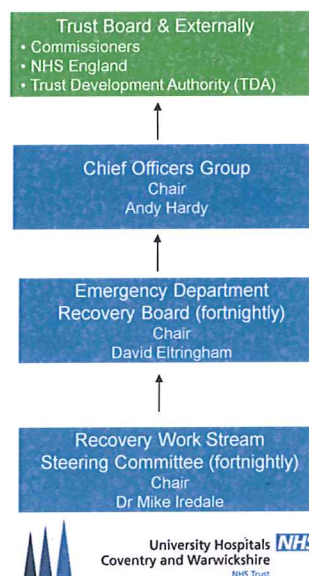


## Recovery Plan Governance Structure

Strong governance framework supports the recovery programme; providing assurance that we are doing what we've committed to & that our actions are working

Plan developed with local partners through the Urgent Care Board (System Flow Board) & progress formally reported through the governance structure

Approach signed off by the NHS Emergency Care Intensive Support Team (ECIST)



## Recovery plan work-streams & rationale

### 1. Developing alternatives to ED

- Developing new services & pathways for patients who do not need treatment in the ED i.e. Consultant or specialist nurse led clinics for patients with urgent conditions that require expert help but can be managed on a planned basis (managing deteriorations in chronic chest conditions, managing patients with suspected DVT's etc)
- Working with commissioners to develop effective GP / Nurse led urgent care on the UHCW site for the less complex patients
- Overall working on schemes that free-up core ED capacity to enables the ED team to deal more promptly with the more complex cases (ambulance attendances etc)

## 2. Improving ED Systems & Processes

- Benchmarking the way we organise our ED patient management against best-practice
- Implementing new ways of working that speed up decision making by moving the consultant workforce 'closer to the door' e.g. 'Rapid Assessment & Treatment' and 'See & Treat'
- Ensuring our Acute Medical Unit is as good as it can be. Specifically recruiting to vacant consultant posts & employing more advanced nurse practitioners to assess / treat patients as quickly as possible
- Again working on schemes that rapidly treat & move appropriate patients enables the ED team to deal more promptly with the complex cases

## 3. Improving Bed & Capacity Management

- Investing in a dedicated (24/7 – 365 days/year) professional site operations team & operations centre. Ensuring a consistent approach to the day-to-day management of bed capacity & patient flow
- Re-profiling the bed base. Formally re-designating a portion of UHCW surgical capacity to medicine & recruiting the correct workforce to properly manage this patient cohort
- Re-designating surgical beds to medicine is designed to reduce or eliminate the number of outliers
- Implementing a dedicated site-operations team is a 'best-practice' measure to ensure consistent operational grip & escalation of problems at all times
- Investing in 7-day working for services critical to decision making & discharge (x-ray, scanning, pharmacy, therapies & additional weekend consultant / medical staff)

#### 4. Improving internal pathway management & simple discharge processes

- Providing a dedicated team, with senior clinical leadership, to develop systems that deliver daily senior reviews of all in-patients (Daily 'Board-Rounds')
- Tracking & escalating internal waits & delays for diagnostic investigations and / or therapy support
- Developing new ways of working to speed up the prescription and dispensing of TTO's (e.g. ward based carts for drug dispensing, designating doctors to focus on early TTO prescription etc)
- Schemes to improve internal pathway management have been incentivised by the commissioners. Specifically additional monies are available for achieving quality improvements in these areas
- The schemes in this section of the plan are designed to reduce length of stay (due to unnecessary waits & delays) and deliver prompt, timely discharge everyday

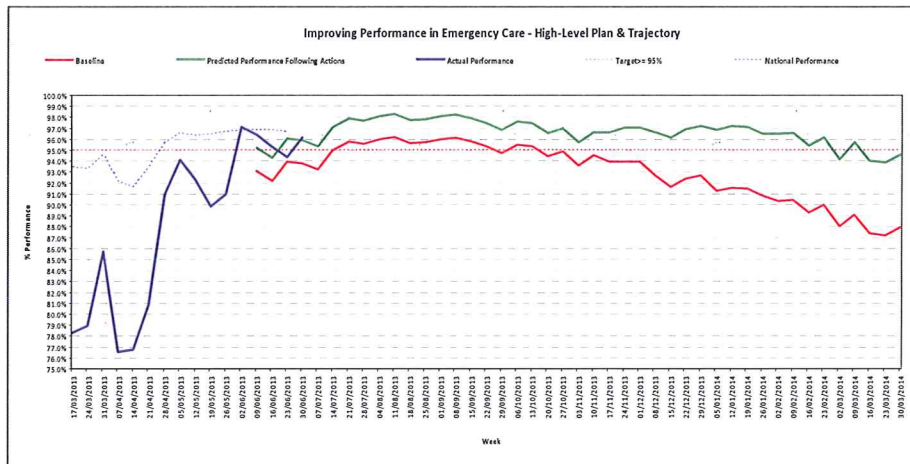
#### 5. Improving complex, supported discharge

- Whole system programme ranging from simple daily measures through to complex service redesign
- Supported by all system partners (CCC, the Community Trust, Community Trust etc) & project managed by the Arden Commissioning Support Unit
- Daily, whole system, escalation conference call (commenced in February 2013) held as an exemplar of best practice by the Trust Development Authority
- Schemes to improve complex discharge are designed to appropriately & safely reduce length of stay for patients who need support on discharge but no longer require medical treatment

## Performance – Expected, Current & Risks to Delivery

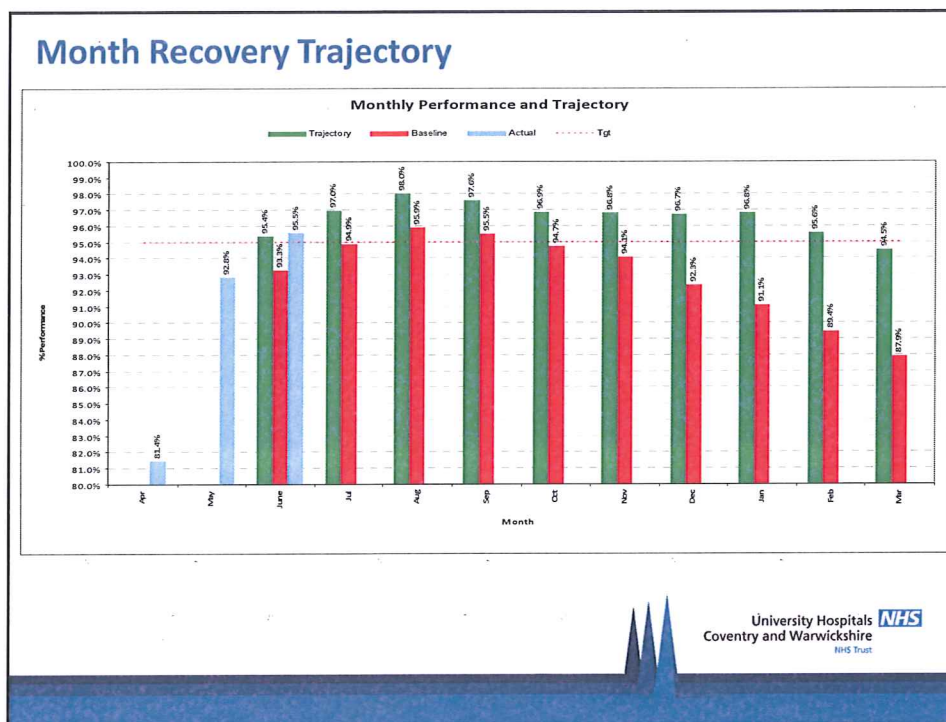
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## Recovery trajectory & performance



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### Trajectory, overall performance & risk

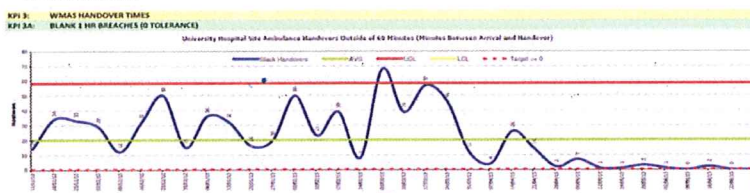
- Trajectory for the year **includes** recovering lost performance in Q1 to deliver 95% for the year – this is extremely challenging
- Recovery trajectory delivered for June 2013 (95.66% vs. plan of 95.4%)
- Performance volatility remains (but is expected until all schemes are in place & working) – June delivered 95%+ for 3 weeks out of 4 (20 days out of 30)
- July remains challenging (w/c 8 July was the second busiest on record but UHCW delivered 95%+)
- Trajectory models the approximate expected impact of the various schemes on 4-hr performance
- Winter (post November) is the most challenging time
- 4% improvement is required against the baseline to delivery the trajectory

- 2% is calculated as being delivered by bed reconfiguration. This scheme is within the Trusts gift to achieve on time & on-plan
- A further 2% improvement is required from 'extra-ordinary' Winter Plan schemes
- Winter plan schemes have been included in the Whole System Winter Plan & include:
  - Using a Homecare provider to run a virtual ward – caring for less acute patients at home & freeing up bed capacity
  - Providing additional physical bed capacity on the UHCW site
  - Using private-sector providers to ensure patients requiring planned care (surgery etc) can be treated if beds are required to support ED
  - Establishing an Urgent Care Centre to deflect appropriate patients from the ED
  - Multiple small-scale schemes to bolster staffing out of hours & at weekends
- The above schemes require investment. Traditionally the NHS has funded Winter pressures however this is usually in a bidding round in December. Commissioners & UHCW have requested decisions regarding Winter funding be considered earlier in the year to ensure the above schemes can be in place & working by December / January.
- An inability to establish all or most of the extraordinary schemes places the recovery trajectory at risk however the Trust remains fully committed, with partners, to delivering the 95%

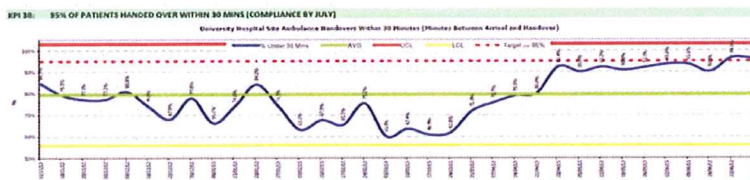
**Scheme performance – examples & approach to measuring success**

**Ambulance Turnaround Times**

- Success story with the virtual elimination of 1hr plus waits and best-ever performance against 30 min handover



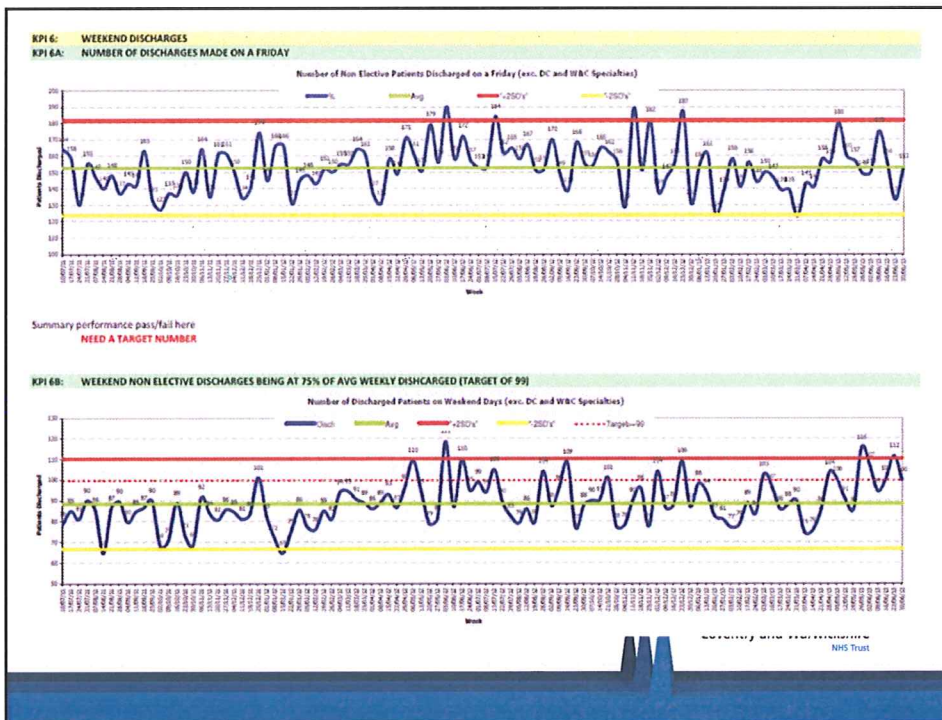
Summary performance pass/fail here



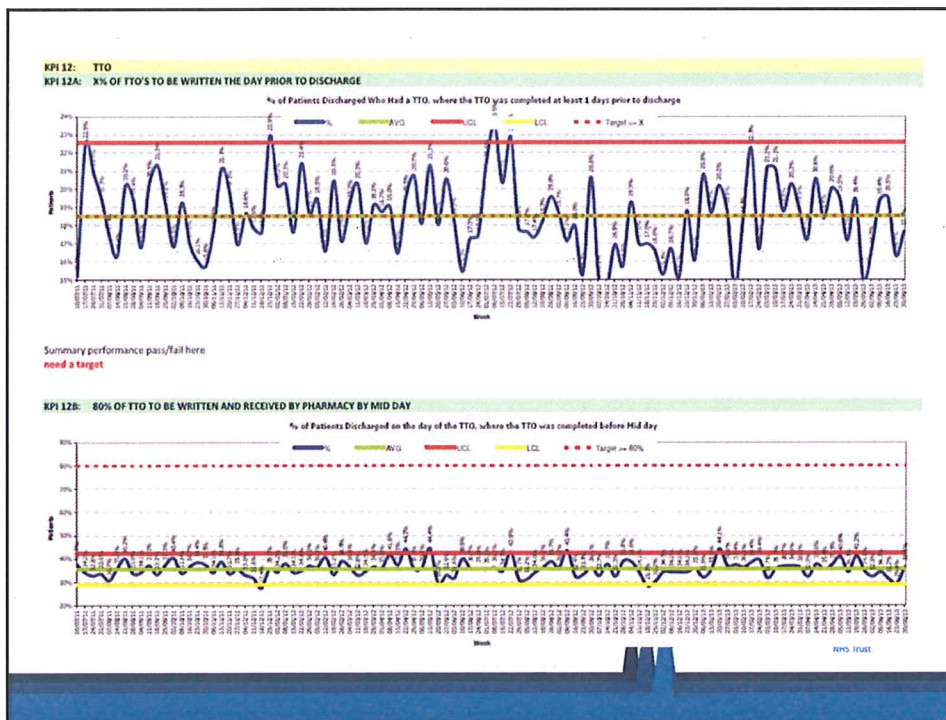
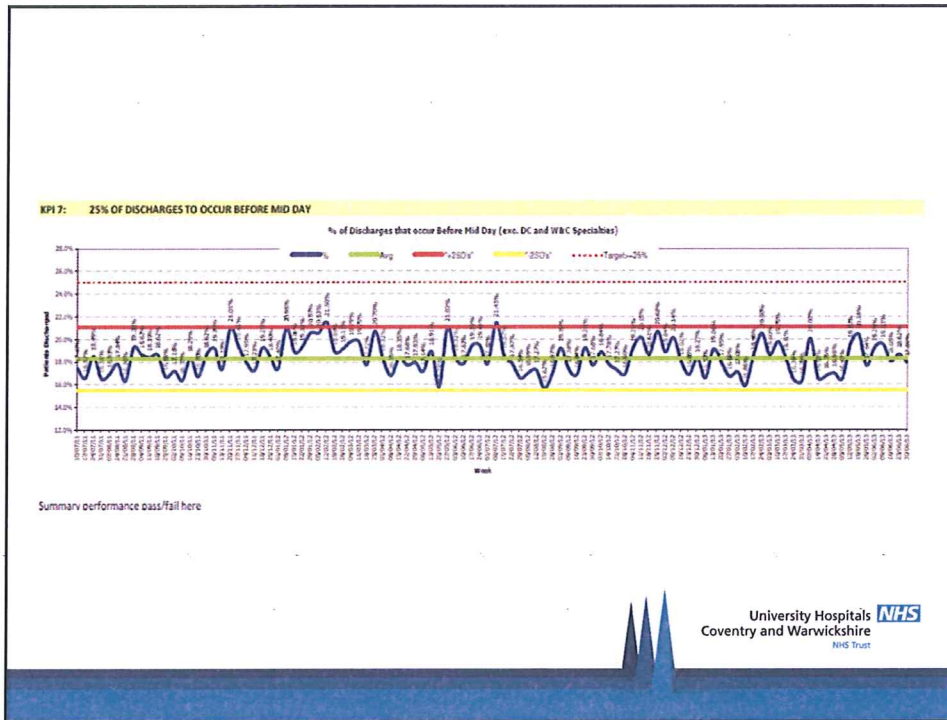
**Scheme performance – examples & approach to measuring success**

**Improving simple discharge:**

- Friday discharge volumes have remained volatile & more progress is expected in this area
- Weekend discharges have increased and at times perform above the target levels set. Again there is volatility and the schemes associated with this are under review to ensure optimal performance
- Where possible performance KPI's are 'balanced' to ensure there are no unintended consequences. For schemes to improve discharges the balancing KPI is the 30-day readmission rate – at present this is stable / unaffected by schemes to improve discharge
- Discharges before midday & the early prescription of TTO's are in their early stages and further progress is expected



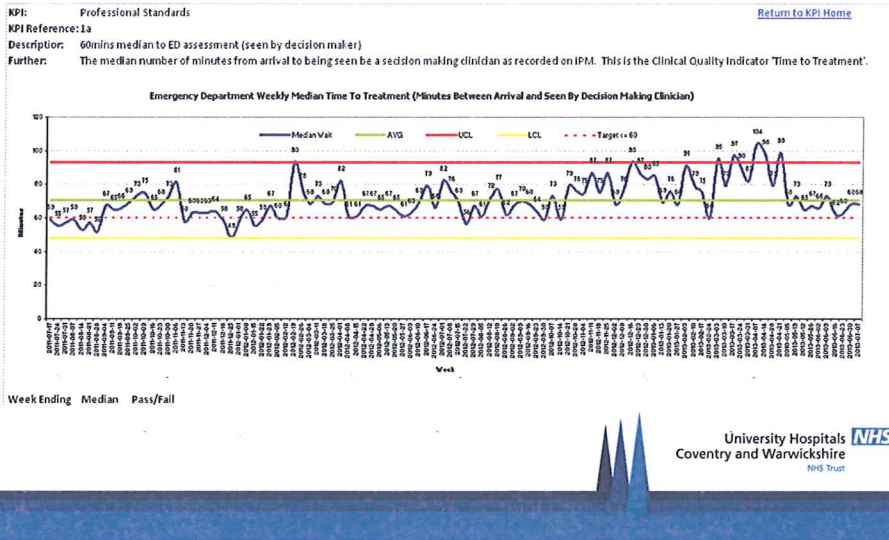






**Reducing the time to be seen by a senior doctor in ED**

- See & Treat appears to have help reduce the time to be seen by a senior ED doctor. RAT (scheduled for go-live on 22 July) is expected to further improve performance in this area



**Summary**

- UHCW is committed to working with partners to resolve this long standing problem affecting many of it's patients
- Through a process of analysis, robust planning & a tight governance framework, we have developed a revised plan that is showing improvements in delivering against both the 95% standard and other important performance indicators (e.g. ambulance turnaround)
- There remains a risk that, without support for the early implementation of extraordinary Winter measures, delivering the full recovery trajectory will be extremely challenging

**ANY QUESTIONS?**



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