



North East Ambulance Service   
NHS Foundation Trust

# Ambulance and A&E report

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**Activity relating to patients in Hartlepool; Stockton on Tees;  
Darlington; Middlesbrough; Redcar & Cleveland**

## 1. Introduction

- 1.1. This report provides an update on ambulance A&E activity to help Tees Valley joint health scrutiny committee to understand the overall current provision of emergency care services.
- 1.2. NEAS is commissioned to deliver emergency care and PTS ambulance services by Clinical Commissioning Group (CCG) areas and our data collection and monitoring is based at this level. This reports shows activity and response data by CCG area
  - North Tees & Hartlepool – covering Stockton on Tees and Hartlepool local authority
  - South Tees – covering Middlesbrough and Redcar & Cleveland local authority
  - Darlington
- 1.3. The Tees Valley OSC also requested data for each local authority area. This is not routinely collected or monitored since the abolition of Primary Care Trusts whose boundaries were coterminous with local government. However, a special data extraction has been undertaken to assist members in seeing ambulance activity by local authority area. This appears in the appendices.

## 2. Summary of key findings

- 2.1. The Trust's performance over the latter part of 2014/15 has continued to deteriorate and without fuller analysis of the winter schemes, it is not possible to quantify how much they have protected performance from further deterioration as a result of system pressure.
- 2.2. There are signs of recovery, however given the acuteness of the deterioration of hospital capacity (as evidenced using the A&E 4 hour metric), there is a strong possibility that our schemes will only continue to minimise further deterioration of our own response standards.
- 2.3. The breach forecast is considerate of the range of factors and whilst misses the 75% and 95% standards, it remains a slight breach. The underperformance in Quarter 4 also leads to an annual breach of both the R8 and R19 targets.

## 3. Ambulance activity

### Category A response times by Ambulance Trust

- 3.1. Potentially life-threatening calls are known as Category A calls. These are split into Red 1 and Red 2 incidents, depending on the nature of incident. All Red cases should receive an emergency response within 8 minutes in 75% of cases across the NEAS operational area. They should receive a patient transport response within 19 minutes in 95% of cases. The charts below show the proportion of calls meeting the response times for each ambulance trust for these time-related indicators.

3.2. Red 1 responses: cardiac arrest (figure 1). These cases relate to patients in cardiac arrest or at risk of going into cardiac arrest. Achievement of this measure for 2014/15 year to date is 69.7%.

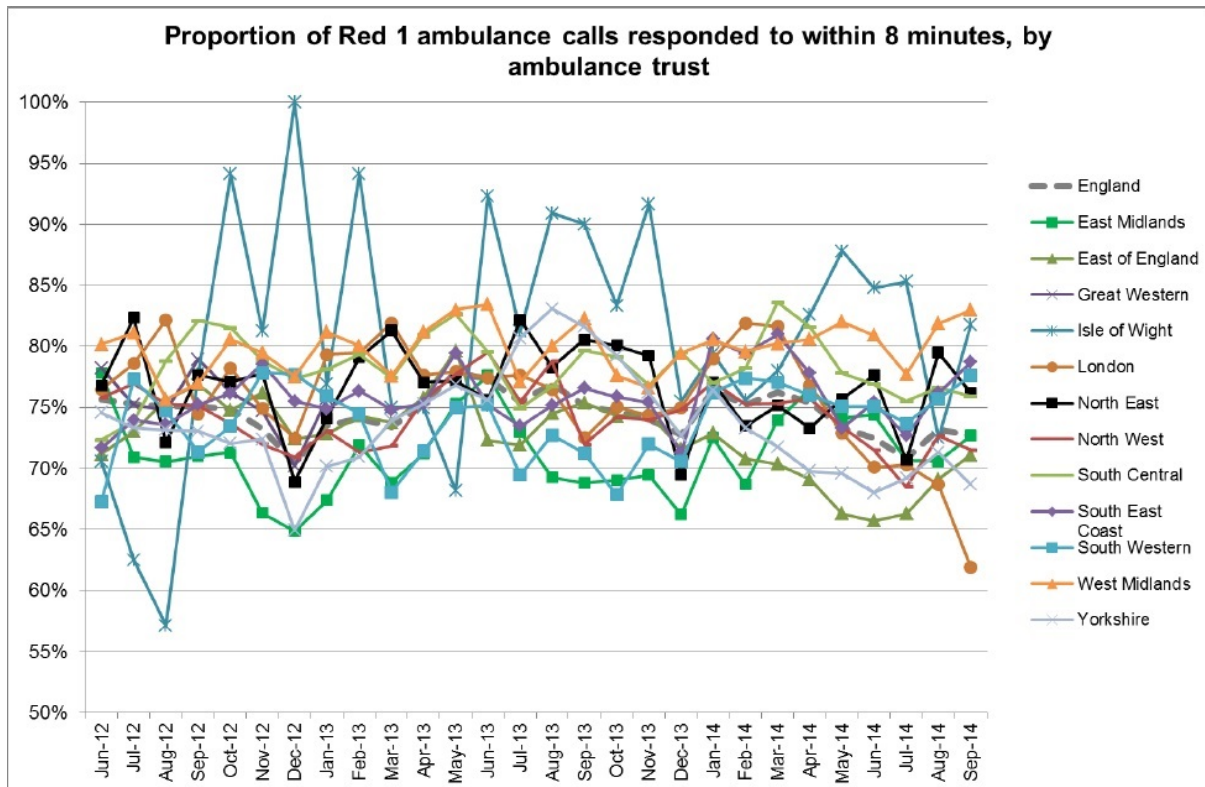


Figure 1: Red 1 calls

3.3. Red 2 responses: serious breathing difficulties, heart attack or suspected stroke (figure 2). The achievement for NEAS has varied over time, with an average 8 minute response rate of 80% between February and October 2013 to a low of 72.9% in July 2014. The NEAS rate in December 2014 was 66.4% and the year to date figure is 73.6%

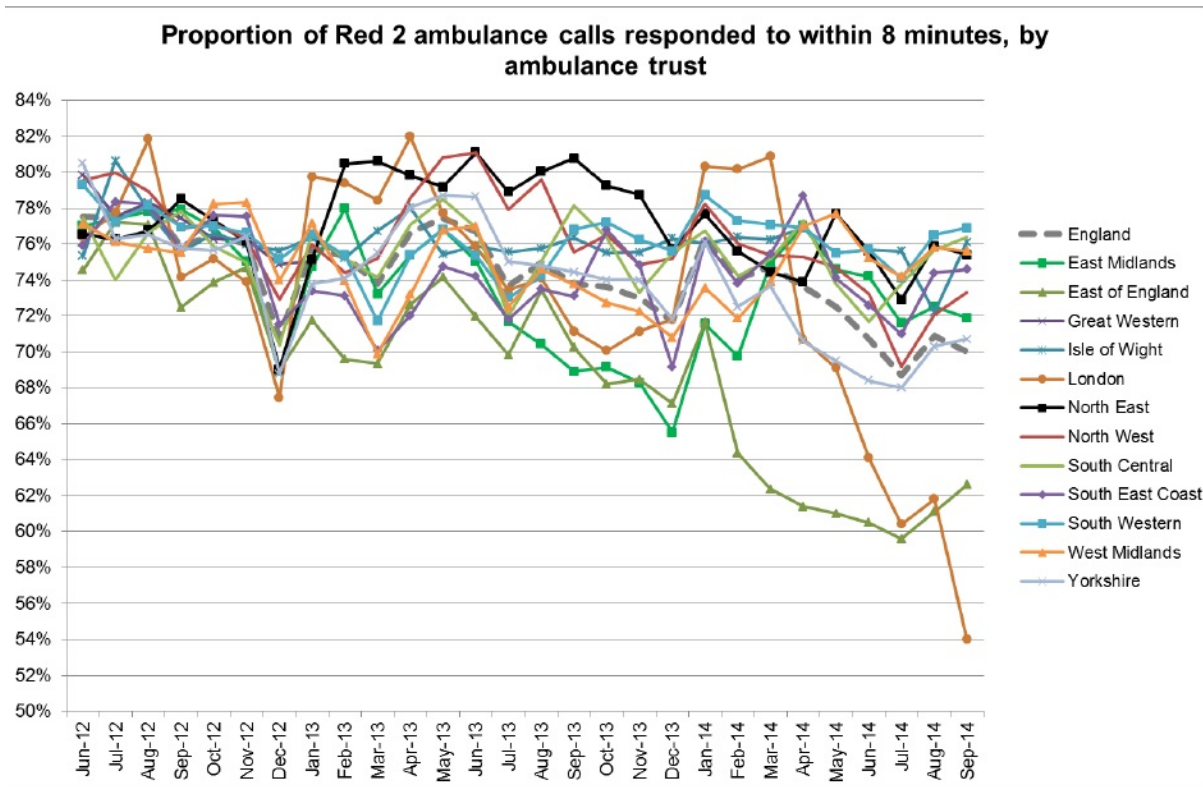


Figure 2: Red 2 calls

3.4. In September 2014, 95.0% of Red category ambulance calls were responded to within 19 minutes for NEAS (figure 3). Between February and November 2013, response times for NEAS were at an average of 97.5% achievement per month, and despite an increase in May 2014, the trend in performance since December 2013 has generally been down. The 2014/15 year to date rate for NEAS is 95.5%.

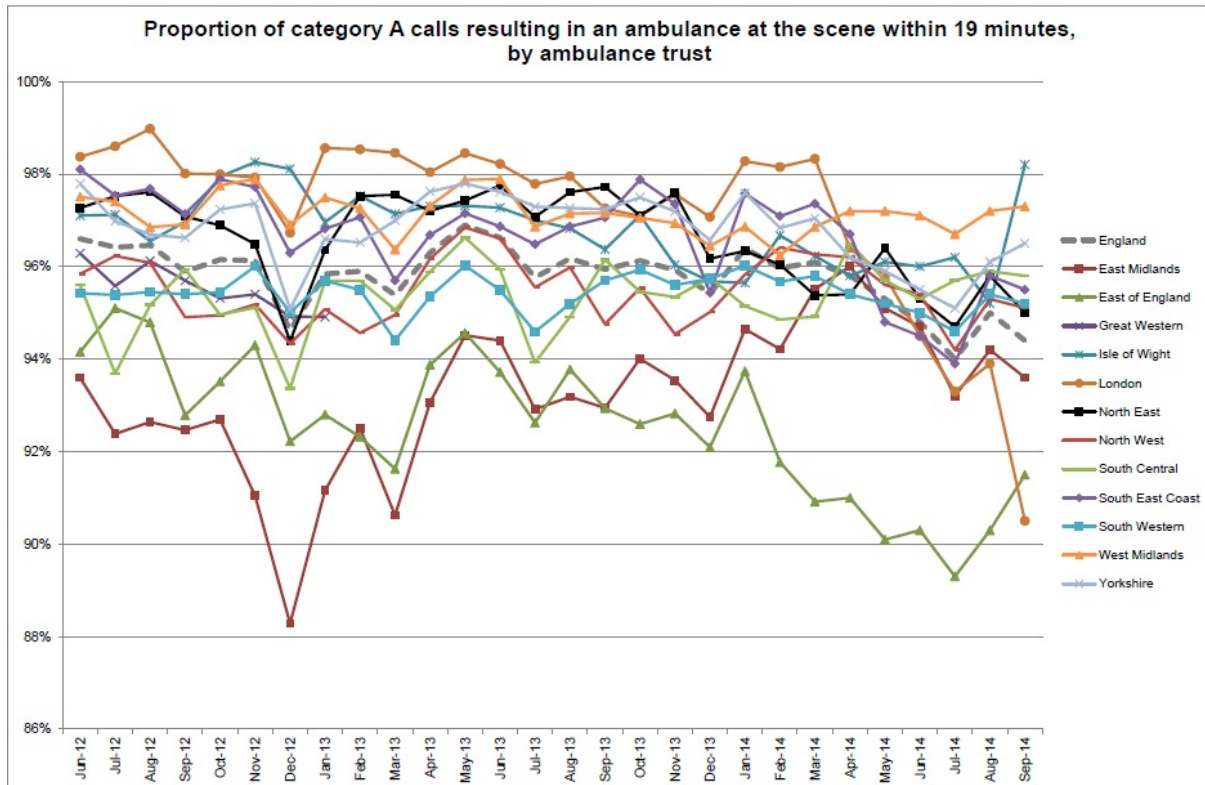


Figure3: Category A calls responded within 19 minutes

## 4. Clinical Commissioning Group (CCG) level data

4.1. NEAS response time reports for Red call in December 2014 and year-to-date (April 2014 to present):

### 4.1.1. North Tees & Hartlepool CCG

December	Red calls	% in 8 min	Red 1	% in 8 min	Red 2	% in 8 min
Achieved in 8 min	1213	66.2%	88	63%	1125	66.5%
Total number	1833		140		1693	

YTD	Red calls	% in 8 min	Red 1	% in 8 min	Red 2	% in 8 min
Achieved in 8 min	10466	73.9%	424	71.5%	10042	74%
Total number	14148		593		13555	

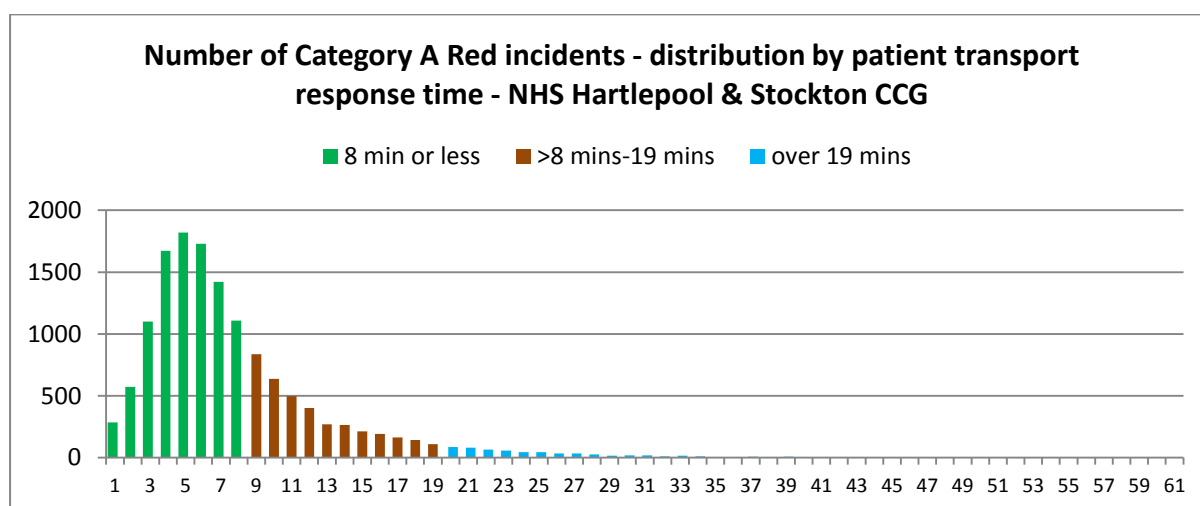


Figure 4: Category A best response times and transport arrival times

### 4.1.2. South Tees CCG

December	Red calls	% in 8 min	Red 1	% in 8 min	Red 2	% in 8 min
Achieved in 8 min	1246	65.3%	97	62.8%	1149	66.5%
Total number	1907		148		1759	

YTD	Red calls	% in 8 min	Red 1	% in 8 min	Red 2	% in 8 min
Achieved in 8 min	11768	73%	485	72.2%	11283	73%
Total number	16116		672		15444	

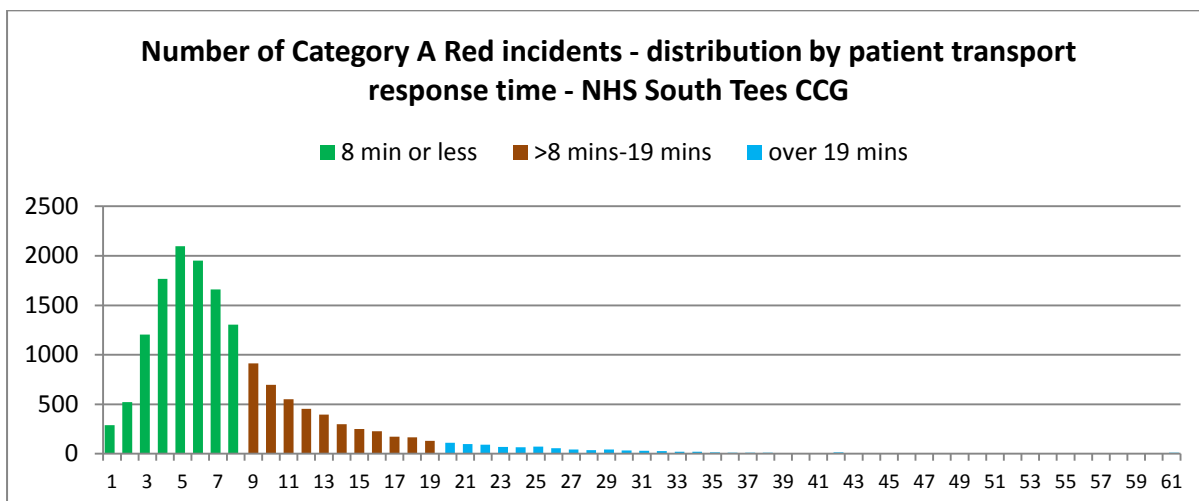


Figure 5: Category A best response times and transport arrival times

#### 4.1.3. Darlington CCG

December	Red calls	% in 8 min	Red 1	% in 8 min	Red 2	% in 8 min
Achieved in 8 min	461	69.5%	30	62.5%	431	70%
Total number	663		48		615	

YTD	Red calls	% in 8 min	Red 1	% in 8 min	Red 2	% in 8 min
Achieved in 8 min	4018	78.2%	183	75.3%	3835	78.4%
Total number	5136		243		4893	

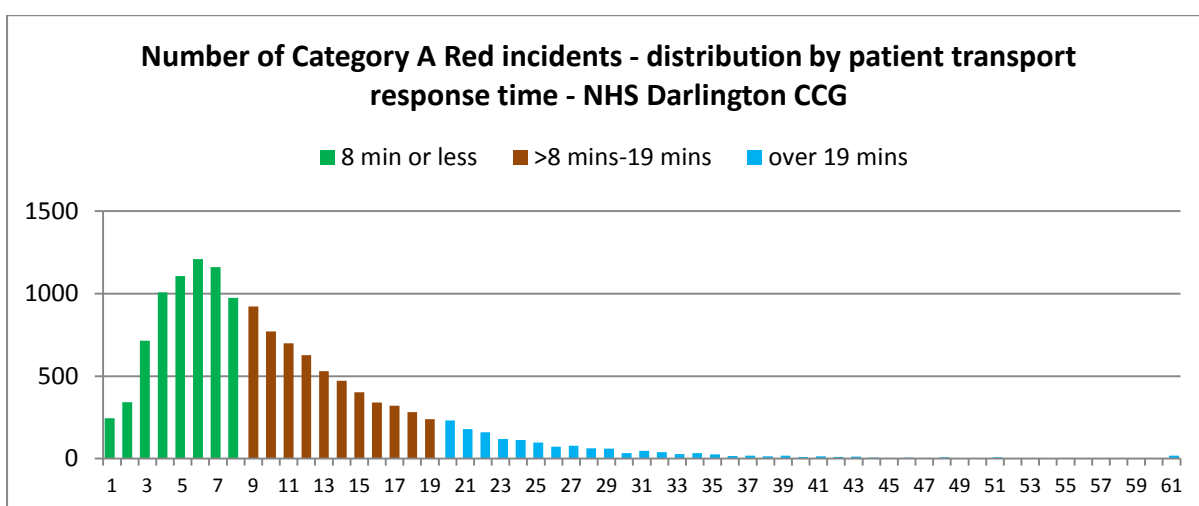


Figure 6: Category A best response times and transport arrival time

#### 4.1.4. NEAS service area (year to date)

	Red calls	% in 8 min	Red 1	% in 8 min	Red 2	% in 8 min
Achieved in 8 min	101,229	73.3%	3772	69.4%	94,457	71.1%
Total number	138,175		5439		132,736	

#### 4.2. Case mix by CCG area

##### 4.2.1. North Tees & Hartlepool CCG

It can be seen in figure 7 that North Tees & Hartlepool area has a higher proportion of Red calls (blue column) and urgent calls compared with the NEAS north east region (orange column); and a lower proportion of green (less serious) cases.

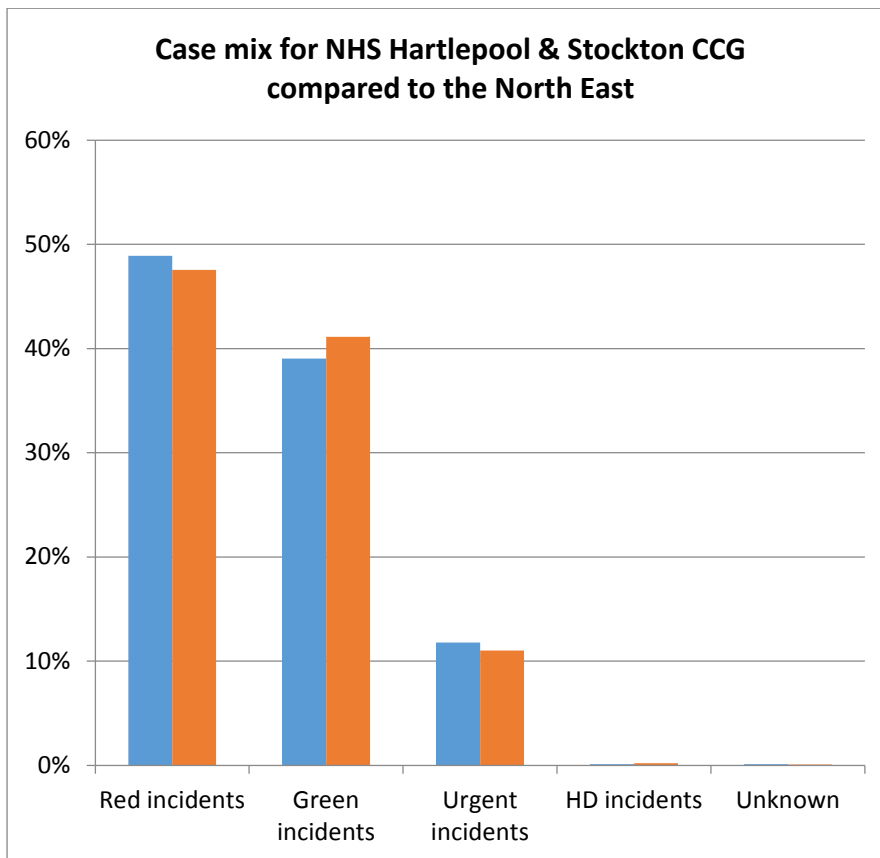


Figure 7: case mix in North Tees CCG



#### 4.2.2. South Tees CCG

It can be seen in figure 8 that South Tees area (Middlesbrough and Redcar & Cleveland) have a higher proportion of Red calls (blue column) compared with the NEAS north east region (orange column); and a lower proportion of green (less serious) and urgent cases.

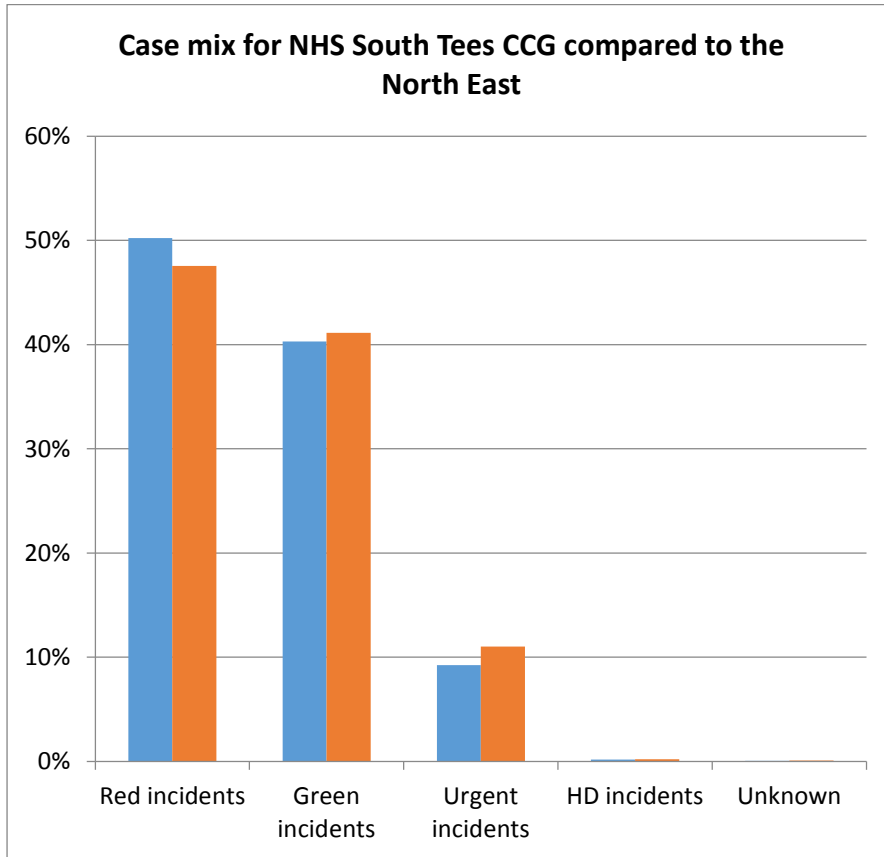


Figure 8: case mix in South Tees CCG

#### 4.2.3. Darlington CCG

It can be seen in figure 9 that Darlington CCG area has a higher proportion of Red calls (blue column) and green calls (less serious) compared with the NEAS north east region (orange column); and a lower proportion of urgent cases.

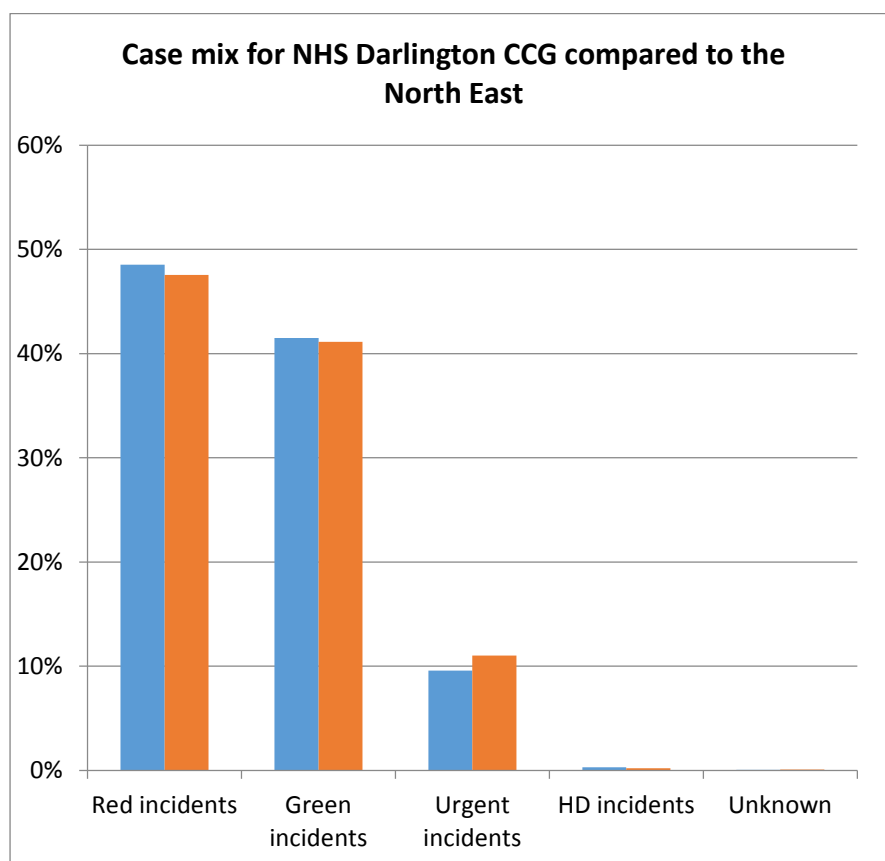


Figure 9: case mix in Darlington CCG

## 5. Incident volume by case mix

- 5.1. In addition to the Red category ambulance responses there are two other main types of call, which are green calls and GP urgent calls. The performance of these call types is intrinsically linked to Red performance due to the nature of the response allocation and the protocol for diverting a vehicle to a life-threatening Red incident from a lower acuity Green or Urgent. (see figure 19 on p19)
- 5.2. Green calls are for conditions that need to be attended quickly but where the patient will not deteriorate or suffer by a slightly slower response, or for non-life threatening conditions which are generally assistance calls in which someone needs help.
- 5.3. Urgent calls are requested by a doctor or midwife, with the response tailored to the needs of each individual patient, as determined by the GP. It may be that the GP may arrange an emergency admission to hospital but give the ambulance service up to two hours to respond to the call. The standard for urgent calls is to get 95% of patients to the hospital within 15 minutes of the time specified by the doctor when booking the ambulance.

5.3.1. **Number of GP urgent calls:** figures 10, 11, 12 show the profile of GP urgent calls made by day and time. The highest numbers of calls are made between 12pm and 3pm on weekdays.

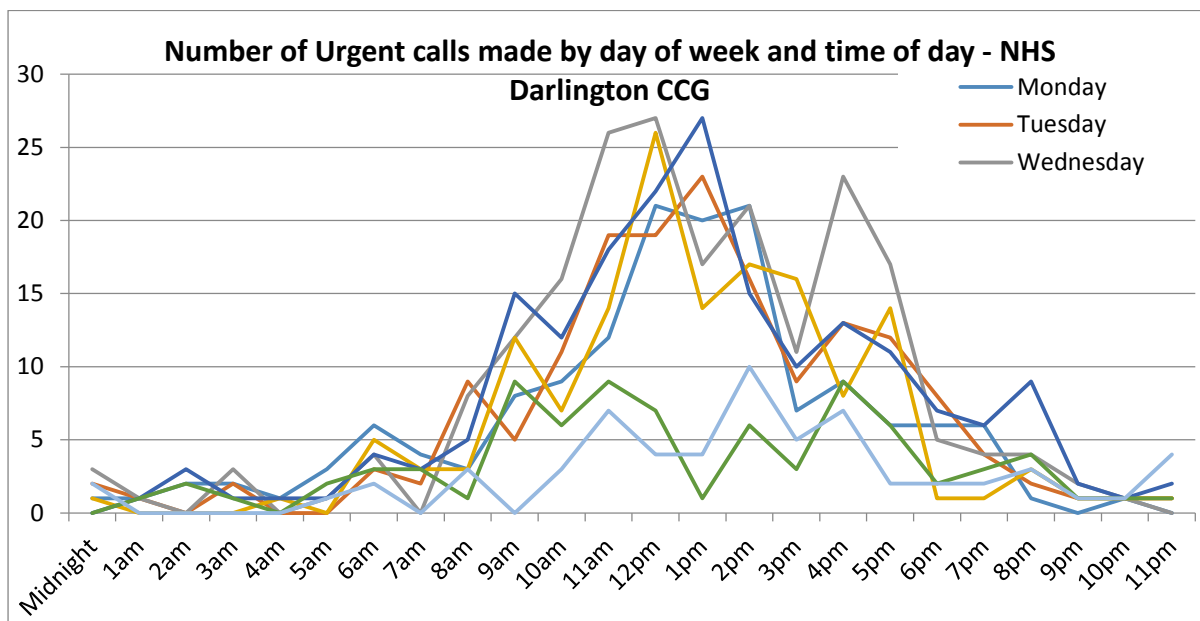


Figure 10: Profile of urgent calls in Darlington CCG

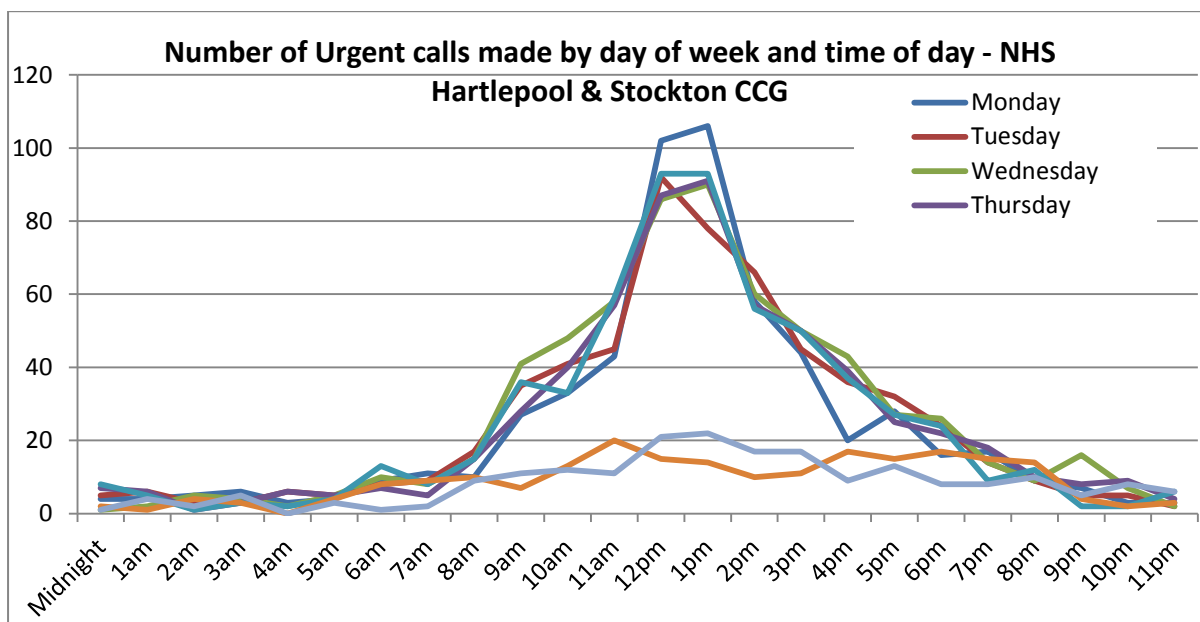


Figure 11: Profile of urgent calls in North Tees CCG

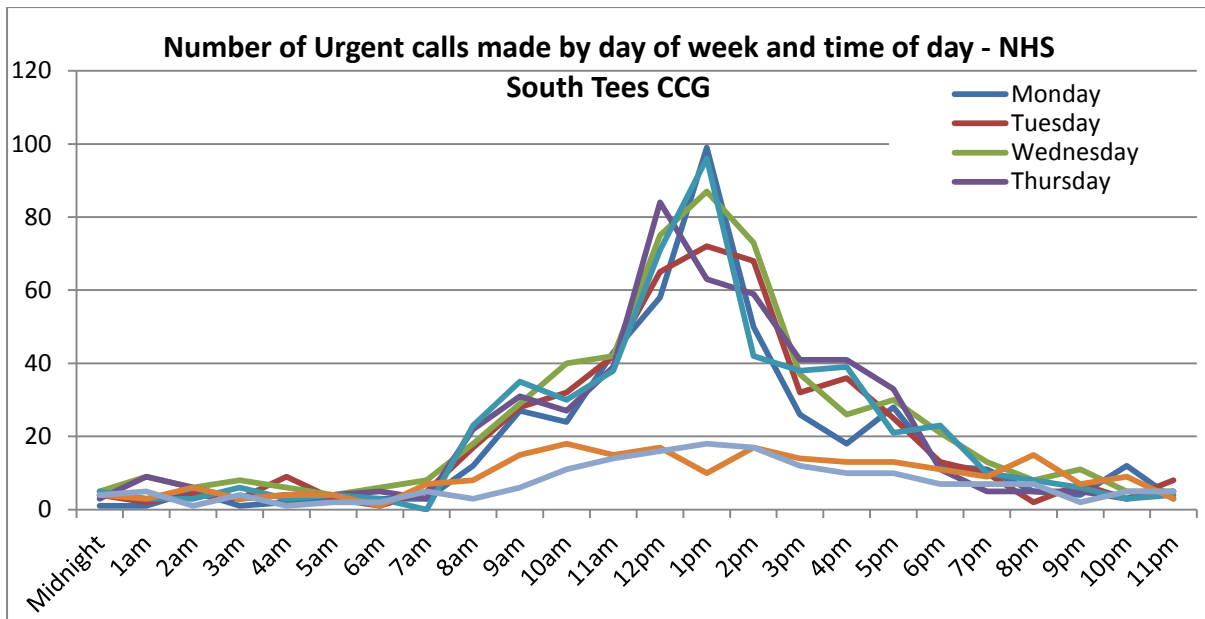


Figure 12: Profile of urgent calls in South Tees CCG

5.3.2. **Time to GP urgent call response:** The charts below (figures 13, 14, 15) show the variation in the length of time taken for a GP urgent call response to arrive at the patient location. According to the data a small number of patients (<3%) waited over 5 hours for a response, and there is a risk that it may then become necessary to escalate the call to a higher call category. It must be noted however that GP urgent call timelines can be up to four hours as standard but can be longer on agreement with GPs and patients.

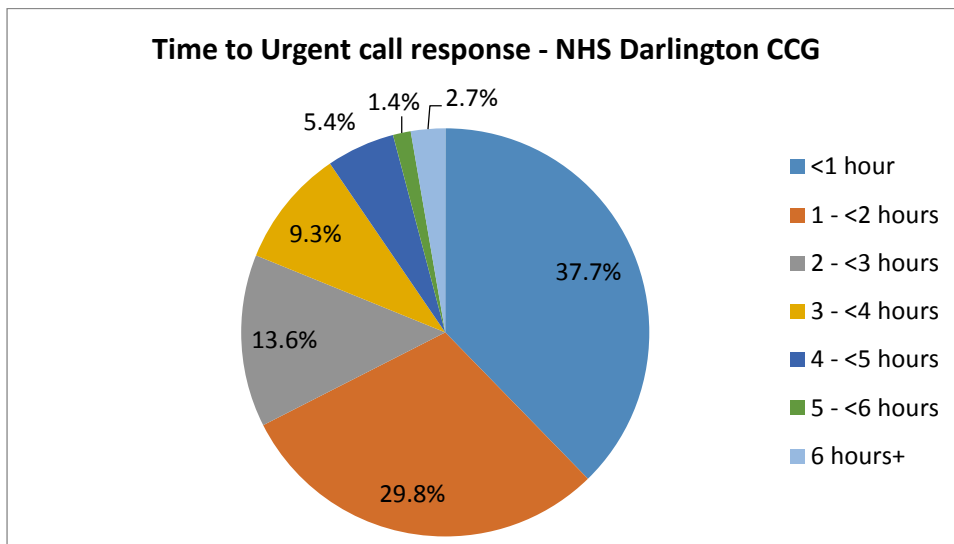


Figure 13: Profile of responses to urgent calls in Darlington CCG

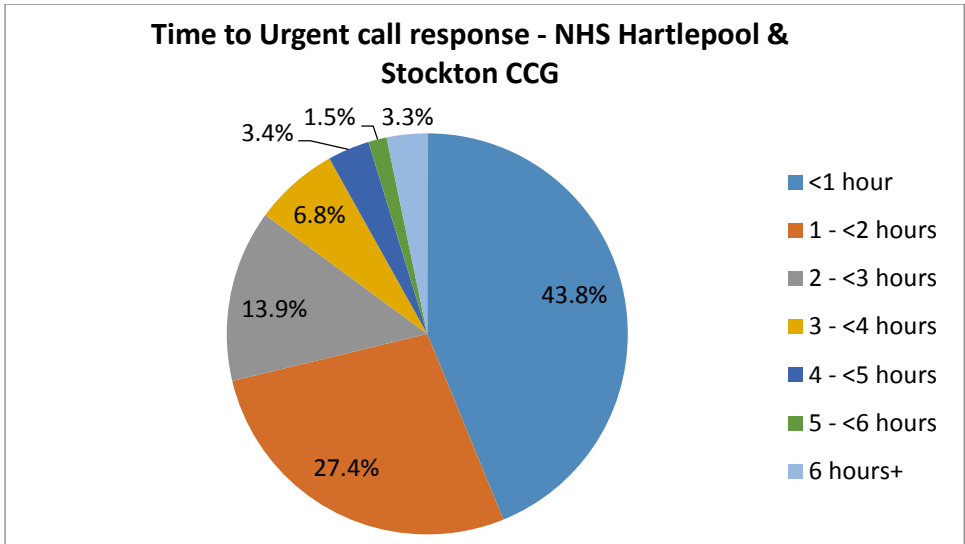


Figure 14: Profile of responses to urgent calls in North Tees CCG

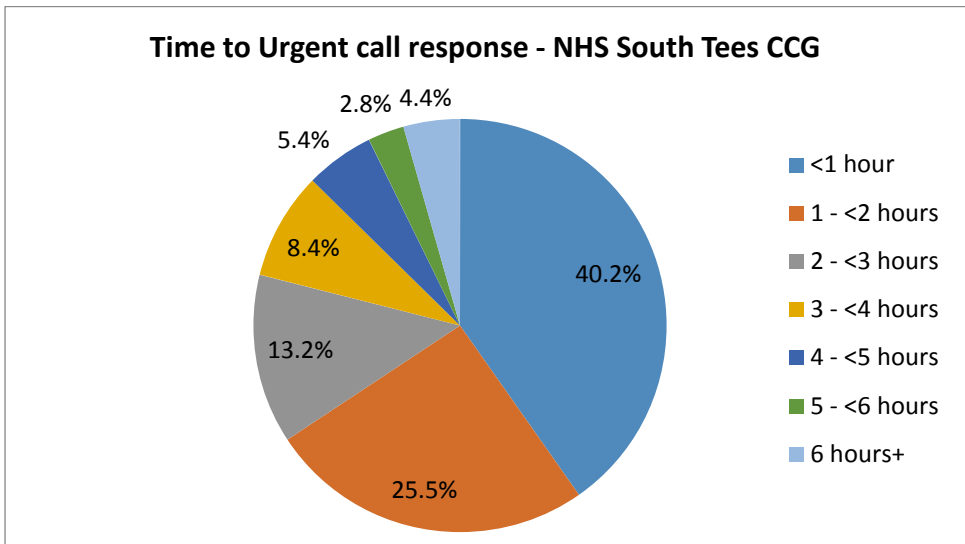


Figure 15: Profile of responses to urgent calls in South Tees CCG

## 6. Ambulance calls by closure type

6.1. There are three categories of closure for ambulance calls which are 'hear and treat', 'see and treat' and 'see and convey'. Calls originating from NHS111 are not counted in the 'hear and treat' or 'see and treat' figures but they are included in the 'see and convey' figures. There can also be variation in how call closure is reported in each ambulance trust as this depends on their A&E department classification and whether patient or incident level data is being reported. The charts below show the proportion of calls closed by each method for each ambulance trust.

6.2. Across the latest 30-month period the proportion of NEAS calls recorded as being closed by telephone advice (figure 16) has increased from 3% to almost

6%, compared to the England level which has ranged from 5.4% to 7.7% in the same period. South East Coast Ambulance Trust steadily increased their proportion of 'hear and treat' calls to almost 13% by March 2014 however for 2014/15 the average proportion of calls closed by telephone advice is 10.8%. The London Ambulance Service has the highest proportion of calls closed by telephone advice, at 14.5% in September 2014.

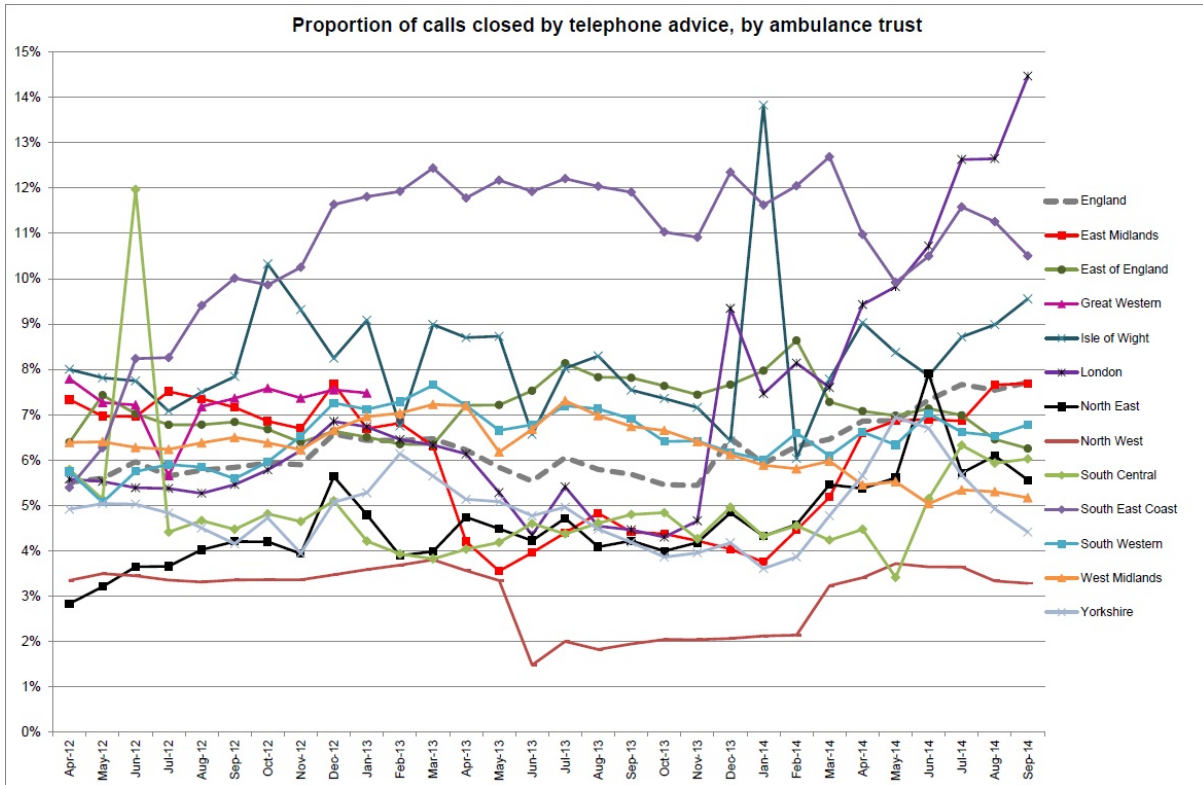


Figure 16: Proportion of calls closed by telephone advice

6.3. In 2014/15, the England average for the proportion of calls closed without transportation to A&E ('see and treat') was approximately 37%. Although these patients are not conveyed to a type 1 or 2 A&E department it is still possible for these patients to be referred to another care pathway or to a type 3 A&E department. The national definition of 'see and treat' is calculated as the number of patients treated on scene divided by the number of incidents responded to, and therefore can result in a rate of greater than 100% for some incidents.

6.4. Figure 17 shows the 'see and treat' rates for each ambulance trust. Within NEAS this is currently nearly 33% and this proportion is relatively stable. There are five trusts where the 'see and treat' rate is consistently above 40%, with the average rate for South Western Trust at 51.9%. Due to the way in which ambulance calls are reported, in terms of included calls, incidents and the number of patients treated, information is not available to accurately report the proportion of hear and treat, see and treat and see and convey rates per ambulance trust although the proportion of incidents where transport to A&E is required can be understood from Figure 17 which shows the proportion *not* transported.

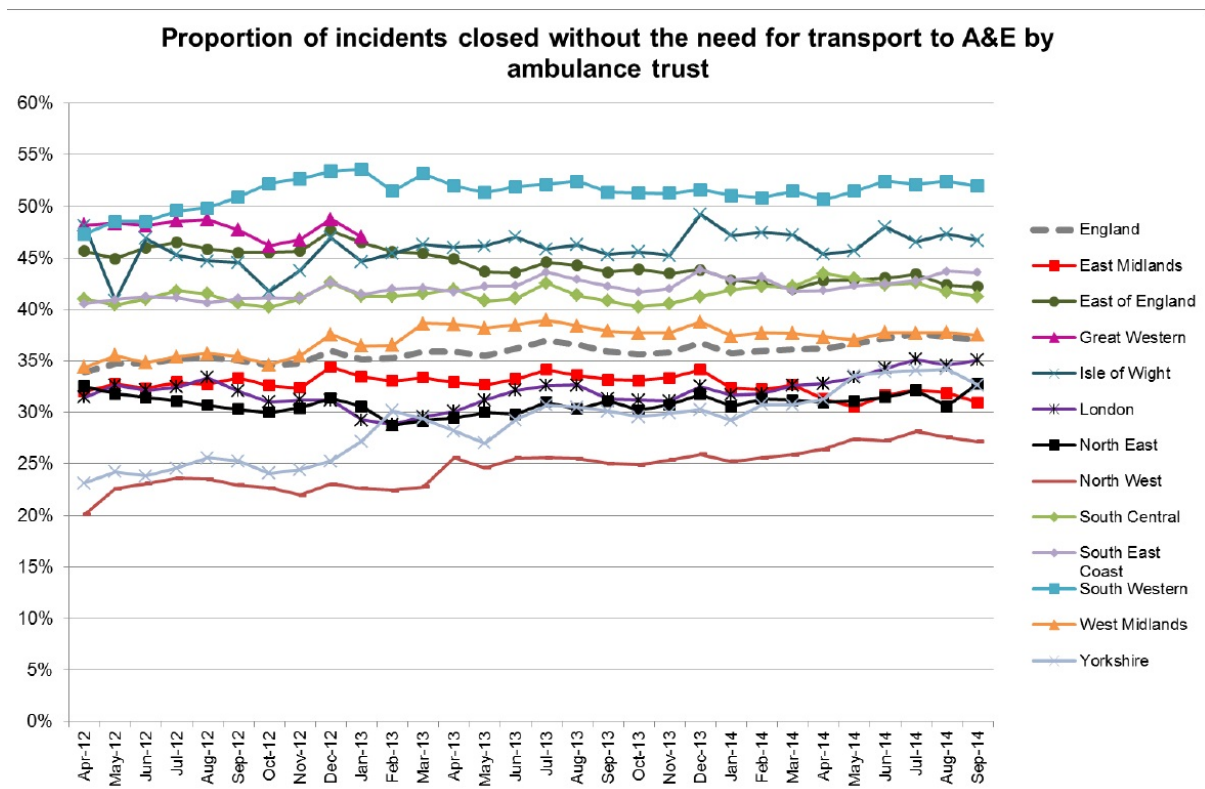


Figure 17: Proportion of calls closed by ambulance crew without transport to hospital

## 7. NEAS Action plans

This section provides an update on the following four areas:

- Update on actions taken to improve performance
- Assessment of the impact of the actions
- Latest performance figures
- Actions planned/assurances regarding delivery during Quarter 4 and beyond

### 7.1. Update on actions taken to improve performance

7.1.1. NEAS has been implementing a range of actions throughout the year to improve performance including:

- 7.1.2. A task and finish group to expedite recruitment which has resulted in:
- the direct recruitment of 16 qualified Paramedics since October



- recruitment of 4 qualified agency Paramedics (to be operational in next couple of weeks)
- an increase of the student paramedic intake in February 2015 from 24 up to 49
- ongoing development of a corporate staff bank
- the redeployment of Advanced Technicians as the lead clinician (subject to individual staff discussions regarding rota moves)
- start of discussions with Armed Forces to recruit Medics returning from duty
- a proposal to Teesside University to increase the three year degree programme intake from 50 to 75, subject to placement assurances and available mentors and finances
- The start of international recruitment.

7.1.3. Increase in staff in the Clinical Hub to support call takers and provide Patient Safety Support.

7.1.4. The Consultant Paramedic spent time within the Contact Centre to review deployment practice and support clinical staff with decision making on scene.

7.1.5. Production of call taker level reporting to target additional coaching to those outliers with high ambulance dispositions.

7.1.6. Continued use of overtime and additional PTS resource used to support Emergency Care

7.1.7. Improved GP communications regarding transport booking

7.1.8. Sickness actions plans compiled by each area of the business (target continues to be 5%)

7.1.9. A range of winter initiatives which has included:

- Hospital Ambulance Liaison Officers (HALO) in place at hospitals around the region to assist with patient flow and to reduce handover/turnaround delays at hospitals, this has proven to be a positive move with acute trusts and requests have been received to increase this resource.
- Increased use of third party resources (for Emergency Care and PTS)
- Increase cover within the Fleet department to ensure that vehicles are available and repairs are expedited, leading to a reduction in lost time due to vehicle unavailability.
- Increase Ambulance Resource Assistant (ARA) cover to assist with cleaning and restocking of vehicles at hospital along with completing minor vehicle repairs.
- Advice line for Paramedics to support 'see and treat' decision making
- NHS 111 Validation of Ambulance Dispositions - Pilot of the validation of specific 111 ambulance dispositions with a view to reducing the volume of inappropriate ambulance dispatches working with our partner NDUC (went live in January).

## 7.2. Assessment of the impact of actions

7.2.1. The winter schemes are currently being assessed for their impact and many of the schemes were mobilised at the end of Quarter 3/start of Quarter 4 and data is in the process of being collated.

7.2.2. Our recruitment activity has released some pressure to cover shift shortfalls, but there is still reliance being placed on overtime and third party. We are able to evidence that just has many hours are being resourced this year, as last.

7.2.3. Third party activity has significantly increased in December, now attending 1,042 incidents, compared to 503 in November. We are continuing to monitor back up responses times to third parties and at this present time, they are not causing concern. The following chart shows the volume of reds they are responding to and their contribution to Red performance. This shows that the majority of incidents attended by community first responders (CFR) and third party ambulances are low acuity, meaning NEAS resources are available more often for the high acuity incidents.

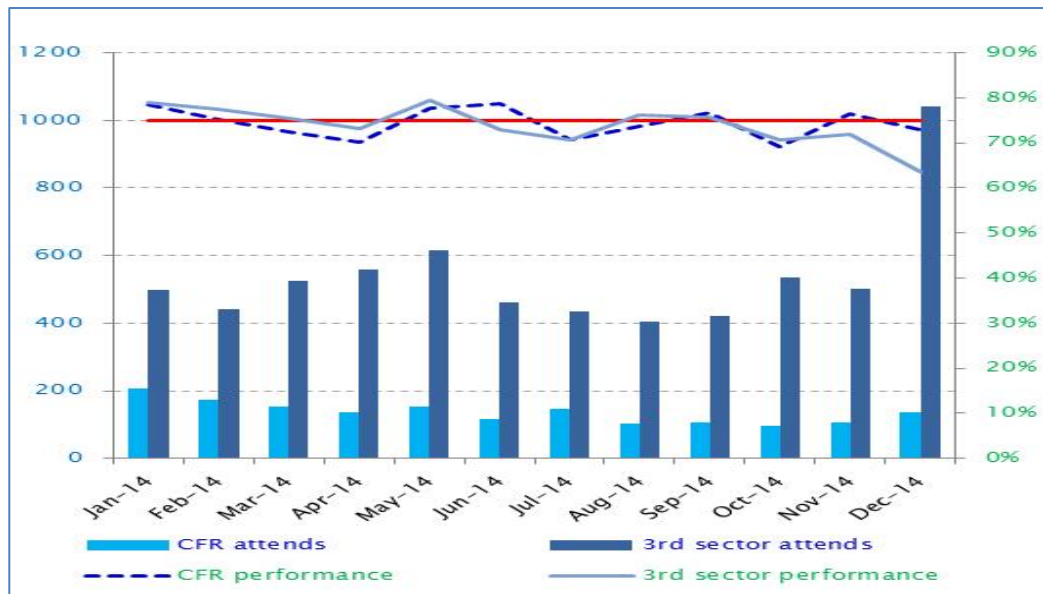


Figure 18: CFR and 3<sup>rd</sup> Party RC Performance and Activity Jan 14 – Dec 14

- 7.3. The increase in clinical hub staff is helping to drive the growth in hear and treat and see and treat activity by directing the right resource. We are forecasting an additional 5,671 hear and treats, growth of 46%.
- 7.4. The roll out of our Enhanced CARE training also appears to be contributing to the growth in see and treat activity. We are forecasting an additional 2,533 See and Treats, growth of 3.2%.
- 7.5. The change in the Trust's activity profile has resulted in more than 5,000 fewer conveyances in 2014/15 compared to 2013/14. Whilst the collective impact of our actions has not yet led to a significant improvement in emergency care or urgent response performance, they are more likely to have impacted by minimising the level of deterioration experienced, and specific schemes are inevitably contributing to helping dampen system pressure.
- 7.6. The schemes can, and will be measured in terms of activity undertaken. It is more difficult to assess their impact on emergency care response performance against a back drop of system pressures which is covered in Section 8.

## 8. Latest performance figures

8.1. Red performance for NEAS has been regularly below the national standards in the later part of the financial year and is below the Red 1, Red 2 and Red 19 standards for the year to date.

	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
<b>Red 1</b>	77.05%	77.15%	75.66%	82.18%	78.31%	80.56%	80.07%	79.22%	69.50%	77.05%	73.48%	75.15%	73.28%	75.73%	77.58%	70.73%	79.47%	76.24%	65.85%	67.43%	62.37%
<b>Red 2</b>	80.28%	79.65%	81.54%	79.35%	80.53%	81.27%	79.77%	79.20%	76.50%	78.32%	76.35%	75.07%	73.91%	77.75%	75.59%	72.91%	75.90%	75.38%	71.26%	71.57%	66.44%
<b>Red 19</b>	97.22%	97.46%	97.75%	97.13%	97.64%	97.74%	97.13%	97.60%	96.23%	96.36%	96.07%	95.42%	95.43%	96.41%	95.27%	94.69%	95.78%	95.05%	93.39%	93.64%	91.26%

8.2. Red activity has also increased significantly over the last year as shown below, putting additional pressure on the Trust and adversely impacting on green call and urgent response performance as we actively direct resource to emergency cases.

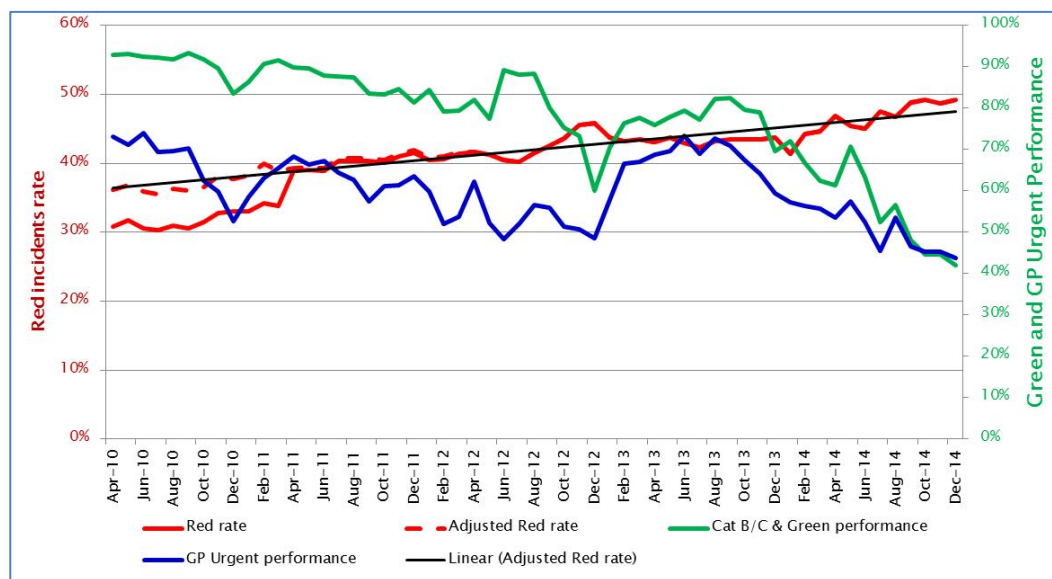


Figure 19: Red rate as percentage of all incidents

8.3. The additional hours/resource deployed and 'work arounds' have not been sufficient to account for the loss in hours due to system pressures. The following chart shows a notable increase in the daily hours lost just due to hospital delays for December. The hours that we plan for do not account for this level of loss in hours, enabling demand to easily outstrip our resource. The most significant delays are experienced at UHND, Sunderland and James Cook.

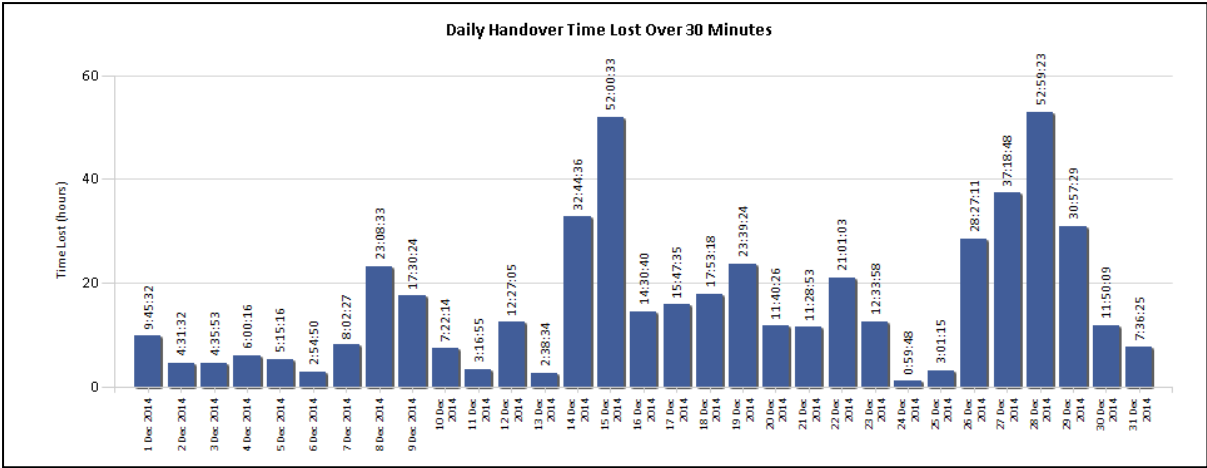


Figure 20: Hours lost daily due to delayed handovers over 30 minutes Sept – Dec

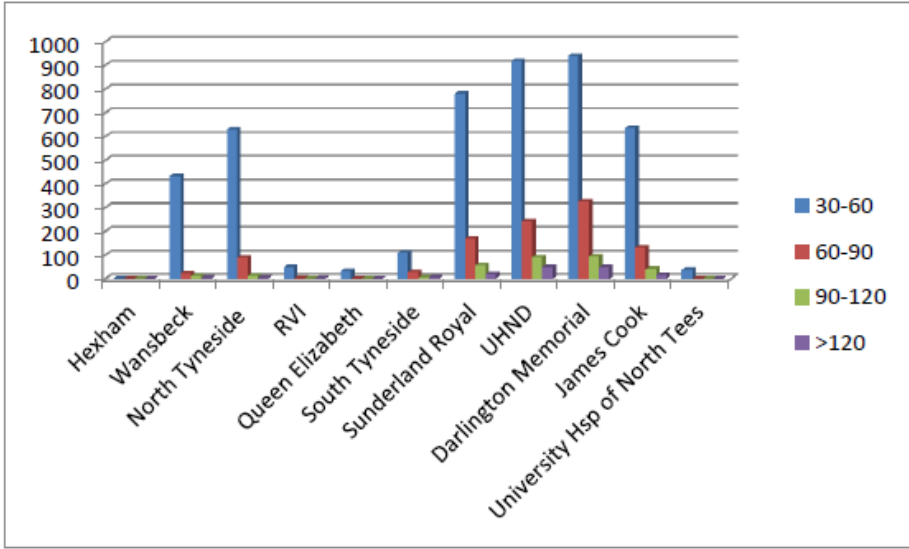


Figure 21: Total delays by hospital and time period 1/4/2014-27/1/2015

8.4. The following chart shows a visual correlation between increased handover delays and our Red performance.

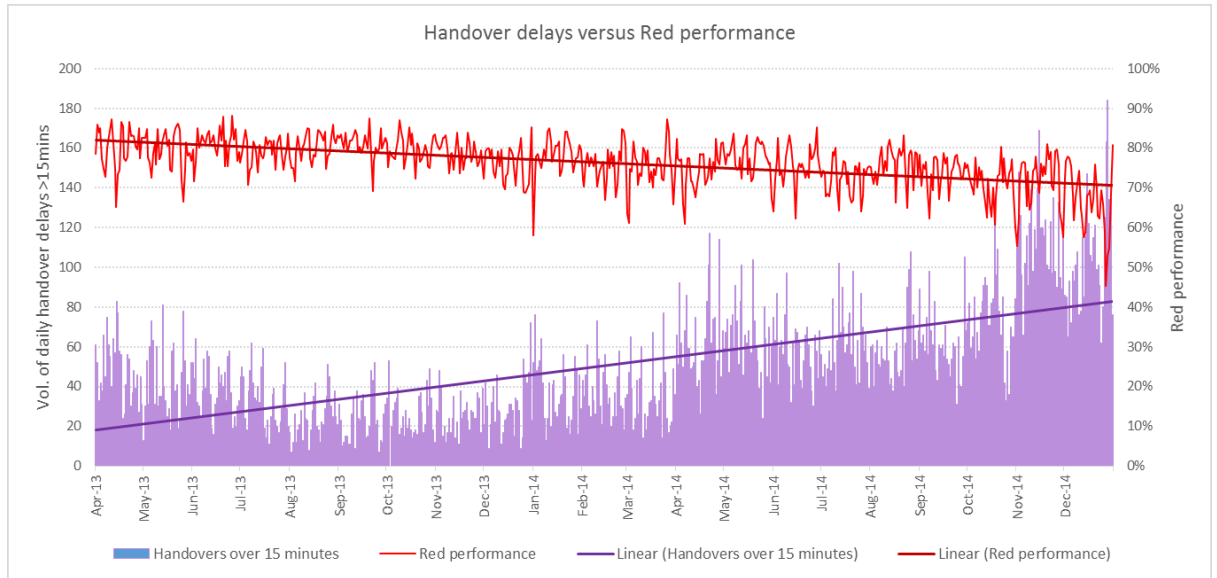


Figure 22: Relationship between handover delays and red performance

8.5. We also lose hours due to hospital divers being put in place and increased travel times. Not all are declared and recorded therefore we have estimated our hours lost based on the CCG report postcode of the patient and linked hospital. In December 2,189 patients were taken to a hospital outside of their own locality and based on increased travel times; we estimate a further 39 hours per day are lost.

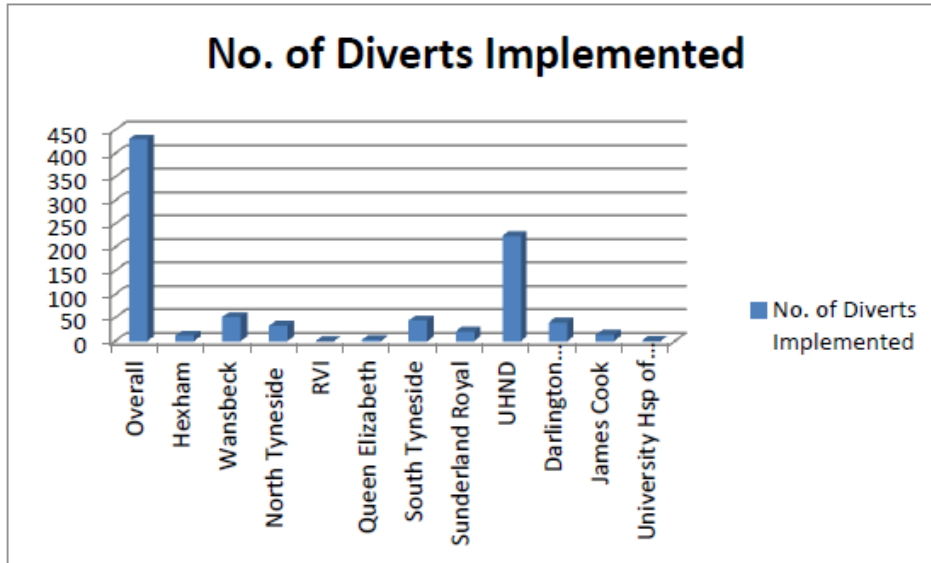
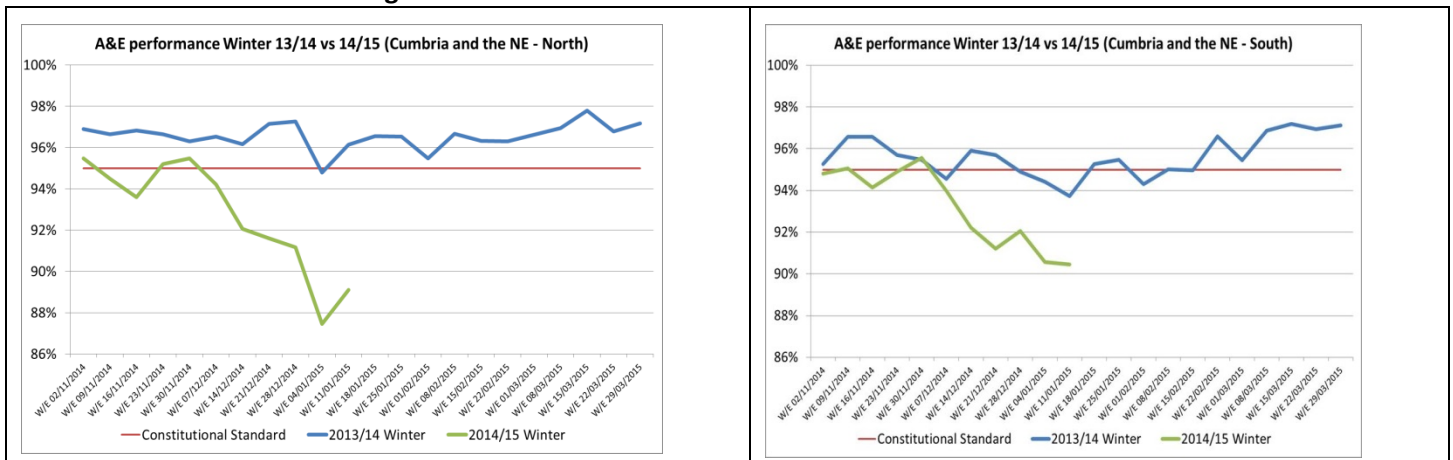


Figure 23: Total divers recorded by NEAS 1/4/2014-27/1/2015

8.6. Winter in the North East has been severe in terms of hospital pressures. The four hour A&E target is consistently being breached in our region, a stark symptom of the system pressure this winter as shown below. We have also escalated to REAP 4 in response to system pressure.

#### A&E 4 hour wait target



## 9. Actions planned/assurances regarding delivery during Quarter 4 and beyond

9.1. January performance has shown positive signs of recovery and the daily SITREPS has shown some relaxation of the system pressure.

9.2. The reduced pressure evidences the levels of performance that can be achieved supported by all of the actions detailed in this paper. Should pressure continue to lift and we are able to sustain this of improvement, Quarter 4 performance may be

attainable.

9.3. The Trust's actions continue to be implemented throughout Quarter 4 providing some mitigation of any further deterioration.

9.4. It is the longer term actions that will support recovery of the Trust's key response targets into 2015/16. These include:

- Ongoing recruitment strategies deployed
- Development of supporting courses to counteract the impact of the move to a three year degree programme for Paramedics, this is a high risk area for NEAS given the extended lead time and potential to lose the ability to 'grow our own'
- Tackling sickness absence (an external review has been commissioned for 12 February)
- Attraction and retention plans to be developed
- The Organisational Development plan to help to tackle our own inefficiencies associated with breaks and downtime and electronic Patient Report Form (e-PRF) record completion and look at different ways to support staff and improve morale.
- A new e-PRF solution from April 2016
- Further development, in particular growth, of the staff bank
- Completion of the external review of our 'red rate' and procurement of CQI system for call handlers
- Management of the bed availability sitrep and taking control of diverts.
- Ongoing roll out and evaluation of Integrated Care and Transport project
- Resuming Enhanced CARE training (currently cancelled due to REAP 4 actions)
- A consistent handover process at hospitals to be agreed and implemented
- Recruitment of the front-line emergency care managers

## **10. Partnership working with Cleveland Police**

10.1. We have a number of ongoing initiatives between the services and it is important that we continue to work closely with police locally and at a national level with the Association of Chief Police Officers, to explain the ongoing challenge we face in our service response and quality.

10.2. Chief Executive Yvonne Ormston gave her apologies for absence at the Tees Valley Scrutiny Committee meeting on 22 January as she was meeting with chief constable Simon Cole, ACPO lead on ambulance liaison, to discuss the national issue of ambulance/ police partnership working and response times.

10.3. Seven and a half percent of all 999 incidents that NEAS attend come from calls by the Northumbria; Durham and Cleveland police services. This is the highest proportion of emergency incidents originating from the police of other ambulance trust in the country. All our calls are prioritised on the patients' clinical need and requests from police officers do not take preference if other callers have a greater

need.

- 10.4. We meet regularly with all police services and are open and honest with all our partners about the issues we are facing. The national shortage of paramedics is particularly acute in the North East; less serious cases are experiencing delayed responses from us because of the increase in the number of potentially life threatening emergencies we are being called to; delays at hospitals mean that we have fewer crews available to respond.



## 11. Appendix 1:

Location and numbers of ambulances across Tees Valley local authority areas

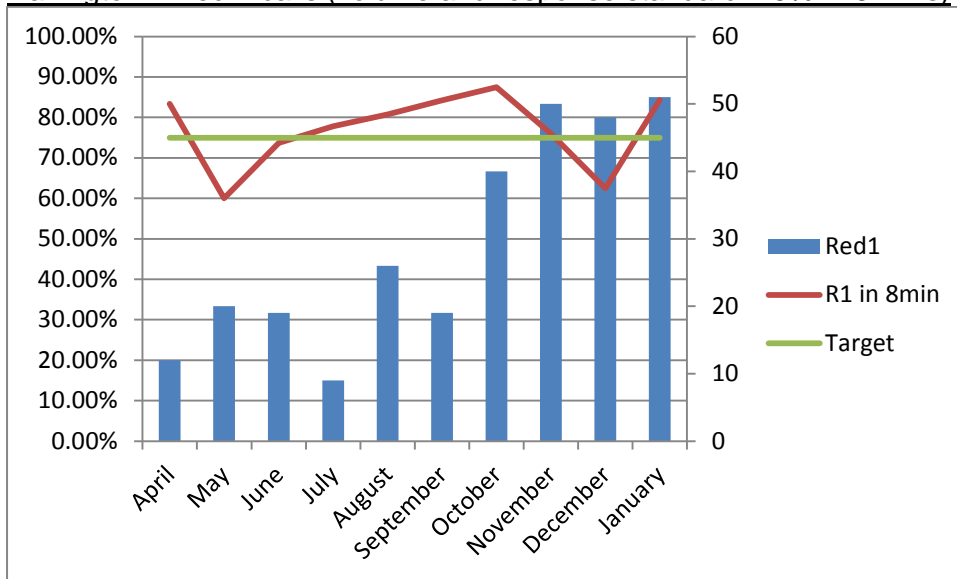


## Appendix 2:

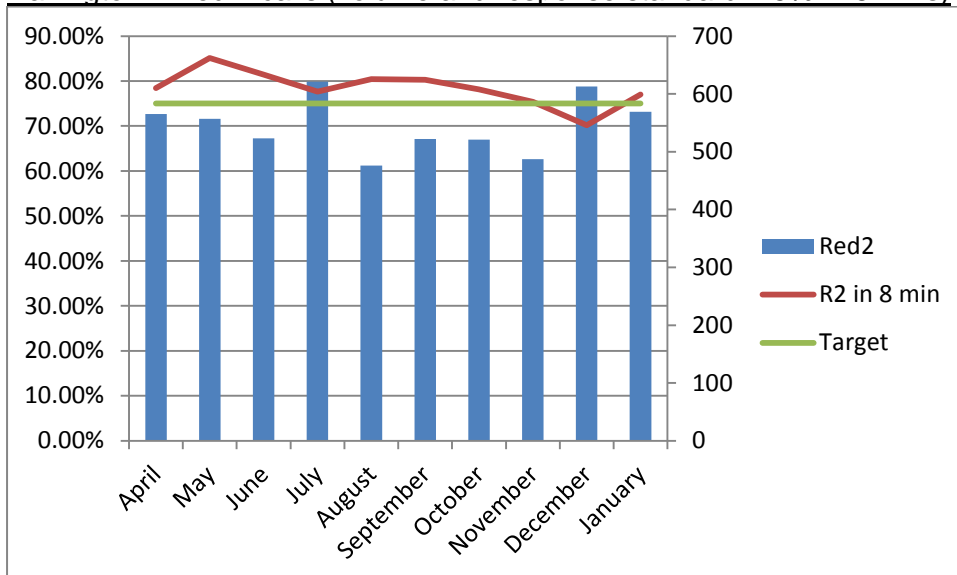
### 12. Local authority level performance data

NEAS performance is commissioned and monitored at CCG level. However, the CCG boundaries do not assist members in understanding the response times in their local authority area. This section provides NEAS responses by local authority area; however, it should be noted that NEAS is not commissioned or monitored at this level.

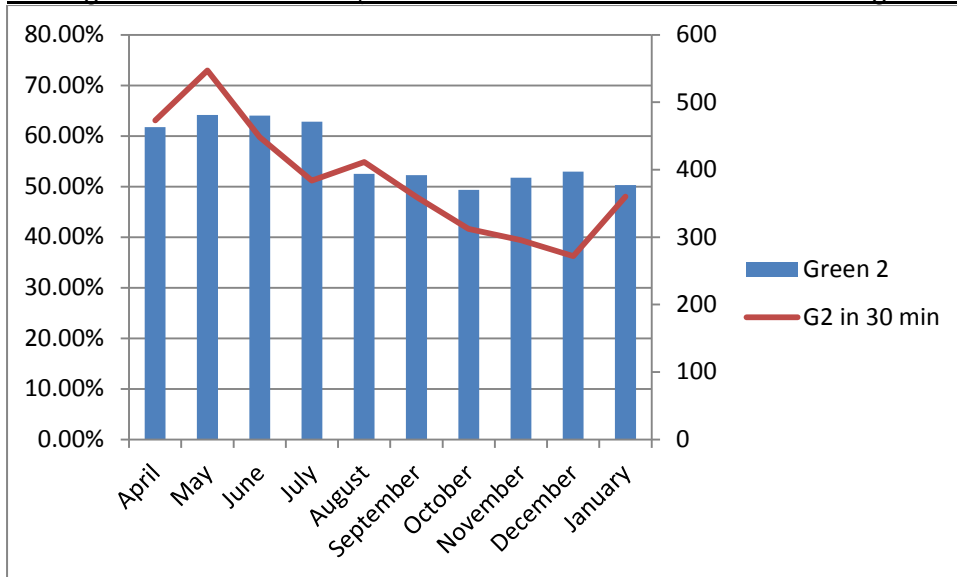
**Darlington – Red 1 calls (volume and response standard: 75% in 8 mins)**



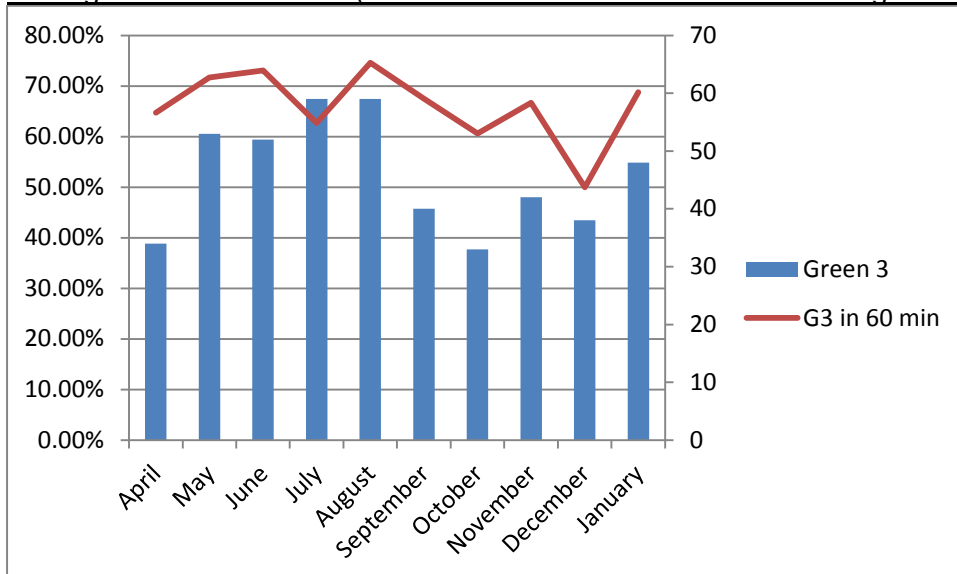
**Darlington – Red 2 calls (volume and response standard: 75% in 8 mins)**



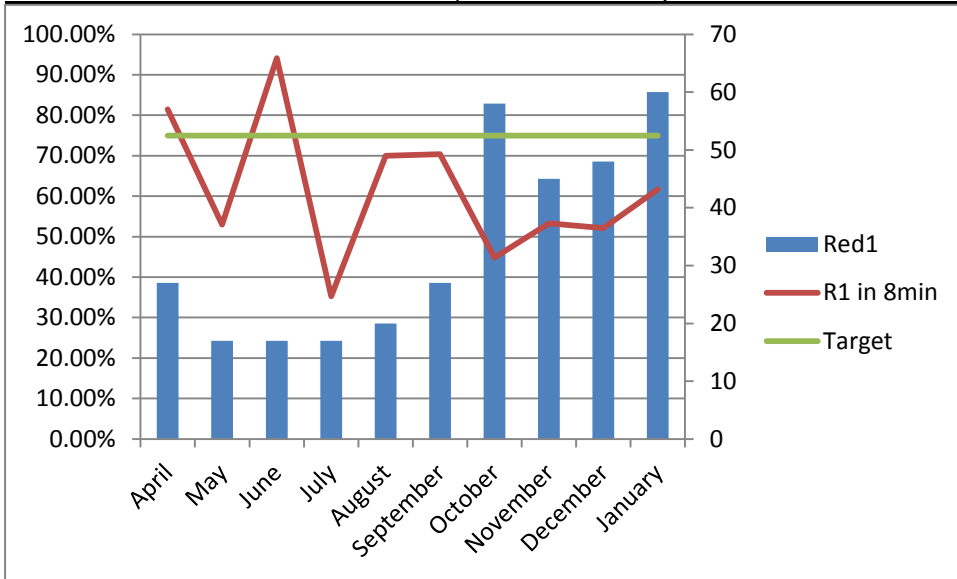
**Darlington – Green 2 calls (volume and standard in 30 mins: no target commissioned)**



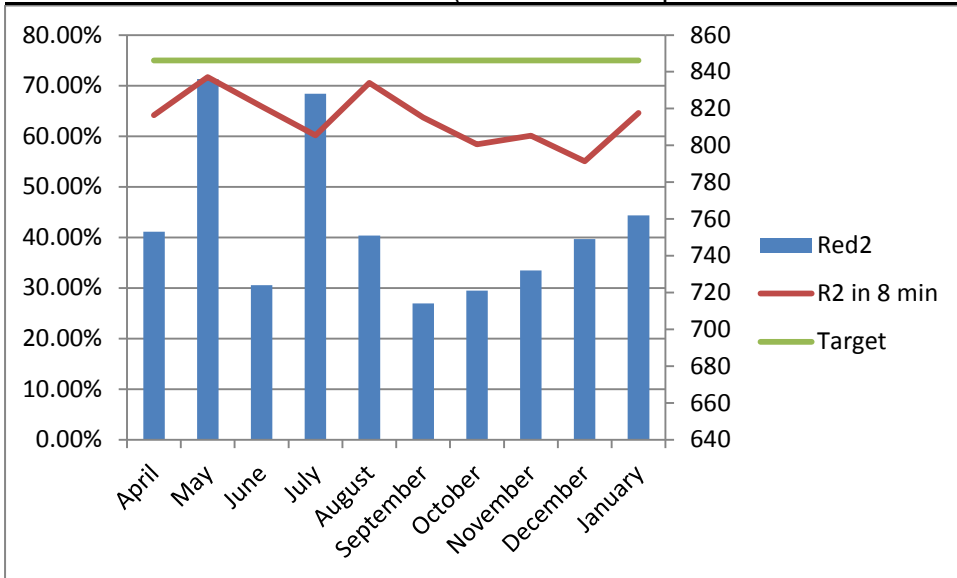
**Darlington – Green 3 calls (volume and standard in 60 mins: no target commissioned))**



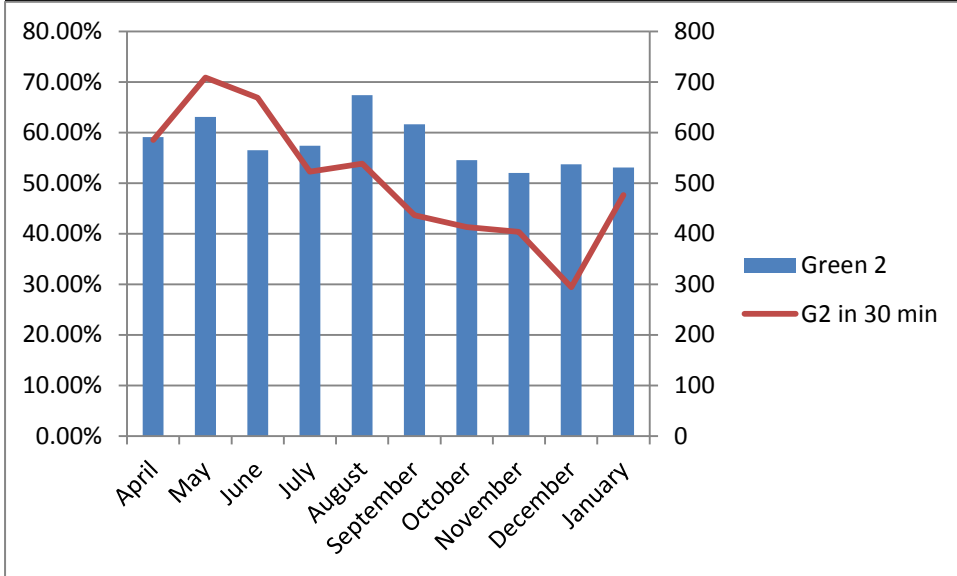
**Redcar & Cleveland – Red 1 calls (volume and response standard: 75% in 8 mins)**



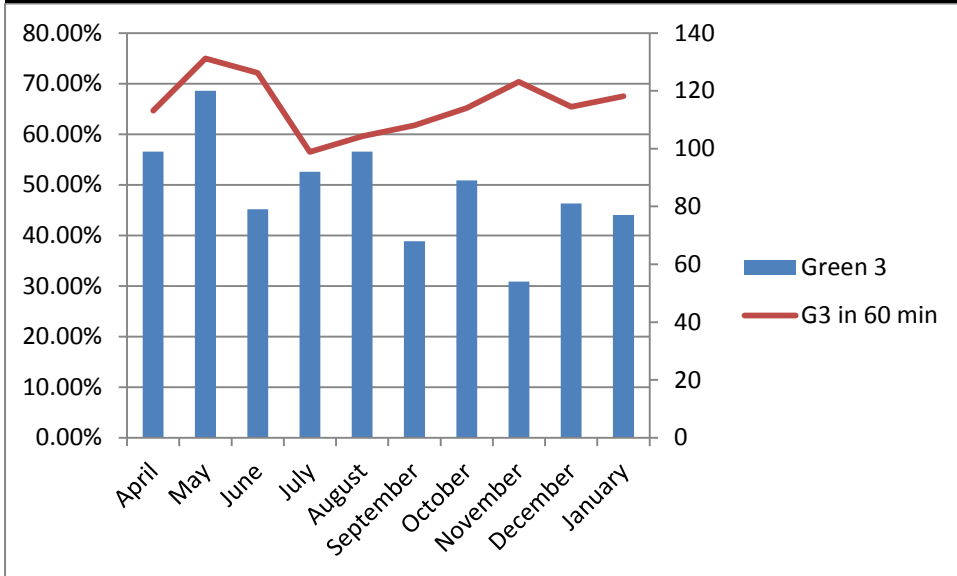
**Redcar & Cleveland – Red 2 calls (volume and response standard: 75% in 8 mins)**



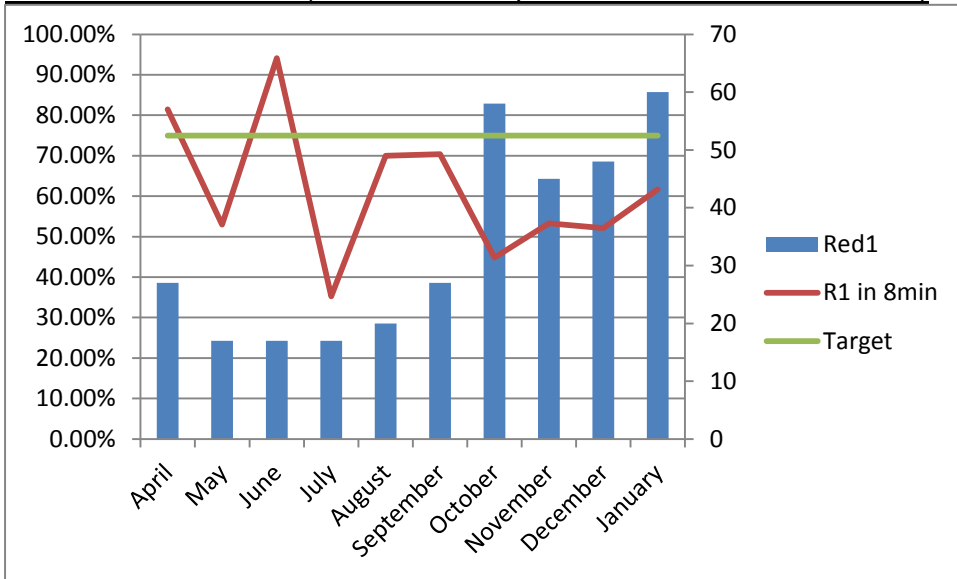
**Redcar & Clv – Green 2 calls (volume and standard in 30 mins: no target commissioned)**



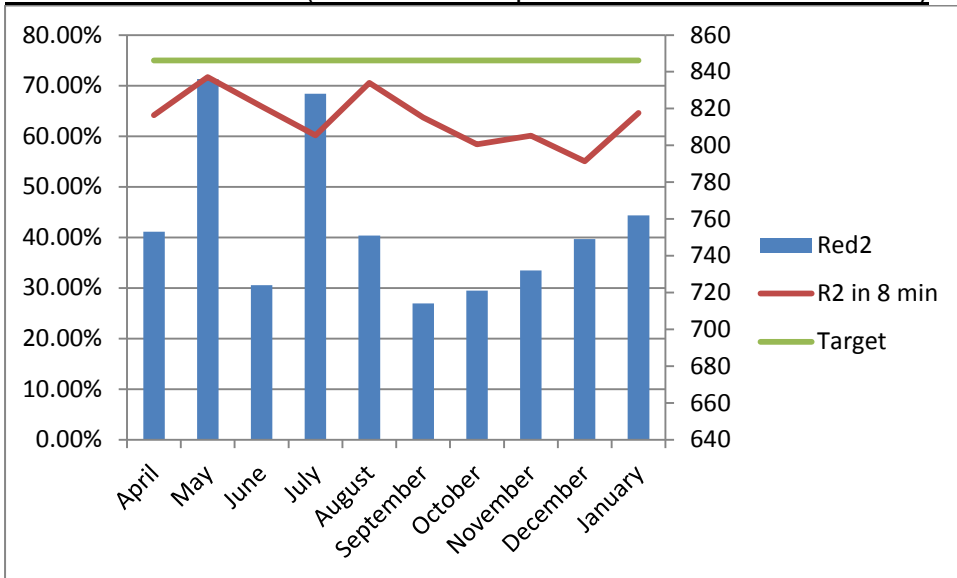
**Redcar & Clv – Green 3 calls (volume and standard in 60 mins: no target commissioned)**



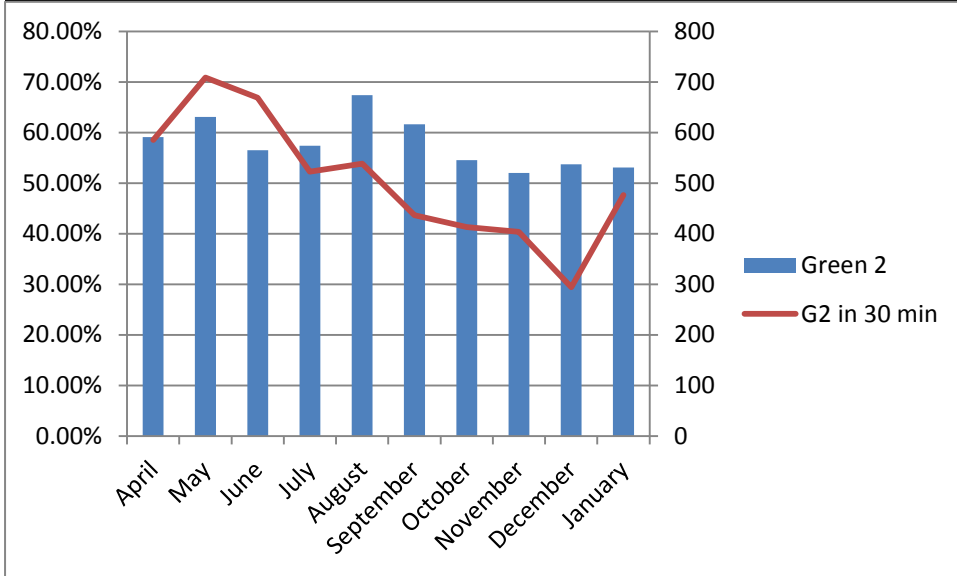
Stockton – Red 1 calls (volume and response standard: 75% in 8 mins)



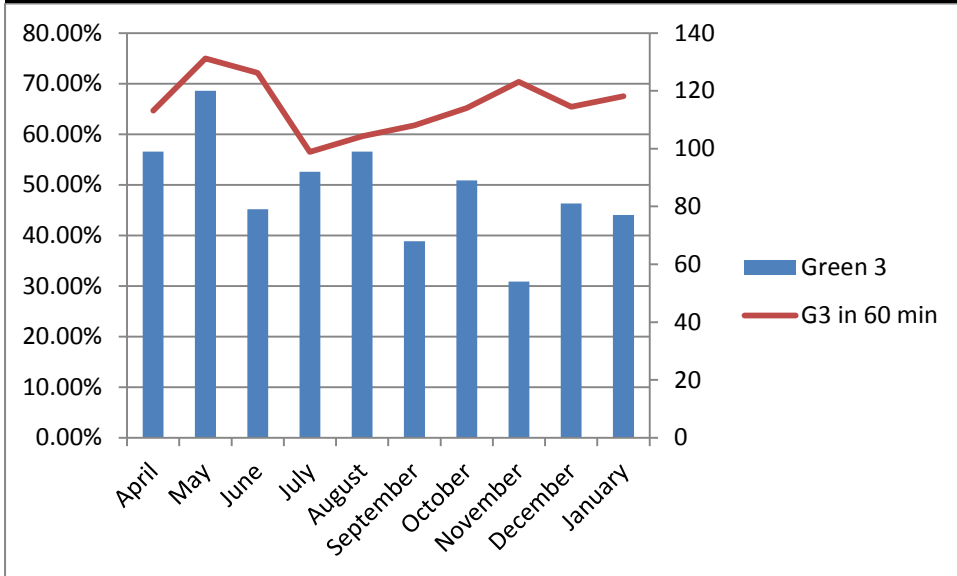
Stockton – Red 2 calls (volume and response standard: 75% in 8 mins)



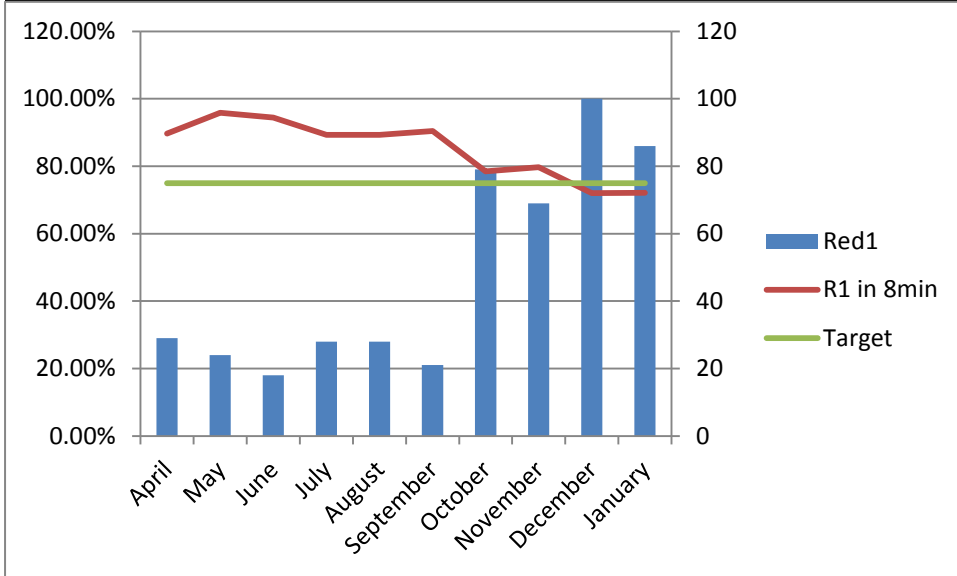
Stockton – Green 2 calls (volume and standard in 30 mins: no target commissioned)



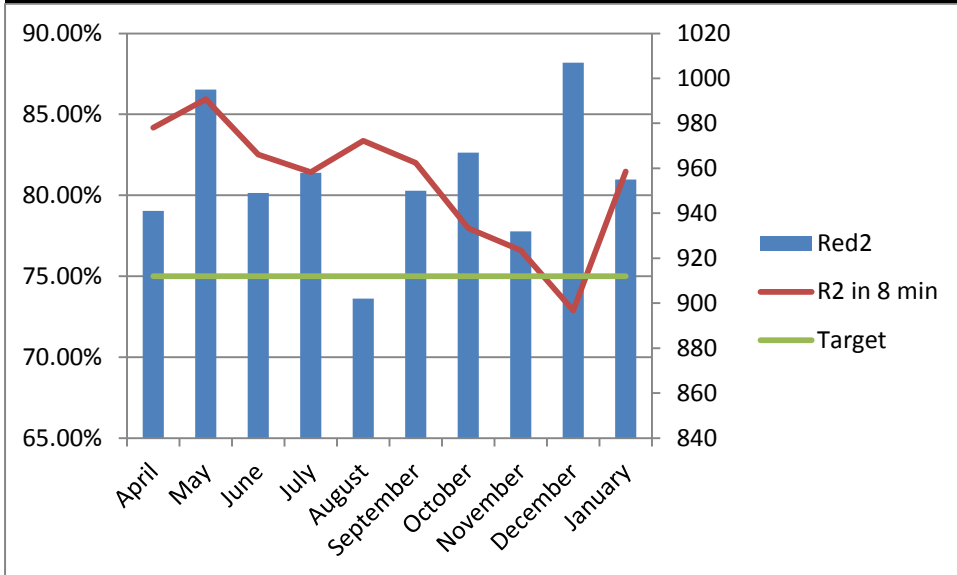
Stockton – Green 3 calls (volume and standard in 60 mins: no target commissioned)



**Middlesbrough – Red 1 calls (volume and response standard: 75% in 8 mins)**

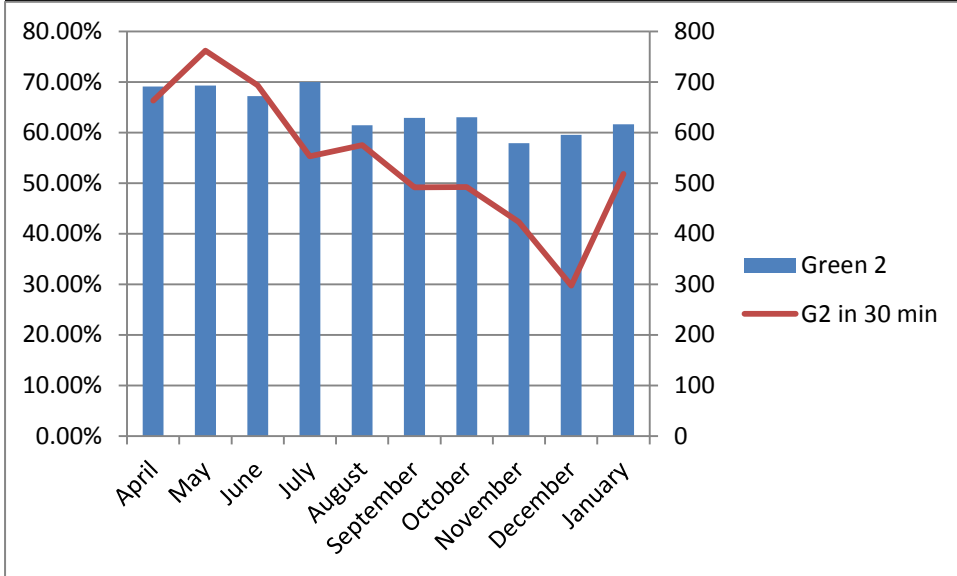


**Middlesbrough – Red 2 calls (volume and response standard: 75% in 8 mins)**

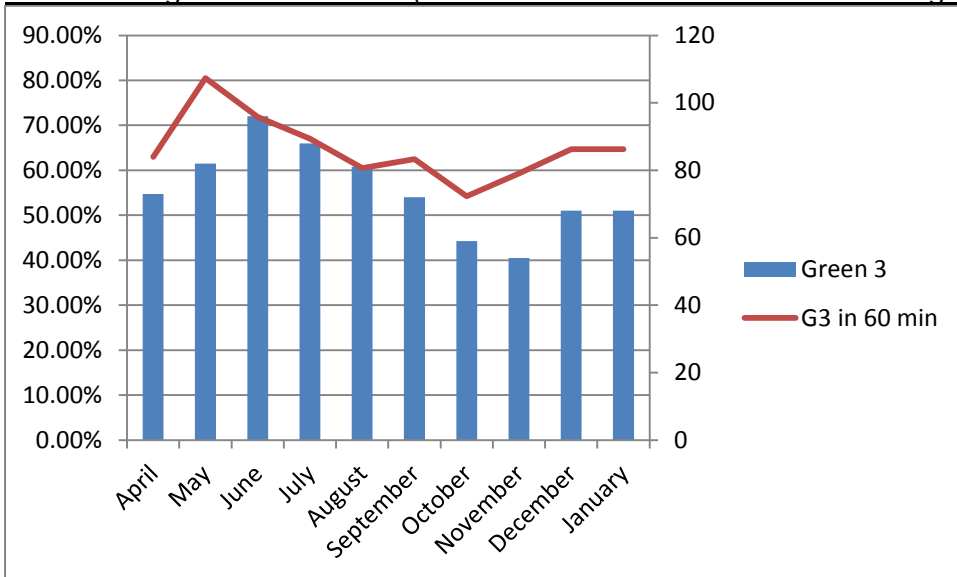




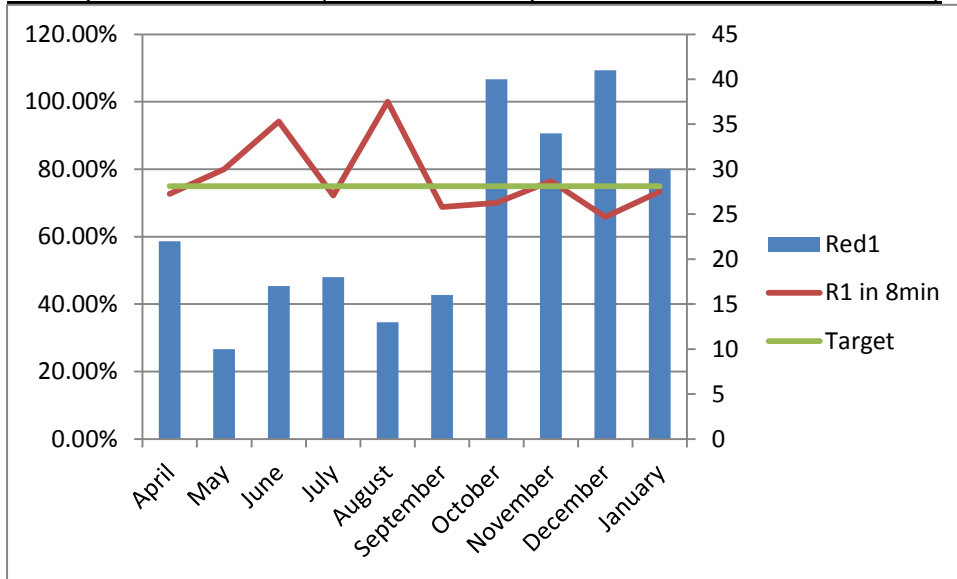
**Middlesbrough – Green 2 calls (volume and standard in 30 mins: no target commissioned)**



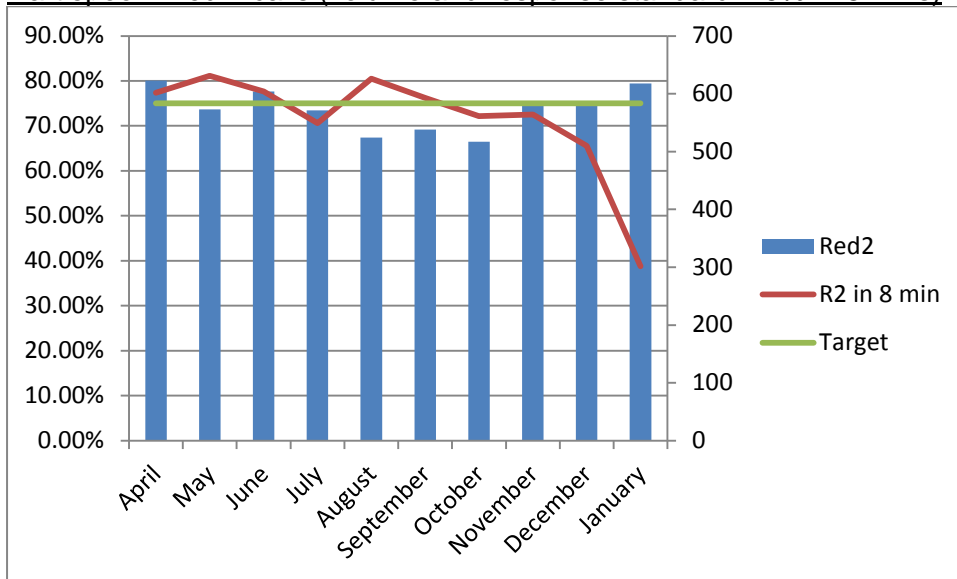
**Middlesbrough – Green 3 calls (volume and standard in 30 mins: no target commissioned)**



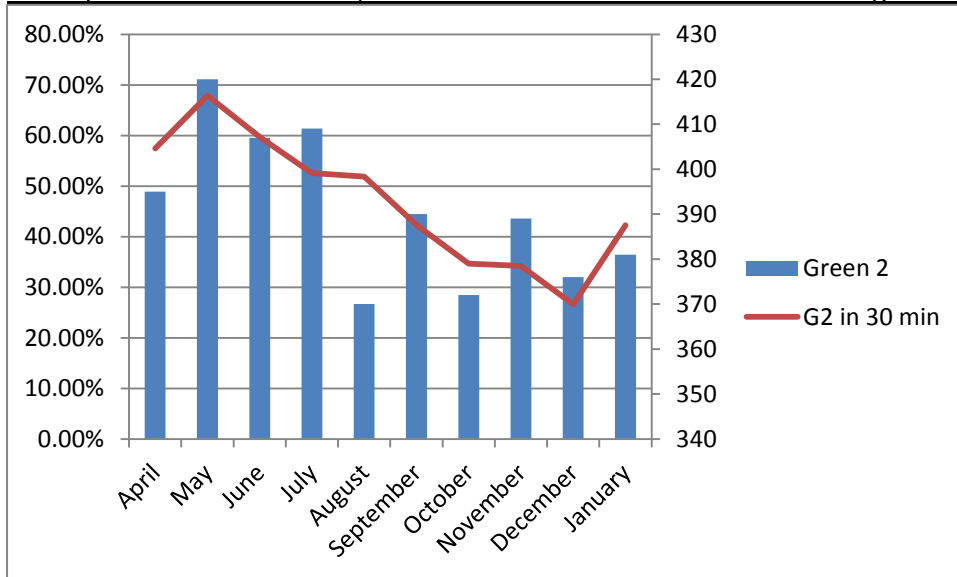
Hartlepool– Red 1 calls (volume and response standard: 75% in 8 mins)



Hartlepool– Red 2 calls (volume and response standard: 75% in 8 mins)



Hartlepool – Green 2 calls (volume and standard in 30 mins: no target commissioned)



Hartlepool – Green 3 calls (volume and standard in 30 mins: no target commissioned)

