

# Major Trauma Dashboard

## Background

The major trauma dashboard measures have been drawn up and agreed by the Clinical Reference Group (CRG) and a small working party of TU representatives to reflect what they believe will allow effective benchmarking between Trauma Units in relation to specific measures. The Trauma Audit & Research Network has agreed to analyse and format the information ONLY.

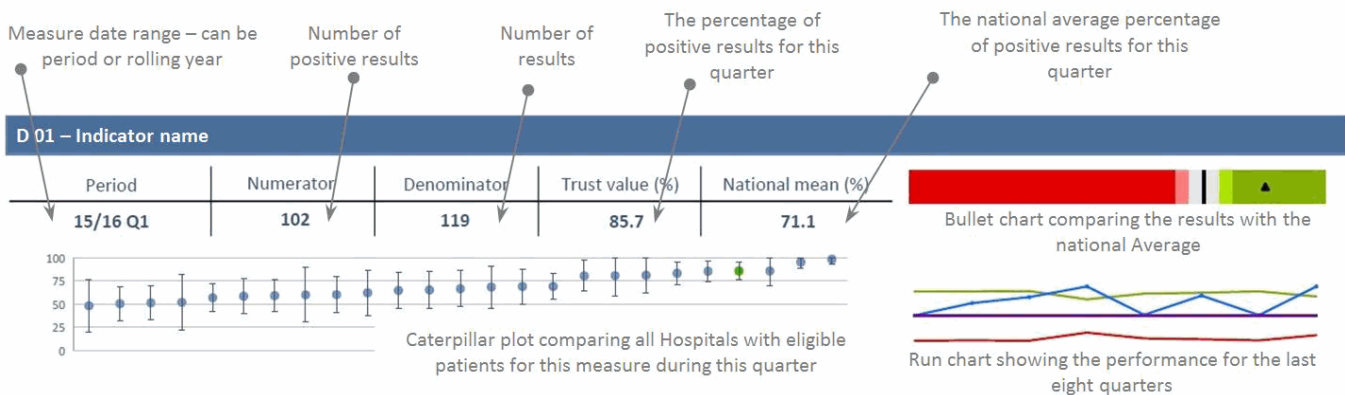
Some measures are based on objective evidence, such as NICE guidance. Others reflect experience from senior clinicians in the trauma networks. Some relate to the quality of data submitted to TARN or to process measures such as time to CT scan or frequency of Consultant-led trauma team. **None of the indicators has an associated target and performance may not be 100%.** The measures are divided into 3 groups:

**Data Quality:** 100% may be expected

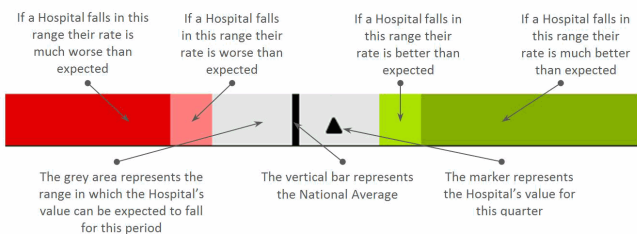
**Evidence Based Measures and System Indicators:** Performance may not be 100% and should be viewed in comparison with other centres

A dashboard support document has been drafted by TARN which explains in detail the numerators and denominators which make up the dashboard. It is recommended that this is read in conjunction with the dashboard.

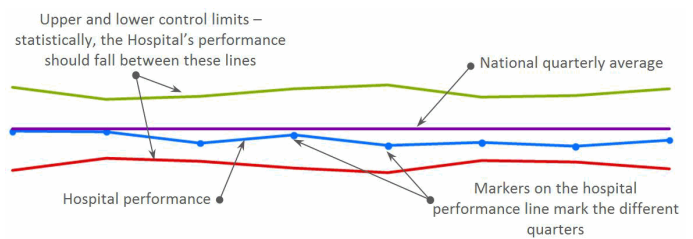
## Report Overview



### Interpreting Bullet Charts



### Interpreting Run Charts



# Control Limits Explained

Control limits are put in place in order to better understand the Trust's difference from the national average, and are worked out based on the number of submissions the Trust has for each measure for that quarter. As larger sample sizes produce more accurately reflective averages, the more cases a Trust has for a quarter then the narrower their control limits will be.

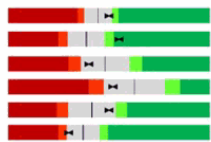
The grey area around the national average represents the range of values within which, statistically, the Trust's value should fall based on the number of submissions the Trust has for that quarter.

If the Trust's value falls within any of the coloured areas on the chart then this implies that there is a non-statistical reason for the Trust's distance from the average, i.e. the Trust is doing something specifically better or worse than other Trusts which has influenced its value.

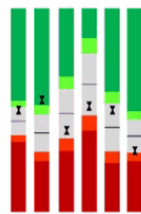
The reason behind control limits being set in this way is so that Trusts can be compared to the national average and to each other regardless of their size or their activity during that quarter. For example, a Trust that has only 10 patients that have CT Scans could have a rate 10% higher than the national average value for 'CT within 30 minutes', but still be within the statistical range in which they would be expected to fall for that many submissions, and as such would appear in the grey area of the chart. A Trust that has 100 CT Scans and a 10% higher rate than national average, however, would fall outside of the much thinner grey area which a sample size of 100 would produce, as the average of larger sample sizes will statistically tend much more closely to the national average. This means that, while the 10 CT Trust's value may well be due to random chance, the 100 CT Trust's consistently high value is probably as a result of better than average practice.

## Method Behind Run Charts

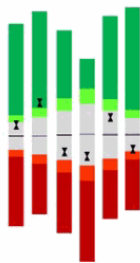
1. The quarterly results are calculated for the last eight quarters



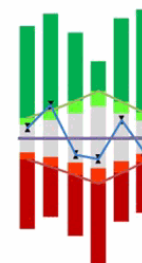
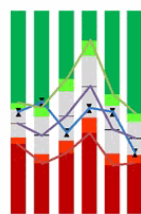
2. The results are ordered horizontally



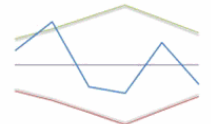
3. National averages are centred as a point of reference



Steps 2 and 3 with the limits, national average and trust performance lines overlaid onto the bullet charts

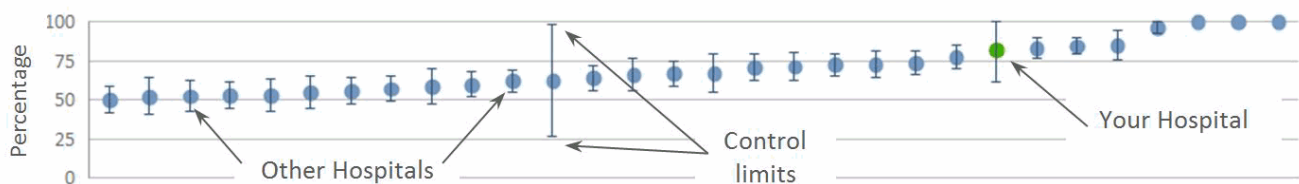


The final result without the bullet charts



## Quarterly Comparisons

The quarterly results of each Hospital for each measure are also compared using the chart below. The green marker shows your Hospital's figure, and the blue markers show the figures of each other Hospital. Please note, if a hospital has a numerator of fewer than 6, the control limits will not be displayed for data protection purposes.



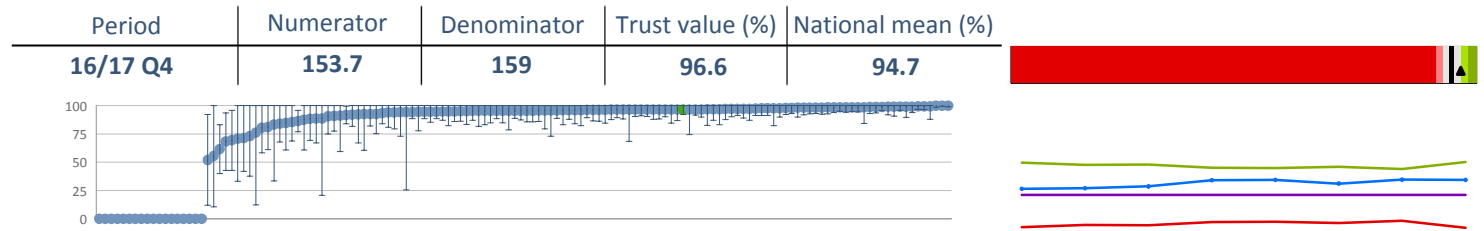
# Trauma Unit Dashboard

## Example Site

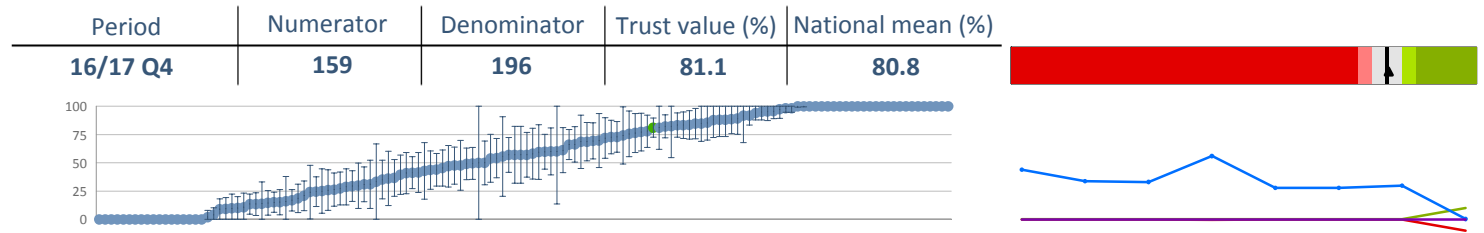
Developed by a working group of clinicians from Trauma Units  
Prepared by the Trauma Audit & Research Network 15/06/2017

### Data Quality

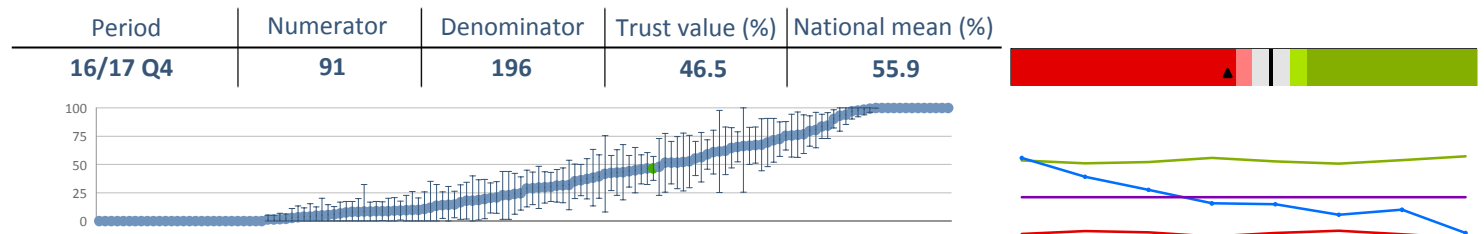
#### TU 01 - Quality of patient data submitted to TARN



#### TU 02a - All TARN eligible patients submitted

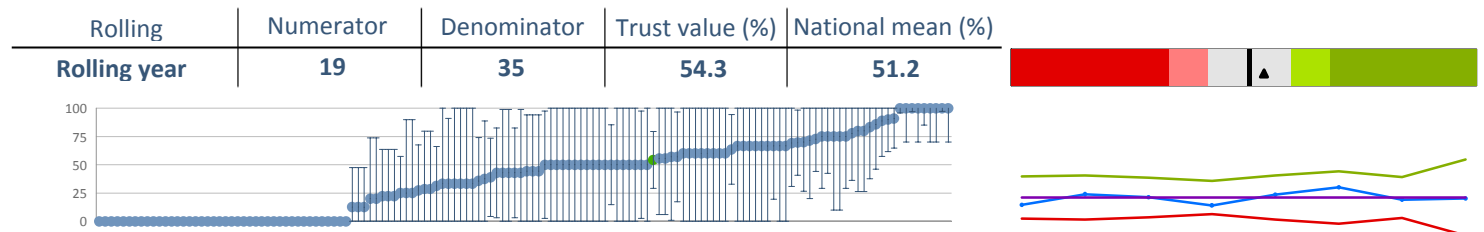


#### TU 02b - All TARN eligible patients submitted within 40 days of discharge or death (excluding coroner's cases)

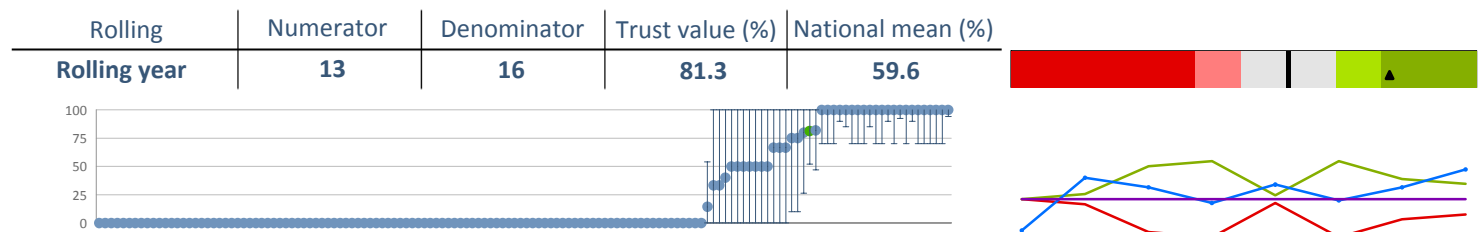


### Evidence Based Measures

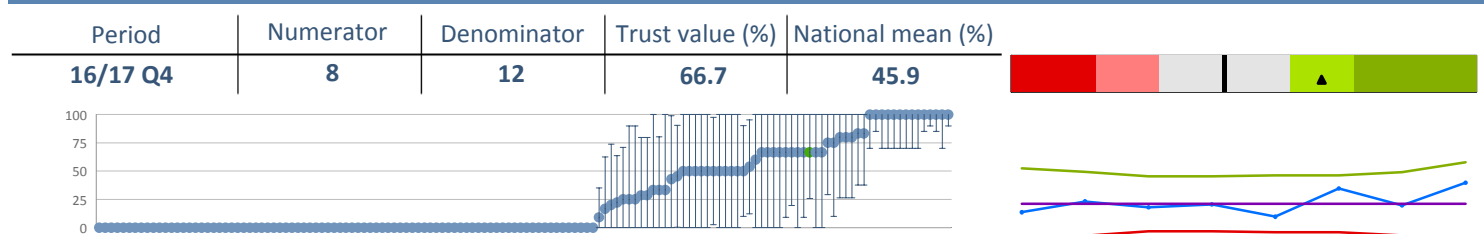
#### TU 03 - Proportion of patients meeting NICE head injury guidelines that receive CT scan within 60 minutes of arrival at TU



#### TU 04 - TUs administer Tranexamic Acid within 3 hours of incident to patients that receive blood products within 6 hours of incident

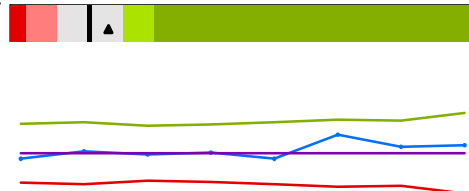
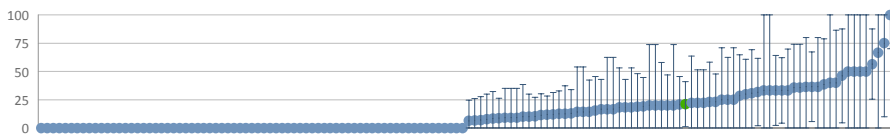


#### TU 05a - TUs deliver Consultant led trauma teams within 30 minutes for triage positive ISS > 15 patients



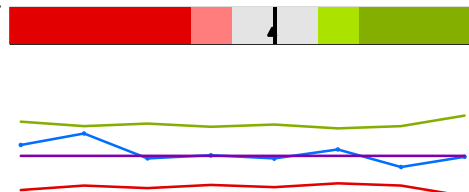
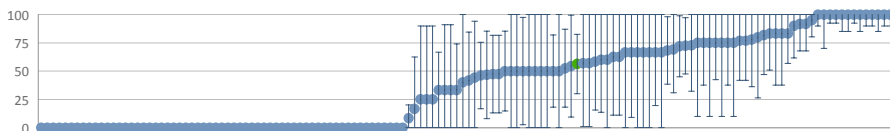
**TU 05b - TUs deliver Consultant led trauma teams within 30 minutes for patients with an Injury Severity Score greater than 15**

Period	Numerator	Denominator	Trust value (%)	National mean (%)
16/17 Q4	8	38	21.1	17.1



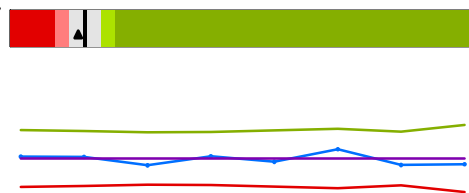
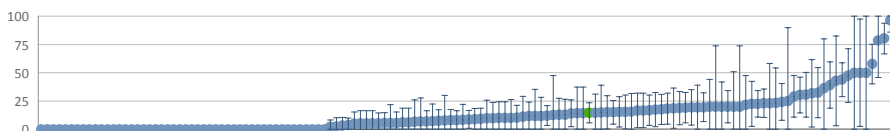
**TU 06a - TUs deliver grade STR 3 or above led trauma teams on arrival for triage positive patients**

Period	Numerator	Denominator	Trust value (%)	National mean (%)
16/17 Q4	18	32	56.3	56.9



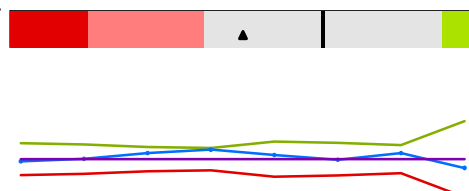
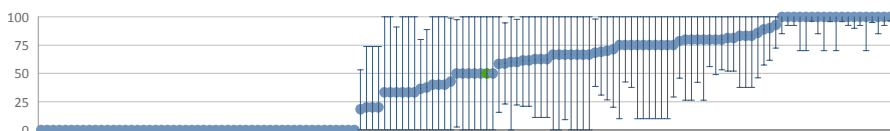
**TU 06b - TUs deliver grade STR 3 or above led trauma teams on arrival**

Period	Numerator	Denominator	Trust value (%)	National mean (%)
16/17 Q4	21	144	14.6	16.1



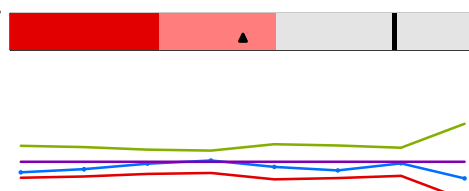
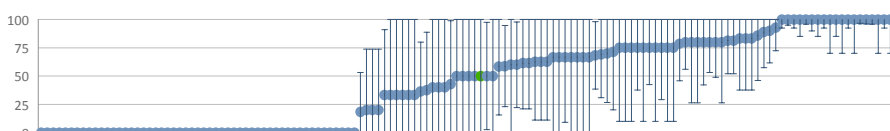
**TU 07a - Rapid access to specialist MTC care - patients transferred to MTC within 12 hours of referral request**

Period	Numerator	Denominator	Trust value (%)	National mean (%)
16/17 Q4	2	4	50	67.3



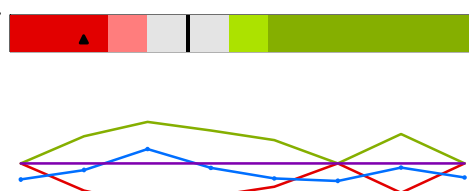
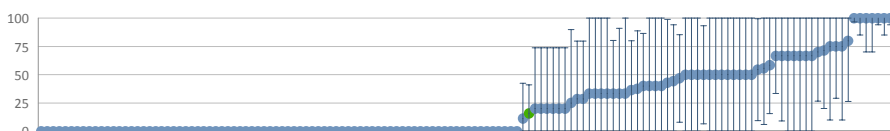
**TU 07b - Rapid access to specialist MTC care - patients transferred to MTC within 2 days of referral request**

Period	Numerator	Denominator	Trust value (%)	National mean (%)
16/17 Q4	2	4	50	82.6



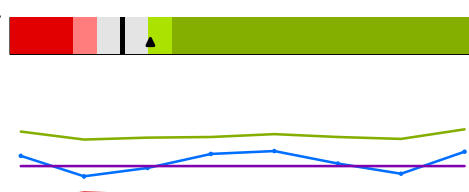
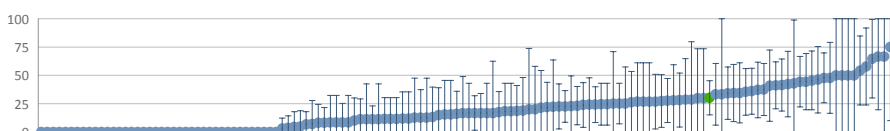
**TU 08 - Proportion of patients with GCS <9 with definitive airway management within 30 minutes of arrival in ED**

Rolling	Numerator	Denominator	Trust value (%)	National mean (%)
Rolling year	3	19	15.8	38.2



**TU 09 - Proportion of directly admitted patients receiving CT scan within 60 minutes of arrival at TU**

Period	Numerator	Denominator	Trust value (%)	National mean (%)
16/17 Q4	25	83	30.1	24.2



TU 10 - Proportion of patients with an ISS of more than 8 that have a rehabilitation prescription completed

