National Peer Review Programme

NHS England

National Peer Review Report:
Major Trauma Networks 2013/2014

An overview of the findings from the 2013/2014 National Peer Review of Trauma Networks in England

www.nationalpeerreview.nhs.uk

FOREWORD

From the National Clinical Director for Trauma

I am delighted to introduce this overview of the findings from the 2013/2014 round of peer review for Major Trauma Networks in England, which was undertaken between November 2013 and May 2014.

I would like to express my heartfelt thanks to everyone who has contributed to the success of the programme whether as a reviewer, a member of the network / provider management team or as a member of the service being reviewed.

This was the second annual round of the peer review, but the first round where the National Peer Review Programme has supported the process. This has allowed major trauma the opportunity to draw upon the vast experience in peer review of cancer services and use this to ensure a more robust, consistent and fair process for the review of major trauma services.

The introduction of the web-based self-assessment system (TQuINS) had a very short time frame and the work of Ruth Bridgeman, Marie Cummins and the rest of the National Peer Review team has been invaluable. The process has been supported by all of the Major Trauma Networks and Centres who have worked extremely hard to meet tight deadlines. Major trauma has excellent, long-term audit data from the Trauma Audit and Research Network (TARN) and this independent data has allowed the development of objective benchmarks to inform the peer review process.

Most importantly, the TARN analysis has confirmed our clinical impression: trauma care is getting better throughout England and the probability of survival has significantly improved over the past two years.

The high compliance rates demonstrated by the peer review are remarkable, given that the new trauma system represents a paradigm in the provision of trauma care and has only been operational for two years. This is a great credit to all, clinicians and managers alike, whom have worked so hard to improve the system. It has been a system wide change from pre-hospital care through to rehabilitation and return home. The process used for the review has ensured that all parts of the patient's journey have been reviewed by a quality assurance program.

The programme reviewed 25 Major Trauma Networks and Centres and involved clinicians from multiple specialities. I have been greatly impressed at the holistic view that all the centres have taken to patient care, putting the patient and their relatives at the centre of the process. We have come a long way in a short period of time but there is still work to do - we can always get better and improve the service for patients. It is hoped that the data in this report will allow local teams to improve their system by identifying areas that have achieved good compliance with standards and then sharing good practice.

Chris Moran
National Clinical Director for Trauma

Contents

1.0 Introduction

This report summarises the findings of the second round of peer review to Major Trauma Centres (MTC) during 2013/2014. The findings are based on Peer Review visit reports and were completed between November 2013 and May 2014. All MTC's undertook a self-assessment of their own service and were then subject to an external peer review visit by the National Peer Review team.

The report principally summarises the numerical data contained within the Trauma Quality Improvement Network System (TQuINS) which records the level of compliance by individual services against the measures for MTC against five areas:

- Network governance
- Pre Hospital Care
- Reception and Resuscitation
- Definitive Care
- Rehabilitation

In addition, the peer reviewers' specific comments are referenced regarding the qualitative information gathered from the peer review visits. The identification of good practice for dissemination and recommendation is a vital positive component of the peer review process. This report therefore highlights examples of good practice that have been identified during this programme. The report also identifies the key messages that have emerged from the reviews and highlights some of the challenges facing the Major Trauma Networks and Centres, providers of services for patients of major trauma, and commissioners, as they strive to ensure the delivery of effective and high quality care.

1.1 National Peer Review of Major Trauma Centres 2013-2014

This second National Peer Review Programme for Major Trauma Centres was commissioned by NHS England as a continuation of the first round of national peer review previously commissioned by the Department of Health. It is planned that this second round of peer review will be followed by a third and final round of comprehensive peer review visits before the service returns to 'business as usual' assurance processes.[1]

The aims of the National Peer Review Programme were to:

- develop national quality standards for major trauma networks;
- to develop a quality assurance methodology aligned with the emerging health environment and meet the needs of the key stakeholders;
- provide timely information for commissioning;
- validated information which is available to other stakeholders;

The Major Trauma Network has delegated responsibility from the NHS England area teams and clinical commissioning groups to ensure that services are appropriately commissioned and have robust clinical governance processes.

[1]The forward programme for National Peer Review is currently being reviewed by NHS England and will be available shortly.

1.2 Background of the Major Trauma Review

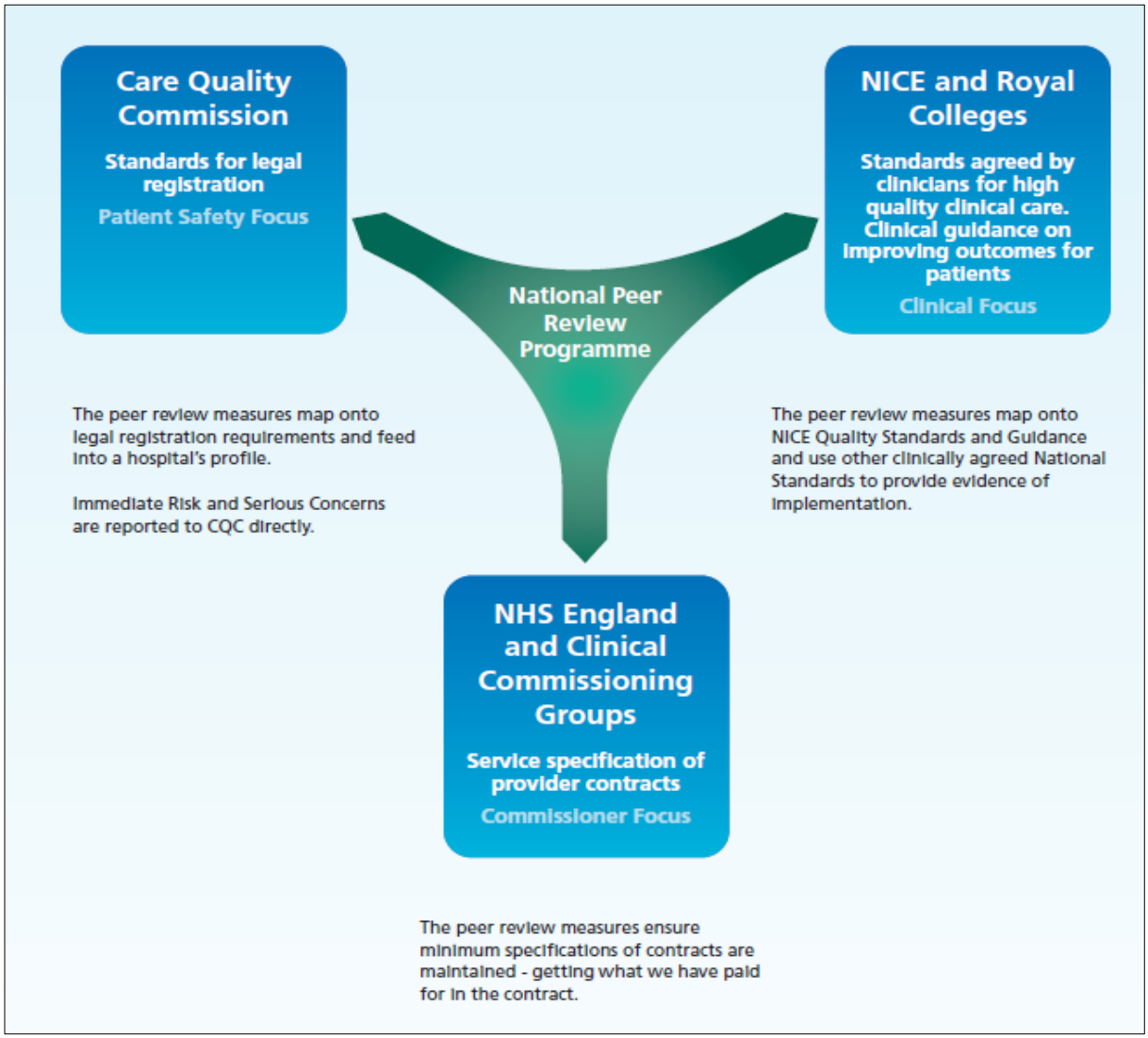
The initial round of peer review for Major Trauma Networks took place in 2012 and was procured by the Department of Health and transferred to NHS England. As part of the planned programme this second round of reviews have taken place. This round of peer review has utilised the experience and knowledge gained through the National Peer Review Programme. There are many principals and quality assurance processes that can be directly transferred to the quality assurance of MTCs.

By using these quality assurance processes, much of the costs and learning required for development of MTC specific assurance system has been saved.

The synergy of running the two quality assurance programmes together has provided savings to both programmes and the NHS as a whole.

The National Peer Review Programme methodology sits neatly in the new health environment. Diagram 1 illustrates how MTC quality assurance programme can meet the needs of the NHS England, Care Quality Commission (CQC) and Clinical Commissioning Groups.

Diagram 1-How the National Peer Review Programme fits in with the new healthcare environment



1.3 The Major Trauma Network Measures

The Measures used in the 2013-2014 National Peer Review Programme were developed from the self-assessment template and the NHS England service specification. It is planned to undertake a clinical consultation to revise the measures prior to the next round of peer review.

The measures are available on request or can be found of the resources page the TQUINS site:

www.tquins.nhs.uk

1.4 The National Peer Review process

The National Peer Review Programme aims to improve care for patients involved in trauma and their families by:

- ensuring services are as safe as possible;
- improving the quality and effectiveness of care;
- improving the patient and carer experience;
- undertaking independent, fair reviews of services;
- providing development and learning for all involved;
- encouraging the dissemination of good practice.

The outcomes of the National Peer Review Programme are:

- confirmation of the quality of services;
- speedy identification of major shortcomings in the quality of services where they occur so that rectification can take place;
- published reports that provide accessible public information about the quality of services;
- timely information for local commissioning as well as for specialised commissioners;
- validated information which is available to other stakeholders.

The details of the process are provided in the handbook for peer review which is available on request or on the resources page of the TQuINS website:

www.tquins.nhs.uk

2. National Major Trauma Centre Summary

This report presents an overview of the peer review visit findings from the National Peer Review Programme for Major Trauma Networks.

A total of 25 Major Trauma Networks were assessed. All five areas of the Major Trauma Network were assessed.

- Network governance
- Pre Hospital Care
- Reception and Resuscitation
- Definitive Care
- Rehabilitation

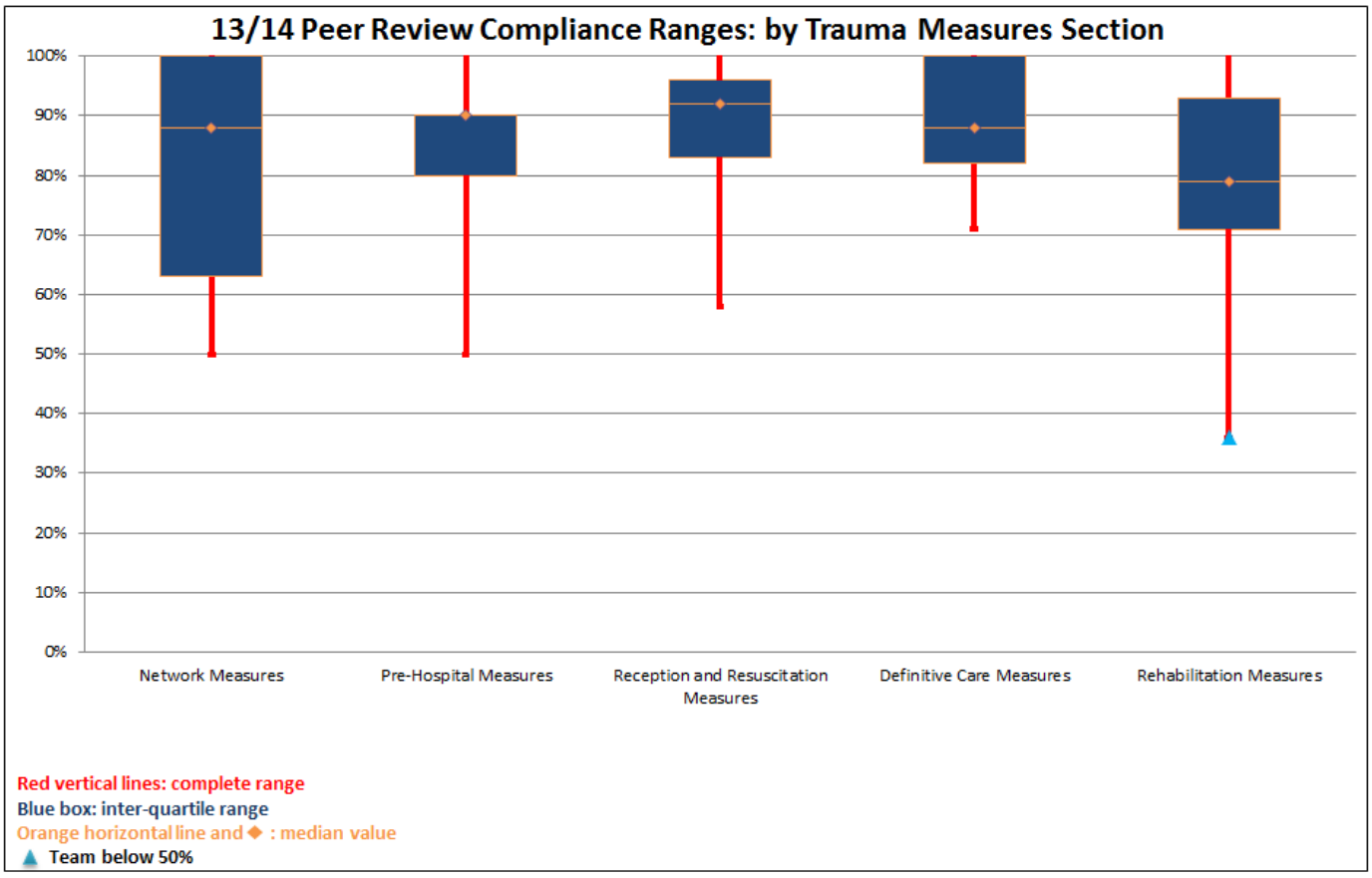
There were no major trauma centres that achieved 100% overall compliance, however 9 achieved ≥ 90% compliance and 19 achieved ≥ 80 compliance.

There were no low performing major trauma centres with 50% or below.

A number of teams had Immediate Risks and Serious Concerns identified at peer review. These have been reported to the Trust Chief Executive and should have been acted upon immediately.

- 1 centre had an immediate risk identified in their peer review report
- 12 centres had serious concerns identified in their peer review report

Figure 1- Peer Review Compliance by Trauma Measures Section 13/14



2.1. Compliance with measures

Network Measures

For the Network measures, the overall median compliance was 88%.

15 MTCs (52%) assessed at or above the median. The highest level of compliance was 100% which was achieved by 9 centres:

- Leeds General Infirmary
- Queen's Medical Centre Nottingham
- Royal Victoria Infirmary Newcastle
- St Mary's Hospital London
- Royal Preston Hospital
- Birmingham Children's Hospital
- Manchester Collaborative MTC
- Cheshire & Merseyside Collaborative MTC
- Queen Elizabeth Hospital Birmingham

15 centres (60%) achieved ≥ 80% compliance

2 centres (8%) had compliance of 50% or under

Network Measures Compliance

Teams compliance	PR
100%	9
90-99%	0
80-89%	6
70-79%	3
60-69%	5
50-59%	2
40-49%	0
0-39%	0
Median	88%
Range	50%-100%
Interquartile Range	63%-100%

Network Measures Immediate Risks

- Geographical challenges for a local Emergency Department have been recognised by the reviewers and evidence of significant excess mortality from the TARN data in the patients attending the Emergency Department. The system for transfer to the Major Trauma Centre was inconsistent, particularly out-of-hours.

Network Measures Serious Concerns

- The Network hosting and staffing arrangements for the regional Operational Delivery Network need further clarification.
- TARN data input and submission from the Trauma Units is an outstanding issue for the Networks.
- The shortage of time allocated within the work plan for a Major Trauma Centre Director and a Network Director.

Network Measures Good Practice

- Excellent leadership and management of the Network.
- Development and working in the Operational Delivery Network structure.
- Forward thinking of the development of the Network Clinical Governance.
- Increasing TARN submissions from Trauma Units.
- The development of a TARN Network group.
- The role of the Data Collection Manager.
- In some MTC's a collaboration with the Commissioners in relation to the support of the commissioning of Rehabilitation.
- The Clinical Effectiveness Committee.
- Openness and data transparency.
- Engagement in Injury Prevention Programmes.

Pre-Hospital Measures

For the Pre-Hospital measures, the overall median score was 90%.

13 MTCs (52%) assessed at or above the median. The highest level of compliance was 100% which was achieved by 6 centres:

- Birmingham Children's Hospital
- Frenchay Hospital Bristol
- Royal London Hospital
- St Mary's Hospital London
- Queen Elizabeth Hospital Birmingham
- University Hospital of North Staffordshire

21 centres (84%) achieved ≥ 80% compliance.

1 centre (4%) had compliance of 50% or under.

Pre-Hospital Measures Compliance

Teams compliance	PR
100%	6
90-99%	7
80-89%	8
70-79%	1
60-69%	2
50-59%	1
40-49%	0
0-39%	0
Median	90%
Range	50%-100%
Interquartile Range	80%-90%

Pre-Hospital Immediate Risks

There were no immediate risks highlighted for the pre-hospital measures.

Pre-Hospital Serious Concerns

There were no serious concerns highlighted for the pre-hospital measures.

Pre-Hospital Good Practice

- The implementation of the 'Trauma Cell', Medical Incident Room and 'Critical Care Desk'.
- Trauma Triage Tool education and awareness.
- Audit of the Trauma Triage Tool with implementation of the findings.
- Some MTC's have the provision of an Enhanced Care team.
- Some MTC's have the use of MERIT.
- Good feedback mechanism to paramedics and medical teams.
- Paediatric Retrieval Teams.

Reception and Resuscitation Measures

For the Reception and Resuscitation measures, the overall median score was 92%.

14 MTCs (56%) assessed at or above the median. The highest level of compliance was 100% which was achieved by 2 centres:

- Birmingham Children's Hospital
- The Royal London Hospital

22 (88%) centres achieved ≥ 80% compliance.

No centres had compliance of 50% or under.

Reception and Resuscitation Compliance

Teams compliance	PR
100%	2
90-99%	12
80-89%	9
70-79%	1
60-69%	0
50-59%	1
40-49%	0
0-39%	0
Median	92%
Range	58%-100%
Interquartile Range	83%-96%

Reception and Resuscitation Immediate Risks

- Lack of dedicated trauma rehabilitation medicine consultant, lack of trauma rehabilitation coordinator and lack of formal Interventional radiology consultant rota. **These were highlighted at self-assessment.**

Reception and Resuscitation Serious Concerns

- The lack of a 24/7 'on-site' Consultant Trauma Team Leader for the Emergency Department, in order that an immediate decision can be made for a patient following a major trauma incident.
- Access to emergency surgery 'out of hours', theatres are always available for immediate surgery, however access for other emergency cases is limited and can cause delays in patients receiving urgent surgery, these delays will put patients at some risk which could lead to poorer outcomes following surgery.

Reception and Resuscitation Good Practice

- Good engagement with Radiology and part of the Trauma Team.
- Provision of Trauma Team Leader Training.
- Good uptake in some MTC's of the Damage Control Surgery Training.
- Innovative scenario training in some MTC's.
- Implementation of the 'Bunker Room'.
- The use of honorary contracts at the MTC to enable clinicians from trauma units (TU's) to gain experience and increase exposure of major trauma to prevent de-skilling.
- The role of the trauma nurse coordinator.
- Rib plating for fractures.

Definitive Care Measures

For the Definitive Care measures, the overall median score was 88%.

16 MTCs (64%) assessed at or above the median. The highest level of compliance was 100% which was achieved by 8 centres:

- Cheshire & Merseyside Collaborative MTC
- James Cook University Hospital
- Leeds General Infirmary
- Manchester Collaborative MTC
- Queen's Medical Centre Nottingham
- Royal London Hospital
- Royal Victoria Infirmary Newcastle
- St Mary's Hospital London

20 centres (80%) achieved ≥ 80% compliance.

No networks had compliance of 50% or under.

Definitive Care Compliance

Teams compliance	PR
100%	8
90-99%	3
80-89%	9
70-79%	5
60-69%	0
50-59%	0
40-49%	0
0-39%	0
Median	88%
Range	71%-100%
Interquartile Range	82%-100%

Definitive Care Immediate Risks

Lack of dedicated trauma rehabilitation medicine consultant, lack of trauma rehabilitation coordinator and lack of formal Interventional radiology consultant rota. **These were highlighted at self-assessment.**

Definitive Care Serious Concerns

- One orthopaedic plastic surgery operating list being available per week, which can delay a patient with severe open fractures receiving definitive care to close the wounds. As a result performance against the British Orthopaedic Audit Standard for Trauma is poor.
- The lack of a Major Trauma service and dedicated ward in order to cohort patients following major trauma and provide robust and definitive care.
- In some MTC's the lack of a co-located CT scanner because the time to CT for major trauma patients can be compromised.
- The increased need of plastic surgical expertise within the trauma specialty when managing complex open fractures.
- The ambiguity of who is responsible for the management of children with moderate head injuries and the management of children with severe pelvic fractures. Requires further clarification in order that the neurosurgical department is aware of both the responsible clinical team and the clinical area where these children are managed.

Definitive Care Good Practice

- High level of consultant-led care.
- Dedicated Trauma ward/unit to cohort major trauma patients.
- Daily MDT meetings.
- Training programmes
- Good collaboration across specialties.
- The role of the trauma case managers.
- 'Consultant of the week' innovation
- Major Trauma bulletin- a good vehicle for communication and dissemination of information.

Rehabilitation Measures

For the Rehabilitation measures, the overall median score was 79%.

15 MTCs (60%) assessed at or above the median. The highest level of compliance was 100% which was achieved by Cheshire and Merseyside Collaborative MTC.

11 centres (44%) achieved ≥ 80% compliance.

2 centres (8%) had compliance of 50% or under.

Rehabilitation Measures Compliance

Teams compliance	PR
100%	1
90-99%	6
80-89%	4
70-79%	8
60-69%	3
50-59%	2
40-49%	0
0-39%	1
Median	79%
Range	36%-100%
Interquartile Range	71%-93%

Rehabilitation Immediate Risks

- Lack of dedicated trauma rehabilitation medicine consultant, lack of trauma rehabilitation coordinator and lack of formal Interventional radiology consultant rota. **These were highlighted at self-assessment.**

Rehabilitation Serious Concern

- The absence of a lead consultant for rehabilitation within the MTC to lead with the development of a robust rehabilitation package for patients following major trauma.

Rehabilitation Good Practice

- The commitment of the therapy teams in rehabilitation.
- In some MTC's the availability of dedicated areas for rehabilitation for major trauma patients for example the Rapid Access Acute Rehabilitation Unit.
- Roll out of the Rehabilitation Prescription.
- The 'follow up' calls to patients/carers.
- Trauma Patient Management System to 'track' major trauma patients.
- The use of a 'cloud' based Rehabilitation Prescription.
- Establishment of a Head Injury Clinic for patients following discharge.
- The role of the Brain Injury Coordinator.
- Daily presence of a Clinical Psychologist.
- Development of a patient information leaflet, aimed at the patient and family being transferred to a MTC and then the patient & family being transferred from the MTC to a TU.

3.0 Immediate Risks (IRs) and Serious Concerns (SCs) at Peer Review

No. of services with IR at PR	% of Services with IR at PR	No. of services with SC at PR	% of Services with SC at PR
1	4%	12	48%

4.0 Measures with 50% or Below Compliance

Pre-Hospital Measures

Measure Number and Short Description		PR
T13-2A-106	Enhanced Care Teams available 24/7	44%

5.0 National Overview

Summary of peer review compliance for each section of the Major Trauma Centre measures

Team	score	Network Measures (8) %	Pre-Hospital Measures (10) %	Recep and Resus (24) %	Definitive Care (17) %	Rehab (14) %	IR	SC	Link to Report
St Mary's Hospital London	5	100%	100%	96%	100%	93%			Report
Queen Elizabeth Hospital Birmingham	3.5	100%	100%	96%	88%	93%		Y	Report
Birmingham Children's Hospital	3	100%	100%	100%	94%	86%			Report
University Hospital of North Staffordshire Stoke on Trent	3	88%	100%	96%	94%	93%			Report
Cheshire and Merseyside Collaborative MTC	3	100%	80%	96%	100%	100%			Report
Queen's Medical Centre Nottingham	3	100%	80%	96%	100%	93%			Report
Leeds General Infirmary	1.5	100%	90%	92%	100%	79%		Y	Report
Royal London Hospital	1.5	88%	100%	100%	100%	36%		Y	Report
Manchester Collaborative MTC	1.5	100%	90%	92%	100%	79%		Y	Report
Addenbrooke's Hospital Cambridge	1	88%	80%	96%	82%	93%			Report
Royal Preston Hospital	0.5	100%	90%	92%	82%	86%		Y	Report
Royal Victoria Infirmary Newcastle	0.5	100%	90%	96%	100%	64%	Y	Y	Report
King's College Hospital London	0	88%	90%	92%	88%	71%			Report
St George's Hospital London	0	75%	80%	96%	94%	79%			Report
Frenchay Hospital Bristol	-0.5	75%	100%	92%	88%	57%		Y	Report
James Cook University Hospital Middlesbrough	-1.5	63%	90%	88%	100%	64%		Y	Report
North West Children's Major Trauma Network	-2	88%	80%	83%	88%	86%			Report
Sheffield Children's Hospital	-2	63%	60%	83%	88%	93%			Report
University Hospital Coventry	-2.5	63%	90%	88%	71%	83%		Y	Report
John Radcliffe Hospital Oxford	-3	63%	50%	88%	82%	64%			Report
Southampton General Hospital	-3	75%	70%	83%	71%	71%			Report
Derriford Hospital Plymouth	-3	88%	80%	79%	76%	71%	*		Report
Hull Royal Infirmary	-4.5	63%	80%	83%	76%	79%		Y	Report
Northern General Hospital Sheffield	-4.5	50%	60%	83%	76%	71%		Y	Report
Royal Sussex Country Hospital Brighton	-4.5	50%	80%	58%	82%	50%		Y	Report

*Identified at self-assessment and not included in scoring

Sections that are highlighted green identify the services that are in the top 20% in the country and highlighted red are in the bottom 20% in the country. Any team that has an immediate risk identified has been coloured red and any team with a serious concern has been shown in amber. The networks have then been ordered from top to bottom based on the scoring system, explained below.

Note: Numbers in brackets on first row of the table are the number of measures for each topic

	Top 20%	+1
	Average	0
	Bottom 20% or Immediate Risk	-1
	Serious Concern	-0.5

6.0 Future of Peer Review

It is planned that this second round of peer review will be followed by a third and final round of comprehensive peer review visits before the service returns to 'business as usual' assurance processes.[2]

In order to further improve the peer review programme, a number of changes will be introduced for the 2014 round.

The evidence requirements for the review visits will be limited to three key documents namely, an operational policy, annual report and work programme. Example evidence documents will be developed to help centres only upload the essential evidence and therefore reducing the burden of the self-assessment documentation.

Three reviewer training sessions will be organised in October and November, which will strengthen the consistency of the reviews and compliance against the peer review measures. A multidisciplinary approach to the programme will be established, with review teams to include:

- 2 Medical Clinicians
- 1 Rehabilitation Clinician / Rehabilitation AHP
- 1 Trauma Coordinator/Paramedic
- 1 Patient

Anybody interested in becoming a reviewer should contact Zara Gross, Review Manager, at:

england.nvmu@nhs.net

The programme will continue to work closely with TARN and it is planned that a TARN peer review profile will be developed. This will ensure that the programme includes both clinical outcomes and Patient Reported Experiences Measure's (PREMS) in a more consistent and effective way.

The Trauma peer review measures will be reviewed and a one month national consultation will take place to ensure clinical engagement. These revisions will reflect the feedback from this last round of visits and also reflect differences between Adult and Children's Major Trauma Centres.

Measures will be introduced for Trauma Units and it is planned that Trauma Units will be encouraged to undertake a self-assessment against these measures. A small number of Trauma Units will be reviewed as part of the next round of the peer review cycle.

The TQuINS database will be further developed to enable a Trauma directory to be established which will include a map function showing which Trauma Units link to which Trauma Centre.

As a result of the positive feedback from the Trauma event, that took place on the 1st and 2nd July 2014 in Birmingham, a further event is planned for next year and a date has been set for the 29th and 30th September 2015 in Birmingham.

The National Peer Review Programme will continue to support commissioners and formalise arrangements with NHS England's Clinical Director for specialised commissioning to provide information on the implementation of services specification and to inform the work of the Clinical Reference Groups.

In addition the Chief Inspector of hospitals (CIOH) for the CQC, Professor Sir Mike Richards is supportive of the NPRP and recognises its value in supporting his hospital inspection model. The NPRP is now 'accredited' by CQC and as such will provide information for their intelligent monitoring model and in CQC inspection data packs.

[2] The Forward programme for National Peer Review Programme is currently being reviewed by NHS England and will be available shortly.

Appendix 1: Compliance against all Major Trauma Network Measures

Network Measures

Measure Number and Short Description		PR
T13-1C-101	Network Configuration	96%
T13-1C-102	Network Governance Structure	88%
T13-1C-103	Network Audit of the Pre-Hospital Phase of Trauma	76%
T13-1C-104	Individual Pre-Hospital Provider Feedback	92%
T13-1C-105	Network Transfusion Protocols	96%
T13-1C-106	Network Radiology Audit	52%
T13-1C-107	The Trauma Audit and Research Network (TARN)	76%
T13-1C-108	Emergency planning	84%

Pre-Hospital Measures

Measure Number and Short Description		PR
T13-2A-101	Pre-Hospital Care Clinical Governance	92%
T13-2A-102	Trauma Triage Tool	92%
T13-2A-103	24/7 Consultant Medical Advice for the Ambulance Control Room	72%
T13-2A-104	A paramedic should be present in the Ambulance Control Room 24 hours a day	76%
T13-2A-105	Network transfer protocol from Local Trauma Units to Major Trauma Centres	88%
T13-2A-106	Enhanced Care Teams available 24/7	44%
T13-2A-107	Pain Management Protocol	92%
T13-2A-108	Pre-Hospital Administration of Tranexanic Acid	92%
T13-2A-109	Pelvic Binders Applied Pre-Hospital where indicated	96%
T13-2A-110	Hospital pre-alert and handover	100%

Reception and Resuscitation Measures

Measure Number and Short Description		PR
T13-2B-101	Trauma Team Leader	60%
T13-2B-102	Trauma Team Leader Training Programme	80%
T13-2B-103	Trauma Team Activation Protocol	100%
T13-2B-104	Surgical and Resuscitative Thoracotomy Capability	92%
T13-2B-105	24/7 CT Scanner Facilities and on-site Radiographer	72%
T13-2B-106	Timeliness and competencies for Radiology reporting and documentation	84%
T13-2B-107	24/7 MRI Scanning Facilities	92%
T13-2B-108	24/7 Interventional Radiology Capability within 60 minutes	80%
T13-2B-109	Interventional Radiology located in operating room or resuscitation	76%
T13-2B-110	Teleradiology facilities	92%
T13-2B-111	24/7 access to Emergency Theatre and Surgery	100%
T13-2B-112	Damage Control Training for Emergency Trauma Consultant Surgeons	68%
T13-2B-113	24/7 access to on-site Surgical Staff	100%
T13-2B-114	24/7 access to Key Consultants	84%
T13-2B-115	Dedicated Orthopaedic Trauma Operating Theatre	96%
T13-2B-116	Facilities to provides fixation of pelvic ring injuries within 24 hours	96%
T13-2B-117	Trauma Management Guidelines	92%
T13-2B-118	On-site Intensive Care Unit	100%
T13-2B-119	Audit of the Intensive Care Unit	96%
T13-2B-120	A specialist in Acute Pain Services	96%
T13-2B-121	Transfusion Lead Clinician	100%
T13-2B-122	4/7 Specialist Transfusion Advice	100%
T13-2B-123	Massive Transfusion Protocol	100%
T13-2B-124	Administering Tranexanic Acid	96%

Definitive Care Measures

Measure Number and Short Description		PR
T13-2C-101	Major Trauma Service Lead Clinician	100%
T13-2C-102	Major Trauma Service	84%
T13-2C-103	Major Trauma Coordinator	92%
T13-2C-104	Major Trauma MDT Meeting	64%
T13-2C-105	MDT Conference Facilities	84%
T13-2C-106	Dedicated Major Trauma Ward or Clinical Area	52%
T13-2C-107	Protocol for Formal Tertiary Survey	76%
T13-2C-108	Neurosurgery	88%
T13-2C-109	Craniofacial Trauma	100%
T13-2C-110	Spinal Injuries	84%
T13-2C-111	Musculoskeletal Trauma	100%
T13-2C-112	Hand Trauma	100%
T13-2C-113	Complex peripheral nerve injuries	100%
T13-2C-114	Endovascular Surgery	96%
T13-2C-115	Designated Specialist Burns Care	100%
T13-2C-116	Nutritional Management Policy	100%
T13-2C-117	Discharge summary	92%

Rehabilitation Measures

Measure Number and Short Description		PR
T13-2D-101	The Trauma Network Director of Rehabilitation	56%
T13-2D-102	Clinical Lead for Acute Trauma Rehabilitation Services	88%
T13-2D-103	Rehabilitation Coordinator Post	72%
T13-2D-104	Enhanced Rehabilitation Service	76%
T13-2D-105	Key worker	84%
T13-2D-106	Rehabilitation Prescriptions	88%
T13-2D-107	Traumatic Amputation	72%
T13-2D-108	Facilities for Family / Carers	79%
T13-2D-109	Patient Information	79%
T13-2D-110	Directory of Rehabilitation Services	56%
T13-2D-111	Referral Guidelines to Rehabilitation Services	72%
T13-2D-112	Patient Transfer	84%
T13-2D-113	Clinical Psychologist for the Assessment and Treatment of Major Trauma Patients	80%
T13-2D-114	24/7 Access to Psychiatric Advice	96%