

Improving Trauma Care across the West Midlands

The case for change including: the reasons for the change

The NHS in the West Midlands is proposing to transform the care people receive when they suffer major trauma by introducing an improved trauma system of care across the region.

The need for change was identified following the publication of several studies that highlighted the care provided to severely injured patients in England was not as good as it could be. These studies included the National Confidential Enquiry into Patient Outcome and Death (NCEPOD) in 2007 which highlighted that only 17 hospitals in the UK have all the clinical services needed.

There is a wealth of evidence particularly in the USA that shows the benefits and improved outcomes for patients if dedicated specialist centres have a wide range of specialist staff, equipment, like scanners, and services that are available on the same hospital site. Based on evidence from overseas, where trauma systems have already been put in place, the West Midlands could expect to save an additional 45 – 60 patients' lives following a major trauma incident, like a serious road traffic accident, a farming accident or fall from a height off a ladder or from scaffolding on a building site.

The introduction of a trauma care system across the West Midlands is mandated as a national requirement in the NHS Operating Framework in England 2011/12 as it is recognised the improved outcomes for patients that can be achieved as a consequence. It says that all regions should be moving trauma service provision into regional trauma systems - to make significant improvements in the clinical outcomes for major trauma patients. Here in the West Midlands we expect to begin implementation of a regional trauma care system no later than March 2012.

How will the new proposals be better?

Currently we do not have a 24 hours a day and 7 days a week specialist trauma care system in the region. We know that having a trauma care system could save 45 – 60 (15-20%) more lives every year. If a trauma system is put in place which serves the whole region, patients will have access to major trauma centres, providing round the clock specialist care supported by a number of trauma units and local hospital emergency departments.

By introducing a trauma care system across the West Midlands patients with severe/multiple injuries will have a better chance of survival in a major trauma centre and a much better recovery and quality of life for the future.

Major trauma is defined as serious injuries which threaten life including: above the knee amputation; major head injuries; multiple injuries, both internal and external; spinal injury, which could lead to paralysis, and severe knife and gunshot wounds. Most major trauma patients are taken to a hospital by a 999 emergency ambulance. Major trauma is about the most serious injuries.

Other types of trauma such as a fractured hip or other bones and minor head injuries will continue to be treated at trauma units and your local emergency hospitals.

A Trauma Care System is the name given to the partnership working between hospitals that will provide the Trauma Care Services via a Trauma Network, in a given geographical area – for us it will be the West Midlands region.

The Trauma Project Board recommended at its meeting in September, that the preferred option for a trauma care system across the West Midlands would be for three trauma networks with 4 major trauma centres for the region. The preferred option was approved by the West Midlands Strategic Commissioning Group on 31st October 2011. This group is made up of the five PCT Cluster Chief Executives from across the region. Each trauma network would have a Major Trauma Centre at its heart; plus trauma units, local emergency hospitals and specialist rehabilitation hospitals. All district general hospitals within the region have been given the option of expressing an interest in becoming a trauma unit if they meet the trauma unit designation standards.

At the heart of the Trauma Network is the Major Trauma Centre plus all other providers of trauma care including: ambulances and the air ambulance; other hospitals who receive emergency trauma patients and rehabilitation services. The trauma network will also have links into social care and the independent sector.

The preferred option is for three trauma care networks, with a major trauma centre at the heart of each network.

The hospitals that will become major trauma centres for adult patients are:

- Queen Elizabeth Hospital, Birmingham
- University Hospital of North Staffordshire
- University Hospital, Coventry and Warwickshire.

In addition, the Birmingham Children's Hospital would be the West Midlands' Major Trauma Centre for Children.

Children will be also be treated at their local major trauma centre, for example if a child is involved in a road traffic accident in Stoke or Coventry, they will go to University Hospital of North Staffordshire or University Hospital Coventry, respectively, and would only need to go to Birmingham Children's Hospital if they required specialist children's consultant's expertise, for example a child who had suffered extensive burns or a serious head injury. They would then be transferred using the West Midlands Paediatric Retrieval Service (WMPRS) and would be escorted by a doctor and/or nurse.

The Rationale for choosing Option 1 as the preferred option

Option 1 for a trauma care system across the West Midlands with three trauma care networks, each with a major trauma centre at the heart of the network was approved for the three hospitals (Queen Elizabeth Hospital in Birmingham, University Hospital of North Staffordshire and University Hospital Coventry) plus the Birmingham Children's Hospital as the major trauma centre for children. Each of these hospitals has the required specialist services available on their hospital sites.

The introduction of the trauma care system will deliver safe, high quality and

accessible trauma care across the region:

- Improving the care and survival of patients suffering major trauma injuries
Ensuring that patients get rapid access to the most appropriate treatment
- Improving patient outcomes for example: saving up to an extra sixty lives every year across the region; reducing disability; speeding up recovery
- The majority of people live within a 45 minutes travel time from a major trauma centre
- 3 major trauma centres will provide the best access for families and visitors who are travelling by car or public transport
- And will also reduce the need to transfer patients between major trauma centres and trauma units because the specialist staff and facilities are available on the one hospital site

Benefits of introducing a trauma system

Benefits to patients who are cared for within a trauma network include:

- Improved survival rates by 20% (45 – 60 lives each year)
- Speedier recovery for patients (less time in hospital)
- Severity of patient disability reduced
- Patients able to live more independently following their recovery
- More patients able to return to work
- Specialised major trauma care available 24 hours a day and 7 days a week
- Specialised staff, services and facilities available on the same hospital site
- Access to specialised rehabilitation services which will help the patients to recover quicker and to overcome disability
- The use of quality improvement programmes with the aim of making sure that there is continuous improvement in the quality of care provided

Communications and Engagement to date

Communications and engagement has been ongoing throughout 2011 with clinicians, NHS managers, the 3 emergency services, patients' advocacy groups like Headway and Rehab UK, all HOSCs and LINKs and through Primary Care Trusts and Hospital Trust communications leads to share with appropriate groups. Information is available on our website www.wmsc.nhs.uk and a press release and newsletter has been issued in August/September, followed by a press release on 2nd November 2011 to announce the preferred option (option 1) again to all key stakeholders as above. News articles have been published in the Birmingham Post and Mail, Coventry Evening Telegraph, Worcester Evening News, Stoke Sentinel, Beacon and BRMB radio and also Central News. Information is also available on a number of websites across the region including LINKs websites e.g. Staffordshire and Coventry and PCTs.

Clinicians from across the region which include Accident and Emergency Consultants, Consultant Traumatologists, Neurosurgeons, Cardiothoracic surgeons, specialist rehabilitation and other specialist doctors and nurses have been involved in the engagement and are in support of a three major trauma centre option.

It should be noted that it is a mandated national requirement of the NHS Operating Framework 2011/12 that all regions should introduce a regional trauma system no later than March 2012. As such, people are not able to influence whether these changes are made or existing pathways remain but they are able to share their views and experience to help shape the services that are important to them as we implement the improved system.

Two workshops have been held with key stakeholders – one in February and one in July 2011 attended by a wide range of stakeholders including local councillors, representatives from Headway and Rehab UK and clinicians from hospital trusts across the region. The first workshop was for members to agree the service specifications for the West Midlands major trauma system. The second event was to input into the production of the Integrated Impact Assessment (IIA) produced by Mott McDonald (MM). MM has also worked with focus groups including patients, patient representatives and other stakeholders to inform the IIA. Approximately 25 – 30 people attended each workshop. A third workshop on 19th December at Birmingham City Football Club will look at implementation of the trauma care system which HOSC members have been invited to.

West Midlands Specialised Commissioning Team (WMSCT) is undertaking this review on behalf of the 17 West Midlands Primary Care Trusts (PCTs). WMSCT is a formal sub-committee of the PCTs and therefore it is the responsibility of the PCTs, as the statutory organisation, to undertake the engagement for this review. At a meeting with the PCT Cluster communications and engagement leads last week it was agreed that they would take this forward on our behalf. They will engage with the high risk groups as highlighted in the Integrated Impact Assessment:

- Young males aged 16 – 29 years
- People from BAME groups and in particular young males from BAME groups
- Older people (those over 65)
- People from socio-economically deprived communities
- People from densely populated and urban areas
- People from rural communities

A more formal engagement period is taking place for a 6 – 8 weeks from 1st November 2011 – 20th December 2011 which the PCTs are leading on.

They propose to use local events, patient groups and other forums already in place within their organisations to reach as many people as possible and will report back at the end of the engagement period, noting number of people at events and their views, highlighting any concerns.

Providing specialist emergency care

Patients who suffer major trauma injuries need urgent specialist emergency care as quickly as possible and all available on one hospital site to give them the best chances of survival. Only hospitals described as ‘tertiary’ centres, which are big hospitals which have all the specialist services on one hospital site are able to provide this emergency care 24 hours a day 7 days a week. These specialist services include:

- All specialist staff, services and facilities available on one hospital site which not all hospitals are able to provide
- Specialist care provided 24 hours a day 7 days a week
- Access to MRI and CT scanners within one hour
- Access to Intensive Care/Critical Care beds
- Specialist hospital staff including neurosurgeons when dealing with severe brain injuries or cardiothoracic surgeons when dealing with crushed chest injuries or amputations
- Specialist rehabilitation whilst in the trauma centre
- Would go straight to the specialist trauma centre by emergency ambulance

where possible

Capacity

The number of patients who require specialist major trauma care is very small in comparison to total accident and emergency department figures and equates to 0.01% of the total of a hospital's A & E incidents. A trauma triage tool will be used to assess the injuries and we expect this to trigger 6 times per day in the region for the West Midlands population. As part of the process we have undertaken, providers have considered the capacity requirements and therefore the infrastructure they would require to provide care for any additional patients treated at their hospital from April 2012 onwards. The financial implications will be based on the Hospital Trust's business case in which they considered the additional activity.

The introduction of a trauma care system across the West Midlands aims to improve the quality of emergency specialist care that patients with severe life threatening injuries will receive with the aim of achieving best outcomes for patients. By improving patient's chances of survival, reducing disability and enabling more patients to live a more independent life and return to work where possible will reduce that person's impact on both NHS and social care making best use of taxpayers' money.

Recommendations:**That:**

- *Members note this report*
- *And support the NHS in its proposal for a period of engagement with identified high risk stakeholders for approximately 6 – 8 weeks.*

Contact:

**Chris Capewell, Communications & Engagement Manager
West Midlands Specialised Commissioning Team**