Welcome

The Trauma Audit & Research Network (TARN)

Foundation course
The NHS in England has saved an additional 1,600 patients with severe injuries since the establishment of major trauma centres in 2012.
Today’s session

- Background
- Inclusion Criteria
- Identifying Cases
- Data Entry
- System Features
- Quality Assurance: Case ascertainment & Data Accreditation
- Injury scoring & calculating the ISS
Background

- **Largest** European Trauma registry: >800,000 injured patients with >50,000 injured children
- **Review** and monitor process of care & outcome
- **Report** to Trusts & Commissioners
- **Inform** changes in practice: Improve Trauma Care
- **100%** membership in England, Wales, ROI and Northern Ireland
- **Member** in Denmark
- **220 Hospitals** submitting data
- **Clinically led (BOARD and Executive committees), Academic, Independent**
The beginning

- **1988: Report by RCS: The Management of patients with Major Injuries**
  
  "Serious deficiencies in the management of severely injured patients"
  
  - Enhancing pre-hospital care, ensuring appropriate medical intervention
  - Rapid transfer to the best local facility
  - Assessing the use of helicopters
  - Adopting ATLS principles
  - Integrating trauma services within and between hospitals
  - Investing in rehabilitation services

- **System of Auditing & Research**

- **TARN Established in 1990**

- **Based Salford Royal Hospital**
Major Trauma Network development

Committing to development of Major Trauma Networks across England by end of 2011/12

Mandating TARN membership

Most Major Trauma Networks “live” April 2012
What has changed

On scene patient triage: Positive

Direct to MTC
(< 45 mins travel)

TARN

Indirect Transfer
(>45 mins, time critical intervention)

MAJOR TRAUMA CENTRE
✓ Consultant led trauma team
✓ Immediate operating theatre
✓ All specialties: **neurosciences**
✓ Immediate CT scan
✓ Interventional radiology
✓ Specialist critical care

Trauma Unit
Trauma team
Immediate CT Resuscitate, Assess & ? Transfer
Major Trauma Centre: Best Practice Tariff Year (19-20)

- Additional payment made to **Major Trauma Centres in England only**
- Based on Injury Severity
  - Level 1: Moderate Trauma (ISS>8): £1,500
  - Level 2: Major Trauma (ISS>15): £3,000
- Conditional on ‘Best Practice’ targets being met & data correctly entered onto TARN database
- **NHS England have updated the BPT criteria for 2019-20**
- BPT worth 51 million per annum
- Last year 5 million in missed payments
Web-based Trauma Data Collection

- Electronic data collection & reporting system
- Secure on-line system through patient pathway
- Data Collection **AND** Reporting
TARN Reports

- **Clinical Reports:** Uploaded March, August, November. Email notification to all users
- **Performance Comparisons:** Updated March, August, November. Available to all.
- **Online Reports:** Self produced reports
- **Ad Hoc analysis:** Available any time
- **Dashboards:** Published Quarterly for MTC and Trauma Units, half yearly for CMTCs

Separate Reporting & Refresher Training session
Trauma Dashboards
Benchmarking between comparable hospitals

Major Trauma Centre Dashboard
Developed by MTC Clinical Reference Group

Children’s Major Trauma Centre Dashboard
Developed by TARNLet

Trauma Unit Dashboard
Developed by Trauma Unit Working Party

<table>
<thead>
<tr>
<th>Period</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Trust value (%)</th>
<th>National mean (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17/18 Q1</td>
<td>4</td>
<td>5</td>
<td>80</td>
<td>23.9</td>
</tr>
</tbody>
</table>
Dashboards April 2020

- From April 2020 no Dashboard amendments will be accepted.

- Dashboards published from April 2020 onwards will be final, therefore the onus will be on the Hospitals to ensure their data is complete prior to dispatch to TARN.

- This decision is fully supported by the TARN Executive Committee and brings TARN into line with other National Audits who do not offer a validation period for reporting.

- If any Hospital wishes to discuss setting up an internal validation process to ensure their data is of the highest quality prior to dispatch, we are more than happy to help with this.
### April 2020 Onwards: Dashboard Dates

<table>
<thead>
<tr>
<th>Dashboard</th>
<th>Patients admitted during</th>
<th>Submitted up to</th>
<th>Report circulated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q4</strong></td>
<td>January, Feb &amp; March 2020</td>
<td>9(^{th}) April 2020</td>
<td>23rd April 2020</td>
</tr>
<tr>
<td><strong>Q1</strong></td>
<td>April, May &amp; June 2020</td>
<td>9(^{th}) July 2020</td>
<td>30th July 2020</td>
</tr>
<tr>
<td><strong>Q2</strong></td>
<td>July, August &amp; Sept 2020</td>
<td>8(^{th}) Oct 2020</td>
<td>29th Oct 2020</td>
</tr>
<tr>
<td><strong>Children's</strong></td>
<td></td>
<td>9(^{th}) July 2020</td>
<td>30th July 2020</td>
</tr>
<tr>
<td><strong>TU</strong></td>
<td>October, Nov &amp; Dec 2019</td>
<td>19(^{th}) March 2020</td>
<td>9(^{th}) April 2020</td>
</tr>
<tr>
<td><strong>Q4</strong></td>
<td>January, Feb &amp; March 2020</td>
<td>19(^{th}) June 2020</td>
<td>9(^{th}) July 2020</td>
</tr>
<tr>
<td><strong>Q1</strong></td>
<td>April, May &amp; June 2020</td>
<td>18(^{th}) Sept 2020</td>
<td>8(^{th}) Oct 2020</td>
</tr>
<tr>
<td><strong>ROI</strong></td>
<td>July - Dec 2019</td>
<td>2(^{nd}) July 2020</td>
<td>16(^{th}) July 2020</td>
</tr>
</tbody>
</table>
The 2019 TARN database
TARN figures: 2019: Gender breakdown

44%

56%
TARN figures: 2019: Median Length of Stay

8 days
TARN figures: 2019: Age breakdown

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;16</td>
<td>5%</td>
</tr>
<tr>
<td>16-35</td>
<td>14%</td>
</tr>
<tr>
<td>35-65</td>
<td>31%</td>
</tr>
<tr>
<td>65-80</td>
<td>22%</td>
</tr>
<tr>
<td>&gt;80</td>
<td>28%</td>
</tr>
</tbody>
</table>
TARN figures: 2019: Mechanism of injury

- Vehicle incident: 19%
- Falls <2m: 61%
- Falls >2m: 10%
- Penetrating injury: 2%
- Blows: 6%
- Other: 2%
TARN figures: 2019: Most severely injured body regions

- Head: 25%
- Face: 2%
- Chest: 17%
- Abdomen: 2%
- Spine: 12%
- Limbs: 32%
TARN figures: 2019: ED Admissions

Accident & Emergency

10% not admitted to ED
Contact us

Phone-line: 0161 206 4397

Twitter account: @TARNaudit
Facebook: www.facebook.com/TARNaudit

Email: support@tarn.ac.uk
tarn.supportstaff@nhs.net

Website: www.tarn.ac.uk

Newsletter