Major Trauma Audit Study Day

The Trauma Audit & Research Network (TARN)

Antoinette Edwards
Executive Director
The Trauma Audit & Research Network

- National Clinical Audit for trauma care
  27 years old!

- Data submitted by all hospitals (June – Northern Ireland)
  >200 hospitals submitting data

- Based at Salford Royal Hospital, University of Manchester & Manchester Academic Health Sciences Centre (MAHSC)

- Largest European trauma registry >500,000 injured patients

- Clinically led, Academic and Independent
Progress to date

Audit

- Dashboards
- Measuring the gap in ‘rehabilitation needs’
- Patient Reported Outcome Measures - Maintain into 2017-18
  - Launched regular reports

- National Reports
  - 1st Report ‘Major Trauma in Older People’

- TARN Annual Awards
Improvements in Care Award

Recognises the individual or team who has made best use of their trauma data to improve the quality of care of their trauma patients

TARN Audit Coordinator of the Year

Recognises the positive impact that the TARN Audit Coordinators have within their hospital

November  Invitation to apply circulated to all TARN hospital contacts
January  Deadline for submissions
January  Judging committee score and correspond by email
February  Winner notified and asked to attend TARN Conference
March  Prize presentation at TARN Conference

Past winners include:

Dorset Police and Dr Ian Mew: Motorcycle Road Deaths and Serious Injury
Mr Miguel Fernandez, UHCW: Open Lower-Limb Fracture Performance
Northern Trauma Network: Guidance to Improve Timeliness of C-Spine Imaging in Older Patients
Audit Coordinator of the year 2017: Holly West, Furness General Hospital, Lancashire
Progress to date

Research

- 24 publications since 2015
  - 2 ‘In Press’
  - 4 Submitted manuscripts
  - 54 on-going projects

- Maintain international collaborations
  - VSTORM
  - Hong Kong

Research Publications

- EMJ Anniversary Edition – 25 years of TARN
  December 2015

- Twenty-five years of the trauma audit and research network: a continuing evolution to drive improvement

- The changing face of major trauma in the UK

- Prediction modelling for trauma using comorbidity and ‘true’ 30-day outcome

- The effect of preinjury warfarin use on mortality rates in trauma patients: a European multicentre study

- Resuscitative endovascular balloon occlusion of the aorta (REBOA): a population based gap analysis of trauma patients in England and Wales

- A profile of suspected child abuse as a subgroup of major trauma patients

- Top 10 TARN research publications
The Team
18 members of staff including:

- **Injury Coding Team**
  - 9 full time members including Coding Supervisor
    - Code & validate approx. 2000 cases per week (*Using AIS 2005*)
    - Provide email & telephone support
    - Validation
    - Quality Assurance Activities
Injury Coding: Quality Assurance

ISS accuracy %

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<th>Month</th>
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    - Code & validate approx. 2000 cases per week (*Using AIS 2005*)
    - Provide email & telephone support
    - Validation
    - Quality Assurance Activities

- **Analyst & Statistical Team**
  - 4 full time members including Registry Manager & Medical Statistician
  - Manage reports, involved in research analysis.
  - Deal with 30-40 ‘ad-hoc’ data requests each week

- **Training & Audit Manager, Project Manager, Executive Assistant, & Accounts Manager**
BOARD

Executive Committee (Operational)

TARNnet

Research Group

TARN Research

Audit Group

TARN Audits

Chairman: Professor Tim Coats
Executive Director: Antoinette Edwards
Research Director: Professor Fiona Lecky
Strategy Director: Maralyn Woodford
Clinical Audit Director: Dhushy Surendra Kumar
Professor Tim Coats  
TARN Chairman

Professor Chris Moran  
National Clinical Director for Trauma

Professor Jason Smith  
Consultant in Emergency Medicine, Derriford Hospital

Professor David Lockey  
Clinical Director, Severn Major Trauma Network

Mr Nigel Tai  
Vascular Surgeon, Royal London Hospital

Professor Paul Dark  
Academic Director, Acute Tissue Injury and Trauma, (MAHSC)

Professor Peter Hutchinson  
Professor of Neurosurgery, University of Cambridge

Dr Emily McWhirter  
Director of Performance & Governance, Kent Surrey & Sussex Air Amb.

Dr Peter Oakley  
Consultant, University Hospital North Midlands

Mr Ross Fisher  
Consultant Paediatric Surgeon, Sheffield Children's Hospital

Gabby Lomas  
Corporate Matron, Salford, Salford Royal NHS Foundation Trust

Mr Iain McFadyen  
Consultant Orthopaedic Surgeon, University Hospital North Midlands

Dr Ian Maconochie  
Consultant in Paediatric Emergency Medicine, St Mary’s Hospital

Professor Jon Nicholl  
Dean of ScHARR

Mr Ken Dunn  
Consultant Burn and Plastic Surgeon, Manchester Burn Service

Dr Conor Deasy  
Clinical Lead, National Office of Clinical Audit, Ireland

Mr Daren Forward  
Consultant in Orthopaedic Trauma, University Hospital Nottingham

Professor David Yates  
Emeritus Professor, TARN

Mr David Skinner  
Consultant & Major Trauma Guideline development Group, NICE

Mr Roy Dudley-Southern  
Lay Member

Dr Mark Wilson  
Neurosurgeon & pre-hospital Care Imperial College NHS Trust, London

*Board includes members of the TARN Executive*
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<thead>
<tr>
<th>Name</th>
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<tr>
<td>Mr Ross Fisher</td>
<td>Paediatric Emergency Medicine  Chair</td>
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<tr>
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<td>Emergency Medicine</td>
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<td>Professor Fiona Lecky</td>
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<tr>
<td>Dr Lorcan Duane</td>
<td>Paediatric Emergency Medicine</td>
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<tr>
<td>Mr Roberto Ramirez</td>
<td>Paediatric Neurosurgeon</td>
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<tr>
<td>Antoinette Edwards</td>
<td>Executive Director, TARN</td>
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<td>Maralyn Woodford</td>
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<tr>
<td>Naomi Davis</td>
<td>Paediatric Orthopaedic Surgeon</td>
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<td>Nathan Griffiths</td>
<td>Paediatric Nurse Consultant</td>
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<td>Chris Fitzsimmons</td>
<td>Paediatric Emergency Medicine</td>
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<tr>
<td>Samantha Negus</td>
<td>Paediatric Radiologist</td>
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<td>Ciaira Martin</td>
<td>Paediatric Emergency Medicine</td>
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Developments for 2017 and beyond...

- Reporting
- Implementation of the TARN Strategy Plan
Reporting

Clinical Feedback Reports

- Information gathering
  - Clinical & Network Leads – March 2016
  - Speciality Leads – September 2016
  - Working with Audit Committee

- Planned modifications include:
  - Executive Summary
  - Highlight good practice at other trusts
  - Improve explanations

- Making revisions – launch this year
Reporting

Business Intelligence Solutions – Dashboards

- Series of static reports on the system
- Limitations when requiring specific analysis

Business Intelligence
- Provide a more robust and flexible reporting system
- Cover a range of audit needs for clinicians, managers and coordinators
- View & interact with charts
- Potential to create new charts
TARN Strategy

Improving trauma care through audit and research

- 5 year strategy plan - TARN Board sub group

- Re-development of TARN Data Collection system
  - Launched in 2005
  - Management of new features more dynamically
  - Future proof system
  - Mobile technology
  - Support data upload

- Data Collection Requirements Group
  - TARN Stakeholder event
  - NOCA representation
New Projects

NIHR Research Project – Improving outputs of national clinical audits to support organisations to improve the quality of care & clinical outcomes
- Effectiveness and use of national clinical audits across the health services

Employment and Economic Outcomes for Trauma Patients
determine the economic burden of inadequate rehabilitation on trauma patients

- Collaborative project between NHS England, Department for Work & Pensions, TARN
  - Link benefit data to clinical information from TARN
  - Quantify costs of injury through benefit data
## Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter</th>
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<tr>
<td>13:15</td>
<td>Welcome &amp; Overview</td>
<td>Antoinette Edwards</td>
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<td>13:30</td>
<td>Quality Assurance: Data Completeness &amp; Accreditation explained</td>
<td>Laura White Training Manager</td>
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<td>13:45</td>
<td>Quality Assurance: TARN Coordinators experiences</td>
<td>NOCA Coordinators</td>
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<td>14:15</td>
<td>ISS (Injury Severity Score) Ps (Probability of Survival) &amp; Ws (Hospital Survival Rate)</td>
<td>Naomi Brook TARN Injury Coder &amp; Training Officer</td>
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<td>14:30</td>
<td>Online reports</td>
<td>Laura White</td>
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<tr>
<td>15:00</td>
<td>Published reports: Clinical Reports and Dashboards</td>
<td>Antoinette Edwards &amp; Laura White</td>
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<td>15:30</td>
<td>Questions</td>
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<td>15:45</td>
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