The Trauma Audit & Research Network

Major Trauma Service in England - TARN's supporting role

Scottish Trauma Audit Group
National Meeting
11th November 2016

MANCHESTER 1824 The University of Manchester
University of Leicester
The University Of Sheffield.
EuroTARN
TARNlet developing effective assessment of paediatric trauma care
TARN THE TRAUMA AUDIT & RESEARCH NETWORK

Major Trauma Services in England - TARN's supporting role

- Background
- TARN
  - Structure and function
  - Injury severity scoring, the Ps model, comparisons of trauma care
  - Supporting change through information-TARN Reports & Research
  - The environment and trauma care
  - Latest TARN innovations

We all knew the problem!

- Life threatening or life changing serious physical injury typified by delay, inappropriate care, avoidable death and disability.

"60% received a standard of care less than good practice."

NAO National Audit Office

TARN
THE TRAUMA AUDIT & RESEARCH NETWORK

Levers & Commissioning for change

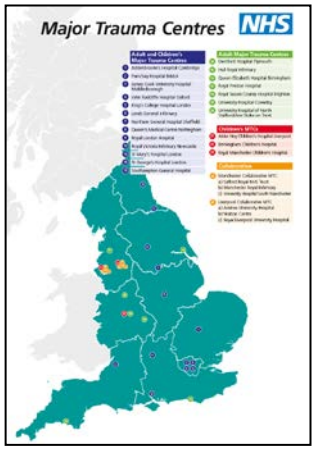
NAO National Audit Office

Public Accounts Committees March 2010
Chief Executive of NHS on public record as .....

- ✓ Committing to Networks for Major Trauma by end of 2011/12
- ✓ Mandating TARN registry returns

What has changed?

On scene patient triage



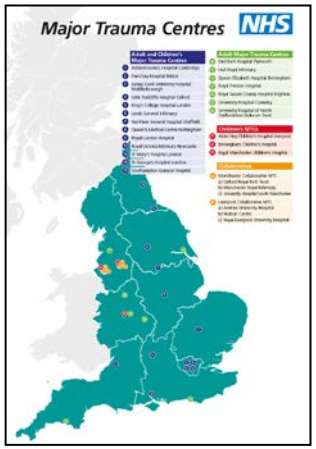
Direct to MTC
(< 60 mins travel)

Indirect Transfer
(> 60 mins time critical intervention)

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

Trauma Unit
- ✓Trauma team
- ✓Immediate CT
- ✓Resuscitation
- ✓Assessment
- ? Transfer

What has changed?



On scene patient triage:

Direct to MTC
(< 60 mins travel)

Indirect Transfer
(> 60 mins, time critical intervention)

TARN

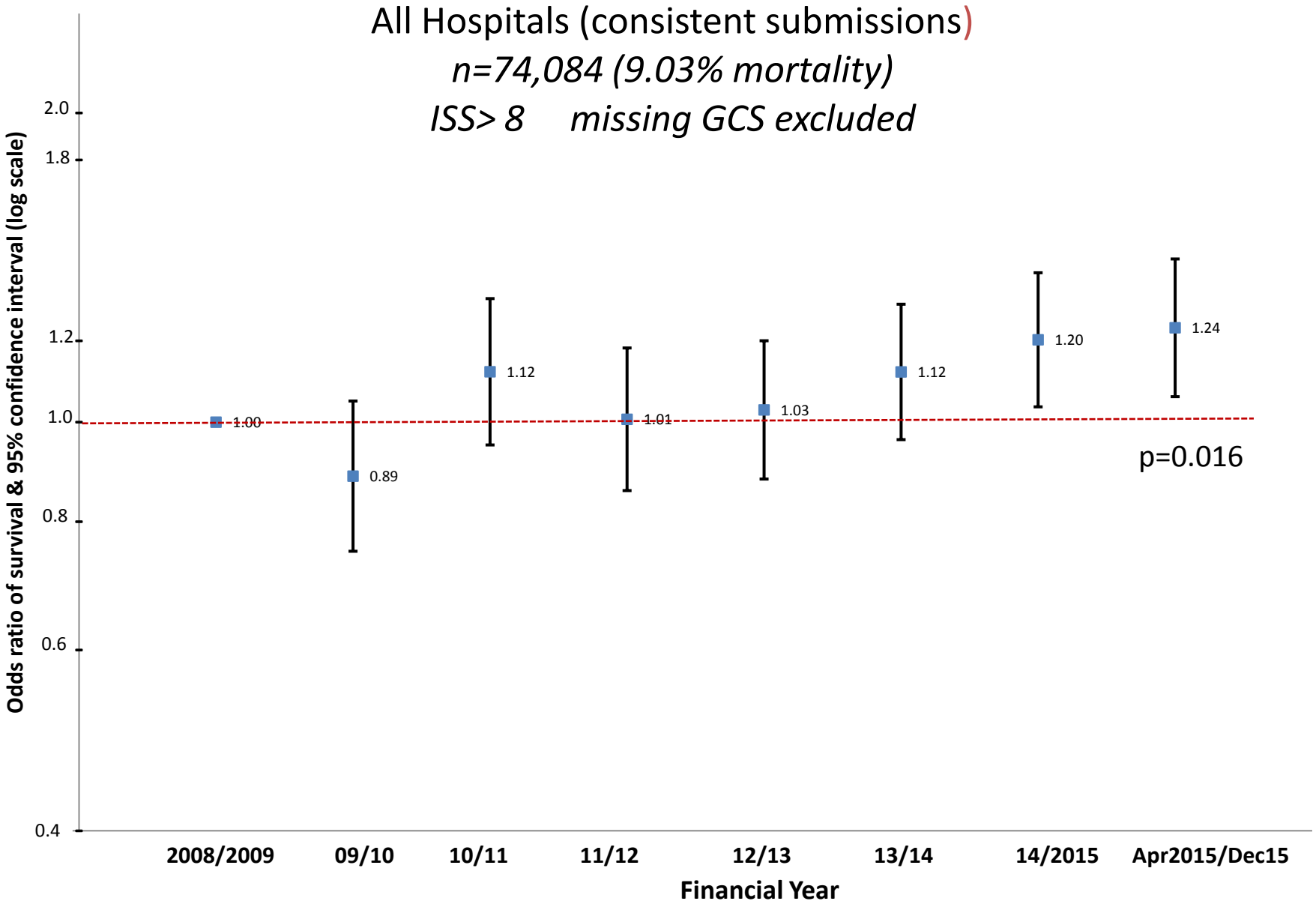
MAJOR TRAUMA CENTRE

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

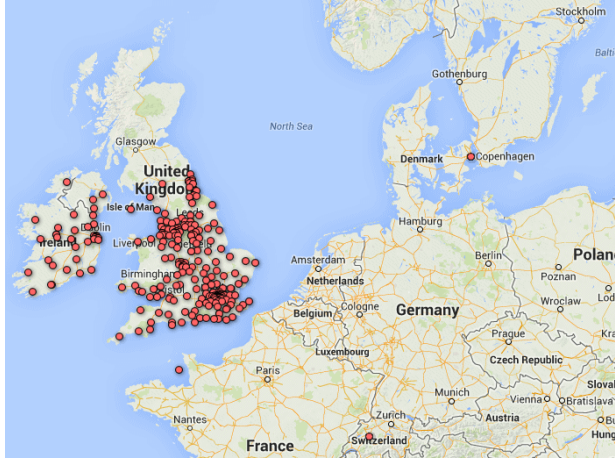
Trauma Unit

- ✓Trauma team
- ✓Immediate CT
- ✓Resuscitation
- ✓Assessment
- ? Transfer

Risk adjusted odds ratio of survival in England



TARN: Currently……



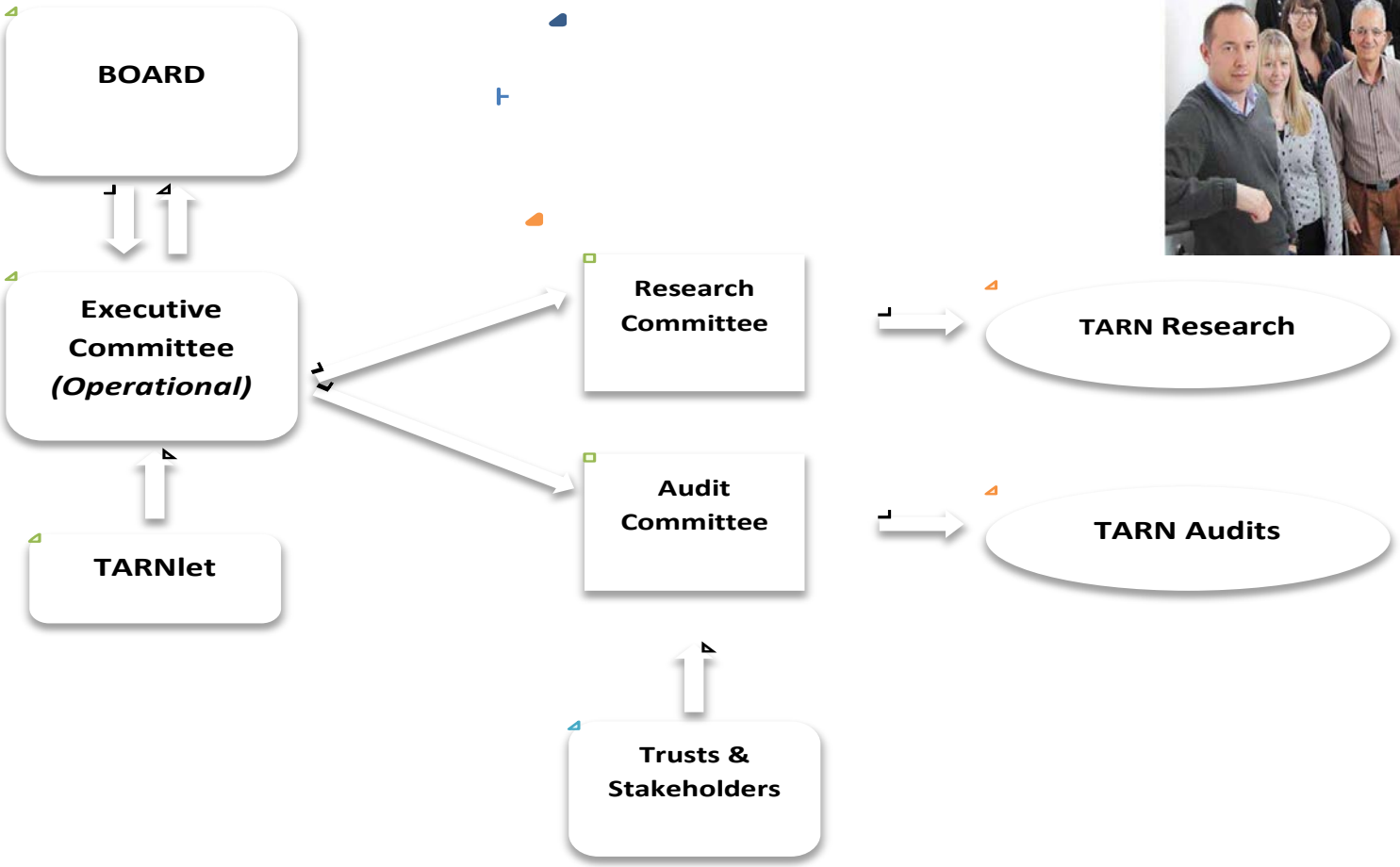
- Largest European trauma registry
  over 600,0000 injured patients

- Self funded through hospital membership fees
  - non profit making organisation

- Clinically-led, Academic and Independent

- 26 years

TARN Structure and Governance

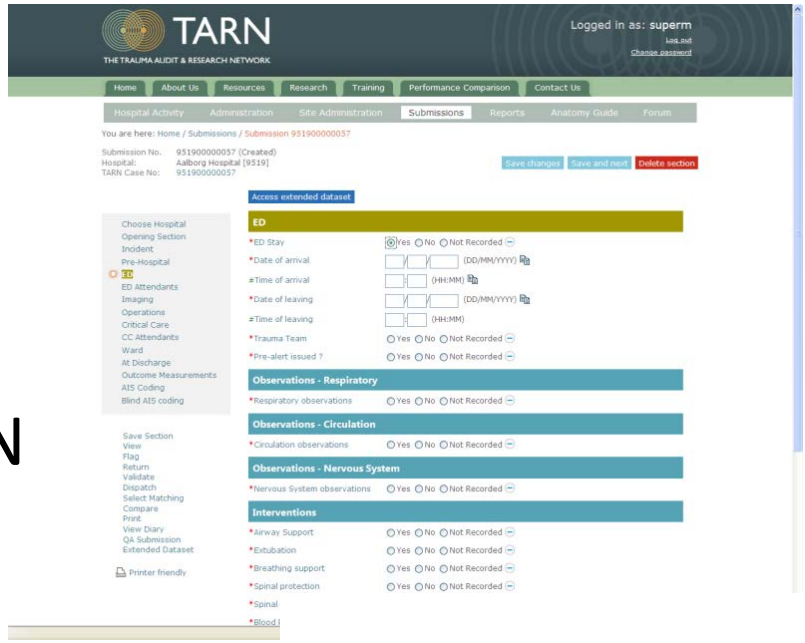


Web-based Trauma Data Collection & Reporting

- electronic data collection & reporting system (eDCR)

  - supports hospital staff in robust and effective data collection

- through patient pathway
- Secure
- reporting functionality
- training & support from TARN



Submission No. 951900000001 (Created)
Hospital: Aalborg Hospital [9519]
TARN Case No: 951900000001 (Incomplete - awaiting further submissions)

Save changes | Save and next | Delete section

ED

*ED Stay	(•) Yes ( ) No ( ) Not Recorded
*Date of arrival	01 / 01 / 2012 (DD/MM/YYYY)
#Time of arrival	: (HH:MM)
*Date of leaving	03 / 01 / 2012 (DD/MM/YYYY)
#Time of leaving	: (HH:MM)
*Trauma Team	(•) Yes ( ) No ( ) Not Recorded
*Pre-alert issued ?	(•) Yes ( ) No ( ) Not Recorded
*Date of Pre-alert	01 / 01 / 2012 (DD/MM/YYYY)
#Time of Pre-alert	: (HH:MM)
*Massive transfusion protocol activated?	(•) Yes ( ) No ( ) Not Recorded
*Activation Date	01 / 01 / 2012 (DD/MM/YYYY)
#Activation Time	: (HH:MM)

Choose Hospital
Opening Section
Patient Details
Incident
At Scene [2]
Enroute
ED [1]
Imaging
Operations [1]
Critical Care - Level 3
Critical Care - Level 3
Ward
Outcome
Injuries
Specialist Rehabilitation
Transfer
Chest Wall Injury
Outcome Measurements
Hospital Questions
TARN Questions
AIS Coding
Blind AIS coding

Save Section
View
Flag
Return
Validate And Dispatch

Incident

#Date of incident: 02 / 01 / 2016 (DD/MM/YYYY)

#Time of incident: 08 : 00 (HH:MM)

#Incident Post Code (first part): m28

#Incident Post Code (second part):

#Incident Post Code (1st numeric of second part):

*Incident location: Road

Description of incident (free text):

*Type of injury: Blunt / Penetrating

*Mechanism of injury:

*Injury Intent:

*Additional incident information:

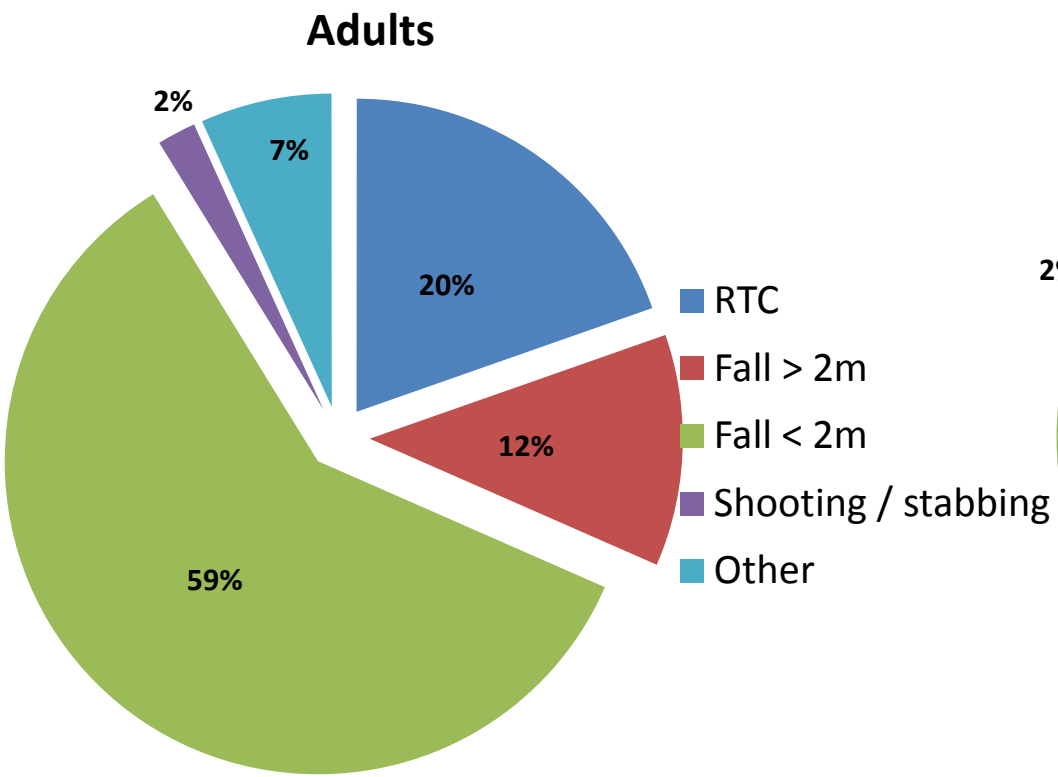
*Position in VI:

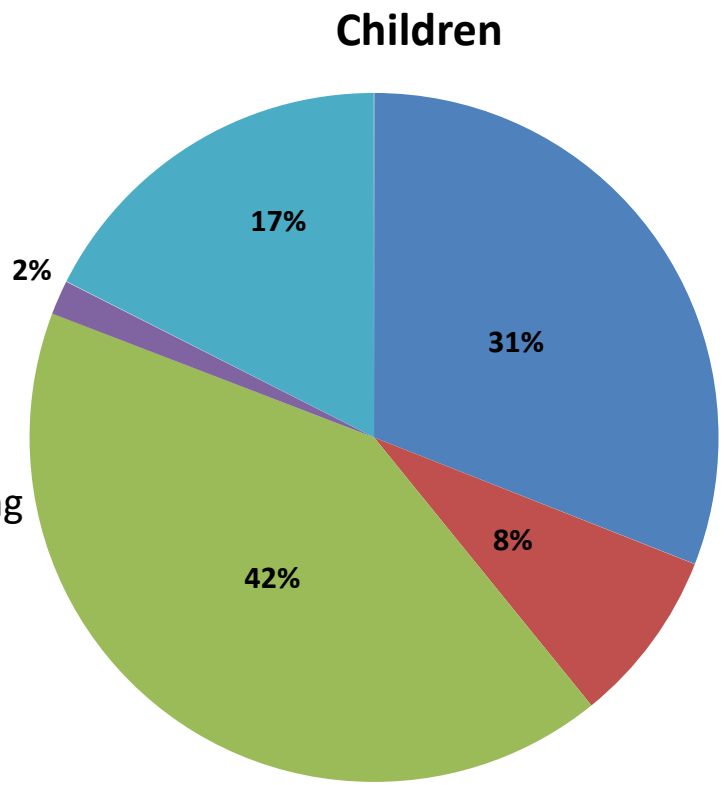
*Protection in VI:

- Vehicle incident/collision
- Fall more than 2m
- Fall less than 2m
- Blast
- Blow(s)
- Burn
- Other
- Crush
- Shooting
- Stabbing

Airbag

Mechanism of Injury





Patients currently included in the Ps model

1) All Trauma patients, irrespective of Age; who fulfill the following criteria:-

↓

2) Admission 3 days + or

Admission to an intensive care area or

Transferred out for continuing care or

Transferred in for continuing care or

Died

↓

3) And whose injuries fulfill the TARN injury criteria

……. mainly more severe injuries

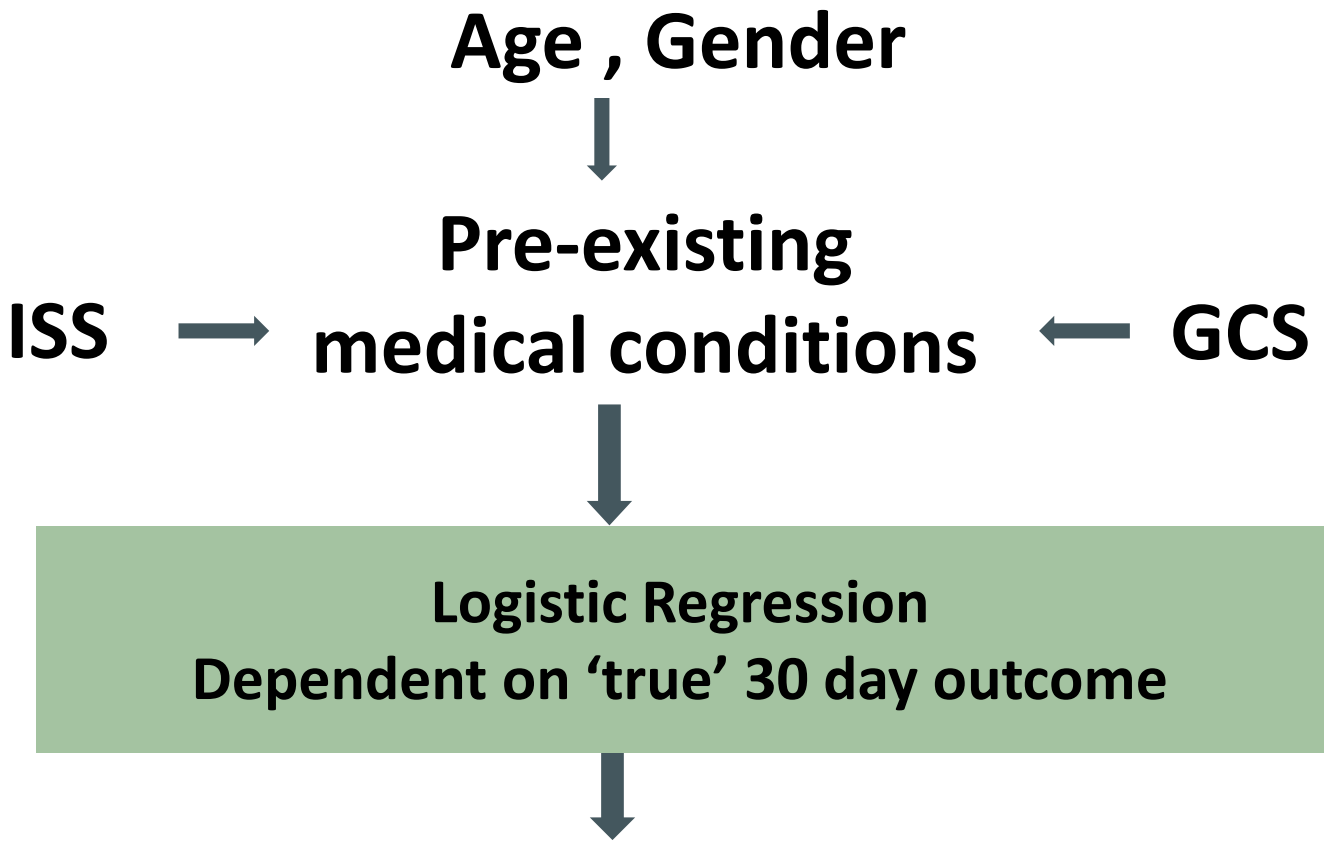
Major Trauma Services in England - TARN's supporting role

- Background
- TARN
  - Structure and function
  - Injury severity scoring, the Ps model, comparisons of trauma care
  - Supporting change through information-TARN Reports & Research
  - The environment and trauma care
  - Latest TARN innovations

STAG National Meeting
11th November 2016

Probability of Survival (Ps 14): 6 components

Ps model – **weights those parameters that best predict survival**



Injury Severity Score

- Calculated at TARN
  -injury coding performed centrally at TARN from accurate injury descriptions

- Coding uniformity

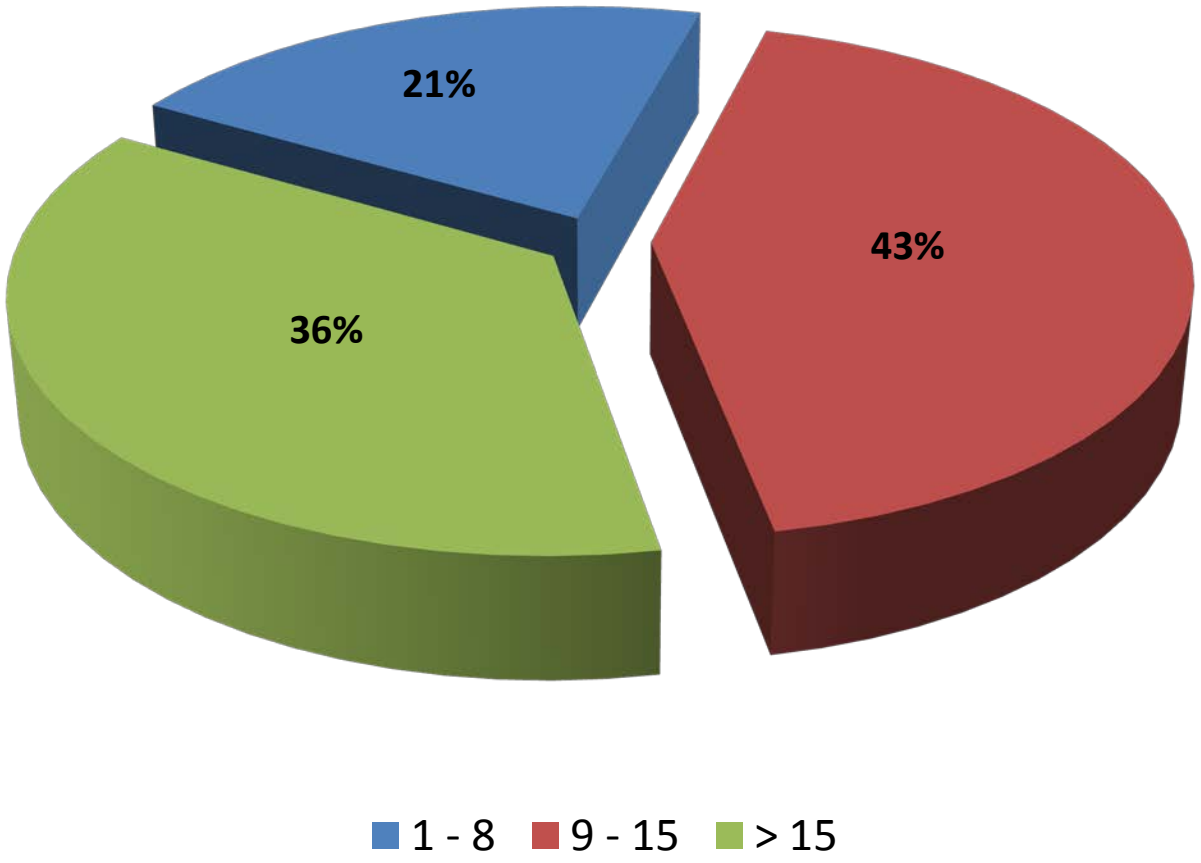
- Abbreviated Injury Scale dictionary (AIS2005)

- > 60,000 submissions per year coded

- Each submission assigned an Injury Severity Score

ISS distribution (England) 2015

ISS	N (%)
1 - 8	11,626 (21%)
9 - 15	23,908 (43%)
> 15	20,208 (36%)



Probability of Survival of a patient

Age = 63 , Gender = male

ISS = 43 → **PED:** type2 diabetes, MI, lymphoma, osteoporosis ← **GCS = 10**

Probability of Survival = 38%

Logistic Regression
Dependent on 'true' 30 day outcome

Rate of Survival (Ws)

Major Trauma Services in England - TARN's supporting role

- Background
- TARN
  - Structure and function
  - Injury severity scoring, the Ps model, comparisons of trauma care
  - Supporting change through information-TARN Reports & Research
  - The environment and trauma care
  - Latest TARN innovations

STAG National Meeting
11th November 2016

Using the Data - TARN Reports

1. Supporting trauma networks and NHS E
2. Dashboard
3. Best Practice Tariff
4. Website

5. Ad Hoc Reports - self production using the eDCR
6. Electronic reports
7. Clinical Reports
8. National Reports

Supporting trauma networks and NHS E

Time to CT

ISS > 15 **Adults** Direct admissions

Patient group = **Adults**	Hospitals in England				
	11/12	12/13	13/14	14/15	15/16
CT recorded	7206 (86.8%)	9274 (89%)	11549 (91.6%)	13217 (93.5%)	14958 (95.1%)
Median time to CT from arrival (hours)	1.3 (0.7 - 3)	1.1 (0.5 - 2.6)	1 (0.5 - 2.5)	1 (0.4 - 2.5)	1 (0.4 - 2.6)
Directly admitted to **MTC**: median time to CT from arrival	0.9 (0.5 - 2)	0.6 (0.4 - 1.5)	0.6 (0.3 - 1.3)	0.6 (0.3 - 1.3)	0.5 (0.3 - 1.4)
Directly admitted to **Trauma Unit**: median time to CT from arrival	1.8 (1 - 3.6)	1.8 (0.9 - 3.7)	1.8 (0.9 - 3.7)	1.8 (0.9 - 3.6)	1.9 (0.9 - 3.5)

Supporting trauma networks and NHS E

Time to CT

ISS > 15 **Children** Direct admissions

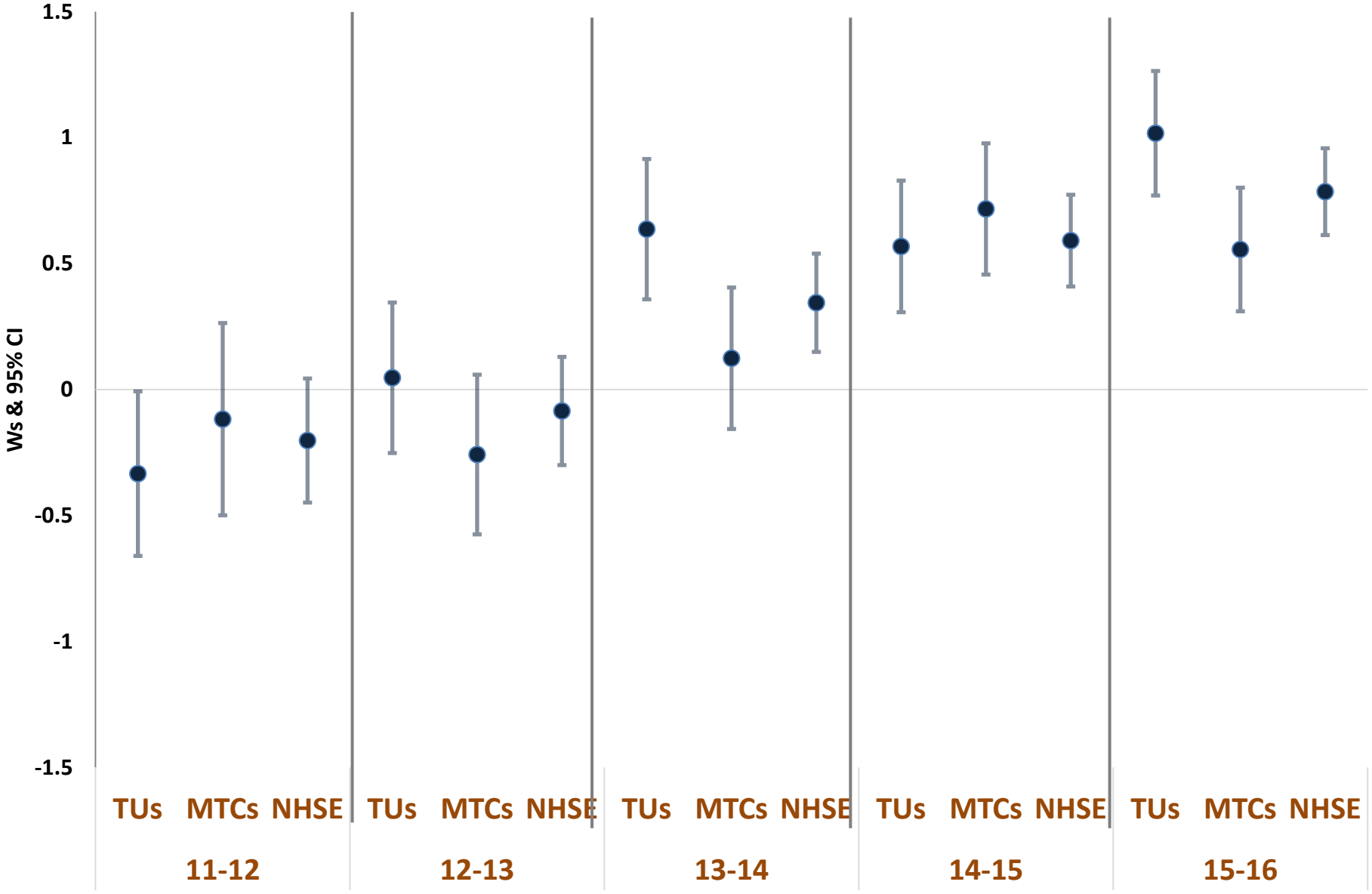
Patient group = **Children**	Hospitals in England				
	11/12	**12/13**	**13/14**	**14/15**	**15/16**
CT recorded	443 (85.5%)	457 (83.9%)	530 (88.8%)	529 (88.6%)	575 (93.5%)
median time to CT from arrival (hours)	1 (0.6 - 2)	0.9 (0.5 - 1.9)	0.8 (0.5 - 1.9)	0.9 (0.5 - 2)	0.8 (0.5 - 2)
Directly admitted to MTC: median hours to CT from arrival	0.7 (0.5 - 1.2)	0.7 (0.4 - 1.3)	0.7 (0.4 - 1.2)	0.6 (0.4 - 1.2)	0.6 (0.4 - 1.1)
Directly admitted to Trauma Unit: median hours to CT from arrival	1.6 (0.9 - 3.2)	1.5 (0.8 - 3.8)	1.5 (0.8 - 4.2)	1.8 (0.9 - 4.1)	1.8 (0.8 - 3.6)

Consultant within 30 minutes
ISS > 15 Direct Admissions

Patient group = **Adults**	Hospitals in England				
	11/12	**12/13**	**13/14**	**14/15**	**15/16**
Consultant recorded within 30 minutes	3266 (39.3%)	5201 (49.9%)	6393 (50.7%)	6871 (48.6%)	7395 (47%)
Directly admitted to **MTC**: Consultant recorded within 30 minutes	2110 (58.3%)	3917 (74.5%)	5169 (74.9%)	5648 (74.1%)	6024 (72.3%)
Directly admitted to **Trauma Unit**: Consultant recorded within 30 minutes	1156 (24.7%)	1284 (24.9%)	1224 (21.5%)	1223 (18.8%)	1371 (18.5%)

Patient group = **Children**	NHS England				
	11/12	**12/13**	**13/14**	**14/15**	**15/16**
Consultant recorded within 30 minutes	289 (55.8%)	357 (65.5%)	388 (65%)	397 (66.5%)	380 (61.8%)
Directly admitted to **MTC**: Consultant recorded within 30 minutes	196 (71.8%)	260 (83.1%)	319 (83.5%)	323 (85%)	313 (80.9%)
Directly admitted to **Trauma Unit**: Consultant recorded within 30 minutes	93 (38%)	97 (41.8%)	69 (32.1%)	74 (34.1%)	67 (29.4%)

Risk adjusted rates of survival (Ws)

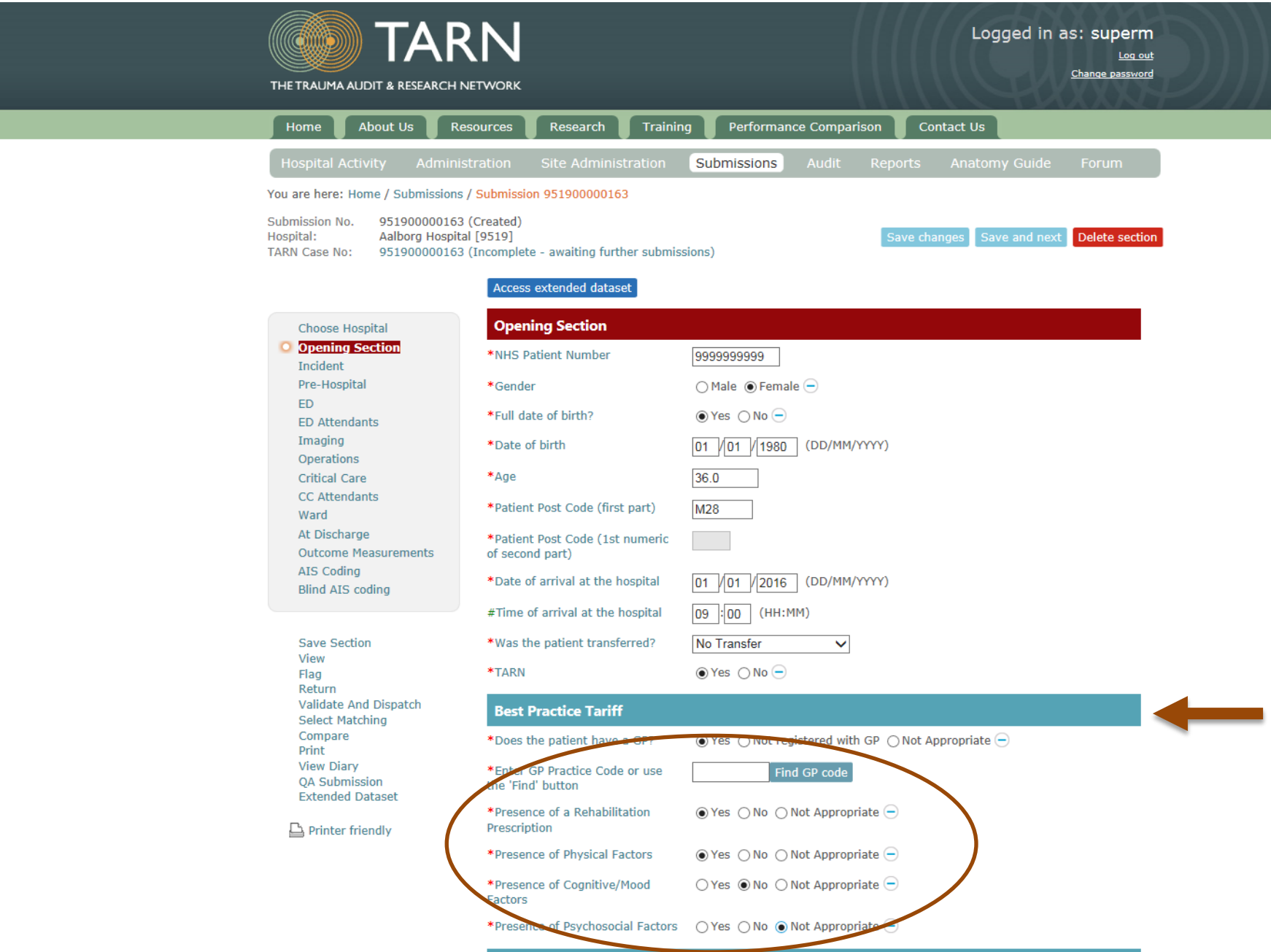


Best Practice Tariff

- To enhance trauma Networks to improve care!
- 2 Levels based on the Injury Severity Score, data collection (within 25 days of discharge) and certain process measures – TXA, early CT scan, senior doctor, early transfer
- TARN's role is to provide the functionality for the correct, validated data and reports to support provider/ commissioner discussions
- Provide the expertise and uniformity for injury severity coding

- **Worth £45million each year……£10.5million missed in 2015!**

The BPT screen

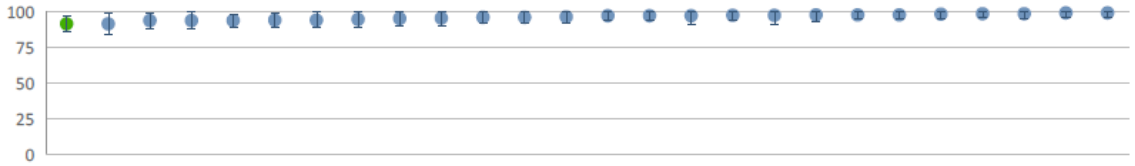


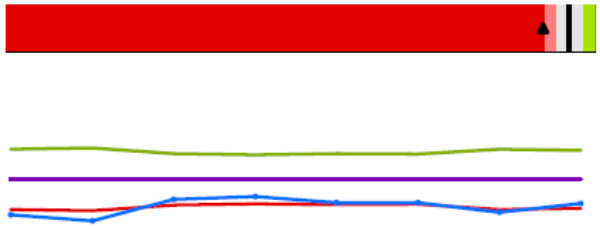
Major Trauma Dashboards

Data Quality 2015/16 Q4

MTC 01 - Quality of patient data submitted to TARN

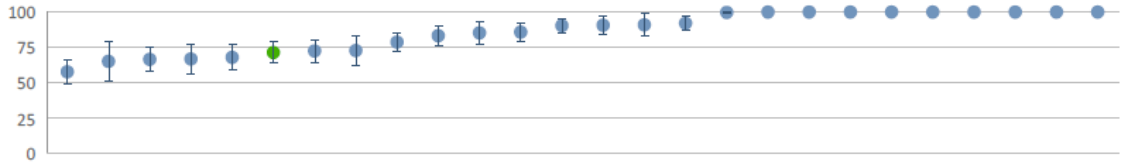
Period	Numerator	Denominator	Trust value (%)	National mean (%)
15/16 Q4	220.4	242	91.1	95.7

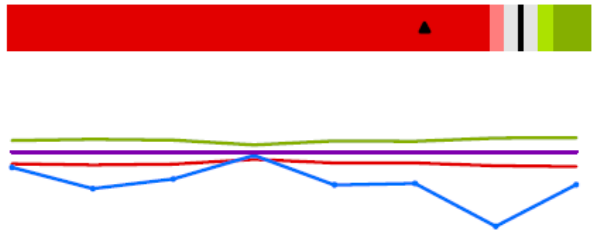




MTC 02b - All TARN eligible patients submitted within 25 days of discharge or death (excluding coroner's cases)

Period	Numerator	Denominator	Trust value (%)	National mean (%)
15/16 Q4	239	334	71.5	88.1



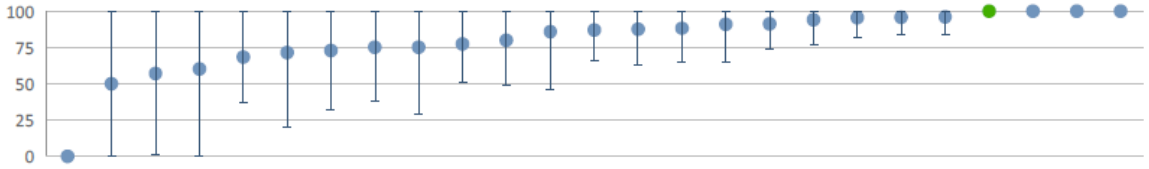


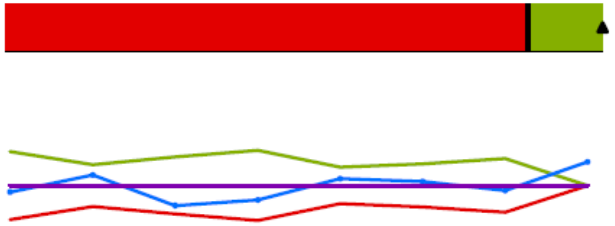
Major Trauma Dashboards

Evidence-based measures 2015/16 Q4

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

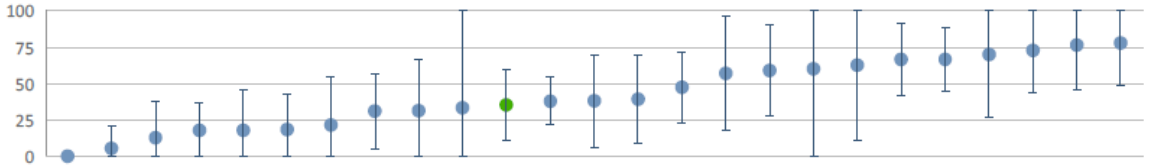
Period	Numerator	Denominator	Trust value (%)	National mean (%)
15/16 Q4	26	26	100	87.6

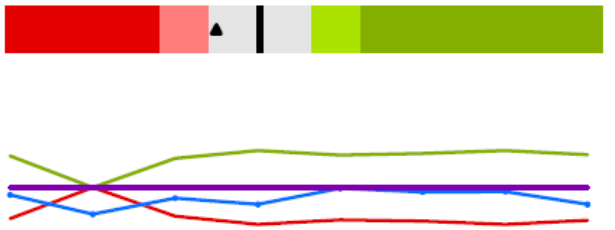




MTC 04 - MTCs deliver definitive cover of open fractures within BOAST 4 guidelines

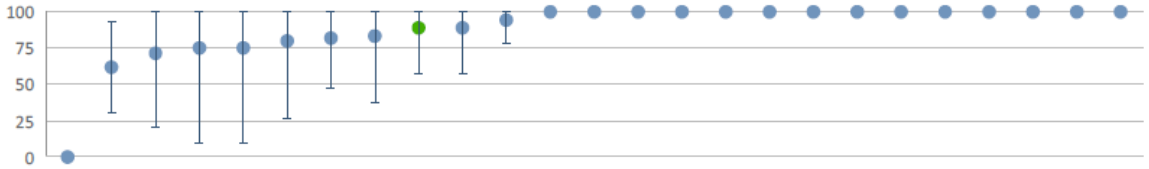
Rolling	Numerator	Denominator	Trust value (%)	National mean (%)
Rolling year	12	34	35.3	42.7

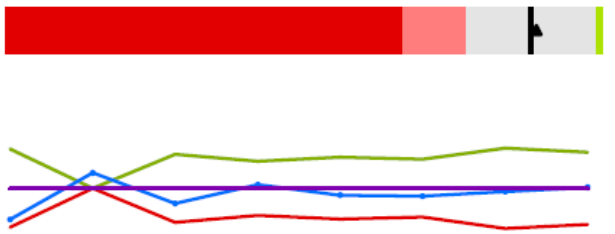




MTC 05 - MTCs administer Tranexamic Acid within 3 hours of incident to patients that receive blood products within 6 hours of incident

Period	Numerator	Denominator	Trust value (%)	National mean (%)
15/16 Q4	8	9	88.9	88.1



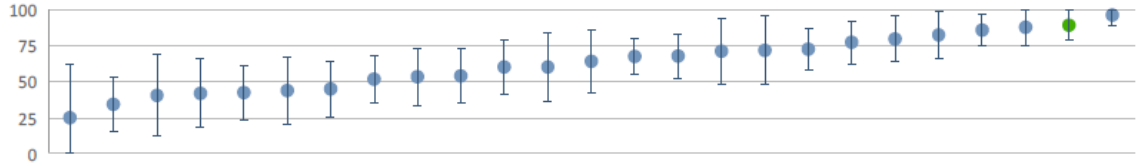


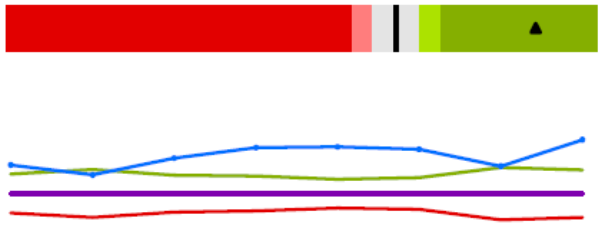
Major Trauma Dashboards

System indicators 2015/16 Q4

MTC 06 - MTCs deliver consultant led trauma teams ON ARRIVAL for patients with an Injury Severity Score greater than 15

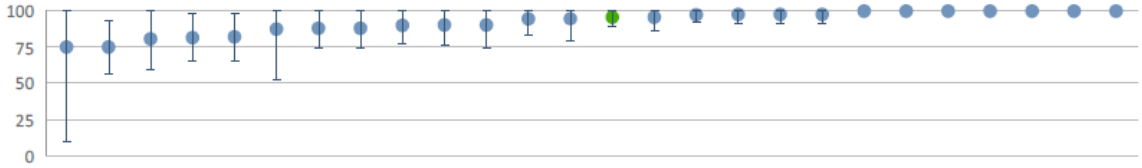
Period	Numerator	Denominator	Trust value (%)	National mean (%)
15/16 Q4	69	77	89.6	66

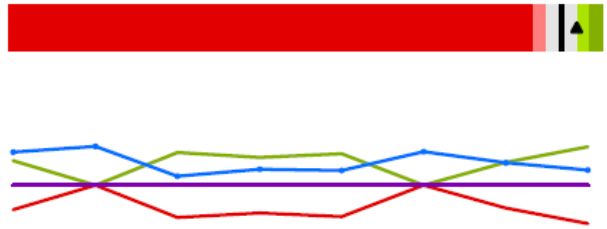




MTC 09 - Rapid access to specialist MTC care - patients transferred to MTC within 2 days of referral request

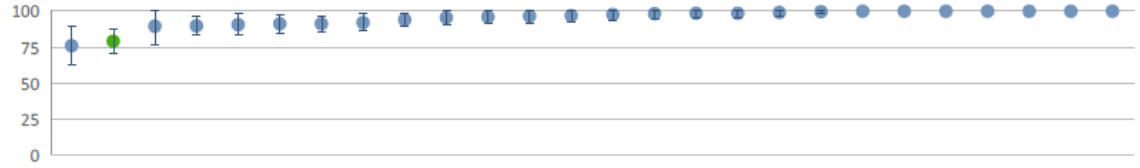
Period	Numerator	Denominator	Trust value (%)	National mean (%)
15/16 Q4	87	91	95.6	93.1

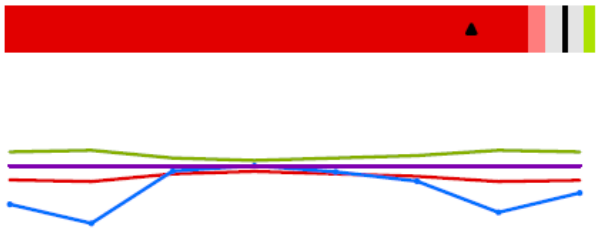




MTC 12 - Proportion of patients with an ISS of more than 8 that have a rehabilitation prescription completed

Period	Numerator	Denominator	Trust value (%)	National mean (%)
15/16 Q4	167	211	79.1	95





TARN

THE TRAUMA AUDIT & RESEARCH NETWORK

user name | password | Log in

Forgotten my password?

Home | About Us | Resources | Research | Training | Performance Comparison | Contact Us

Welcome

Every year across England and Wales, 10,000 people die after injury. It is the leading cause of death among children and young adults of 44 years and under. In addition, there are many thousands who are left severely disabled for life.

Our foundation in research and our highly skilled team ensures that we provide accurate and relevant information to help Doctors, Nurses and Managers improve their services.

Performance comparison

View all hospitals' standards of care across England and Wales

Click to view

Support and research groups

College of Emergency Medicine
Royal College of Surgeons
British Orthopaedic Association
NICE
Headway
The London Trauma Office

Latest news

- **'Saving Lives: Frontline Medicine in a Century of Conflict'** - Imperial War Musuem North launch major new exhibition

- Feedback
- TARNlet
- Regional TARN
- EuroTARN

- Performance Comparison
- Research
- Training
- Resources

- About Us
- Contact Us
- Introduction
- Join

www.tarn.ac.uk

Performance Comparison: Trauma Care

Trauma Care
Information for Hospitals
Information for Patients

East Midlands
East of England
Greater Manchester
Merseyside and Cheshire
North Cumbria
North East London and Essex
North East England
North West London
Peninsula
South Cumbria and Lancashire
South East London, Kent & Medway
Severn
Sussex
South West London and Surrey
Thames Valley

Trauma Care in England and Wales

Every year across England and Wales, 10,000 people die after injury. It is the leading children and young adults of 44 years and under. In addition, there are many millions year.

Understanding the benefits and the risks associated with different types of treatment However it is not generally appreciated that there are variations in the success of trea follows that there are probably opportunities to improve care.

This website was developed by the Trauma Audit & Research Network to help patients Care Quality Commission (formerly The Healthcare Commission), the independent reg England and Wales has advised The Trauma Network on the design of the website usi as a model.

The website provides, for the first time, important information about the rates of surv been injured and treated at different hospitals across England and Wales. It also prov benefits of certain kinds of treatment.

How to use this information

To read more about this website and to review survival rates at different hospitals, co

To interpret the information on this site, please go to Information for Patients

What it can't tell you

Performance Comparisons

Performance Comparison: Severn

Trauma Care
Information for Hospitals
Information for Patients

East of England
East Midlands
Greater Manchester
Merseyside and Cheshire
North East London and Essex
North West London
Northern
Peninsula
Severn
South Cumbria and Lancashire
South East London, Kent & Medway
South West London and Surrey
Sussex
Wales
Wessex
West Midlands
Thames Valley
Yorkshire & Humber

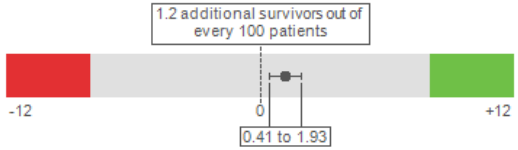
Feedback
Useful Links
Accessibility
Evaluation Form

Last updated 22nd July 2016. All data shown is by calendar year.

Hospital Name	Completeness of Data 2013 - 2014 %	Completeness of Data 2015 %	Completeness of Data 2016 %
Gloucestershire Hospitals NHS Foundation Trust	**22 - 27**	**98**	**82**
Gloucestershire Royal Hospital			
Cheltenham General Hospital			
Great Western Hospitals NHS Foundation Trust	**45 - 53**	**77**	**54**
Great Western Hospital			
North Bristol NHS Trust	**90 - 100**	**100+**	**100+**
Frenchay Hospital			
Southmead Hospital			
Royal United Hospital Bath NHS Trust	**53 - 61**	**91**	**83**
Royal United Hospital			
Taunton and Somerset NHS Foundation Trust	**80 - 97**	**72 - 87**	**67 - 80**
Musgrove Park Hospital			
University Hospitals Bristol NHS Foundation Trust	**67 - 81**	**88 - 100+**	**77 - 93**
Bristol Royal Infirmary			
Bristol Royal Hospital for Children			
Yeovil District Hospital NHS Foundation Trust	**83 - 100+**	**91 - 100+**	**52 - 63**
Yeovil District Hospital			

Rate of Survival at this Hospital

Between January 1st 2013 and December 31st 2016



Outcomes (survival or death) after trauma is best measured by the number of those who actually survived compared with the number who are expected to survive.

The numbers of expected survivors is generated from our database of thousands of patients who have already been treated for similar injuries.

The horizontal white line in the chart represents a **95% Confidence Interval.** Please refer to the 'Survival Rates' page for further information.

Rate of Survival at this Hospital: Yearly Figures

Rate of Survival Breakdown at this Hospital

Survival band %	Number in group	Expected survivors	Actual survivors	Difference*	Adjusted difference**
95 - 100	1491	1465	1469	0.2	0.2
90 - 95	415	385	387	0.4	0.0
80 - 90	246	211	225	5.5	0.4
65 - 80	161	118	136	11.0	0.4
45 - 65	107	59	61	1.2	0.0
25 - 45	57	20	22	1.9	0.0
0 - 25	36	5	9	10.5	0.1
Total	**2513**	**2267**	**2309**	**1.7**	**1.2**

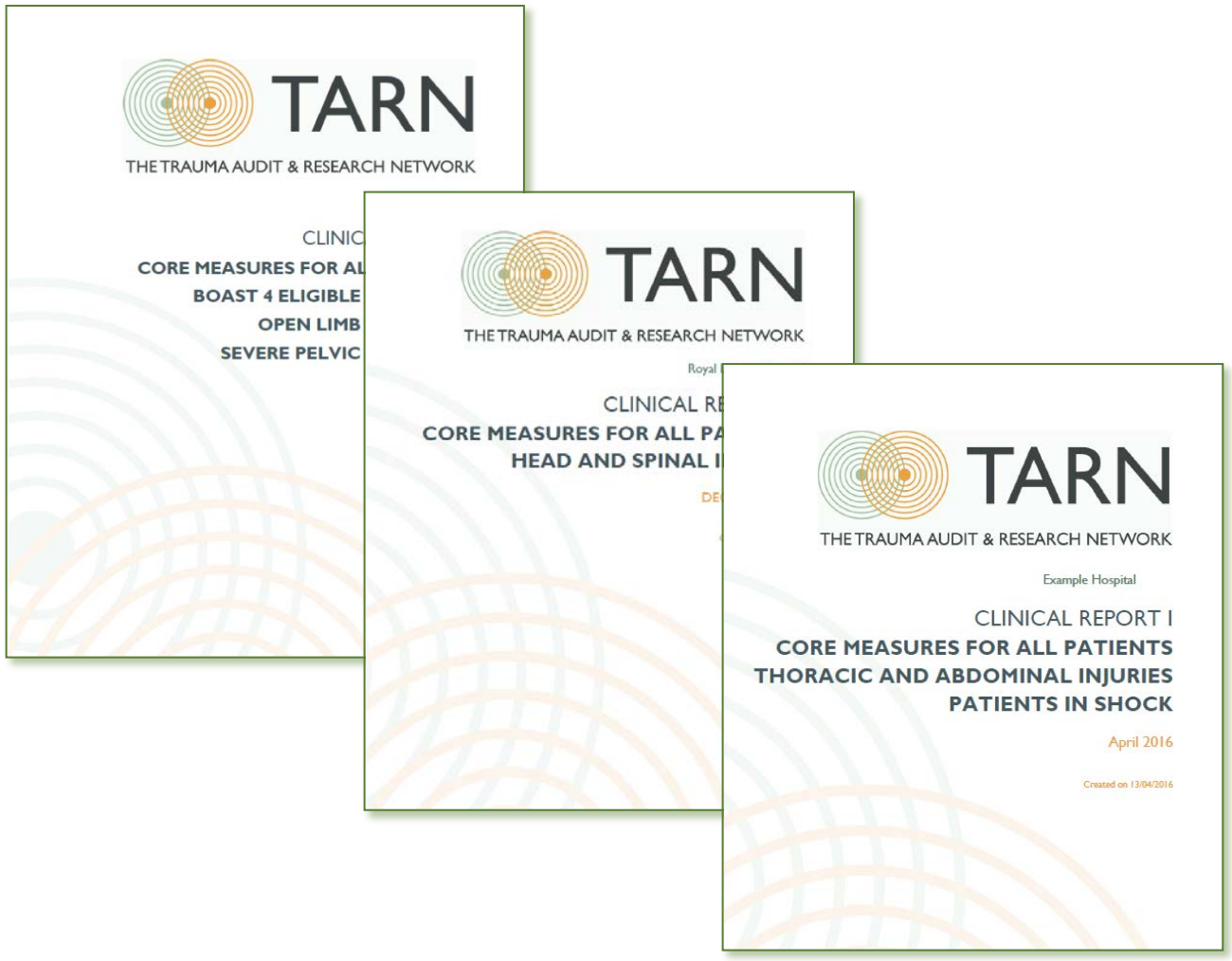
Unexpected deaths in minor/moderate injury
Usually due to poor management of co-morbidity and/or complications

Unexpected survivors with more serious injury
Usually indicates good initial resuscitation and the treatment of head injury in Neurological Centres

Quality Assurance

We ensure that the data submitted to the Trauma Audit & Research Network is checked by an internal validation

TARN Clinical Reports

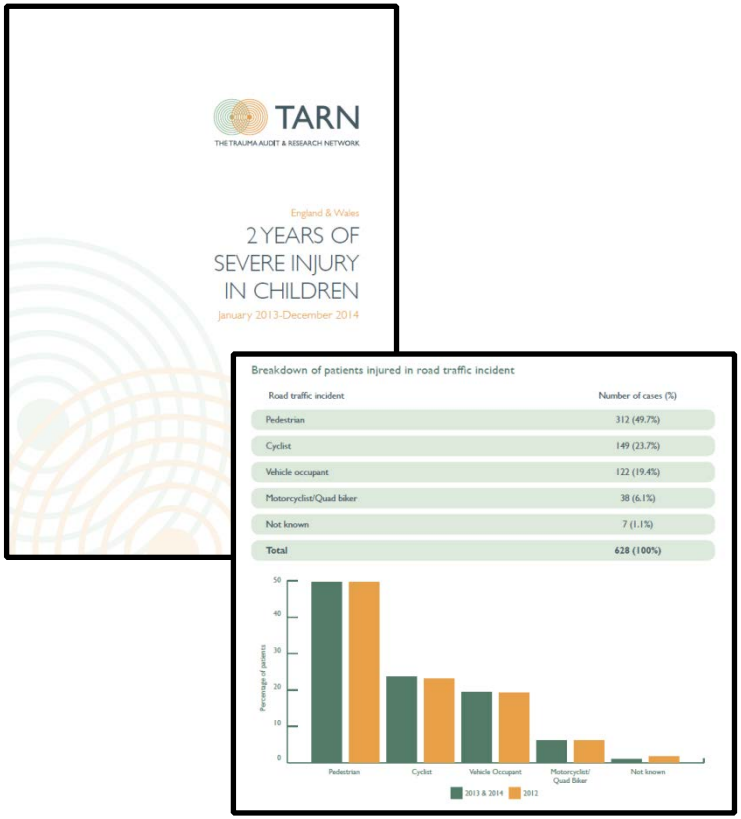


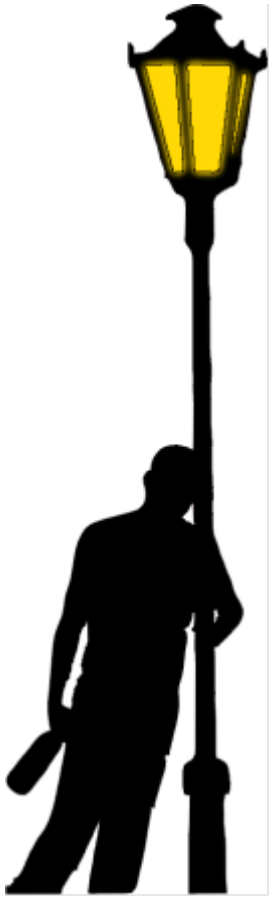
a cautionary tale

Year	Case Ascertainment (Data Completeness)	
	MTC	TU
2010	56.5%	35.9%
2011	69.1%	46.8%
2012	85.3%	58.0%
2013	90.7%	57.3%
2014	93.4%	60.7%
2015	100.1%	67.9%

National Reports

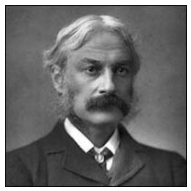
- Children
- Older people
- Head injury





national clinical audit

"People use statistics like a drunken man uses a lamp post ……
…… for support rather than illumination"



Andrew Lang 1844 – 1912
poet, novelist, literary critic, collector of folk and fairy tales.
University of St Andrew

How does audit & research fits together

- Huge database
- Publications
- Inform Guidance
- NHS-E

EMJ Anniversary Issue

Fiona Lecky

Emerg Med J 2015;32:906-908 doi:10.1136/emermed-2015-205460

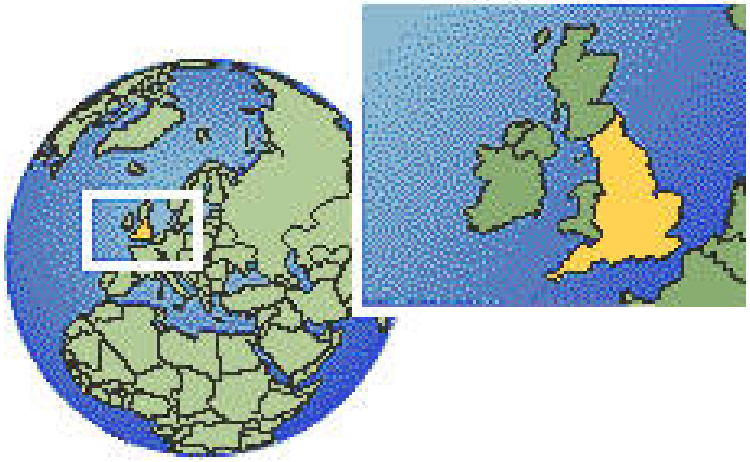
- **Top 10 TARN research publications.** A Edwards
- **Prediction modelling for trauma using comorbidity and 'true' 30-day outcome** O Bouamra
- **The effect of preinjury warfarin use on mortality rates in trauma patients: a European multicentre study** F Lecky
- **Resuscitative endovascular balloon occlusion of the aorta (REBOA): a population based gap analysis of trauma patients in England and Wales.** E Barnard
- **A profile of suspected child abuse as a subgroup of major trauma patients.** F Davies
- **The changing face of major trauma in the UK.** A Kehoe

Major Trauma Services in England - TARN's supporting role

- Background
- TARN
  - Structure and function
  - Injury severity scoring, the Ps model, comparisons of trauma care
  - Supporting change through information-TARN Reports & Research
  - The environment and trauma care
  - Latest TARN innovations

STAG National Meeting
11th November 2016

UK Population 2012



53.5 million

Population Age Pyramid

Increasing Age

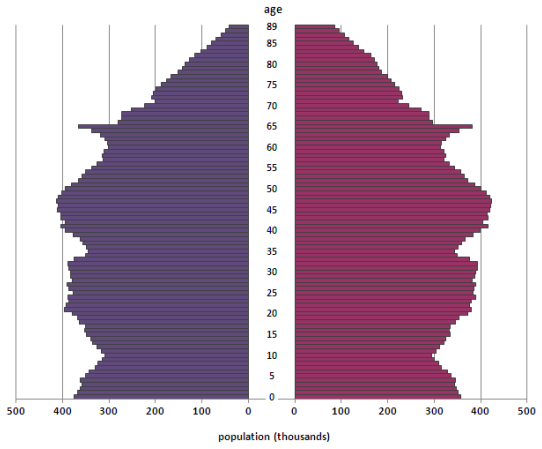


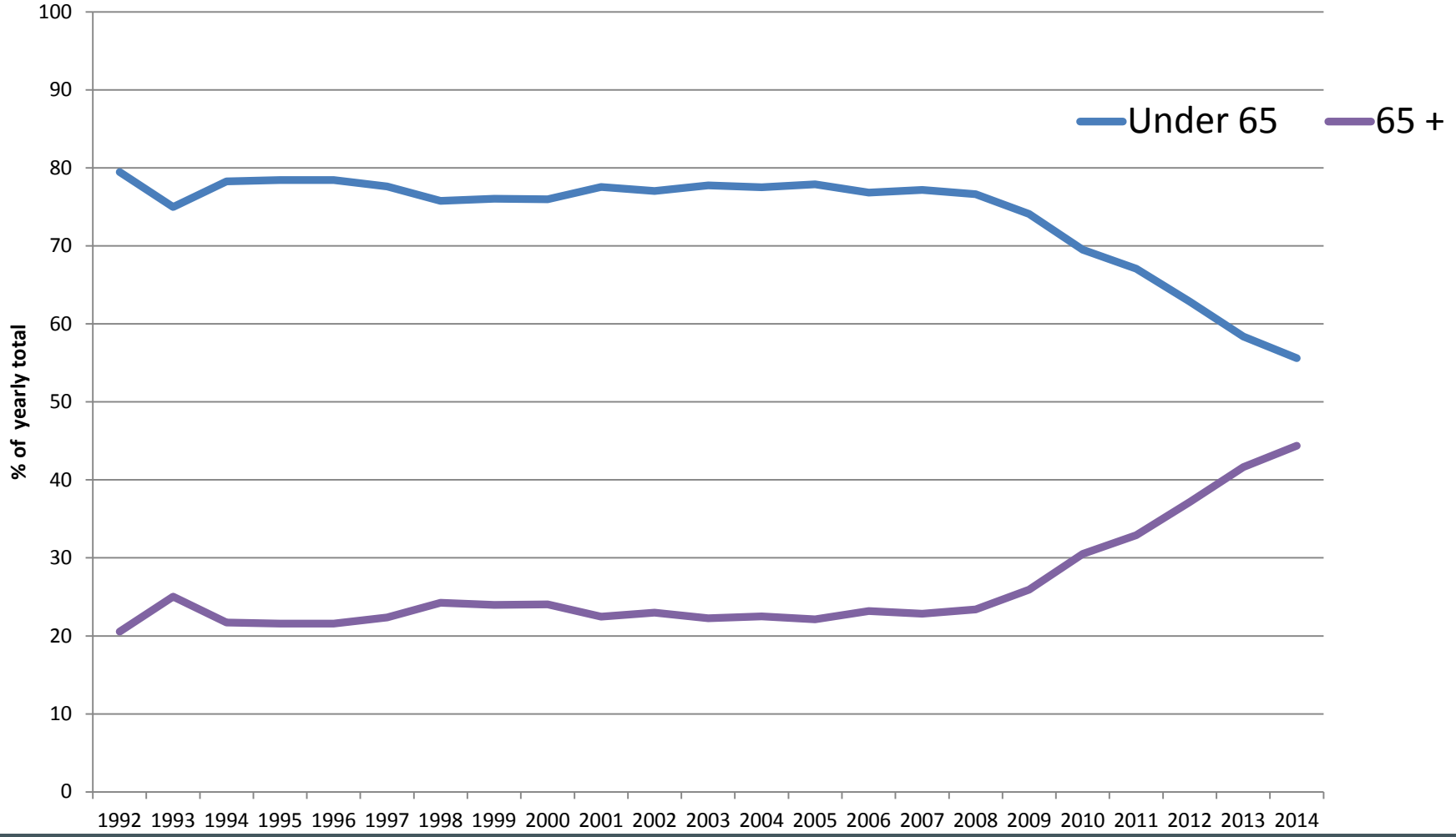
Table 4: Projected population by age, United Kingdom, mid-2012 to mid-2037

Millions

Ages	2012	2017	2022	2027	2032	2037
0-14	11.2	11.7	12.2	12.3	12.2	12.2
15-29	12.6	12.4	12.1	12.3	12.9	13.3
30-44	12.8	12.7	13.3	13.6	13.5	13.2
45-59	12.6	13.3	13.0	12.6	12.4	13.0
60-74	9.4	10.1	10.7	11.6	12.3	12.1
75 and over	5.0	5.5	6.6	7.7	8.5	9.5
75-84	*3.6*	*3.8*	*4.6*	*5.3*	*5.4*	*5.9*
85 & over	*1.4*	*1.7*	*2.0*	*2.4*	*3.1*	*3.6*
All ages	63.7	65.8	68.0	70.0	71.7	73.3
Median age (years)	39.7	40.1	40.6	41.3	42.1	42.8
Under 16	12.0	12.4	13.0	13.1	13.0	13.0

Population Demographics

Patients aged under and over 65 as proportion of TARN dataset



The changing face of major trauma in the United Kingdom

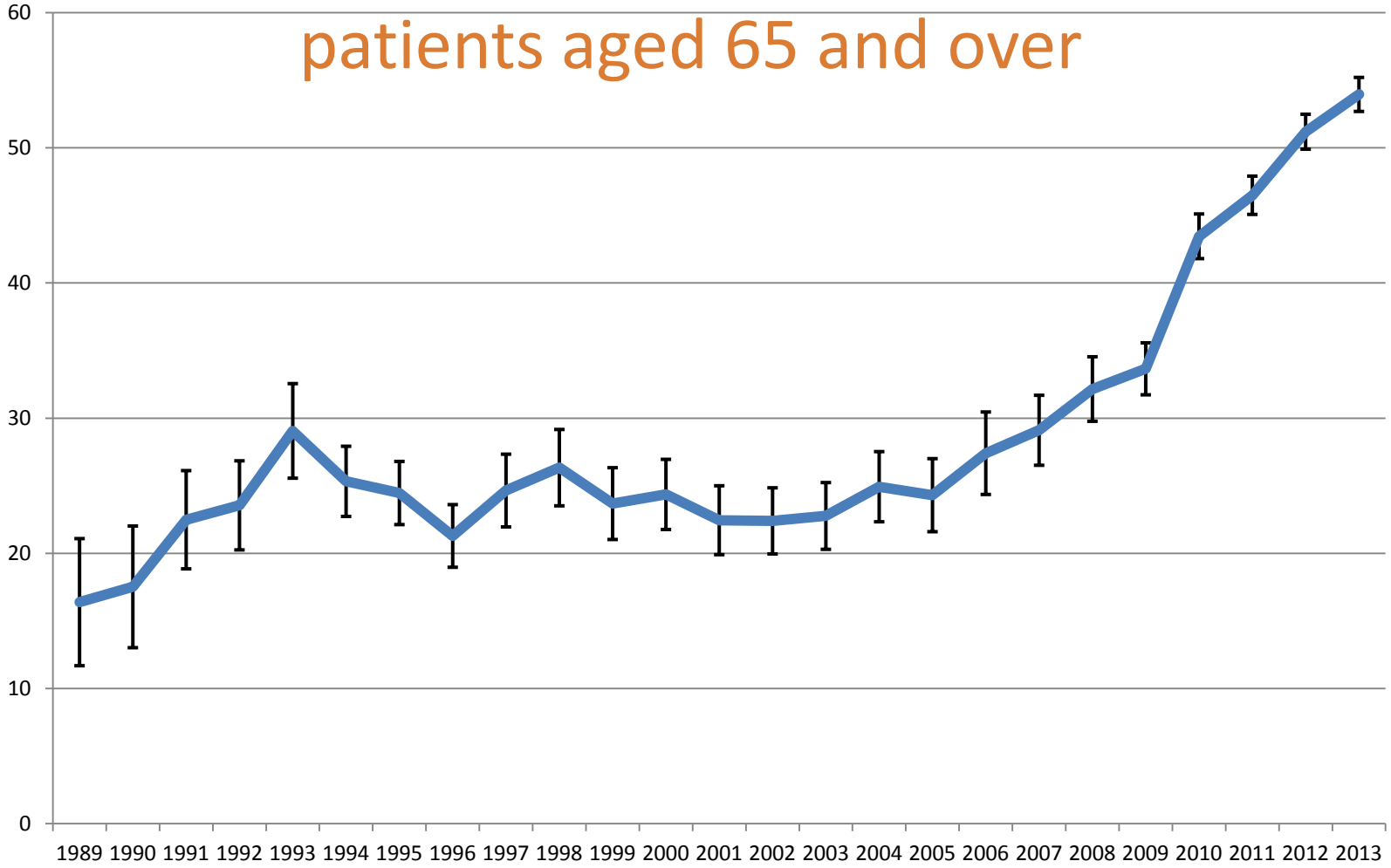
A Kehoe, JE Smith, V Field, G Westran, A Edwards, F Lecky
Emergency Department, Derriford Hospital, Plymouth, UK
Academic Department of Military Emergency Medicine, Royal Centre for Defence Medicine, Birmingham, UK

"Trauma has traditionally been considered a disease of the young, affecting predominantly young males, who are the victims of motor vehicle collisions and interpersonal violence".

Conclusions

"The results of this study show that our major trauma population (in the South West) is becoming more elderly, and the predominant mechanism that precipitates major trauma is a fall from less than 2m".

Percentage of adult head injury patients aged 65 and over



Poor outcomes in older TBI victims

- Comorbidities
- Therapies – such as Warfarin
- Increasing age

All independently increase mortality after TBI

- Standards of care?

Poor outcomes in older TBI victims

Conclusion:

Differences in management may contribute to the observed differences in mortality between younger and older patients with brain contusions.

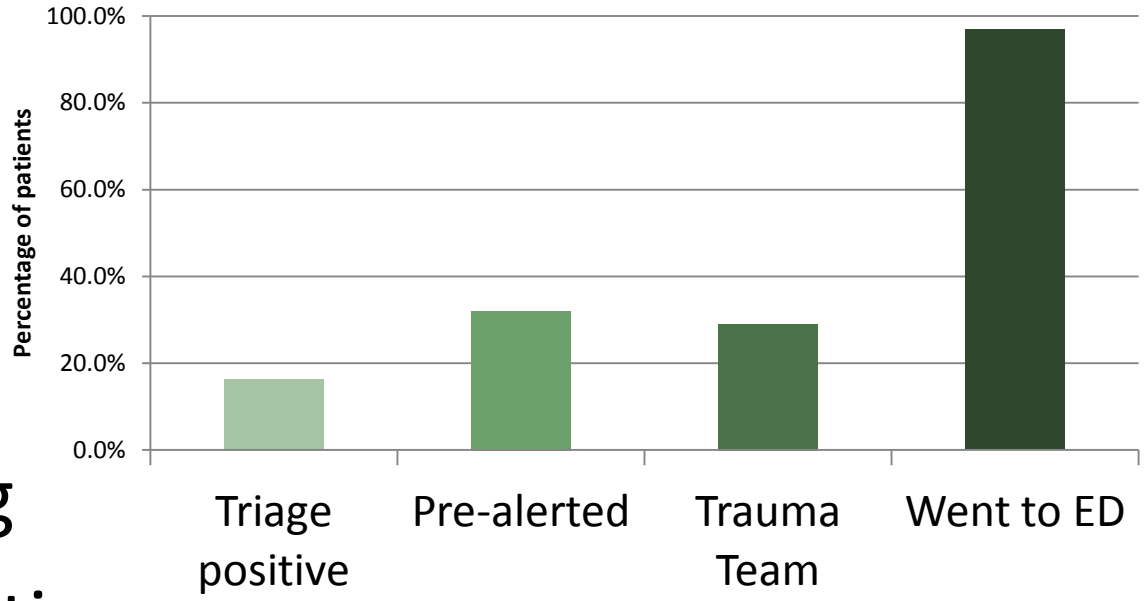
Increased Mortality Associated with Cerebral Contusions following Trauma in the Elderly: Bad Patients or Bad Management?

Matthew A. Kirkman, Tom Jenks, Omar Bouamra, Antoinette Edwards, David Yates, and Mark H. Wilson. Journal of Neurotrauma. August 2013, 30(16): 1385-1390. doi:10.1089/neu.2013.2881.

https://www.ncbi.nlm.nih.gov/labs/articles/23441674/

Consequences of triage tool negative

- No pre-alert
- No trauma team
- Junior doctor assessment
- Delay to scanning
- Delay to intervention
- Few transferred to MTC



21st Century Trauma

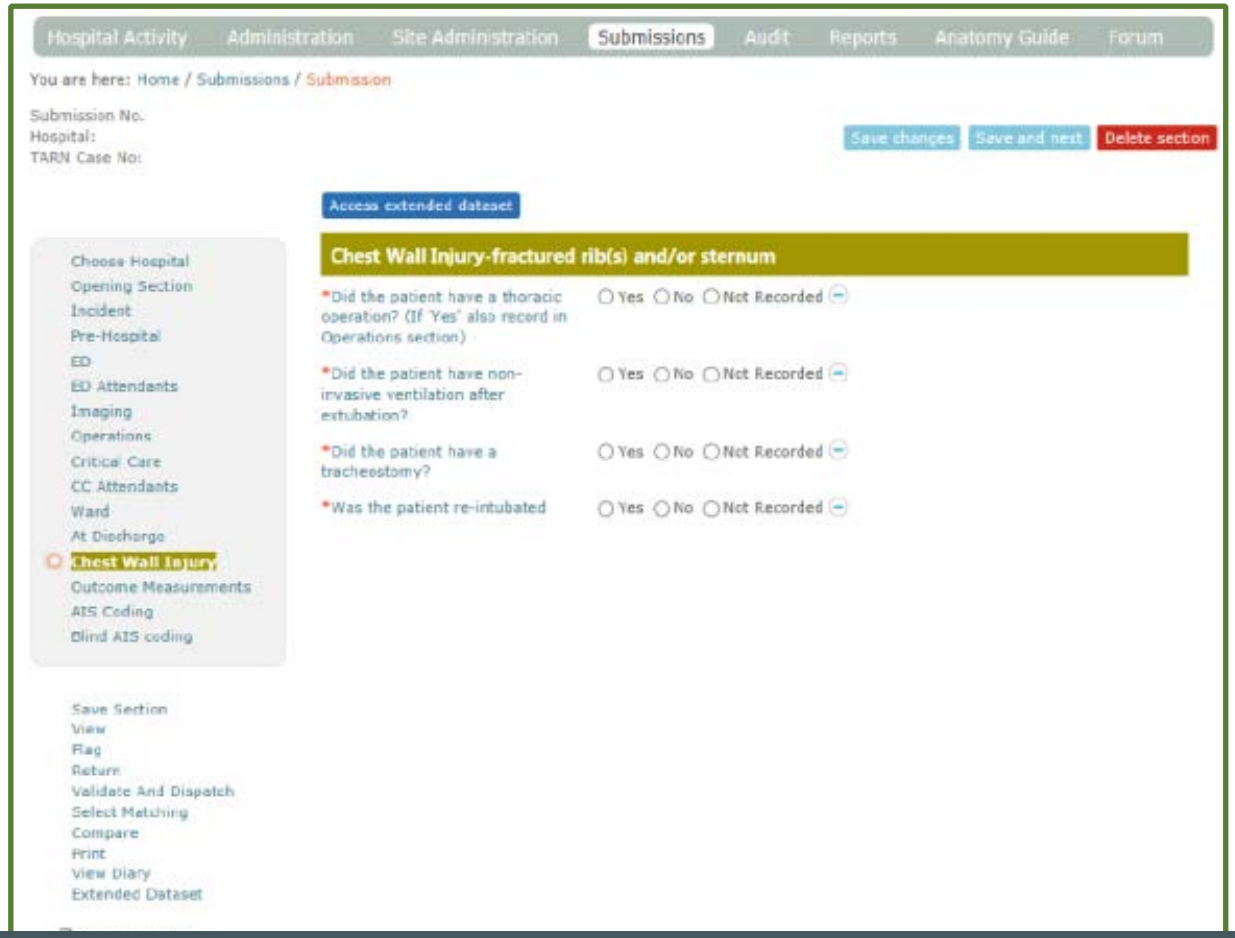
Major Trauma Services in England - TARN's supporting role

- Background
- TARN
  - Structure and function
  - Injury severity scoring, the Ps model, comparisons of trauma care
  - Supporting change through information-TARN Reports & Research
  - The environment and trauma care
  - Latest TARN innovations

STAG National Meeting
11th November 2016

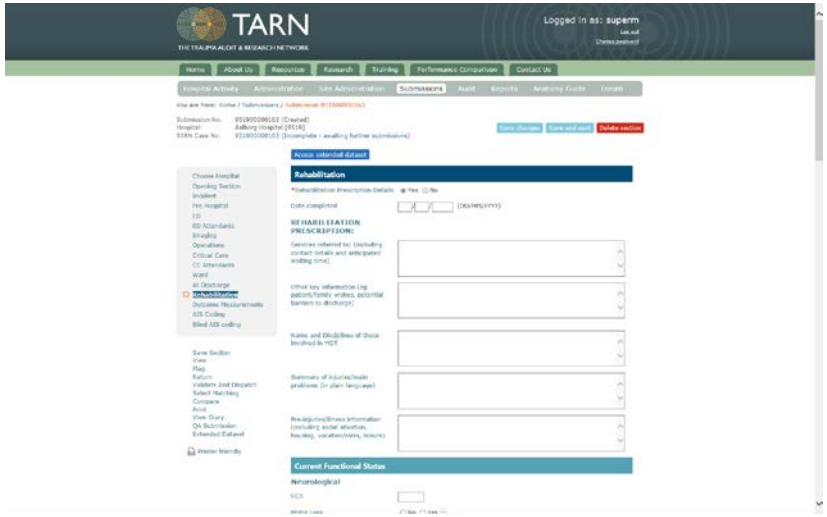
Chest Wall Trauma Screen

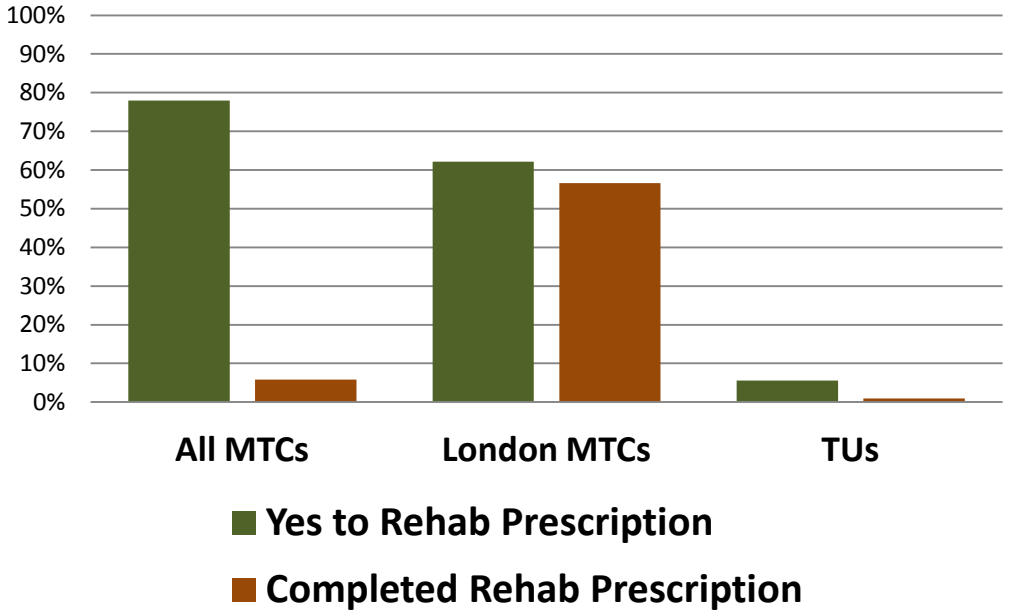
- ✓ Clinicians to ‘own’ measures and set ’own’ targets



TARN
THE TRAUMA AUDIT & RESEARCH NETWORK

RP completion rates 2015





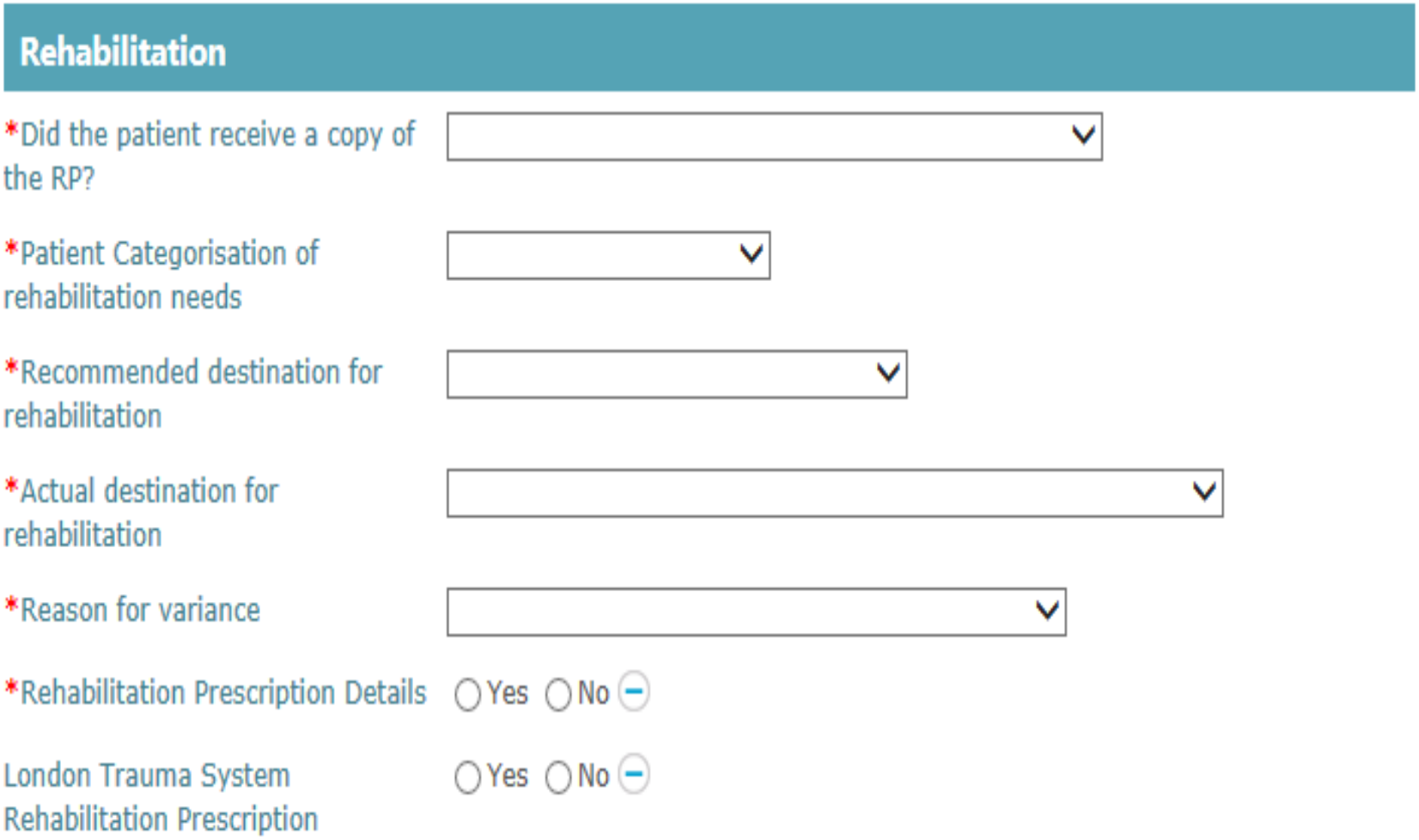
Group	Cases	RP = Yes	Completed RP
All MTCs	27,101	21,122 (78%)	1,581 (6%)
London MTCs	4,654	2,894 (62%)	2,634 (57%)
TUs	30,959	1,723 (6%)	304 (1%)

New rehabilitation questions

- Why
- Developed with Therapists
- Launched July 2016

- Early analyses – from admissions 1st July (3 months)

New rehabilitation questions

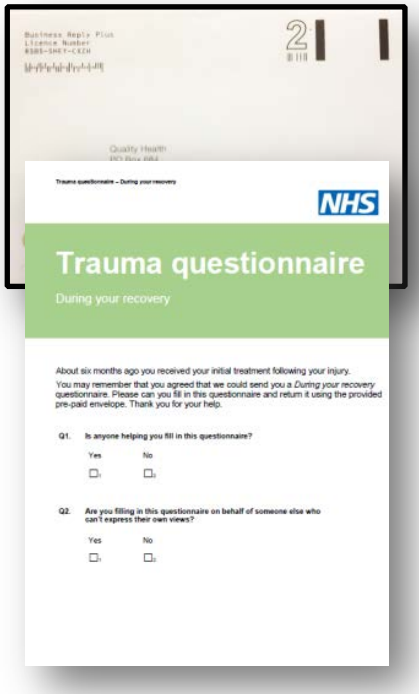


- ✓ Rehabilitation measurement tools added to TARN edCR

- ➢ Datalinkage between HQIP funded UKRoC and TARN
- ➢ Project Manager – Karen Hoffman

Patient Reported Outcome Measures

- 2013 Support from NHS England;
  Professor Chris Moran - NCD for Trauma
  Professor Keith Willett - Domain 3 Lead



- An important extension to TARN

- All MTCs

- Currently - over 4,500 Questionnaires received and matched to patients on the TARN database

PROMS - Initial Findings

Patient Experience – Q1

- Do you think the hospital staff did everything they could to help control your pain?

84% = Yes definitely

At 6 months (Q2)

- As far as you know, was your GP give enough information about your condition and the treatment you had at the hospital?

67% = Yes

QUESTIONS?