



Irish Dashboard Measures

SUPPORT DOCUMENT

March 2018

TO BE READ IN CONJUNCTION WITH THE IRISH DASHBOARD

Introduction

This document addresses key questions relevant to the Irish Dashboard and assists in the understanding of the measures. It explains the numerators and denominators in detail and should be read in conjunction with the Dashboard.

The Dashboard measures were drawn up and agreed by clinicians to allow effective benchmarking in relation to specific measures between hospitals. The Trauma Audit & Research Network has agreed to analyse and format the information ONLY.

Some measures are based on objective evidence, such as NICE guidance. Others reflect experience from senior clinicians in the trauma networks. Some relate to the quality of data submitted to TARN or to process measures such as time to CT scan or frequency of Consultant-led trauma team.

None of the indicators has an associated target and performance may not be 100%. The measures are divided into 3 groups:

- **Data Quality:** 100% may be expected
- **Evidence Based Measures:** Performance may not be 100% and should be viewed in comparison with other Trauma Units.
- **System Indicators:** Performance may not be 100% and should be viewed in comparison with other centres.

Where values of zero are shown on the caterpillar plots, this is likely to represent sites with a very low number of cases for that measure.

Detailed information on Dashboard Measures

Please note that where patient numbers are low, two years of data is used. For all other measures, six months of data is used. For measures using time of incident where this is not recorded, best pre-hospital time is used, selected in the following order: 999 call, ambulance dispatch, ambulance arrival, ambulance departure from scene, time of first attendant or first pre-hospital intervention.

IRE 01 - Quality of patient data submitted to TARN

Period:	Current Reporting Period
Numerator:	Number of core data fields fully completed for patients submitted to TARN
Denominator:	Number of expected core data fields for the patients submitted to TARN and approved
Type:	Data quality
Data fields:	<ul style="list-style-type: none">• If the patient is seen in the Emergency Department then Grade of ED Attendants, Date/Time of ED Attendants, Speciality of ED Attendants data fields are expected to be completed. If the patient is not seen in the ED then these data fields are not expected to be completed.• Glasgow Coma Scale (GCS) should be recorded for all patients (if the patient is transferred into a ward then the GCS is not expected).• If the patient has no GCS recorded in ED or the Critical Care Unit then a recording of intubation or ventilation is expected in the relevant data fields. If details of intubation or ventilation are also missing then no score is applied.• Arrival Date/Time at hospital.• Arrival Date/Time at ED. <i>[Please note that Arrival Date/Time at hospital and Arrival Date/Time in the 1st location should be the same values].</i>• Incident Date/Time (if missing the 999 call Date/Time is used)• If the patient is referred for further care or transferred in the following data fields are counted: Previous hospital, Next hospital, Transfer in reason, Transfer out reason. <i>Other</i> or <i>Not known</i> responses are not counted.• If the patient has a CT scan then the following data fields are counted: CT date/Time• If the patient is treated in theatre and has an operation/procedure then the following data fields are counted: Operation Date/Time, Grade of Surgeon, Speciality of Surgeon, Grade of Anaesthetist• Full injury descriptions (no description should need to be coded with a <i>Not Further Specified</i> AIS code due to incomplete injury descriptions).• Pre-existing medical conditions: if the submission uses the options <i>Other</i> and <i>Not known</i>, these will not be counted.• Pupil reactivity, required for those head injured patients (AIS 3+ in head)
Notes:	The number of core data fields that are relevant for each patient is dependent on the patient's injuries and their treatment. It is not, for example, expected that CT date and time should be recorded where the patient did not have a CT scan.

IRE 02a - All TARN eligible patients submitted

Period: Current Reporting Period
Numerator: TARN approved patients
Denominator: Patients in the 2015 HIPE dataset that fulfil the TARN inclusion criteria
Type: Data quality

IRE 02b - All TARN eligible patients submitted within 90 days of discharge or death (excluding coroner's cases)

Period: Current Reporting Period
Numerator: TARN approved patients submitted within 90 days of discharge or death
Denominator: Patients in the 2015 HIPE dataset that fulfil the TARN inclusion criteria
Type: Data quality
Notes: If a patient submission is returned and then re-dispatched, the initial dispatch date is used.

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

Period: Rolling 2 Years
Numerator: Directly admitted patients receiving CT scan within 60 minutes of arrival
Denominator: Directly admitted patients with GCS <13 on arrival in ED or intubated pre-hospital, with a head injury and received CT scan, with date and time of CT scan recorded
Type: Evidence based
Data fields: Date and time of hospital arrival; ED date and time; Date and time of CT scan
Notes: Direct admissions from the scene of the injury only.
The patient group is defined as any patient with a head injury (AIS 1+) whose first recorded GCS in ED was <13 or was intubated pre-hospital.
Time to CT calculated from the time of arrival in the ED to the time of the scan. If ED arrival time is not recorded, hospital arrival time is used. However, please note that ED date/time should be the same as hospital arrival date/time.
Patients taken to theatre within 2 hours of arrival and before any CT scan are not included in the denominator.

IRE 04 - Hospitals deliver definitive cover of open fractures within BOAST 4 guidelines

Period:	Rolling 2 Years
Numerator:	Patients with ISS > 8 and who have stabilisation of Gustilo 3b or 3c or unclassified open tibial fractures within 24 hours of incident and definitive wound cover within 72 hours of incident
Denominator:	Patients with ISS > 8 Gustilo 3b or 3c or unclassified open tibial fracture.
Type:	Evidence based
Data fields:	Date and time of incident, or best available pre-hospital time if not recorded; Operation; Operation date and time
Notes:	Patients transferred for repatriation, transferred in from abroad, who died within 72 hours of incident, had surgical amputation within 72 hours of incident or best available pre-hospital time are missing are excluded from this measure. For further details of this measure, see appendix 1.

IRE 05 - Tranexamic Acid within 3 hours of incident for patients receiving blood products within 6 hrs. of incident

Period:	Rolling 2 Years
Numerator:	Directly admitted patients who received blood products within 6 hours of injury and were given Tranexamic Acid within 3 hours of injury
Denominator:	Directly admitted patients who received blood products within 6 hours of injury
Type:	System indicator
Data Fields:	Date and time of incident, or best available pre-hospital time if not recorded; Blood product type; Date and time of blood products; Tranexamic acid date and time.
Notes:	Patients with isolated head injuries (AIS severity 3+ head injury with no AIS 3+ severity injury to another body area) and those receiving Beriplex only are excluded from the denominator. Included blood products: FFP, Fibrinogen, Platelets, Cryoprecipitate, Blood/plasma reduced cells, If Tranexamic Acid or blood products are recorded at pre-hospital/scene with no associated time then the time of arrival at hospital is used for these interventions. If Tranexamic Acid or blood products are recorded in ED with no associated time then the time of departure from ED is used for these interventions.

IRE 06 – Hospital deliver consultant led trauma teams within 30 minutes for patients with ISS greater than 15

Period:	Rolling 2 Years
Numerator:	Directly admitted patients with ISS greater than 15 with Consultant present within 30 minutes of arrival in the ED
Denominator:	Patients with ISS greater than 15 directly admitted from the scene to ED
Type:	System indicator
Data Fields:	Hospital arrival date and time; ED date and time; Grade of doctor; Date and time of doctor
Notes:	Consultants recorded at any in hospital location are eligible. If ED arrival time is not recorded, hospital arrival time is used. <i>[NB: hospital arrival and 1st location date/time should be the same].</i>

IRE 08 - Proportion of patients with GCS <9 with definitive airway management within 30 minutes of arrival in ED

Period:	Rolling 2 Years
Numerator:	Directly admitted patients with a GCS < 9 on arrival in ED who are intubated or have a definitive surgical airway within 30 minutes of arrival in ED
Denominator:	Directly admitted patients admitted to ED with GCS < 9 or intubated pre-hospital.
Type:	System indicator
Data Fields:	GCS in ED; Airway Status, Airway Support, Breathing Status and Breathing Support pre-hospital
Notes:	Intubation or ventilation is identified using one of the following procedures: Intubation, Cricothyroidotomy, Tracheostomy

IRE 09 - Proportion of directly admitted patients receiving CT scan within 60 minutes of arrival at Hospital

Period:	Current Reporting Period
Numerator:	Directly admitted patients receiving CT scan within 60 minutes of arrival
Denominator:	Directly admitted patients receiving CT scan within 12 hours of arrival and date/time of CT recorded
Type:	System indicator
Data Fields:	Transfer type; arrival date and time; ED date and time; CT date and time
Notes:	Time to CT calculated from the time of arrival in the ED to the time of the scan. If ED arrival time is not recorded, hospital arrival time is used. However, please note that ED date/time should be the same as hospital arrival date/time. Patients taken to theatre within 2 hours of arrival and before any CT scan are not included in the denominator.

IRE 10 - Proportion of patients with an ISS of more than 8 that have a rehabilitation assessment completed

Period:	Current Reporting Period
Numerator:	Patients with ISS > 8 with rehabilitation assessment recorded or where a RP was recorded as inappropriate
Denominator:	Patients with ISS > 8
Type:	System indicator
Data fields:	Rehabilitation prescription
Notes:	Any patients that died within 2 days of arrival at the TU are excluded from the denominator.

Appendix 1: further information for standard IRE 04 (BOAST 4 patients)

This measure is based on the British Orthopaedic Association Standards for Trauma (BOAST) 4, details of which can be found at <https://www.boa.ac.uk/wp-content/uploads/2014/05/BOAST-4-The-Management-of-Sever-Open-Lower-Limb-Fractures.pdf>

Operative procedures defined as stabilisation, with OPCS Classification of Interventions and Procedures code

Description	OPCS codes
Acute Bone Shortening	W17.4
Application of Ilizarov Frame	W30.8
Primary Closed reduction and internal fixation	W24.9
Primary closed reduction and External fixation	W25.8
Primary closed Reduction Fracture	W26.8
Primary open Reduction Fracture	W22.9
Primary open Reduction & External Fixation	W20.8
Primary ORIF - Nail	W19.8
Primary ORIF - Pin	W19.8
Primary ORIF - Plate	W19.8
Primary ORIF - Screw	W19.5
Primary ORIF - unspecified	W19.9
Primary ORIF - Wire	W19.6
Secondary open Reduction & External Fixation.	W23.5
Secondary ORIF	W23.1

Operative procedures defined as definitive coverage, with OPCS Classification of Interventions and Procedures code

Description	OPCS codes
General	
Direct wound suture	S42.8
Free flap - unspecified	S27.9
Graft of skin - unspecified	S39.9
Local fasciocutaneous flap	S25.2
Local muscle flap	Y64.9
Specific	
Axial pattern distant flap of skin	S20.2
Axial pattern local flap of skin	S27.2

Description	OPCS codes
Axial pattern local subcutaneous pedicle flap	S26.2
Flap muscle - Microvascular free tissue transfer	T76.1
Flap skin - Distant random pattern	S20.4
Flap skin - Local random pattern	S27.4
Flap skin - Local sensory	S22.4
FLAP SKIN - Neurovascular island sensory	S22.2
Harvest flap - Digitorum brevis (extensor)	Y64.5
Harvest flap - Gastrocnemius	Y64.3
Harvest flap - Gastrocnemius & skin	Y62.3
Harvest flap - Gluteus maximus & skin	Y61.4
Harvest flap - Gracilis muscle	Y64.2
Harvest flap - Latissimus dorsi	Y63.1
Harvest flap - Latissimus dorsi muscle & skin	Y61.3
Harvest flap - Pectoralis & skin	Y61.2
Harvest flap - Rectus abdominis & skin	Y61.5
Harvest flap - Serratus anterior	Y63.2
Harvest flap - Soleus muscle	Y64.4
Harvest flap - Tensor fasciae latae & skin	Y62.2
Harvest flap - Trapezius & skin	Y61.1
Harvest lower leg flap of skin and fascia	Y59.6
Harvest Skin Graft-Other Specified	Y58.8
Harvet Flap Epigastric (Inferior)	Y63.3
Meshed split autograft skin	S35.2
Pedicle flap - Distant myocutaneous subcutaneous	S17.2
Pedicle flap - Fasciocutaneous subcutaneous	S18.2
Pedicle flap - Local fasciocutaneous subcutaneous	S25.2