



Irish Dashboard Measures

SUPPORT DOCUMENT

August 2021

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 04a - BOAST open lower limb long bone fractures: Orthopaedics & Plastics consultants present at first debridement.

Period:	Rolling 2 Years
Numerator:	Where Orthopaedics Consultant & Plastics consultants are both present at first debridement.
Denominator:	Open fractures of lower limb long bones (regardless of Gustilo grade)
Type:	Evidence based
Data fields:	Operations; Operation date and time, Speciality and Grade of surgeons.
Notes:	<p>Surgeon 1 and Surgeon 2 must be the most senior orthopaedic surgeon and the most senior plastic surgeon in the room.</p> <p>Patients transferred for repatriation, transferred in directly 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 2.</p> <p>Lower limb long bones: Femur, Tibia or Fibula.</p> <p>Only Primary fixation (internal or external) selected from the BOAST surgical stabilisation dropdown will be used in this numerator and debridement is inherent in these codes. If fixation selected from generic Limbs dropdown, these will not be included in the numerator.</p>

IRE 04b - BOAST open lower limb long bone fractures: Soft tissue coverage within 72 hours of incident

Period:	Rolling 2 Years
Numerator:	Soft tissue coverage performed within 72 hours of incident
Denominator:	Open fractures of lower limb long bones (regardless of Gustilo grade)
Type:	Evidence based
Data fields:	Date and time of incident, or best available pre-hospital time if not recorded; Operation; Operation date and time; AIS code.
Notes:	<p>Patients transferred for repatriation, transferred in directly 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 2. Lower limb long bones: Femur, Tibia or Fibula.</p> <p>Only Soft tissue coverage chosen from the BOAST Soft Tissue coverage dropdown will be used in this numerator. If chosen from the generic Skin dropdown, these will not be included in the numerator.</p>

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

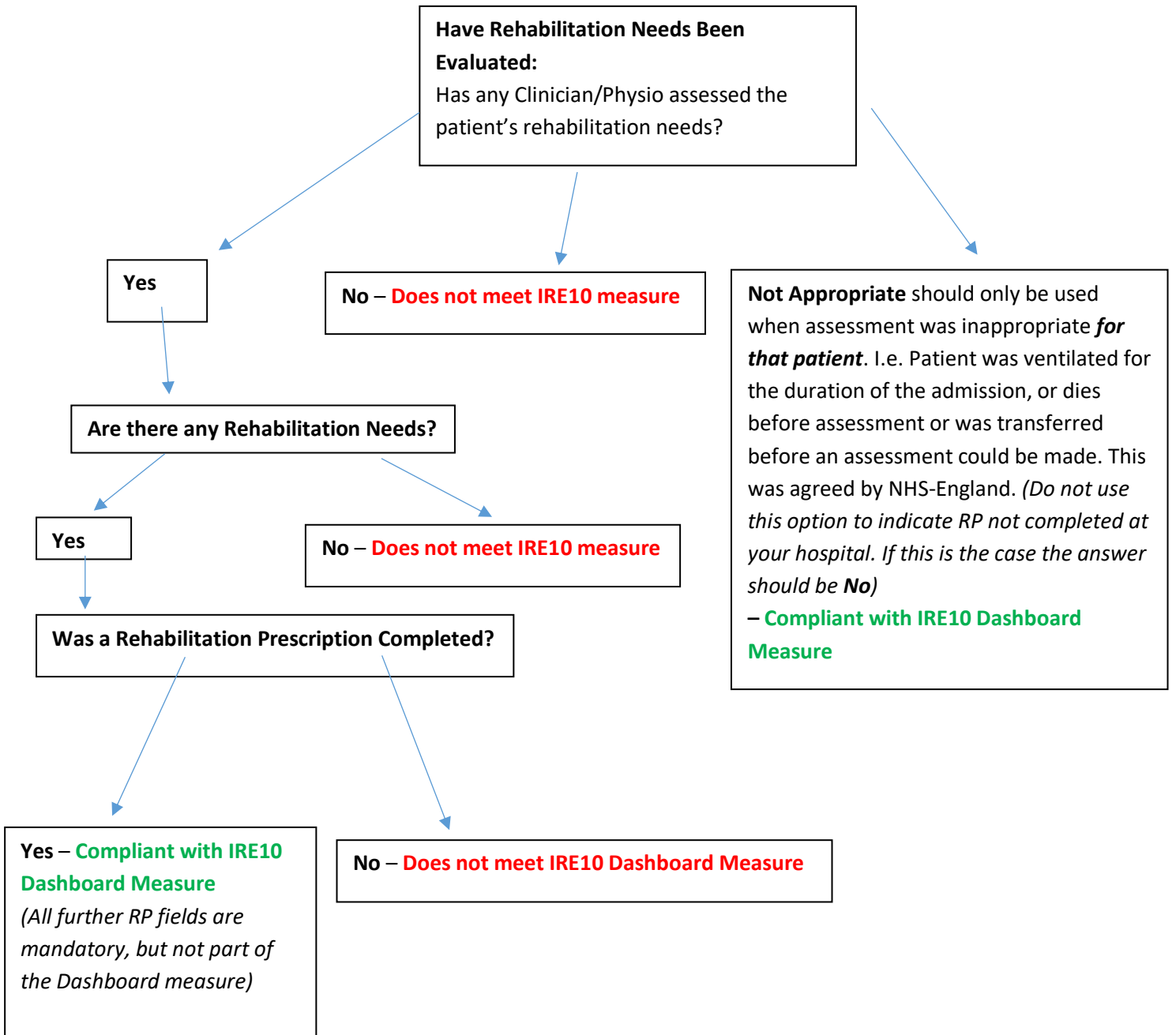
Period:	Rolling 2 Years
Numerator:	Directly admitted patients with a GCS < 9 on arrival in ED who are intubated or have a definitive surgical airway within 30 minutes of arrival in ED
Denominator:	Directly admitted patients admitted to ED with GCS < 9 or intubated pre-hospital.
Type:	System indicator
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:	<p>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.</p> <p>Patients taken to theatre within 2 hours of arrival and before any CT scan are not included in the denominator.</p>

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 prescription recorded or where it was impossible to assess rehabilitation needs
Denominator:	Patients with ISS > 8
Type:	System indicator
Data fields:	Have rehabilitation needs been evaluated; Are there rehabilitation needs; Has a rehabilitation prescription been completed
Notes:	<p>This measure reports the total number of patients assigned an ISS of more than 8 who have had a rehabilitation prescription completed, or whose rehabilitation needs were impossible to assess.</p> <p><i>See flow diagram on next page</i></p> <p>Any patients that died within 2 days of arrival are excluded from the denominator.</p>



Appendix 2: further information for standard IRE 04a & b (BOAST patients)

Operative procedures defined as first Debridement, with OPCS Classification codes:

Description	Group	OPCS codes
BOAST- Internal fixation: Nail & Debridement	BOAST Fixation/Stabilisation	W19.2 W19.3
BOAST- Internal fixation: Plate & Debridement	BOAST Fixation/Stabilisation	W20.1
BOAST - Internal fixation: Other & Debridement	BOAST Fixation/Stabilisation	W19.8
BOAST - External fixation: Application of Circular frame & Debridement	BOAST Fixation/Stabilisation	W30.8
BOAST - External fixation: Application of Monolateral (Non-circular) frame & Debridement	BOAST Fixation/Stabilisation	W30.8
BOAST - POP & Debridement	BOAST Fixation/Stabilisation	X48.1

Operative procedures defined as definitive soft tissue coverage, with OPCS Classification codes:

Description	Group	OPCS codes
BOAST- Direct closure	BOAST Soft tissue coverage	S42.1
BOAST- Split Thickness Skin Graft	BOAST Soft tissue coverage	S39.9
BOAST- Local or perforator base skin/fascia flap	BOAST Soft tissue coverage	S25.8
BOAST- Local Muscle / musculocutaneous flap	BOAST Soft tissue coverage	Y64.9
BOAST- Free Tissue Transfer	BOAST Soft tissue coverage	Y64.9
BOAST- Other	BOAST Soft tissue coverage	T96.9