Public Health Scotland

Scottish Trauma Audit Group (STAG)

Definitions for eSTAG

Document Control

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Other Related Documents	Abbreviated Injury Scale 2005, Update 2008
Comments to	Angela Khan

Document History			
Version	**Date**	**Comment**	**Author(s)**
V0.01	30/05/2016	1st Draft Created	A Khan
V0.02	02/11/2016	2nd Draft Created following official handover of dataset to IT Developer – formatted document with numbering and field names from dataset.V0.8	L Hunter
V0.03	11/04/2017	3rd draft created, review of definitions, appendices and final proofing.	A Khan
V0.04	01/05/2017	Changes following PW review of bookmarks	A Khan
V0.05		Updated during User Acceptance Testing of eSTAG	A Khan
V0.51	23/10/2017	Version split to contain definitions only and separate User Manual created.	A Khan
	15/11/2017	Updated VJ/AK	A Khan
V0.6	16/11/2017	Additional bookmarks added LH	L Hunter
V0.7	05/12/2017 11/12/17	Updates to definitions following comments from LACs Updated (OtherSpec, Patient_stay_after_30days MTCCare, achievable etc.)	A Khan L Hunter
V0.8	19/12/17	Updated following UAT feedback from HD.	L Hunter
V0.9	22/01/18	Updated to include new blood tests and bookmarks	A Khan
V1.0	20/02/18	Updated to fix bookmarks and clarify definitions for psych episode and PROMs	A Khan
V1.1	27/02/18	Extract facility AND data extract definitions	A Khan
V1.2	05/03/18	Updates to lists and definitions (version not yet in eSTAG)	A Khan
V1.3	07/06/2018	New updates to definitions and bookmarks. Additional fields.	A Khan
V1.4	05/07/2018	Updated following UAT.	A Khan
V1.5	20/08/2019	Updated following Change requests 26 -30, clarification following discussions at Communication meetings, and the introduction of local and national questions.	A Khan
V1.6	01/02/2020	Changes from 1.5 in highlighted in green. Updates following Change Requests 31-33.	A Khan
V1.7	16/07/2020	Changes following Change requests 31-34, move to new Public Health Scotland and some of the suggestions made during recent dataset review (other suggestions require further change request). Updates highlighted in yellow.	A Khan

Content

Introduction

The objective of this document is to ensure that STAG has comprehensive, robust and standardised data.

eSTAG has been developed to support the collection of trauma data in order to report on process and outcome measures to help target and support quality improvement for this patient group. One of the key objectives will be to support the introduction and development of the Scottish Trauma Network, by reporting the compliance with the Key Performance Indicators (KPIs) for this network.

eSTAG has real time linkage with a subset of Scottish Ambulance Service (SAS) data ensuring that where possible data are only collected once.

Standard reports have been produced in Tableau™ and this information is updated daily from data entered into eSTAG the day before ensuring that reports are using current data. There is also the ability for NHS staff to create bespoke reports within eSTAG (see chapter 5).

The development of eSTAG and Tableau™ reporting meets strict information governance standards to ensure that General Data Protection Regulation is adhered to.

General overview

https://apps.nhsnss.scot.nhs.uk/estag/login eSTAG login page	
https://viz.nhsnss.scot.nhs.uk/ Tableau™ (standard reports) login page	
https://useraccess.nhsnss.scot.nhs.uk/ User Access System login page (to request access to Tableau reports)	
Colour coding	
	The data fields that are calculated or derived by eSTAG, following data entry and validation of other fields, are colour coded amber (e.g. age is derived when a full date of birth is recorded and validated).
	The data fields that are only collected for paediatric patients (age < 16 years on date of attendance) have field names in green text. These will only be editable when the date of birth or age is entered and age is < 16 years.
	Scottish Ambulance Service (SAS) data will be populated into eSTAG where appropriate. The 'link' between eSTAG and the Information Services Divisions (ISD) Corporate Data Warehouse (CDW), can be done once mandatory fields have been recorded and validated. The benefit of this linkage is to ensure that 'where possible' data are only collected once. The appropriate information governance processes have been agreed by both ISD and SAS to allow this linkage.

Field and question types	
Primary and secondary questions	A primary question determines whether a secondary question(s) needs to be asked therefore it will not be possible to complete a secondary question without answering the primary question it relates to (e.g. if a patient's mechanism of injury was 'moving vehicle accident' then you will be asked MVA type and patient position in vehicle whereas if MOI is a 'fall' then these questions will be greyed out as they are not applicable).
Date field	Enter a date in either of the following formats: • (DDMMYYYY); or • Click on the calendar to record the date. If the date is not recorded, then click on the box 'not recorded'.
Time field	Enter the time in the following format: (HHMM). If a date is not recorded, then the time field will grey out. If the time is not recorded, then click on the box 'not recorded'. Notes: Midnight (00.00) is not allowed. If the patient attended at exactly 00.00, please record the time as 00.01 ensuring you enter the correct date. Please note that a 'not recorded' time will show as midnight in any data extract. This time has been excluded from any STAG analysis and should be excluded from any bespoke analysis carried out. Please speak with a member of the STAG team if you need further clarification.
Drop down list	This is a pre-set list where one choice should be made. Select the down arrow button to show the list. A scroll button may be available when a list has many options. For long lists it may be easier to type the first letter of the option you require (e.g. typing O in the specialty list will take you to the first option with an O, in this case Ophthalmology). Once the choice has been made, the list will close and the option will show in the box. There will be an option at the top of the list which looks "empty" and this will clear the choice made, if entered in error. These lists will be maintained by the STAG central team so please contact us if you think a list needs updated.
Tick selection box	These are used to: • Confirm that the information is not recorded; and • Choose multiple answers to one question (e.g. additional information) Click on the box to insert a tick and click again to remove the tick if clicked in error.
Auto population	Some fields will auto populate if certain criteria are met e.g. if a patient is admitted to HDU from ED then 'HDU stay' will auto populate = yes on the outcome tab.

General definitions	
Patient ID and Episode ID	A Patient ID and Episode ID will be allocated by eSTAG. Each Patient ID will be unique and each Episode ID will be unique within the national database.
STAG Number (StagNo)	This information will be derived once the following information has been entered: **1.** First hospital (name) **2.** Year of arrival in ED or year of admission to first hospital (if the patient did not attend ED) The number consists of a short code for the first receiving hospital (with an ED), and then the year of arrival followed by a 5 digit unique number e.g. AYR1701010.
First hospital	The First hospital is the first hospital the patient attends with an Emergency Department (ED); even if they do not attend the ED. Hospitals without an ED are referred to as a **Minor Injury Unit (MIU)/other** within this database.
MIU/Other	Sites including MIUs, small hospitals and health centres in rural areas that carry out ED related activity and are GP or nurse led. They may or may not be open 24 hours. See the link below for more details: NHS Scotland Accident and Emergency sites Please see Appendix one for a list of all hospitals or health centres classified as a **MIU or other** facility.
Functions on home page	
Search	The search function is split into 'patient ID data' on the left hand side of the screen and 'episode ID' data on the right hand side of the screen. If you want to view all records for your hospital, click on '**search patients'**. To narrow the search: • Click on relevant option(s) and then '**Search patients**' at the bottom or top of this page to list all the records that meet the criteria. • Click on '**Select**' in the 'Action' column (last column), on the row of the patient record you want to view. • Select '**view'** or '**edit**' to the right side of the record you want to review, to open this record. Note: Only Audit Coordinators have edit rights. • Tabs can be found down the left hand side of the screen that will take you into each section of the record. • To return to the search list, click on the '**back button'** until you have the option to click on '**Patient Search Results'**. Notes: The wildcard character % can be used in searches eg EH% will bring up all postcodes that start with EH. To view all patients who were treated in your hospitals within a given timeframe enter the relevant dates in the 'arrival' and 'admitted' boxes and ensure 'or' is selected between these fields.

Export	See export facility section (5).
Reporting	A link to reports in Tableau™ appears here. Your username and password are the same as eSTAG. Please note that access to these reports has to be sought via the User Access System – details on how to do this can be found at www.stag.scot.nhs.uk
User contact	This takes you to the STAG Central Team contact details. Please contact us if you have any issues.
User manual	Click here for a full version of the Definitions Document.
Functions within patient record	
Home	This will take you back to the home page.
Add comment	This comments section is for Clinicians only; it is intended that it will be used to add a brief summary following review eg KPI compliance, outcome etc. Add comment in the box and then click save or cancel. After clicking on save, you will be asked to confirm this. Please note that the comment cannot be edited after this has been confirmed. eSTAG will add a date and name stamp to each comment. **Please ensure that no identifiable information is recorded in the comments section e.g. staff names. Please use specialty and grade if it is important to mention this in events.** Maximum of 1000 characters.
Print (episode or tab)	Print function allows you to print episode (all tabs) or tab (tab that you are currently on). Please only print the information you need, and ensure you follow local confidentiality guidelines.
Back	Takes you back to the last page. Please note that this will not take you through the tabs within the patient record, but back to the last page you were in before this.
Screen resolution and Browsers	
Screen resolution	Screen resolution of 1024x760 work best. If you go below 1024 then you may get issues with formatting.
Browsers	eSTAG works with Internet Explorer 11 or Firefox. Work is currently underway to allow compatibility with other browsers e.g. Edge.
Compatibility mode	Some users have had an issue with formatting (text in export showing over two lines instead of one etc.). If you have this issue: Click on Tools (within internet browser); Click on Compatibility View Settings Make sure scot.nhs.uk is in the 'Add this website' box, then click add.

Data Definitions (by tab, in eSTAG)

The data definitions are broken up into the page (or tab) they appear on within eSTAG. Each page is listed on the left hand side of each screen within a patient episode.

Patient tab

Question number	Description on screen (field name)	Guidance
1.01	CHI (CHI)	Record whether the patient has a CHI available from the following options: **No – please read notes before choosing this option.** **Yes** If the answer = Yes, record the patient's CHI number. If the CHI has been recorded during the creation of a new patient, the information will be copied over onto this field. Derived CHI and UPI – see notes. Notes: **Derived CHI and UPI** – eSTAG will search the CHI database for a patient's CHI following certain data being saved and validated i.e. patient forename, surname, data of birth and gender. All patients who are allocated a CHI will also have a Unique Patient Identity (UPI) which is derived from the same data source. In situations where a patient has more than one CHI, one of these numbers will be assigned as the UPI and if a patient has only one CHI this will become their UPI. IF the patient is non-resident in Scotland, then a CHI will not be available and No should be entered for CHI available. For Scottish residents, if no CHI is found but a UPI is derived, please copy this number into the CHI field. If no UPI has been derived and you have no information on CHI then answer No to CHI available, prior to discharging the patient from the audit.
1.03	Patient Forename (Forename)	Record the patient's first name. This is recorded during the creation of a new patient and is then copied onto the 'Patient' tab within eSTAG. Note: It is assumed that a name will be known for most patients at the time a record is created. If a name is not known, please contact the central STAG team for advice. During the creation of a record, a search is carried out to find any open or closed records for the same patient. Please note that you can update the name of the patient in the patient tab, but then if the patient has another record, these will not be linked. Please contact central STAG team to seek advice if the patient name needs to be changed.

Question number	Description on screen (field name)	Guidance
1.02a	Patient Surname (Surname)	Record the patient's surname. This is recorded during the creation of a new patient, and is then copied into the 'Patient' tab within eSTAG. Note: It is assumed that a name will be known for most patients at the time a record is created. If a name is not known, please contact the central STAG team for advice. During the creation of a record, a search is carried out to find any open or closed records for the same patient. Please note that you can update the name of the patient in the patient tab, but then if the patient has another record, these will not be linked. Please contact central STAG team to seek advice if the patient name needs to be changed.
1.02b	Previous Surname (PreSurname)	This is no longer collected.
1.04	Patient date of birth available (FullDOB)	Record whether a full DOB is available: **Yes or No.** ACTION REQUIRED IF A FULL DOB = No Please record an approximate age (on the Injury score tab) which will be automatically updated if a DOB is later recorded. Notes: An age is important to determine as early as possible because: • The dataset has additional questions if the patient is ≤ 16 years old and; • The Probability of survival (Ps) calculation requires an age.
1.05	Patient DOB (DOB)	Record the patient's date of birth on the date of attendance at the FIRST hospital. Notes: • The First Hospital is the first hospital the patient attends that has an ED for the purpose of this audit. • The patient's age will be displayed at the top of all pages and within the Injury score page. The age is derived from the DOB when available.
1.06	Patient Gender (Sex)	The patient gender is required during the initial creation of a patient record, and will be copied to this field. Record the sex of the patient at birth: **Female** **Male** Note: The patient's sex at birth is required as this is part of the Probability of survival (Ps) calculation.

Incident tab

Question number	Description on screen (field name)	Guidance
Incident details		
2.01	Are incident details available? (Incidentdetail)	Record whether any incident details are available: **Yes or No.** Notes: • Enter yes; even if only part of the information is available (eg a date but no time). • This information may become available at a later time therefore you can change the answer from no to yes.
2.02/2.03	Date and time of incident (IncidentDate/ IncidentTime)	Record the date and time of the trauma incident. If either or both the date and time is not recorded or unknown, click on the appropriate not recorded box. Notes: • Record the time of the incident as the earliest documented time (eg if ED documentation says the patient fell at 12.15 however the PR documents a call start time of 12.10 then use 12.10 - unless there is evidence that suggests delay in calling SAS). • This information is usually found on the Scottish Ambulance Service (SAS) Patient Report (PR).
2.04a	Incident Postcode available (IncidentPostcodeAvail)	Record whether the postcode where the trauma incident occurred is available using the following options: **At sea (Scottish coastline)** **Mountains/hills (Scotland)** **Yes** **Not recorded** **Not known** – documentation states that the incident location is unknown **Out with Scotland** Note: The postcode may be available on the PR if the patient arrived by SAS or if the location name is available, a postcode may be found by entering this into a search engine (eg incident occurred at Strathclyde Country Park and a Google search of this supplies a postcode of ML1 3ED). Postcode is preferable to at sea or mountain/hill options however if a postcode is not available and these codes are relevant then please use. If coordinates are known, please contact STAG inbox for postcode details.
2.04b	Postcode of incident (Incidentpostcode)	Record the incident postcode.

Question number	Description on screen (field name)	Guidance
2.04c	Population Density (PopDens)	This information is derived from the incident postcode, when entered AND Save Validate has been selected. Note: The population density uses the Rural Urban Classification which is an Official Statistic used to distinguish rural and urban areas.
2.05	Incident location (Locus)	Record the location of the trauma incident using the following options: **Business area non-specified** –Use only if area cannot be further specified **Industrial or construction** – Place primarily intended for industrial or construction purposes. Refers to buildings, other structures, excavations and adjacent grounds. Demolition sites, mines quarries, factory/plant, oil and gas extraction facility, power station etc. **Farm** – Excludes injuries occurring in the residential area of a farm, where the farm is the injured person's home **Commercial area** – A commercial area not primarily intended for recreational purposes, e.g. shop, store, commercial garage, office building, café, hotel, restaurant, casino, bar, dance/ night club, swimming pool of hotel, etc. **Medical service area** – Any formal healthcare establishment, including hospital, heath centre, screening mobile van, etc. **Not recorded** **Other specified** **Place of residence** – The person's own home or the home of a third party. Home includes the main dwelling and any associated garden, driveway to home, garage, path (walk) to home, swimming pool in private house or garden, farmhouse, home premises, house, non-institutional place of residence, apartment, boarding house, private caravan park (residential), an institute with residential accommodation, e.g. home for the elderly, nursing home, prison, children's home, hospice, military institution, etc. **School or educational area** – Includes any educational establishment, e.g. nursery, college, university. Includes actual educational building and associated grounds, e.g. school playground **Sports and recreational areas** – Any place specifically intended for formal sporting purposes, e.g. leisure centre. Excludes places where informal sporting recreation may take place. Place primarily intended for recreational or cultural purposes (whether public or commercially owned) or any other public building. Includes public park/ playground, amusement/ theme park, holiday park, campsite, public religious place. Refers to open nature area not classified elsewhere e.g. Beach, cave, forest. Includes injuries occurring in water or the sea, where not part of a formal transport area e.g. marsh/ swamp, river, loch **Transport area** – Publicly owned and maintained highway, street, road, pavements or cycle path. Places where transport

Question number	Description on screen (field name)	Guidance
		out-with a public highway, street or road takes place, e.g. private road, aircraft, ferry terminal, Parking area, Public transport area/facility such as bus terminal, railway station, underground station, airport etc. Pedestrian mall, railway line etc. **Unknown** Note: List taken from AE2.
Injury details		
2.06	Type of injury (InjuryType)	Record the type of injury from the following list: **Blunt** **Blunt and penetrating** **Not recorded** **Penetrating** Note: A **penetrating** injury is a wound with disruption of the body surface that extends into underlying tissue or into a body cavity, (e.g. a stabbing or a shooting). A **blunt** injury is an injury caused by striking or being struck by a blunt surface (e.g. a fall, a blow or being hit by a vehicle).
2.07	Mechanism of Injury (InjuryMech)	Record the mechanism of the patient's injuries from the following list: **Blast** **Contact with person** **Crushing force** – Caught or jammed between stationary and moving objects. Crushed by or in a crowd **Contact with animal/object** – Includes being struck or kicked by animal. Excludes being bitten, scratched or clawed by animal **Drowning/near drowning** ~~**Fall > 2m** – A vertical drop of greater than 2 metres e.g. this could be a witnessed fall down a flight of stairs or jumps/fall from bridge/scaffolding~~ archived 31/05/20 ~~**Fall < 2m** – For example: a trip or slip from own height or documented fall of less than 2 metres~~ archived 31/05/20 **Please use following codes from 1st June 2020:** **Fall on same level** - person falls and lands on the same surface height as they were standing eg trip or fall off kerb. **Fall from height** – person falls and lands on lower height than they were standing eg fall down stairs. **Mechanical threat to breathing** – Includes Hanging, Strangling, External compression of airway or chest, choking (includes effect of cave-in), suffocation **Moving vehicle (Transport)** – all injuries that involve a device designed primarily for, and being used at the time primarily for, conveying persons or goods from one place to another.

Question number	Description on screen (field name)	Guidance
		Not recorded **Other** – Use if mechanism of injury is none of the options given here **Piercing/penetrating** – Includes cut by knife, broken glass, severing of a body part with an axe etc. Excludes human bite or animal bite **Shooting** – Includes shooting by bullet, pellet, lead shot, arrow, etc. **Unknown** Notes: • List adapted from AE2 'external cause of injury' • Sport is no longer a code for 'mechanism of injury' and is now coded under 'injury intent'. If the injury occurred during sport, please choose code that describes how the injury happened (eg contact with person or fall). • Default to low fall if height unknown.
2.08	Type of moving vehicle accident (MVAType)	If mechanism of injury = moving vehicle, record the type of accident from the following list: **Moving vehicle versus moving vehicle** **Moving vehicle versus other** **Moving vehicle versus pedestrian** **Not recorded**
2.09	Patients position in moving vehicle accident (MVAPat)	If mechanism of injury = moving vehicle, record the patient's position from the following list: **Driver** **Mass transport** – eg bus, tram, train, plane, passenger ships **Motor cyclist** **Not recorded** **Other – motorised** **Other – non-motorised** **Passenger – front seat** **Passenger – rear seat** **Pedal cyclist** **Pedestrian**
2.10	Injury Intent (InjIntent)	Record the intent of the injury from the following list: **Alleged assault** **Intent inconclusive** **Medical condition –** The trauma was sustained following a medical condition eg stroke or epileptic fit **Non intentional –** Documented as an accident eg slipped and fell **Not recorded** **Other** **Sport –** Injury sustained during an activity classified as sport. **Suspected self-harm –** Documented as self-harm or suspected self-harm

Question number	Description on screen (field name)	Guidance
		Note: If the injury was sustained while 'playing' on a toy vehicle or bicycle, then code as sport.
2.11	Type of Sport Injury (SportType)	No longer collected.
2.12a	Additional incident information available (IncidentAdd)	Record whether any of the additional incident information questions (see tick boxes below this question) are: **No** – ALL are not applicable **Not recorded** – there is no recording that all are, or are not applicable **Yes** – one or more are applicable
2.12b	Additional incident information detail (Alcohol, Toxicity, PsychDisturb, MassInc, Pregnancy, Inpatient)	Tick the box beside the information that applies – record **ALL** that are applicable from the following options: **Evidence of alcohol** (documentation that patient or other person involved in incident has suspected or confirmed alcohol intake) **Evidence of toxicity** (documentation that patient or other person involved in incident has suspected or confirmed toxicity intake) **Inpatient in hospital** (at time of trauma) **Mass incident – archived.** **Pregnancy** (at time of trauma) **Psychiatric disturbance** Documentation of psychiatric event (at time of trauma) that may be persistent, relapsing and remitting, or occur as a single episode. Psychiatric disturbance may include patient or other person involved in incident. **Mountain Rescue Team –** were MRT involved in pre hospital care eg safe removal from difficult site. **RNLI –** were RNLI involved in pre-hospital care **Coastguard** – were coastguard involved in pre-hospital care (coastguard may be involved but do not take patient to hospital site) **Major Incident** – tick if major incident declared.

MIU/Other tab

Sites including Minor Injury Units (MIUs), small hospitals and health centres in rural areas that carry out ED related activity and are GP or nurse led. They may or may not be open 24 hours. See the link for more details and Appendix one for current List of MIU/Others in Scotland

Question number	Description on screen (field name)	Guidance
3.01	Did the patient attend a MIU or other facility (on list)? (MIU)	Record whether the patient attended a MIU/Other facility in Scotland: **Yes or No.** Notes: • **Appendix one** has the full list of MIU/Other facilities in Scotland. • If a hospital or Health Centre does not appear on this list then answer **no.**
3.02	MIU/Other (Name) (NonStagHosp)	Record the name of the MIU/Other from the drop down list. See Appendix one for the full list of MIU/Other facilities.
3.03	Mode of arrival to MIU/Other (MIUMOA)	Record how the patient travelled to the MIU/Other from the following list: **Not recorded** **SAS Ambulance (road)** **Self** (this includes arrival by police, taxi or private ambulance etc.)
3.04	SAS Incident No. (MIUSASNo)	Record the SAS incident number from the SAS PR. If not recorded, click on tick box. Notes: • Do not use incident numbers from any other sources other than the SAS. • Only record whole numbers. If the incident number contains letters at the beginning, start with the first number that is ≥ 1 and do not include any numbers after a decimal point eg enter ABC01234567.001 as 1234567
3.05/3.06	Date and time SAS called (MIUCallStartDate/ MIUCallStartTime)	Record the date and time that the SAS ambulance, that transported the patient **to the MIU/Other**, was called. If either or both are not recorded, click on the relevant not recorded box.
3.07/3.08	Date and time of arrival at MIU/Other (NonStagDate/ NonStagTime)	Record the date and time the patient arrived at the MIU/Other. If either or both are not recorded, click on the relevant not recorded box.
3.09/3.10	Date of and time of departure from MIU/Other	Record the date and time the patient departed the MIU/Other.

Question number	Description on screen (field name)	Guidance
	(NonStagDepartDate/ NonStagDepartTime)	If either or both are not recorded, click on the relevant not recorded box.

Pre hospital tab

This section relates to the pre-hospital stage of the patient journey, which **in most cases** will involve the patient being taken directly to an ED from the incident by the SAS.

The primary source of information for this section should be the SAS PR (if they arrive by SAS) though ED notes may be used as a secondary source.

If the patient attended a MIU/Other facility, please include journey details of the patient's journey to the first hospital with an ED.

Question number	Description on screen (field name)	Guidance
4.01	Mode of arrival to First hospital with an ED (MOA)	Record the substantive means by which a patient arrived at the First Hospital from the following list: **Air (SAS or rescue teams) directly to hospital site** **Air (SAS or rescue teams) to non-hospital site + road ambulance** **Ambulance (road) SAS only** **Ambulance (road) with Pre-hospital medical team involvement** **Not recorded** **Self** **NHS England Ambulance –**please enter relevant details in comments.
4.02	Are ANY Pre-hospital details available? (PreHospData)	Record whether there are any pre-hospital details available from **Yes or No.** Note: Enter yes, even if only part of the information is available, i.e. date but no time.
4.03	Air transfer by (AirTrans)	If the patient arrived by air, record which resource was involved in the patient's air journey to the first hospital from the following list: **Armed Forces** **Coastguard** **Other** **Pre hospital Medical Team (SAS) -** includes ScotSTAR eg EMRS and Paediatric Retrieval Team **SAS** **Not recorded** Note: Air travel includes plane or helicopter
4.04	SAS Incident No. (SASNo)	Record the SAS incident number from the SAS PR. If not recorded, click on the tick box. Notes: • Only use incident numbers generated from SAS. • Only record whole numbers. If the incident number contains letters at the beginning, start with the first number that is ≥ 1 and do not include any numbers

Question number	Description on screen (field name)	Guidance
		after a decimal point eg enter ABC001234567.001 as 1234567
4.05/4.06	Date and time SAS called (CallStartDate/CallStartTime)	Record the date and time that SAS received the call to attend the trauma incident. This will be on the PR and is referred to as the **Call start date and Call start time.** If one or both are not recorded, click on the relevant tick box. Note: If the patient was transferred from a hospital with no ED then record the information pertaining to the journey to the first hospital, with an ED.
Scottish Ambulance Service Data **Only applicable if patient was taken to the first hospital by SAS.**		
	Search SAS data	If the patient was taken to hospital by a SAS operated vehicle or Pre hospital Medical Team, then this search facility will be activated. Please note that you will need to record a (**CHI or DOB**) and an (**incident date or SAS Incident number**) before this search can be done. If a linked record is found that matches the key criteria, then the option to '**Select SAS data'** will show at the bottom of the data. Please select this only after checking the journey is correct and noting any information that is not listed below but may be required for this patient record (eg observations, incident number or alcohol status). This information is not brought directly into the eSTAG view as these fields may require other information from hospital notes before they can be confirmed. These data will be available in the background for analysis purposes. Note: Please remember to Save Validate after selecting SAS data to save this information in eSTAG.
SAS	SAS Trauma Triage Tool used (SASTTT)	**No** **Yes** Notes: • The Trauma Triage tool will be used by the SAS to determine which level of facility the patient should be taken to. • In order for this to be 'yes' the triage tool will give a Triage Decision meaning that all relevant questions in the tool have been answered.

Question number	Description on screen (field name)	Guidance
SAS	Triaged to (TriageDecision)	**MTC** **TUC** **ED** The triage tool result will trigger MTC care if a patient's physiology or injuries meet the criteria. Note: ED suggests the patient does not need MTC or TU care but should be taken to their nearest hospital with an ED.
SAS	Triage hospital within 45 minutes (Achievable45)	**No** **Yes** **Override** Note: If a patient is triaged to MTC care, the patient should be taken directly to the MTC, if they are within 45 minutes' travel time. If the SAS disagree that this is the best option for clinical reasons, then an override is available.
SAS	Not achievable reason (NotAchievable)	If Achievable45 = no, then this question will be asked. **Distance** **No aircraft** **Weather** **Patient Condition** **Other**
SAS	Override reason (OverrideReason)	If Achievable45 = override, then this question will be asked. **Clinical judgement** **Trauma Desk advice**
SAS	Pre-alert (SASStandby)	This will be automatically recorded if applicable and there is successful linkage with SAS data, and the information has been recorded. **Please note** that in the new SAS database this has changed from a date/time field to a yes/no field therefore: 01/01/1900 = yes (there was a pre alert) Null = no
SAS	Division (SASDivision)	This will be automatically recorded if applicable and there is successful linkage with SAS data.

Hospital(s) tab

The fields and definitions for First Hospital and Transfer Hospital are almost identical therefore for ease we have amalgamated them. The First hospital page has three additional fields and this is referred to where appropriate.

The first hospital refers to the first hospital the patient attends **with ED facilities**. It may be possible for a patient to attend this facility and not be seen in ED although this is highly unlikely (eg a patient brought in by the Paediatric Retrieval Team and taken directly to ITU or theatre). A patient may attend a hospital prior to this that has a minor injury unit or similar facility, however it is not classified as the first hospital in this dataset and information on this attendance should be completed in the MIU/Other page.

The Transfer hospital (or next hospital) includes the second (and possibly more) hospital(s) the patient is admitted to that has an ED or Regional Specialty (Golden Jubilee National Hospital, Clydebank and the Western General Hospital, Edinburgh). If a patient is transferred to a hospital without these facilities, then their audit period will end.

See **Appendix 2** for a list of all hospitals in Scotland with an ED or Regional Specialty.

Patient Journey

Prior to recording or viewing data on the hospital page, please check that the hospital details which you want to view or edit are under selected hospital.

Selected Hospital	
Name of hospital	Shows the name of the hospital that is currently selected.
Hospital Type	This is the type of hospital the patient attended or was admitted to and will be automatically entered after the Hospital Name has been recorded. There are four different types of hospital: • Major Trauma Centre (MTC); • Trauma Unit (TU); • Local Emergency Hospital (LEH); and • Regional Specialty. Definitions of these hospitals are being confirmed by the STN. Please refer to their website for updates https://www.scottishtraumanetwork.com/ The Scottish Government have decided that four Scottish hospitals will have the status of MTC and each Regional Network has or will confirm which hospitals within their network will be classified as a TU or LEH.
Network	Each MTC operates within a network of hospitals, although patients will sometimes move out with their primary network (eg for Spinal Injury care as there is only one hospital that has this facility). The four networks are: East, North of Scotland, South East and West of Scotland. Some hospitals sit within similar distances to two MTCs meaning they may transfer patients to more than one network. For the purpose eSTAG, the network where these hospitals send the majority of patients to has been allocated as their network.

No.	Number of hospital the patient attended in order of attendance/admission.
Location	This is the ISD code for the hospital and will be populated by eSTAG.
Name of hospital	Record the name of the hospital from the drop down list. Note: The first hospital will show a list of all hospitals within Scotland that have an ED. Any other hospitals the patient is transferred to will include these hospitals and any other hospitals that have a Regional Specialty that trauma patients may require but do not have an ED (eg Golden Jubilee National Hospital).
Owning location	This will be automatically entered by eSTAG, and always starts with the hospital that creates the record. Only one Health Board can own (or edit) the record at any time. There is the ability to change the owning location on the Hospital tab (see patient journey at top of this tab), when the patient has been transferred to another hospital and data entry is required for this part of the patient journey.
Seen ED	Tick the box if the patient was seen in ED. This information is important so if you are not sure, please confirm this before proceeding. Notes: • Seen in ED includes all patients brought into ED whether or not they were seen by clinical staff. • If this is ticked and the patient did not attend ED, then the hospital will have to be deleted from the patient journey and re-entered. Please note that you can only delete the last hospital from the patient journey therefore if this was the 3rd out of 4 hospitals, you would have to delete hospital 4 and hospital 3. • Please contact the STAG central team for advice if required.
Arrival Date	If the patient was seen in ED, record the date the patient attended ED.
Admission Date	If the patient was not seen in ED, record the date the patient was admitted to this hospital.
Type of hospital	This will be auto-populated once the hospital name is recorded and confirmed. Type of hospital includes: • Major Trauma Centre • Trauma Unit • Local Emergency Hospital • Regional Specialty – has a specialty required by trauma patients but hospital does not have an ED.
Network	The Network is the trauma network the hospital belongs to. If a patient is taken to a MTC they will be part of this network, even if this network is not within their normal residential area, (eg a patient who is transferred to QEUH for spinal injuries care will be part of the West of Scotland network even if they started their journey in Aberdeen). If a patient does not attend a MTC then they will be part of the network that the hospital(s) they attended is part of. Note: Some Health Boards cross boundaries with more than one network. For the purpose of eSTAG, these hospitals have been allocated a network based on where the majority of their patients are transferred to. This may change in the future depending on patient pathways after the introduction of the Scottish Trauma Network.

Question number	Description on screen (field name)	Guidance
Selected Hospital – the name of the hospital in which recordings are being made will appear in this section along with the type of hospital which will be Major Trauma Centre, Trauma Unit, Local Emergency Hospital or Regional Specialty.		
Emergency Department		
5.01/6.01	Seen in ED (SeenED/TransSeenED)	This information is recorded in the Patient Journey section and will then show on screen here. Note: 'Seen in ED' includes patients that were seen by any member of staff whether they did or did not have treatment initiated.
5.02/5.03	Arrival in ED date and time (EnterDate and EnterTime)/ (TransEnterDate and TransEnterTime)	The date is recorded in the Patient Journey section. Record the time the patient arrived in ED. Click on 'not recorded' box if time is not available. Note: Record time of arrival in ED as the first evidence of patient being in department – so that might be PRF arrival time, EWS chart, ED card, TRAK etc.
5.04/6.04	Pre-alert (Standby/ TransStandby)	Record whether there was evidence of a pre-alert (standby) call made to the staff in the ED to give them notice of arrival. Record one of the following options: **No** **Yes** **Not recorded** Note: Pre alerts are usually made by the SAS but can be made by other hospital staff when a patient has attended another ED or MIU/Other facility or by other services (eg coastguard). The SAS PR is the most likely place that this information will be recorded if SAS are involved in transfer. On rare occasions the ED may be called by a witness to the incident or family/friends and this should be recorded as pre alert = yes.
5.05/6.05	Patient management type (Area/AreaTransfer)	Record the area of ED to which the patient was initially triaged from the following list: **Resus** **Major** **Minor** **Not recorded** Notes: • Triage is the process of determining the priority of patients' treatment based on the severity of their condition.

Question number	Description on screen (field name)	Guidance
		• An ED may have another name for these areas therefore please discuss with the Lead for STAG if unsure.
5.06/6.06	Re-triaged to Resus (Retriage/TransRetriage)	Record whether or not the patient was moved to Resus from another area in ED from the following options: **No** **Yes** **Not recorded** Note: If a patient is moved for routine procedures (eg manipulations of fractures/dislocations) then enter no.
5.07 and 5.08/6.07 and 6.08	Retriage Date &Time (RetriageDate & RetriageTime/ TransRetriageDate & TransRetriageTime)	Record the date & time that the patient was transferred into the Resus room. If not recorded, click on the relevant tick box(s).
5.09 and 5.10/6.09 and 6.10	Date and time of departure from ED (DepartDate & DepartTime/TransDepartDate & TransDepartTime)	Record the date and time that the patient was discharged from ED (the time that they left the department). If not recorded, click on the relevant tick box(s). Note: If the patient died in ED enter the time of death rather than the time of transfer to the mortuary.
5.11/6.11	Destination from ED (Dest/ TransDest)	Record the first destination the patient was transferred to from ED, from the following list: **HDU** **ITU** **Interventional radiology** **Mortuary** **Not recorded** **Other hospital** **Radiology** **Theatre** (operation performed) **Theatre** (no operation) **Ward** Note: Only choose Radiology if patient did not return to ED following X-ray/imaging.
5.12/6.12	Other hospital destination (OtherDest/ TransOtherDest)	If destination from ED = Other Hospital, record the first destination the patient is transferred to in the other hospital from the following list: **Emergency Department** **HDU**

Question number	Description on screen (field name)	Guidance
		ITU **Interventional radiology** **Mortuary** **Not recorded** **Radiology** **Theatre** (operation performed) **Theatre** (no operation) **Ward**
5.13/6.13	Ultimate Destination (UltDest/TransUltDest)	If the destination from ED or Other hospital destination was to a temporary area (ED, interventional radiology, radiology or theatre), record the area to which the patient was first admitted to from the list: **HDU** **ITU** **Mortuary** **Not recorded** **Other hospital** **Ward**
5.14/6.14	Theatre (no operation) details (TheatreNoOp/ TransTheatreNoOp)	If the patient went to theatre but did not have an operation, record the reason for this from the following options: **Holding area –** prior to transfer to another hospital or awaiting a bed **Manipulation** **Not recorded** **Operation no longer necessary** **Other** **Pain control** **Splinting**
ED review		
5.15/6.15	Consultant present on arrival of patient (ConsultLed/ TransConsultLed)	Record whether the patient was seen by a consultant on arrival in ED from the following options: **No** **Yes** **Not recorded** Note: A consultant present on arrival is usually due to a pre-alert call and initiation of a Consultant led trauma or ED team in Resus.
5.16/6.16	Consultant Specialty (ConsultLedSpec/ TransConsultLedSpec)	Record the specialty of the consultant present on arrival of the patient from the following options: **Anaesthetics** **Cardiothoracic surgery**

Question number	Description on screen (field name)	Guidance
		Emergency Medicine **General Surgery** **Intensive Care Medicine** **Major Trauma Service** **Neurosurgery** **Not recorded** **Other** **Paediatric Anaesthetics** **Paediatric Cardiothoracic surgery** **Paediatric EM** **Paediatric ICM** **Paediatric Major Trauma Service** **Paediatric Neurosurgery** **Paediatric surgery** **Paediatric trauma and orthopaedic surgery** **Trauma and orthopaedics surgery** **Vascular surgery** Notes: • If the consultant is on call for the Major Trauma Service, then this should be chosen before their individual specialty. • If multiple consultants are involved, record the lead consultant specialty, unless any are on call for the Major Trauma Service.
First doctor or Advanced Practitioner review This will only be asked if the answer to 'Consultant present on arrival of patient = N or Not recorded.		
5.16b	Reviewed by Dr or Advanced Practitioner in ED **(ReviewedED)**	Record whether the patient was seen by a Dr or Advanced Practitioner in ED. Note: Sometimes patients will be referred to a Specialty in another hospital and then taken to its ED. The specialty doctor will not always see the patient in ED, preferring to see them once they are in a ward or other part of the hospital.
5.17 and 5.18/6.17 and 6.18	Arrival date and time (ArrivedDate & ArrivedTime)/ (TransArrivedDate & TransArrivedTime)	Record the date and time the first doctor or advanced practitioner arrived to review the patient. If either or both are not recorded, click on the relevant tick box.
5.19/6.19	Grade (Grade/ TransGrade)	Record the grade of the first doctor or advanced practitioner from the following options: **Advanced Nurse Practitioner** **Consultant or Associate Specialist (on consultant rota)** **Foundation Year 1** **Not recorded** **Nurse Consultant** **Physicians Associate**

Question number	Description on screen (field name)	Guidance
		Specialty Dr or Associate Specialist (NOT on consultant rota) **Specialist Trainee 4-8** **Specialist Trainee 3** **Specialist Trainee 1 – 2, GP or Foundation Year 2**
5.20/6.20	Specialty (Spec/ TransSpec)	Record the specialty of the first doctor or advanced practitioner from the following list: **Anaesthetics** **Cardiothoracic surgery** **Emergency Medicine** **General Surgery** **Intensive Care Medicine** **Major Trauma Service** **Neurosurgery** **Not recorded** **Ophthalmology** **Oral and maxillofacial surgery** **Other** **Otolaryngology (ENT)** **Paediatric Anaesthetics** **Paediatric Cardiothoracic surgery** **Paediatric EM** **Paediatric ICM** **Paediatric Major Trauma Service** **Paediatric Neurosurgery** **Paediatric Ophthalmology** **Paediatric Oral and maxillofacial surgery** **Paediatric Otolaryngology (ENT)** **Paediatric Plastic surgery** **Paediatric Radiology** **Paediatric surgery** **Paediatric Trauma and orthopaedic surgery** **Paediatric Urology** **Plastic surgery** **Radiology** **Spinal Injuries** **Trauma and orthopaedic surgery** **Urology** **Vascular Surgery**
5.21/6.21	Was the patient reviewed by a more senior Doctor whilst in ED? (SeniorDr/ TransSeniorDr)	Record one of the following options: **No** **Yes** **Not Recorded** Note: If the patient was seen by a more senior doctor than the first doctor, then record yes.

Question number	Description on screen (field name)	Guidance
Most senior doctor review (ED) This will only be asked if the answer to the question 'Patient reviewed by a more senior Doctor whilst in ED = Yes.		
5.22	Review type (SeniorDrReview/ SeniorDrTransReview)	Record the type of review from the following options: **Face to face discussion (between junior and senior doctor)** **Not recorded** **Reviewed patient in person** **Telephone ONLY**
5.23 and 5.24	Review date and time (ArrivedDateSenior & ArrivedTimeSenior/ TransArrivedDateSenior & TransArrivedTimeSenior)	If the senior doctor review type was 'in person', record the date and time that the most senior doctor reviewed the patient in ED. If either or both are not recorded, click on the relevant tick box.
5.25	Grade (GradeSenior/ TransGradeSenior)	Record the grade of the most senior doctor to review patient in ED from the following options: **Consultant or Associate Specialist (on consultant rota)** **Not recorded** **Specialty Dr or Associate Specialist (NOT on consultant rota)** **Specialist Trainee 4-8** **Specialist Trainee 3** **Specialist Trainee 1 - 2 or GP, Foundation Year 2**
5.26	Specialty (SpecSenior/ TransSpecSenior)	Record the specialty of the most senior doctor from the following list: **Anaesthetics** **Cardiothoracic surgery** **Emergency Medicine** **General Surgery** **Intensive Care Medicine** **Major Trauma Service** **Neurology** **Neurosurgery** **Not recorded** **Ophthalmology** **Oral and maxillofacial surgery** **Other** **Otolaryngology (ENT)** **Paediatric Anaesthetics** **Paediatric Cardiothoracic surgery** **Paediatric EM** **Paediatric ICM** **Paediatric Major Trauma Service** **Paediatric Neurosurgery** **Paediatric Ophthalmology** **Paediatric Oral and maxillofacial surgery** **Paediatric Otolaryngology (ENT)**

Question number	Description on screen (field name)	Guidance
		Paediatric Plastic surgery **Paediatric Radiology** **Paediatric surgery** **Paediatric Trauma and orthopaedic surgery** **Paediatric Urology** **Pain team** **Plastic surgery** **Psychiatry** **Radiology** **Spinal Injuries** **Stroke Medicine** **Trauma and orthopaedic surgery** **Urology** **Vascular Surgery** Note: The Intensive Care Medicine (ICM) specialty can be asked to review the patient for admission to a critical care bed. Anaesthetics may be called to assist with airway management or pain control. Most ICM doctors are Anaesthetists but not all are. Please discuss with central team or local STAG lead if you are unsure of how to code.
5.26b	Trauma Team Activation (TraumaTeam)	**No** **Not recorded** **Yes, on arrival** **Yes, prior to arrival** **Yes, time not documented**
5.26c	Trauma Team Type (TraumaTeamType)	**Tier 1 – ED team only** **Tier 2 – Enhanced team that includes anaesthetics and General Surgery as a minimum.** **Tier 3 – Full team (usually activated for patients with significant bleeding)** **Not recorded**
Normal Residence		
5.27a	Patients residence (NormRes)	Record the patient's residence on the day of injury from list below: **NHS Healthcare provider –** in long term care **No fixed abode** **Not known** **Not recorded** **Other** **Private healthcare provider –** may include hospice **Private residence –** includes sheltered housing **Residential institution –** home for the elderly, children's home, military institution

Question number	Description on screen (field name)	Guidance
		Temporary residence – student accommodation, prison, holiday. Notes: • This information is often found in the social circumstances section of nursing notes.
5.27b	Permanent residence postcode available? (FullPost)	Record whether the patient's residence postcode is available: **No** **Normal residence is out with Scotland** **Yes (Scottish postcode)** Note: Permanent residence should not include temporary residence locations.
5.27c	Postcode (PostCode)	Record the patient's full postcode of their normal place of residence. Note: This information is only collected on the First hospital page.
Admission Details		
5.30	Was the patient admitted to this hospital? (Admit /TransAdmit)	Record whether the patient was admitted to this hospital from the list below: **No** **Yes** **Not recorded** Notes: A patient taken to theatre (for operation) is NOT admitted unless they are later taken to a ward or unit. Therefore, if a patient dies in theatre or is transferred to another hospital then the patient was not admitted to this hospital.
5.31 and 5.32	Admission to this hospital date and time (FirstHospDate & FirstHospTime/ TransHospDate & TransHospTime)	Record the date and time of admission to this hospital. If the time is not recorded, click on the tick box for 'not recorded'. Notes: Record the most accurate time from notes or electronic systems in your hospital. If the patient has been admitted to Critical Care and is on WardWatcher – use this time unless time doesn't reflect patient pathway/events. If the patient goes from ED to theatre, use the time the patient was admitted to a ward or unit and NOT the time they arrived in theatre.
5.33a	Admitted under (Specialty) (AdmitSpec/ TransAdmitSpec)	Record the primary admission specialty from one of the options from the drop down list:

Question number	Description on screen (field name)	Guidance
		Cardiothoracic surgery **Emergency Medicine** **Medicine (not otherwise listed)** **General surgery** **Intensive Care Medicine** **Major Trauma Service** **Neurosurgery** **Not recorded** **Ophthalmology** **Oral and maxillofacial surgery** **Other** **Otolaryngology (ENT)** **Paediatric Cardiothoracic surgery** **Paediatric EM** **Paediatric ICM** **Paediatric Major Trauma Service** **Paediatric Medicine** **Paediatric Neurosurgery** **Paediatric Ophthalmology** **Paediatric Oral and maxillofacial surgery** **Paediatric Otolaryngology (ENT)** **Paediatric Plastic surgery** **Paediatric surgery** **Paediatric Trauma and orthopaedic surgery** **Paediatric Urology** **Plastic surgery** **Spinal Injuries** **Trauma and orthopaedic surgery** **Urology** **Vascular surgery** Note: Admitted under suggests that this specialty is taking clinical responsibility for the patient. Do not record ICM as primary specialty unless there are no other specialties involved in care. Primary specialty would most likely be the specialty the patient is discharged to on discharge from ITU.
5.33b	Other specialties involved in care **(OtherSpec)**	Record all other specialties involved in the patients care during the audit period, including visiting specialties from other hospitals. Record 'no other specialties involved in care' if the patient was not under any other specialty during their audit period.
Neurosurgery and/or Spinal Injuries Unit Referral		
5.34	Referral to Neurosurgery (SpecRefNeuro/ TransSpecRefNeuro)	Record one of the following options: **Not referred** **Not recorded**

Question number	Description on screen (field name)	Guidance
		No, as referred prior to arrival at this hospital **Yes**
5.35	Referral date (SpecRefDateNeuro/ TransSpecRefDateNeuro)	Record the date the referral took place. If not recorded, click on the tick box 'not recorded'.
5.36	Referral source (SpecRefSourceNeuro/ TransSpecRefSourceNeuro)	Record the patient's location when the referral took place from the following options: **ED** **Following admission to this hospital** **Not recorded** **Other transient area** – eg theatre, interventional radiology, radiology
5.37	Referral request accepted (SpecRefDecisionNeuro/ TransSpecRefDecisionNeuro)	Record whether the patient was accepted under the care of this Specialty: **No** **Not recorded** **Yes** Note: if the request is accepted, this would imply that there is evidence of ongoing active review and clinical responsibility by this specialty, but it is not necessary for the patient to be in a designated specialty bed.
5.38	Referral to Spinal Injuries Unit (SpecRefSIU/ TransSpecRefSIU)	Record one of the following options: **Not referred** **Not recorded** **No, as referred prior to arrival at this hospital** **Yes**
5.39	Referral date (SpecRefDateSIU)/ (TransSpecRefDateSIU)	Record the date the referral took place. If not recorded, click on the tick box 'not recorded'.
5.40	Referral source (SpecRefSourceSIU/ TransSpecRefSourceSIU)	Record the patient's location when the referral took place from the following options: **ED** **Following admission to this hospital** **Not recorded** **Other transient area** – eg theatre, interventional radiology, radiology
5.41	Referral request accepted (SpecRefDecisionSIU/ TransSpecRefDecisionSIU)	Record whether the patient was accepted under the care of this Specialty: **No** **Not recorded** **Yes**

Question number	Description on screen (field name)	Guidance
		Note: if the request is accepted, this would imply that there is evidence of ongoing active review and clinical responsibility by this specialty, but it is not necessary for the patient to be in a designated specialty bed.
Transfer Details		
5.42	Was the patient transferred to another hospital (TransOut/ Trans2Out)	Record one of the following options: **No** **Not recorded** **Yes** Note: This field will be auto-populated with yes if destination from ED = other hospital.
5.43	Transfer out reason (TransReason/ Trans2Reason)	Record the reason for transfer to another hospital from one of the following options: **Critical Care bed –** patient is moved due to lack of CC bed in this hospital or no CC facility (ITU or HDU). **MTC care –** patient is moved to a MTC facility due to suspected or confirmed major trauma or severe head injury (NOTE – please do not use this code until the hospital has officially opened as a MTC. Discuss with central team if unsure) **Not recorded** **Other reason –** include psychiatric facility **Regional/National or Sub specialty –** patient is transferred to a hospital with an acute specialty not available in the current hospital or MTC* (eg GJNH – thoracic, WGH – Neuro, GRI – Plastic surgery or more specialised services eg low volume orthopaedics) **Rehabilitation (STAG hospital)** **Rehabilitation (Non STAG hospital)** **Repatriation (STAG hospital)** **Repatriation (Non STAG hospital)** **Out with Scotland** Note: Please choose the primary reason for transfer from the patient notes (eg if a patient is transferred to a MTC due to suspected/confirmed major trauma but also needs a critical care bed then choose MTC care). * Once MTC is operational. If patients are transferred to HB, Network or hospital where they live then Repatriation should be recorded. Select rehabilitation if a patient is transferred to a Specialist Rehabilitation Facility or a rehabilitation facility within their own HB.

Question number	Description on screen (field name)	Guidance
		Rehabilitation and Repatriation are subdivided into STAG and Non STAG hospitals to allow eSTAG to know whether a further hospital journey is required. If the patient is transferred to a STAG hospital, then their journey will continue to be audited up until a maximum of 30 days. STAG are unable to monitor journeys out with the hospitals where STAG Coordinators are in place.
5.44	Transfer out type (TransOutType/ Trans2OutType)	Record the location the patient was transferred from using the following options: **Direct from ED** **Direct from Radiology or Interventional Radiology** **Direct from theatre** **Following admission to a hospital bed** **Not recorded**
5.44b	Single point of contact (SPOC)	**No** **Not recorded** **Yes** **Note – Single Point of Contact (SPOC) is used primarily for 'hot' transfers of patients normally being transferred to a MTC. It allows the referring Clinician to access one Consultant on for Major Trauma in the receiving hospital who can accept the patient on behalf of multiple specialties. SPOC may also be used for repatriation in some regions to ensure that delay from a MTC back to a TU or LEH is minimised. During 'hot' transfers, the initial call is a conference call set up by the SAS. This allows SAS to organise a quick transfer where appropriate.**
5.44c	Health Board of Non-STAG hospital (NonSTAGHB)	**Record the HB where the non-STAG hospital is located from the list.** **Note – if hospital is non-NHS please still state which physical HB it is located in.**
5.44d	Non STAG hospital Name (NonSTAGTrans)	**Record the name of the non-STAG hospital from list.** **Please let the STAG team know if a hospital is not on the list.**
5.45	Transfer by (Transby/ Trans2by)	Record one of the following options: **Non SAS Ambulance** **Not recorded** **SAS Ambulance** **Self** Note: This question will only be asked if the patient is being transferred for MTC care or Regional/National Specialty.

Question number	Description on screen (field name)	Guidance
5.46	SAS Incident number (inter-hospital transfer) (SASNoTransfer/ SASNo2Transfer)	Record the SAS incident number. If this is not recorded, please click on the tick box. Note: Only record whole numbers. If the incident number contains letters at the beginning, start with the first number that is ≥ 1 and do not include any numbers after a decimal point eg enter ABC001234567.001 as 1234567
5.47 and 5.48	Departure from hospital date and time (DepartHospDate & DepartHospTime)	Record the date and time the patient departed this hospital. If not recorded, tick the box.
Scottish Ambulance Service Data Only applicable if patient was transferred by SAS to another hospital for MTC care or to a Regional Specialty Hospital.		
	Search SAS data	If the patient was transferred for MTC care or Regional/National Specialty AND transfer to this facility was by the SAS, then this search facility will be activated. Please note that you will need either a CHI and departure date or SAS incident number and departure date. If a linked record is found that matches the key criteria, then the option to 'Select SAS data' will show at the bottom of the data. Please select this only after checking the data record is correct.
SAS 5	Journey Type (to MTC or Regional Specialty) (JourneyTypeTransMTC/ JourneyTypeTrans2MTC)	Journey type should = inter hospital transfer. This will be automatically recorded if applicable and there is successful linkage with SAS data.
SAS 6	Date and time SAS called to transfer patient (to MTC or Regional Specialty) (CallStartDTTrans1MTC/ CallStartDTTrans2MTC)	The date and time that SAS received a call to organise to transfer the patient to another hospital (MTC or Regional Specialty). This will be automatically recorded if applicable and there is successful linkage with SAS data.
SAS 7	Date and time SAS left the scene (to MTC or Regional Specialty) (ResourceLeftSceneDTTrans1MTC/ ResourceLeftSceneDTTrans2MTC)	The date and time that SAS left this hospital to transfer the patient to another hospital (MTC or Regional Specialty). This will be automatically recorded if applicable and there is successful linkage with SAS data.
SAS 8	Division (to MTC or Regional Specialty) (SASDivisionTrans1MTC/ SASDivisionTrans2MTC)	The Division of SAS that undertook the transfer. This will be automatically recorded if applicable and there is successful linkage with SAS data.

Question number	Description on screen (field name)	Guidance
5.49/6.27/ 6.47	Transfer to (hospital name) (TransHosp/ Trans2Hosp)	Record one of the hospitals on the list in the patient journey section. (See Appendix 2). Notes: • If a patient is not transferred to one of the hospitals on the list, then this is the end of their audit period. • This question will only be asked if the transfer out reason = MTC Care, Regional specialty, Critical care bed or Repatriation (within Scottish hospital with ED).
	Hospital Type	This is the type of hospital the patient attended or was admitted to and will be automatically entered after the Hospital Name has been recorded.

Observations and Blood Tests tab

Please note that the observations should be taken from recordings in the following order of preference - **First** ED (first hour), last set within the **pre-hospital** phase (which may include MIU) or earliest in First ED (IF this falls after one hour). Please note however that there are instructions under 'notes' for specific scenarios eg intubation. Use the first blood test results available up to three days from attendance in ED or admission to First Hospital.

Question number	Description on screen (field name)	Guidance
Respiratory		
7.01	Respiratory rate available (RRAvail)	Record whether the respiratory rate is available from the following options: **Yes** **No**
7.02	Source of respiratory rate (SrcRR)	Record one of the following options for the source of the respiratory rate in the following order of preference, UNLESS a patient arrives in ED being ventilated (see notes for more detail of when to use **pre-intubation** as the source): 1. **First set in first ED or Admission/Assessment Unit (within the first hour)** 2. **Last set in pre-hospital phase** (this includes any obs carried out during pre-hospital journey) 3. **Earliest within the first ED or Admission/Assessment Unit (after one hour)** **Pre-intubation –**see notes for details of when this should be used **Not recorded –** only use when there is no record of a respiratory rate from pre-hospital or first ED Notes: • If a patient arrives in ED in **respiratory or cardiac arrest,** then record the respiratory rate as 0 and the source 'First set in ED'. • **Pre-intubation** – If a patient arrives in ED ventilated (mechanical or hand bagging), then the pre-ventilation respiratory rate should be used, even if this is 0 and note should be made in comments section. In this situation the source is 'pre-intubation'. • If hand bagging is to supplement a patient's own respiratory effort, then normal rules apply and pre-intubation should not be used.
7.03	Respiratory rate (per minute) (RR)	Record the respiratory rate.

Question number	Description on screen (field name)	Guidance
7.04	Oxygen saturation (O_2 sats) available (02SatsAvail)	Record one of the following options: **No** **Un-recordable** (record if oxygen saturation noted as un-recordable in pre-hospital and first ED). **Yes** Note: This can be taken from a pulse oximetry reading or an **arterial** blood gas.
7.05	Source of O_2 sats (Src02Sats)	Record one of the following options for the source of the oxygen saturation in the following order of preference UNLESS a patient arrives in ED being ventilated (see note for more detail of when to use **pre-intubation** as the source): 1. **First set in first ED or Admission/Assessment Unit (within the first hour)** 2. **Last set in pre-hospital phase** (this includes any obs carried out during pre-hospital journey) 3. **Earliest within the first ED or Admission/Assessment Unit (after one hour)** **Pre-intubation –**see notes for details of when this should be used **Not recorded –** only use when there is no record of an oxygen saturation from pre-hospital or first hour of attendance in first ED Note: **Pre-intubation** – If a patient arrives in ED ventilated (mechanical or hand bagging), then the pre-ventilation oxygen saturation should be used. In this situation the source is pre-intubation.
7.06	O_2 sats (%) (02Sats)	Record the O_2 saturation percentage.
Cardiovascular		
7.07	Heart rate available (HRAvail)	Record one of the following options: **No** **Unrecordable** (record if heart rate noted as un-recordable in pre-hospital and first ED) **Yes**
7.08	Source of heart rate (SrcHR)	Record one of the following options for the source of heart rate in the following order of preference 1. **First set in first ED or Admission/Assessment Unit (within the first hour)**

Question number	Description on screen (field name)	Guidance
		2. **Last set in pre-hospital phase** (this includes any obs carried out during pre-hospital journey) 3. **Earliest within the first ED or Admission/Assessment Unit (after one hour)** 4. **Not recorded** Note: If a patient is documented to be in cardiac arrest on arrival in the first ED, then the value of 0 should be used with the source 'First set in ED'.
7.09	Heart rate (beats per minute) (HR)	Record the heart rate per minute.
7.10	Blood pressure (BP available (BPAvail)	Record one of the following options: **No** **Unrecordable** (record if BP noted as un-recordable in pre hospital and First ED) **Yes** Note: Both the systolic and diastolic recordings should be available.
7.11	Source of BP (SrcSBP)	Record one of the following options for the source of the blood pressure in the following order of preference: 1. **First set in first ED or Admission/Assessment Unit (within the first hour)** 2. **Last set in pre-hospital phase** (this includes any obs carried out during pre-hospital journey) 3. **Earliest within the first or Admission/Assessment Unit (after one hour)** 4. **Not recorded** Notes: • If a patient is documented to be in cardiac arrest on arrival in ED, then the value of 0 should be used with the source 'First set in ED'. • Intubation should not affect the preference for source for BP.
7.12	Systolic BP (mmHg) (SBP)	Record the systolic BP.
7.13	Diastolic BP (mmHg) (DBP)	Record the diastolic BP from the same BP measurement as the systolic BP.

Question number	Description on screen (field name)	Guidance
7.14	Mean Arterial Pressure (mmHg) (MAP)	This field will be calculated by eSTAG once the systolic and diastolic BP has been entered AND Save Validate has been selected.
Neurological		
7.15	Glasgow coma scale (GCS) available (GCSAvail)	Record whether a GCS is available from the following options: **Yes** **No** Notes: • In the absence of a GCS, patients can be given a total of 15 in the following circumstances: **1.** If they are documented as being alert and orientated (or other similar description OR equivalent for paediatric patients). **2.** If they have an AVPU score of A. **Please enter GCS = Y in these circumstances and then enter GCS Total = 15.** • In the absence of a GCS, patients can be given a total of 3 in the following circumstance: **3.** If they have an AVPU score of U. **Please enter GCS = Y in these circumstances and then enter GCS Total = 3.** • Please discuss paediatric patients GCS with relevant clinicians if the description is not absolutely clear. • Please note that if the answer is No then it will not be possible to calculate the probability of survival for this patient unless they were intubated.
7.16	Source of GCS (SrcGCS)	Record one of the following options for the source of the GCS in the following order of preference, UNLESS a patient arrives in ED being ventilated (see notes for more detail of when to use **pre-intubation** as the source): **1. First set in ED or Admission/Assessment Unit (within the first hour)** **2. Last set in pre-hospital phase** (this includes any obs carried out during pre-hospital journey) **3. First set in ED or Admission/Assessment Unit (after one hour)** **Pre-intubation –**see notes for details of when this should be used

Question number	Description on screen (field name)	Guidance
		Not recorded – only use when there is no record of a GCS from pre-hospital or first hour of attendance in first ED Notes: • If a patient arrives in ED after having been sedated to allow intubation (whether intubation was successful or not) then the pre-intubation GCS should be used and the source will be 'pre-intubation' • If a patient is documented to be in respiratory or cardiac arrest on arrival in ED, then the GCS should be recorded as 3 and the source will be 'First set in ED'.
7.17	Breakdown of GCS available (GCSEVM)	Click in the box if the breakdown of the GCS is available (i.e. the eyes, motor and verbal score). Notes: • All the elements should be available otherwise enter No. • If a patients total GCS is only recorded as 15 or 3, then enter yes and record as either: **1.** GCS 15 = 4-eyes open spontaneously/5-verbal orientated and 6-motor obeys commands or **2.** GCS 3 = 1-eyes open none/1-verbal none/1-motor none.
7.18	Eye opening response (GCSE)	Record the eye opening response from one of the following options: **1 = None** **2 = To pain** **3 = To voice** **4 = Spontaneous**
7.19	Verbal response (patient is > 5 years old) (GCSV)	Record the verbal response from one of the following options if the patient is aged > 5 years old: **1 = None** **2 = Incomprehensible sound (inconsolable, agitated)** **3 = Inappropriate word (inconsistently consolable, moaning)** **4 = Confused (cries but is consolable, inappropriate interactions)** **5 = Orientated (smiles, orientated to sounds, follows objects, interacts)**

Question number	Description on screen (field name)	Guidance
7.20	verbal response (patient is ≤ 5 years old) (GCSV5)	Record the verbal response from one of the following options if the patient is aged ≤ 5 years old: **1 = None** **2 = Inconsolable, agitated** **3 = Inconsistently consolable, moaning** **4 = Cries but is consolable, inappropriate interactions** **5 = Smiles, orientated to sounds, follows objects, interacts**
7.21	Motor response (GCSM)	Record the motor response from one of the following options: **1 = None** **2 = Extension** **3 = Flexion** **4 = Withdrawal** **5 = Localises to pain** **6 = Obeys command**
7.22	GCS Total (GCSTotal)	The GCS total will be calculated by eSTAG if eyes, verbal and motor scores are recorded AND Save Validate has been selected. Otherwise record a GCS between 3 and 15.
7.23	Pupil size available (PupilSize)	Record whether the pupil size is available from the following options: **Yes** **No** **No, but 'PEARL' documented**
7.24	Source of pupil size and reactivity (SrcPupilSize)	Record one of the following options for the source of the pupil size and reactivity (the same recording time as the GCS was measured should ideally be used. If this is not available, then record in the following order of preference: 1. **First set in first ED or Admission/Assessment Unit (within the first hour)** 2. **Last set in pre-hospital phase** (this includes any obs carried out during pre-hospital journey) 3. **Earliest within the first ED or Admission/Assessment Unit (after one hour)** **Pre-intubation** –if pre-intubation GCS has been used or 1-3 not available **Not recorded –** only use when there is no record of the pupil size from pre-hospital or first hour of attendance in first ED Note: The pupil size and reactivity should be taken from the same source and timeframe.

Question number	Description on screen (field name)	Guidance
7.25	Pupil size (left) (PupilSizeLeft)	Record a number between 1-10mm or click on 'left eye closed' if eye closed due to swelling etc. Click on not recorded if this pupil size is not available.
7.26	Pupil size (right) (PupilSizeRight)	Record a number between 1-10mm or click on 'right eye closed' if eye closed due to swelling etc. Click on not recorded if this pupil size is not available.
7.27	Pupil reactivity available (PupilReact)	Record whether the pupil reactivity is available from the following options: **Yes** **No**. Note: If one eye has been recorded as being closed, then you will not be asked about pupil reactivity for this eye.
7.29/7.30	Pupil reactivity (left) and (right) (PupilReactLeft) (PupilReactRight)	Record one of the following options: **Absent** **Brisk** **Not recorded** **Sluggish** Note: If documented as PEARL (pupils equal and reactive to light) then this will be auto populated as 'brisk'.
Temperature		
7.31	Temperature available (TempAvail)	Record one of the following options: **No** **Un-recordable** **Yes**
7.32	Source of Temperature (SrcTemp)	Record one of the following options in the following order of preference: 1. **First set in first ED or Admission/Assessment Unit (within the first hour)** 2. **Last set in pre-hospital phase** (this includes any obs carried out during pre-hospital journey) 3. **Earliest within the first ED or Admission/Assessment Unit (after one hour)** 4. **Not recorded –** only use when there is no record of a temperature from pre-hospital or first hour of attendance in first ED

Question number	Description on screen (field name)	Guidance
7.33	Temperature (Centigrade) (Temp)	Record in the format NN.N.
Weight (paediatrics only)		
7.34	Weight available (WeightAvail)	Record whether the patient's weight is available from the following options: **Yes** **No** Note: Only use a weight recorded pre-hospital or in ED following the trauma incident.
7.35	Source of Weight (SrcWeight)	Record one of the following options: **ED** **Not recorded** **Pre hospital team**
7.36	Patient weight (Kgs) (Weight)	Record the patient's weight in kgs. This can be actual or estimated weight. Note: ED weight should be used and if this is not available please use weight documented by pre hospital team.
7.37	Weight actual or estimated (WeightActualEstimate)	Record whether the patient weight is: **Actual** – patient was weighed while in ED or during pre-hospital journey **Estimated** **Not recorded** Note: Drug calculations should not be used to estimate weight.
Blood tests		
7.38	Coagulation screen available (Coagulation)	Record whether a coagulation screen is available from the following options: **Yes** **No** Notes: • A **coagulation screen** is a combination of screening laboratory tests, designed to provide rapid non-specific information, which allows an initial broad categorization

Question number	Description on screen (field name)	Guidance
		of haemostatic problems. APTT, PT and TCT ratio and Fibrinogen are part of this screen. • The earliest coagulation screen taken should be used within the first three days of the patient attendance.
7.38a/7.38b	Coagulation screen date and time (CoagDate)/ (CoagTime)	Record the date and time the coagulation screening was taken – If the date and/or time are not recorded click on the relevant tick box.
7.39	APTT ratio (APTTratio)	Record the result N.N If this is not part of the usual coagulation screen or not recorded for this result, click on not recorded.
7.39b	APTT (Sec) (APTTSec)	Record the result NNN.N If this is not part of the usual coagulation screen or not recorded for this result, click on not recorded.
7.40	PT ratio (Ptratio)	Record the result N.N If this is not part of the usual coagulation screen or not recorded for this result, click on not recorded.
7.40b	PT (sec) (PTSec)	Record the result NN. N If this is not part of the usual coagulation screen or not recorded for this result, click on not recorded.
7.41	TCT ratio (TCTratio)	Record the result in the following format NN.N. If this is not part of the usual coagulation screen or not recorded for this result, click on not recorded.
7.42	Fibrinogen available in coagulation screen result (FibrinAvail)	Record whether a fibrinogen result is available from the following options: **Yes** **No** Note: Fibrinogen is measured as part of the coagulation screen. In some hospitals the result is not reported if it is within a normal range.
7.43	Fibrinogen value (g/L) (Fibrinogen)	Record the result in the following format N.N
7.44	Blood gas available (ABGs)	Record whether there is a blood gas result available from the following options: **Yes** **No** Note:

<table>
<tr><th>Question number</th><th>Description on screen (field name)</th><th>Guidance</th></tr>
<tr><td></td><td></td><td>The earliest blood gas taken within the first three days of the patient attendance should be used.</td></tr>
<tr><td>7.44a/7.44b</td><td>Blood gas date and time (ABGsDate)/ (ABGsTime)</td><td>Record the date and time the blood gas was taken.
If the date and/or time are not recorded click on the relevant tick box.</td></tr>
<tr><td>7.44c</td><td>A or V</td><td>Record the type of blood sample used for the blood gas from the following list:
Arterial
Capillary (paediatric patients only)
Venous
Not recorded</td></tr>
<tr><td>7.45</td><td>pH or H+ ion measured (AcidBase)</td><td>Record one of the following options:
pH
H+ ion

Note:
A blood gas result will have information on either the pH or H+ ion. This depends on the hospital.</td></tr>
<tr><td>7.46</td><td>pH (pH)</td><td>Record the result in the following format (N.N)</td></tr>
<tr><td>7.47</td><td>H+ ion (Hion)</td><td>Record the result in the following format (whole number)
Round up or down if necessary.</td></tr>
<tr><td>7.48</td><td>PaO_2 (kPa) (P02)</td><td>Record the result in the following format (N.N)</td></tr>
<tr><td>7.49</td><td>$PaCO_2$ (kPa) (PC02)</td><td>Record the result in the following format (N.N)</td></tr>
<tr><td>7.06b</td><td>$Fi0_2$</td><td>Record the oxygen (when the blood gas was taken) in a fraction
Eg 40% = 0.40.
Click on room air if the patient did not receive any oxygen therapy.

Note:
<table>
<tr><th>Facemask/nasal Cannula (litres)</th><th>$Fi0_2$</th><th>litres</th><th>$Fi0_2$</th></tr>
<tr><td>1</td><td>0.24</td><td>5</td><td>0.40</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Question number</th><th>Description on screen (field name)</th><th>Guidance</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>2</td><td>0.28</td><td>6-7</td><td>0.50</td></tr>
<tr><td>3</td><td>0.32</td><td>7-8</td><td>0.60</td></tr>
<tr><td>4</td><td>0.36</td><td></td><td></td></tr>
<tr><td>Facemask with reservoir</td><td>Fi0$_2$</td><td>litres</td><td>Fi0$_2$</td></tr>
<tr><td>6</td><td>0.60</td><td>9</td><td>90</td></tr>
<tr><td>7</td><td>0.70</td><td>10</td><td>0.95</td></tr>
<tr><td>8</td><td>0.80</td><td></td><td></td></tr>
</table>
Source
Note:
Please record 1.0 when the patient is receiving oxygen via bag/valve/mask in preparation for a rapid sequence induction (RSI).
</td></tr>
<tr><td>7.50</td><td>Base excess (mEq/L) (BE)</td><td>Record the result in the following format (negative or positive N.N)
If this is not available, click on not recorded.
Note:
eSTAG will allow negative number.</td></tr>
<tr><td>7.51</td><td>HCO_3 (mmol/L) (HC03)</td><td>Record the result in the following format (whole number).
If this is not available, click on not recorded.
Note:
Round up or down if necessary.</td></tr>
<tr><td>7.52</td><td>Lactate available (LactateAvail)</td><td>Record whether there is a lactate result available from the following options:
Yes
No</td></tr>
<tr><td>7.52a</td><td>Lactate date and time (LactateDate/ LactateTime)</td><td>Record the date and time the lactate was taken – if the date and/or time are not recorded click on the relevant tick box.</td></tr>
<tr><td>7.53</td><td>Lactate result (mmol/L) (Lactate)</td><td>Record the result in the following format (N.N).</td></tr>
</table>

Imaging tab

Imaging data should be taken from the PACs Radiology reporting system or other electronic system used for the purpose of recording this information eg eCRIS.

Please discuss whether this system has been calibrated with your Superintendent Radiographer to ensure that the time is accurate.

Question number	Description on screen (field name)	Guidance
8.01	Imaging performed (Imaging)	Record whether imaging has been performed from one of the following options: **No** **Not recorded** **Yes**
X-ray		
8.02	Plain X-ray (PlainXR)	Record whether an X-ray was performed during the audit period from the following options: **No** **Not recorded** **Yes** Note: ALL X-rays within the initial review should be included therefore if a patient is transferred from one ED to another then X-rays taken in both EDs should be recorded. DO NOT include follow up or late X-rays taken after the patient has been admitted to a hospital bed, unless the first X-ray was taken after admission to hospital AND was used for coding of injuries. Please also include any X-rays taken in MIU.
	Action +	Click on 'Add new x-ray to Episode'
8.03	Plain X-ray date and time (PlainXRDate/ PlainXRTime)	Record the date and time that the X-ray(s) was performed.
8.05	Body region (PlainBodArea)	Click on the box(s) beside all the body region(s) that was X-rayed from the list: **Abdomen** **Chest** (may be recorded as thorax) **Extremity** **Face** **Head** **Not recorded** **Pelvis** **Spine – all** **Spine – Cervical** (includes neck and/or c-spine) **Spine – Lumbar** **Spine – Thoracic** Notes:

Question number	Description on screen (field name)	Guidance
		• Record all the body regions that were X-rayed prior to the patient being admitted to hospital. This may include multiple X-rays in more than one hospital. • If the entire spine was X-rayed during the same X-ray attendance, please select Spine – all
	Action +	**Click on the + sign to add another X-ray that was performed before hospital admission but at another time from the first X-ray (eg within the second ED).**
CT (ALL CT scans during patient audit stay – max 30 days)		
8.06	CT Scan (CTScan)	Record whether or not a CT scan was performed during the audit period from the following options: **No** **Not recorded** **Yes**
	Action +	Click on 'Add new CT Scan to Episode'
8.07	CT date and time (CTScanDate/ CTScanTime)	Record the date and time that a CT scan was performed. Click on the relevant not recorded box if this information is not available. Notes: If multiple body regions were scanned during one CT attendance, then record the earliest date and time. Please enter all the CT scans during the audit period.
8.09	Body region (CT) (CTBodArea)	Click on the box(s) beside all the body region(s) that were scanned during each CT scan from the list: **Abdomen** **Chest** (may be recorded as thorax) **Extremity** **Face** **Head** **Not recorded** **Pelvis** **Spine – all** **Spine – Cervical** (includes neck and/or c-spine) **Spine – Lumbar** **Spine – Thoracic** Note: If the entire Spine was scanned during the same scan, please select Spine – all.
8.10	**CT written report** (CTScanWritten)	If CT = Head, then record whether a CT written report is available for this CT scan from the following options:

Question number	Description on screen (field name)	Guidance
		No **Yes** Note: A report is an interpretation of a radiological image recorded in writing (handwritten or electronic) by a radiologist. If a report has been signed off by a SpR (of whatever grade) then it is reasonable to assume that they are doing so with the approval of their supervising consultant therefore this is acceptable.
8.11/8.12	**CT written report date and time** (CTScanWrittenDate/ CTScanWrittenTime)	Record the date and time of written report (data should be taken from the same source as CT data and time eg PACs system or other electronic system). Note: This is the report that describes the **CT head** scan results.
	Action +	Click on the + sign to add another CT Scan that was performed during the audit period.
Other scans (in ED or pre-hospital)		
8.13	Ultrasound scan (USS)	Record whether an ultrasound scan was performed in ED (or pre-hospital) from the following options: **No** **Not recorded** **Yes** Note: Include all diagnostic scans using ultrasound (including cardiac echo) but not when USS is used to aid insertion of lines etc.).
8.14	eFAST or FAST Scan (Efast)	Record whether an eFast Scan was performed in ED or pre-hospital from the following options: **No** **Not recorded** **Yes** Note: Clinician performed bedside ultrasound is a limited, goal directed examination, designed and used to answer specific clinical questions. Some indications for performing a FAST or eFAST include unexplained hypotension, Trauma in Pregnancy, free fluid and/or Pneumothorax/ haemothorax

Interventions tab

Question number	Description on screen (field name)	Guidance
IV Blood Products		
9.00a	Code red activation (CodeRed)	Record whether the SAS (or other) activated Code Red requesting pre-hospital blood: **No** **Not recorded** **Yes**
9.00b	Major haemorrhage Protocol (MajorHaem)	Record whether a Major Haemorrhage Protocol was activated in ED: **No** **Not recorded** **Yes**
9.01	Blood products (BloodProduct)	Record whether the patient was given IV blood products pre-hospital and/or the first six hours after arrival in the first hospital: **No** **Not recorded** **Yes**
9.02	Blood product started in (BloodStart)	Record the location where the IV blood product was started from the following options: **ED** **Location after ED** **Not recorded** **Pre hospital** (includes MIU/Other)
9.03/9.04	Date and time started (first blood product) (BloodDate/ BloodTime)	Record the date and time that the first blood product was started – click on the tick box(s) if either or both are not recorded. Note: If there is documentation to say that blood products were given pre-hospital, but no time, use the time the patient **entered ED** as a proxy. If there is documentation to say that blood products were given in ED, but no time, use the time the patient **left ED.**
9.05	Blood product type (BloodType)	Record the type of IV blood products given in the first six hours from one or more of the following options: **Cryoprecipitate** **FFP** (fresh frozen plasma) **Not recorded** **Platelets** **RBC** (red blood cells) **Autologous transfusion** (in theatre)

Question number	Description on screen (field name)	Guidance
9.06	Pre-hospital blood products (volume) (PreHospBlood)	Record the volume in mls or click on the box 'not recorded'.
9.07	Blood products in ED (EDBlood)	Record one of the following options: **No** **Not recorded** **Yes**
9.08	Blood products in ED(volume) (EDBloodVol)	Record the volume in mls or click on the box 'not recorded'.
Tranexamic Acid		
9.09	**Tranexamic acid (TXA)** (TXA)	Record whether the patient was given TXA pre-hospital and/or the first six hours after arrival in the first hospital: **No** **Not recorded** **Yes** Notes: Tranexamic acid is an IV medication used to treat or prevent excessive blood loss.
9.10	Tranexamic acid started in (TXAStarted)	Record the location where the TXA was started from the following list: **ED** **Location after ED** **Not recorded** **Pre hospital** (includes MIU/Other)
9.11/9.12	**Date and time started (TXA)** (TXADate/TXATime)	Record the date and time that the TXA was started – click on the tick box(s) if either or both are not recorded. Note: If there is documentation to say that TXA was given pre-hospital, but no time, use the time the patient **entered ED** as a proxy. If there is documentation to say that TXA was given in ED, but no time, use the time the patient **left ED.**
IV Fluids		
9.13	Pre-hospital IV fluid given? (IVFluid)	Record one of the following options: **No** **Not recorded** **Yes**

Question number	Description on screen (field name)	Guidance
9.14	Pre-hospital IV fluid volume (crystalloid/colloid) (IVFluidVol)	Record the volume in mls. Note: This should include fluid given from incident to First ED (and may include MIU/Other).
9.15	IV fluid (bolus) in ED (EDIVFluid)	Record one of the following options: **No** **Not recorded** **Yes** Note: This should include bolus fluid only and NOT maintenance fluid.
9.16	IV fluid in ED (volume) (EDIVFluidVol)	Record the volume in mls or click on the 'not recorded' box.
IV Antibiotics		
9.17	**IV antibiotics (ABX)**	Record whether the patient was given IV antibiotics pre-hospital and/or the first six hours after arrival in the first hospital: **No** **Not recorded** **Yes** Note: If incident time is unknown use first contact with emergency services as a proxy.
9.18	IV ABX started in (IVAbxStarted)	Record the location where the IV antibiotics were started from following options: **ED** **Location after ED** **Not recorded** **Pre hospital** (includes MIU/Other)
9.19/9.20	**Date and time started (IV antibiotics)** (IVAbxDate/ IVAbxTime)	Record the date and time that the IV antibiotics were started or click on the 'not recorded' box if either or both are not recorded. Note: If there is documentation to say that IV ABx was given pre-hospital, but no time, use the time the patient **entered ED** as a proxy.

Question number	Description on screen (field name)	Guidance
		If there is documentation to say that IV ABx was given in ED, but no time, use the time the patient **left ED.**
Intubation		
9.21	Patient intubated in pre-hospital or ED (Intubat)	Record one of the following options: **No** **Not recorded** **Yes** Notes: Intubation is a shorter term for tracheal intubation and is via an endotracheal tube (ETT) or tracheostomy. Emergency surgical airways should be recorded as intubation. Guedel airway, OP airway and laryngeal mask (including iGel) are not classified as intubation. Please note that if this information is important for a Ps score if the GCS is missing.
9.22	Intubation location (IntubatLoc)	Record the location the intubation was performed from the following options: **ED** **Not recorded** **Pre Hospital**
9.23/9.24	Date and time of intubation (IntubatDate/ IntubatTime)	Record the date and time of the first intubation (prior to discharge from ED) or click on the 'not recorded' tick box.
9.25	Intubated by (IntubatBy)	Record the role of the person who intubated the patient from following list: **Advanced Practitioner** **Doctor** **Not recorded** **Paramedic**
9.26	Grade (IntubatGrade)	Record the grade of the doctor who performed the intubation from the following list: **Clinical Assistant** **Consultant** **Locum** **Specialty Dr or Associate Specialist** **Specialist Trainee 4-8** **Specialist Trainee 3** **Specialist Trainee 1 – 2, GP or Foundation Year 2** **Not recorded**
9.27	Specialty (IntubatSpec)	Record the specialty of the doctor performing the intubation from the following list:

Question number	Description on screen (field name)	Guidance
		Anaesthetics **Emergency Medicine** **Intensive Care Medicine** **Pre hospital Emergency Medicine** **PICU** **Other** **Not recorded** Note: ICM should be chosen if the patient was referred to ITU and the doctor who reviewed the patient performed the intubation.
9.28	Anaesthetic Drugs given (IntubatAnDrugs)	Record whether the patient was given anaesthetic drugs prior to intubation. **No** **Not recorded** **Yes** Note: Please refer to the BNF or discuss with the local Clinical Lead as to names of anaesthetic drugs used in your hospital.
Thoracotomy		
9.29	Thoracotomy (ED/Pre hospital) (ThoracotomyED)	Record one of the following options: **No** **Not recorded** **Yes**
9.30	Thoracotomy performed by (ThoracotomyBy)	Record the specialty of person performing this procedure: **Cardiothoracic** **Emergency Medicine** **Pre hospital** **Not recorded** **Other**
Interventional Radiology		
9.31	Interventional Radiology (IR)	Record one of the following options: **No** **Not recorded** **Yes** Note: include the first IR intervention at any time during the patients audit period.
9.32/9.33	Date and time of Interventional radiology (IRDate/ IRTime)	Record the date and time that the interventional radiology procedure started – If not recorded click on the tick box 'not recorded'.

Question number	Description on screen (field name)	Guidance
Pelvic Binder		
9.34	Pelvic binder? (PelvicBinder)	Record whether a pelvic binder was applied prior to leaving ED from the following options: **No** **Not recorded** **Yes**
9.35	Where was the pelvic binder applied? (PelvicBinderLoc)	Record the location the pelvic binder was applied from the following options: **ED** **Not recorded** **Pre-hospital**
9.36/9.37	Date and time applied (PelvicBinderDate/ Time)	Record the date and time the binder was applied or click on the tick box 'not recorded'.

Theatre tab

This section records details of the first operation following the trauma incident that was performed in Theatre. Please note that if a patient is taken to theatre for a tracheostomy to aid mechanical ventilation, then this should NOT be recorded in this section.

Question number	Description on screen (field name)	Guidance
10.01	Operation performed (Theatre)	Record whether the patient had an operation(s) following the trauma incident (and during the audit period) from the following options: **No** **Not recorded** **Yes**
10.02/10.03	Date and time of operation (TheatreDate/ TheatreTime)	Record the date and time of the first operation or click on the relevant tick box(s) 'not recorded'. Note: Record the date and time that the operation started using 'skin to knife' recordings.
10.04	Anaesthetic grade (AnaesGrade)	Record the grade of the most senior Anaesthetist in theatre from one of the following options: **Consultant** **Locum** **Not recorded** **Specialty Dr/Associate Specialist** **Specialist Trainee 1 – 2 OR Foundation Year 2** **Specialist Trainee 3** **Specialist Trainee 4-8**
10.05	Operation type (OpType)	Record the specialty of the doctor(s) who performed the operation(s). If there was more than one specialty involved during the same anaesthetic, then record **all** the relevant specialties from the following list: **Cardiothoracic** **ENT** **General Surgery** **Maxillo facial** **Neurosurgery** **Not recorded** **Ophthalmology** **Orthopaedic** **Plastic surgery** **Spinal surgery** **Urology** **Vascular** **Other**

Question number	Description on screen (field name)	Guidance
10.06	Surgeon grade (SurgGrade)	Record the grade of the most senior surgeon who performed the operation from the list, entering one of the following options for each type of operation: **Consultant** **Locum** **Specialty Dr/Associate Specialist** **Specialist Trainee 1 – 2 OR Foundation Year 2** **Specialist Trainee 3** **Specialist Trainee 4-8**
10.07	Was a laparotomy performed during this operation (Laparotomy)	Record whether there was a laparotomy performed as part of the first operation: **No** **Not recorded** **Yes**
10.07b	Was a laparoscopy performed during this operation (Laparoscopy)	Record whether there was a laparoscopy performed as part of the first operation: **No** **Not recorded** **Yes**
10.08	Was a thoracotomy performed during this operation (Thoracotomy)	Record whether there was a thoracotomy performed as part of the first operation: **No** **Not recorded** **Yes**

Injury score tab

The AIS Dictionary (2005 version with 2008 update) is currently used by STAG to code each injury. There is the ability to score up to 25 AIS codes within eSTAG.

The most accurate injury descriptions are likely to be obtained from radiology reports, theatre notes and post mortem reports.

Question number	Description on screen (field name)	Guidance
Patient Details		
11.01	Patient age (years) (Age)	This field will be automatically derived from date of birth, when available. If no DOB is available, please record an approximate age (on the date of arrival to the First ED (or date of admission to first hospital if patient was not seen in ED) Record a number between 0 and 130. Note: The dataset has additional questions if the patient is ≤ 16 years old.
11.02	Patient age (months) (AgeMon)	This field will be automatically derived from date of birth when available and age is < 1-year-old. Record the patient's age in months if aged < 1-year-old. Record a number between 0 and 11. 0 should be used if the patient is recorded as being < 4 weeks old.
Pre-existing Medical Conditions		
11.10	Record of pre-existing medical condition(s) (PMHEvidence)	Record whether there is any evidence of any pre-existing medical condition(s) in the patient's medical record from the following options: **No past medical history** (recorded as the patient having no or no relevant PMH) **Not known** (recorded as the PMH being not known) **Not recorded** (no record of PMH in patient notes) **Yes** (record of PMH in patient notes)
11.11	Pre-existing medical condition (PMH)	See Appendix three for a full list of pre-existing medical conditions that should be recorded in this field. Record whether the patient has a record of pre-existing medical conditions from the following options: **No** **Not known** **Not recorded** **Yes** If the answer = Yes, record all the conditions recorded in the patients notes from the following categories: **Alcohol abuse –** recurring harmful use of alcohol

Question number	Description on screen (field name)	Guidance
		Blood conditions **Cancer** **Cerebral vascular accident** **Connective tissue disorder** **Dementia** **Diabetes** **GU/GI disease** **Haematological malignancy** **Heart failure** **HIV** **Liver disease** **Mental health** **MI** **Neurological disorders** **Not classified** **Other** **Paraplegia** **Pulmonary disease** **Renal disease** **Vascular diseases** Choose the relevant category from the list, and then click on one or more of the tick boxes beside the documented condition. Now click on 'Add condition' Note: Patients who are admitted on anti-coagulant drugs eg such as Warfarin, Apixaban, Rivaroxaban, Edoxaban, Dabigatran should have blood condition/coagulopathy recorded.
11.12	Pre-existing weighting (PMHWeighting)	This field will be calculated automatically by eSTAG after questions on pre-existing medical conditions have been recorded and validated.
Injury Details		
11.06	AIS Code (AISCode)	Record the 6-digit code from the AIS dictionary **OR search for the AIS code using the Injury description field.** Notes: • Use the AIS dictionary (2005 version, 2008 update), to determine the code most applicable to each injury. • **Do not enter** the post dot number. This will be automatically entered by eSTAG in the 'Score' field. • Please note that any code that starts with a zero (pages 166-167) should be added without the zero. Eg 020000 should be entered as 20000. • Previously, AIS codes with a score of 6 have been deemed incompatible with life and were not allowed to be used for live patients. The AAA has decided that with advancements in trauma care, there may be some instances where these codes may be used for patients who survive. If you think that one of these

Question number	Description on screen (field name)	Guidance
		codes would be most suited to an injury, please discuss with the STAG consultant, and if they are in agreement with the allocated code, please contact the STAG central team to alert us. • Do not code a '**clinical** rib # or flail chest' if the patient has had a CT and the injury is not confirmed on CT.
11.04	Injury Description (ClinDescrip)	This can be used as a **search facility AND to record a clinical description** of all individual injuries from the patient's records. For searching, use a generic description (eg radius, brain stem) and then click on the magnifying glass to search. This will list all codes with this description, allowing you to choose the most relevant. Click on the appropriate code to save this and other information to this injury line. REMEMBER then to go back to this box and enter the clinical description, which will be a prompt and useful for quality assurance. Notes: • Be as descriptive as possible, including length, and depth of lacerations, any underlying injuries, and specific bones and associated damage, whether unilateral or bilateral. • If there is only minimal injury description in the records, clinicians should be contacted to provide further description. • Only if no further description is available enter NFS = Nothing Further Specified, after the injury description. • The most accurate injury descriptions are likely to be obtained from X-ray/CT reports and theatre operation notes. • Do not include injuries such as rib fractures sustained during and attributable to CPR.
11.05	Source (AIS) (AISSource)	Record one of the following options: **Clinical document** **CT scan** **MRI Scan** **Not recorded** **Post-mortem** **Surgery** **Ultra Sound Scan** **X-ray** Notes: • QA checks require confirmation of the source of injury, therefore it is important that this is recorded accurately.

Question number	Description on screen (field name)	Guidance
		• If a description in the patient notes of a CT result is used, then the source should be Clinical Document. • For any injuries coded/scored as a result of discussion with clinicians, write details of this in the comments section noting the injury and grade and specialty of the clinician involved in decision. Ensure that no identifiable information is noted in this section i.e. Clinical team names. Example – Injury was coded on the basis of a decision by a clinician who differs from the clinical notes explanation of injury. Injury documented on electronic system = Maxillary fracture Le Fort III 250808 with score =3 Same injury discussed with clinician and confirmed it should = Maxillary fracture, Le Fort III & blood loss >20% 250810 with score =4.
11.08	Region (AIS) (AISRegion)	This will be automatically entered by eSTAG once the AIS code has been entered and validated. Regions 01 = Head and Neck 02 = Face 03 = Chest 04 = Abdomen 05 = Extremity 06 = External
11.09	AIS code description (AISDescrip)	This will be automatically entered by eSTAG once the AIS code has been entered AND Save Validate has been selected.
11.07	Score (AIS) (AISScore)	This will be automatically entered by eSTAG once the AIS code has been entered AND Save Validate has been selected.
	Action +	Click on 'add new injury score to episode to add another AIS code.
11.14	Open fracture (long bones) (OpenLimb)	This will be automatically entered by eSTAG once the AIS codes have been recorded AND Save Validate has been selected.
11.15	ISS Score (ISSScore)	This will be calculated by eSTAG after the AIS codes have been recorded AND Save Validate has been selected. Notes: • A patient may have one or many injuries and the Injury Severity Score (ISS) is an anatomical score that measures the overall severity of injured patients.

Question number	Description on screen (field name)	Guidance
		• All injuries are assigned an AIS code and score from an internationally recognised dictionary that describes over 2000 injuries and ranges from 1 (minor injury) to 6 (an injury that is thought to be 'incompatible with life'). Patients with multiple injuries are scored by adding together the squares of the three highest AIS scores in three predetermined regions of the body. This is the ISS which can range from 1 to 75. Scores of 7 and 15 are unattainable because these figures cannot be obtained from summing squares. The maximum score is 75 ($5^2+5^2+5^2$). By convention, a patient with an AIS 6 in one body region is given an ISS of 75.
11.16	Ps12 (Ps12)	This will be calculated by eSTAG after the AIS codes, GCS and age have been recorded AND Save Validate has been selected. Note: **Probability of survival** A probability of survival (Ps) is calculated for each injured patient. This allows comparative outcome analyses for hospitals. For more information please see the TARN website https://www.tarn.ac.uk/Content.aspx?c=3065 Or a useful article is http://anaesthetics.ukzn.ac.za/Libraries/TRAUMA/Trauma_scoring_systems_and_databases.sflb.ashx Ps 12 uses the ISS, age and sex of the patient to calculate a probability of survival.
11.17	Ps17 (Ps17)	This will be calculated by eSTAG after the AIS codes, GCS, age and pre-existing conditions have been recorded AND Save Validate has been selected. Ps 17 includes a weighting for pre-existing medical conditions as well as using the ISS, age and sex of the patient to calculate a probability of survival.

Outcome tab

Discharge from the audit occurs when whichever one of the following occurs first:

- Patient dies in a hospital with an ED or Regional Specialty, or
- Patient is discharged from a hospital with an ED or Regional Specialty, or
- Patient's length of stay > 30 days in a hospital with an ED or Regional Specialty.

Question number	Description on screen (field name)	Guidance
Discharge Details		
12.01	Outcome (Outcome)	Record the patient status at the point of discharge from the audit from the following options: **Alive** **Dead** Note: Discharge from the audit is either when a patient dies, is discharged or whose length of stay is > 30 days (within a hospital with an ED or Regional Specialty).
12.02	Date of discharge (DOD)	Record the date the patient was discharged or died. Click on 'not recorded' if this information is not recorded. Notes: • This refers to whichever one of the following dates occurs first; the date of discharge, the date of death, or a stay of > 30 days (within a hospital with an ED or Regional Specialty). • If a patient is pronounced brain dead, the date the first confirmation of brain death is recorded should be used.
12.03	Time of death (TOD)	Record the time of death. Click on not recorded if this information is not available. Note: If a patient is pronounced brain dead, the time the first confirmation of brain death is recorded should be used.
12.04	Post mortem examination (PM)	Record one of the following options: **Awaiting PM** **PM not available** **PM not required** **PM received** Note: Waiting PM will flag this patient in the rag status as a prompt however a patient cannot be discharged from the audit if 'waiting PM' remains the answer. Please discuss with central team if PM wait is excessive or final year submission date is given.

Question number	Description on screen (field name)	Guidance
12.07a	Discharged to (FinalDischarge)	Record where the patient was discharged to from the following list: **Hospital out with Scotland** **Mental Health Hospital** **Not recorded** **Ongoing acute care in hospital –** includes acute psychiatric care **Ongoing rehabilitation care in hospital** **Other** **Private healthcare provider** **Private residence** eg usual place of residence or staying with relatives or friends **Residential institution** **Self-discharged** **Temporary residence** eg holiday or student accommodation, prison, no fixed abode or foster care **Terminal care facility** Note: If a patient is still in hospital at 30 days – ongoing acute care in hospital or ongoing rehabilitation care in hospital should be used.
12.07b	Rehabilitation facility (RehabType)	If the patient discharge = ongoing rehabilitation care in hospital, record what type of facility this is from the list: **Brain injury** **Elderly** **General** **MSK** **Spinal Injuries**
12.08	LOS (days) Total (TotalLOS)	Calculated by eSTAG after the attendance/admitted date and date of discharge have been entered AND Save Validate has been selected. Patients are followed up to a maximum of 30 days.
12.08a	Patient still in hospital after 30 days **(Patient_Stay_After_30days)**	Click on this box if the patient remains in a hospital (with ED or Regional Specialty) at 30 days. The date of discharge will auto populate.
12.27	Non Accidental Injury (NAI)	Record whether there is non-accidental injury (NAI) from the following list: **No:** no evidence of NAI or similar documented in patient notes; **Not recorded:** no documentation within patients notes to confirm NAI has been considered; **Considered:** For all under 2s where there is no clear documentation of 'no evidence of NAI' or similar in notes AND the threshold for 'suspected' is not met **Suspected:** Threshold for 'suspected NAI' is reached if:

Question number	Description on screen (field name)	Guidance
		1. NAI suspected by a member of the clinical team (NOT family or carers) AND 2. Concerns have been escalated to police/ social work/ child protection service eg one or more of the following: • A joint medical or forensic examination has been/ is being organised (eg post mortem); and/or • skeletal survey/ retinal examination has been/ is being organised (documentation or radiology); and/or • The results of a multi-agency case review are awaited. **Yes: Confirmed** NAI documented in patient notes or relevant database following decision by court/multi-agency case review or children's panel. Notes: 1) 'Considered' and 'suspected' are temporary codes and should be converted to a confirmed 'yes' or 'no' as soon as this information becomes available. 2) 'Considered' and 'suspected' cases will be flagged up centrally and should be reviewed 6 monthly until a definitive code can be applied. 3) Any cases that are not explicit should be discussed with the clinical lead.
Intensive Therapy Unit (ITU)		
12.09	ITU stay (audit period) (ITUStay)	Record whether the patient was admitted to an ITU during the audit period from the following options: **No** **Yes** Note: This field will be auto-populated if destination from ED is ITU or ultimate destination from ED is ITU.
	Action +	Click on 'Add new ITU stay to episode'
12.10	Date admitted to ITU (ITUDOA)	Record the date of admission to ITU. Notes: • The most accurate date source is usually WardWatcher or patient notes. • Paediatric ITUs in Scotland are part of the PICANet audit and not SICSAG therefore they do not use WardWatcher.
12.11	Date discharged from ITU (ITUDOD)	Record the date of discharge from ITU (up until 30-day stay in audit)

Question number	Description on screen (field name)	Guidance
		Click on the box if 'remains in unit after discharge' if the patient is still in ITU on day 30. Note: The data source should be the same as date admitted to ITU.
12.12	ITU (type) (ITUType)	Record the type of ITU from the following list: **Cardiothoracic** **General** **Neurological** **Not recorded** **Obstetric** **Paediatric** **Renal** **Surgical** **Transplant**
12.13	WW unit code (WWCodeITU)	Record the ITU the patient was admitted to from the drop down list.
12.14	WW Key (WWKeyITU)	Record the WardWatcher Key number associated with this admission. Click on not recorded if this information is not available. Note: The WW key is made up of numbers (maximum of 12 numbers).
	Remains in unit after discharge	Click on this box if the patient remains in ITU after discharge from the audit on day 30.
	Action +	Click on the + if the patient was admitted to another ITU during the audit period and add information as before.
12.15	LOS (ITU) Total (ITU)	Calculated by eSTAG, after date(s) admitted to and discharged from ITU(s) have been entered AND Save Validate has been selected. Please note that LOS is rounded up to whole days.
High Dependency Unit (HDU)		
12.16	HDU stay (audit period) (HDUStay)	Click on the box if the patient was admitted to a High Dependency Unit (HDU) during the audit period. Note: This field will be auto-populated if destination from ED is HDU or ultimate destination from ED is HDU.
	Action +	Click on 'Add new HDU stay to episode'

Question number	Description on screen (field name)	Guidance
12.17	Date admitted to HDU (HDUDOA)	Record the date of admission to HDU. Notes: • The most accurate date source is usually WardWatcher or patient notes • WardWatcher is not available in all HDUs
12.18	Date discharged from HDU (HDUDOD)	Record the date of discharge from HDU (up until 30/7 stay in audit) Click on the box if 'patient remains in HDU after date of discharge from audit'. Note: Data source should be the same as Date admitted to HDU.
12.19	HDU (type) (HDUType)	Record the type of HDU from following list: **Cardiothoracic** **General** **Medical** **Neurological** **Not recorded** **Obstetric** **Paediatric** **Renal** **Surgical** **Transplant**
12.20	WW unit code (WWCodeHDU)	Record the name of the HDU from the drop down list. Notes: • Please note that not all HDUs are currently part of SICSAG. If the unit does not appear on this list, then click on 'unit not part of SICSAG'.
12.21	WW Key (WWKeyHDU)	Record the WardWatcher Key number associated with this admission. Click on not recorded if this information is not available. Note: The WW key is made up of numbers (maximum of 12 numbers).
	Remains in unit after discharge	Click on this box if the patient remains in HDU after discharge from audit on day 30.
Action +		Click on the + if the patient was admitted to another HDU during the audit period and add information as before.
12.22	LOS (HDU) Total (HDU)	Calculated by eSTAG, after date(s) admitted to and discharged from HDU(s) have been entered AND Save

Question number	Description on screen (field name)	Guidance
		Validate has been selected. Please note that LOS is rounded up to whole days.
Spinal Injuries Unit		
12.23	Spinal Injuries Unit (SIU) stay (SIUStay)	Click on the box if the patient was admitted to the Spinal Injuries Unit in NHS Greater Glasgow and Clyde during the audit period.
12.24	Date admitted to SIU (SIUDOA)	Record the date of admission to SIU (at the Queen Elizabeth University Hospital, Glasgow).
12.25	Date discharged from SIU (SIUDOD)	Record the date of discharge from SIU (up until 30/7 stay in audit) Notes: Include all wards in SIU as part of patient stay in SIU eg acute and rehabilitation. Do not discharge the patient from SIU if patient moved to critical care and then returns to SIU.
12.26	LOS (SIU) (SIU)	Calculated by eSTAG, after date(s) admitted to and discharged from SIU has been entered AND Save Validate has been selected. Please note that LOS is rounded up to whole days. Note: If a patient is transferred to ITU or other area from SIU and then returns to SIU, record date of discharge from SIU as final date OR at 30/7.
Rehabilitation		
12.28	Rehabilitation plan (RehabPlan)	This question will only be asked if a patient has an ISS > 8 AND is admitted to a MTC. Record whether the patient has a Rehabilitation Plan from the following options: **No** **Not required** **Yes** Note: A **Rehabilitation Plan** should be found in the patient's notes. The plan will have an area dedicated for data required by STAG. 'Not required' should be documented on the front of a Rehabilitation Plan. If there is no Rehabilitation Plan, then no should be chosen.
12.29	Date of rehabilitation plan (RehabPlanDate)	Record the date that the Rehabilitation Plan was started.

Question number	Description on screen (field name)	Guidance
		Click on the tick the box if not recorded.
12.30	Presence of physical factors (PhysicalFactors)	This information will be collected as part of the Rehabilitation Plan and should be clearly marked as STAG Data: **No** **Not assessed** **Not recorded** **Yes**
12.31	Presence of cognitive/mood factors (CognitiveMoodFactors)	This information will be collected as part of the Rehabilitation Plan and should be clearly marked as STAG Data: **No** **Not assessed** **Not recorded** **Yes**
12.32	Presence of psychosocial factors (PsychSocFactors)	This information will be collected as part of the Rehabilitation Plan and should be clearly marked as STAG Data: **No** **Not assessed** **Not recorded** **Yes**
End of Life Care		
12.05	End of life care (EOLC) decision taken (EOLC)	Record whether an EOLC decision was taken (during the audit period) from one of the following options: **No** **Not recorded** **Yes** Note: End of life care is discussed with a patient or family when there is advanced, progressive, incurable illness/injury and further acute treatment is futile. The purpose of an End of Life Care Pathway is to ensure the patient is able to live as well as possible until they die. Sometimes this may be referred to as palliation, however palliative care can also be given to patients to treat or manage pain or other physical symptoms. Documentation of End of Life Care decision should be documented clearly in the patient notes. This doesn't have to include the term EOLC but should suggest active treatment has been stopped. **Please note that this is different from a Do Not Resuscitate order.**
12.06	Date of agreement	Record the date that the decision to begin EOLC was agreed.

Question number	Description on screen (field name)	Guidance
	(EOLCDate)	
12.06b	Decision made (EOLCBy)	Record where the EOLC decision was made from the following list: **Before injury occurred** **In ED** **After admission to hospital** **Not recorded**
PROMs		
12.33	Patient/carer approached about PROMs programme? (PROMs)	Has the patient or carer been approached about the Patient Reported Outcomes Measure (PROMs) programme? Record one of the following options: **No** **Not recorded** **Yes** Note: PLEASE NOTE that PROMs for patients with major trauma will be rolled out in spring 2018.A paediatric PROMs programme will be rolled out soon after and will include patients with moderate and major trauma.
12.34	Agreement to participate in PROMS programme (PROMsPermission)	Patient Reported Outcomes Measure (PROMs) involves three patient questionnaires that determine the patient's quality of life, functional outcome and return to work status at different stages in the patient journey. The first questionnaire will be discussed with the patient during their hospital stay. Agreement to participate in PROMs will be part of the first questionnaire. Record one of the following options: **Not recorded** **Permission given by parent, legal guardian or NOK** **Permission given by patient** **Permission not given by parent, legal guardian or NOK** **Permission not given by patient** The PROMs programme will be rolled out in spring 2018.
12.35	Date of agreement (PROMS) (PROMsDate)	Record the date of agreement to participate in PROMs.
12.36	Person involved in permission (Type) (PROMsBy)	Record the role of person who was involved in seeking permission from the following list: **AHP staff** **Medical staff** **Not recorded**

Question number	Description on screen (field name)	Guidance
		Nursing staff **Rehabilitation Coordinator** **STAG Local Coordinator** **Trauma Coordinator** **Other** **Psychology/Psychiatry**
Local Review		
12.37	Local case review completed (LocalReview)	Record one of the following options: **Highlight to STAG Lead** **No** **Not recorded** **Yes** **Note:** STAG recommend that as a minimum the following patients are highlighted for review: • Patients who die • Major trauma patients (admitted to TUs or LEH with no transfer to MTC) • Patients who fail one or more KPIs • Patients who deteriorate and are transferred to Critical Care from a ward setting.
12.38	Local review reason (LocalReviewReason)	Record one or more of the following options: **More than one reason** **Review of death** **Review of KPI compliance** **Review of major trauma patient** **Review of patient pathway** **QI work** **Other**
Notes (Local Audit Coordinator)		
Enter comments (maximum of 1000 characters). These guidelines make reference to areas where it is good practice to record information in the notes section. This section is also useful to verify anything that is out of the ordinary, e.g. excessive time spent in ED. The comments section is for LAC use only; it is intended that it will act as a memory jogger should further clarification be needed during the validation process. **Please ensure that no identifiable information is recorded in the comments section e.g. staff names.**		
Discharge from audit		
12.39	Discharge patient from audit? (DischargeAudit)	Record one of the following options: **No** **Yes**

Question number	Description on screen (field name)	Guidance
		Note: Once all the information is available and the audit period is over you can trigger the discharge from the audit which will search for any outstanding validations and once these are completed then will submit the record and the record will be 'closed'. Once a record is closed, no changes can be made unless the record is 'reopened'. Reopening will change the status back to either 'draft' or 'validated'.

Key Performance Indicators (KPIs)

Depending on the data recorded one of four answers will show a tick.

Met	The standard has been met for this patient.
Unmet	The standard has not been met for this patient. **Please note that a standard will be unmet if data are not available to calculate the information** (eg a patient with an open fracture has been given IV antibiotics but there is no time for either the antibiotics being administered or first contact with emergency services. See below for a full list of KPIs. Notes: When a standard is not met, this should be reviewed by local clinical teams, where there is comprehensive understanding of how trauma services are configured and individual patient information is available.
N/A	The standard is not applicable for this patient (eg the patient self-presented therefore pre hospital care standards are not applicable)
UNK	The relevant data are not yet entered to confirm whether this patient should be included in this standard.
Time to	If a standard is based on time, the time taken (to meet or not meet) this indicator will be shown. PLEASE NOTE that time will be shown even when this standard may not be applicable eg time to consultant will be calculated for all trauma patients.

Pre hospital Care

1.1 Pre hospital Triage	
Description	Patients who have suffered significant trauma are assessed by the Scottish Ambulance Service (SAS) using the SAS Trauma Triage Tool (SASTTT).
Numerator	Number of major trauma patients who are assessed by the SAS, using the SASTTT.
Denominator	Number of major trauma patients who arrive by the SAS.
Note	Please note that this will be reported in eSTAG, BUT this should only be reviewed in operational networks at this time.

1.2 Pre-alert	
Description	Patients who are triaged as requiring Major Trauma Centre (MTC) care are notified to the receiving hospital (pre-alert).
Numerator	Number of patients triaged as requiring MTC care for whom a pre alert is recorded.
Denominator	Number of patients triaged as requiring MTC care.
Note	Please note that this will be reported in eSTAG, BUT this should only be reviewed in operational networks at this time.

1.3 Diversion to lower level of care	
Description	Patients who are triaged as requiring MTC care are taken directly to a MTC if they are within 45 minutes' travel time.
Numerator	Number of patients triaged to MTC care that are within 45 minutes' travel time of a MTC and are taken directly to a MTC.
Denominator	Number of patients triaged to MTC care that are within 45 minutes' travel time of a MTC.
Notes	Please note that this will be reported in eSTAG, BUT this should only be reviewed in operational networks at this time.

Early hospital Care

Early hospital care includes initial reception of the patient in the ED through to the patient being discharged to a rehabilitation service or home.

2.1.1 Consultant led reception for patients triaged and taken to MTC care	
Description	Patients who are triaged as requiring MTC care and are taken to a MTC are received by a Consultant led trauma team.
Numerator	Number of patients who are triaged and taken to a MTC and are received by a Consultant led trauma team.
Denominator	Number of patients who are triaged and taken to a MTC.
Paediatrics	Paediatric Emergency Medicine Consultant: 1. Same definition as adult from 8.00-23.59. 2. Seen by a consultant within 30mins from 00.00 to 7.59).
Note	Please note that this will be reported in eSTAG, BUT this should only be reviewed in operational networks at this time.
2.1.2 Consultant review for patients triaged to MTC care and taken to a TU	
Description	Patients who are triaged to MTC care and are taken to a TU should be seen by a Consultant within 60 minutes of arrival.
Numerator	Number of patients who are triaged to MTC care and taken to a TU and are seen by a Consultant within 60 minutes of arrival.
Denominator	Number of patients who are triaged to MTC care and taken to a TU.
Notes	Please note that this will be reported in eSTAG, BUT this should only be reviewed in operational networks at this time.

2.2 Time to Major Trauma Centre care	
Description	Major trauma patients who are not taken directly to a MTC and are later transferred to a MTC are transferred within 24 hours.
Numerator	Number of major trauma patients, who are admitted to a MTC within 24 hours of arrival in the first ED.
Denominator	Number of major trauma patients who are transferred from an LEH or TU to a MTC.
Note	Please note that this will be reported in eSTAG, BUT this should only be reviewed in operational networks at this time.

2.3 Time to secondary transfer	
Description	Time to secondary transfer to a MTC for patients who have suffered major trauma (ISS > 15) is minimised to ≤ four hours from time of call (to arrange transfer) to SAS to departure.
Numerator	Number of major trauma patients who depart their receiving hospital to a MTC in ≤ four hours from call to SAS.
Denominator	Number of major trauma patients who are transferred from a non-MTC to a MTC.
Paediatrics patients transfer	Note – these are standards set by ScotSTAR Paediatric Retrieval Service and will be reported on out with eSTAG.
Notes	Please note that this will be reported in eSTAG, BUT this should only be reviewed in operations networks at this time.

2.4.1 Time to CT head	
Description	Patients with a severe head injury have a CT scan within 60 minutes of arrival in first hospital with an ED.
Numerator	Number of patients with a severe head injury who undergo a CT head within 60 minutes of arrival in ED.
Denominator	Number of patients with a severe head injury.
Notes	Severe head injury is defined as a patient with a (Glasgow Coma Scale (GCS) ≤ 8 or an Abbreviated Injury Scale (head) ≥ 3.
2.4.2 Time to CT head written report	
Description	Patients with a severe head injury have a CT scan written report available within one hour of the CT scan.
Numerator	Number of patients with a severe head injury where a CT head written report by a radiologist is available within one hour of the time the CT scan was performed.
Denominator	Number of patients with a severe head injury.

2.5 Major Trauma Centre care for patients with a severe head injury	
Description	Patients who have suffered a severe head injury are managed in a MTC.
Numerator	Number of patients who have suffered a severe head injury and are managed in a MTC.
Denominator	Number of patients with who have suffered a severe head injury.
Notes	Severe head injury is defined as a patient with an Abbreviated Injury Scale (head) ≥ 3. Please note that this will be reported in eSTAG, BUT this should only be reviewed in operational networks at this time.

2.6 Management of open long bone fractures	
Description	Patients with an open long bone fracture will receive intravenous (IV) antibiotics within three hours of first contact with Emergency Services.
Numerator	Number of patients with a severe open long bone fracture who received IV antibiotics within three hours.
Denominator	Number of patients with a severe open long bone fracture.
Note	As injury time data is poorly collected, STAG will use “first contact with emergency services” as a surrogate. This will be the first applicable option from - date/time SAS were called; date/time the patient enters a Minor Injury Unit or the date/time the patient enters an Emergency Department. Note that if the patient travelled to ED by SAS and the date/time SAS were called is missing then the KPI will be unmet as it is not possible to calculate an accurate time to antibiotics.

2.7 Administration of Tranexamic Acid in patients with severe haemorrhage	
Description	Trauma patients with severe haemorrhage should be given Tranexamic Acid (TXA) within three hours of first contact with Emergency services.
Numerator	Number of trauma patients with severe haemorrhage that start the administration of TXA within three hours of first contact with emergency services.
Denominator	Number of trauma patients with severe haemorrhage. Severe haemorrhage has been updated and now includes patients who receive RCC in the first six hours only. Prior to this it included all blood products.
Note	See under 2.6 notes for definition of ‘first contact with emergency services’

2.8 Specialist care	
Description	Patients who have suffered major trauma and are taken to a MTC, are admitted under the care of a Major Trauma Service.
Numerator	Number of major trauma patients who are admitted to a MTC (primarily or secondarily) and are under the care of a Major Trauma Service.
Denominator	Number of major trauma patients who are admitted to a MTC (primarily or secondarily).
Notes	Please note that this will be reported in eSTAG, BUT this should only be reviewed in operational networks at this time.

Ongoing hospital care

Ongoing hospital care includes rehabilitation of the patient within a hospital setting or/and within the community.

3.1.1 Assessment of rehabilitation needs	
Description	Major trauma patients admitted to a MTC have a rehabilitation plan written.
Numerator	Number of major trauma patients admitted to a MTC, with a length of stay of more than three days who have a rehabilitation plan.
Denominator	Number of major trauma patients whose length of stay is more than three days.
Note	Please note that this will be reported in eSTAG, BUT this should only be reviewed in operational networks at this time.
3.1.2 Time to assessment of rehabilitation needs	
Description	Major trauma patients admitted to a MTC, who have a rehabilitation plan, have it written within three days of admission.
Numerator	Number of major trauma patients admitted to a MTC who have a rehabilitation plan that is written within three days of admission to a hospital.
Denominator	Number of major trauma patients admitted to a MTC (on day one, two or three) who have a rehabilitation plan.
Note	Please note that this will be reported in eSTAG, BUT this should only be reviewed in operational networks at this time.

3.2 Functional outcome	
Description	Patients who have survived major trauma have their functional outcomes assessed at specified timelines.
Numerator	Number of major trauma patients who survive to discharge who are approached about inclusion in the Patient Recorded Outcomes Measure (PROMS) Trauma Programme.
Data source	Numerator = Proms = yes Denominator = ISS > 15, outcome = alive, FirstHospType OR TransHospType = MTC.

Export facility

The **export data** icon can be found at the top left hand side of the home page. Once you enter the export page, go to the right hand side of the screen and complete steps 1-4. These steps confirm instructions such as hospital; file type, date range, export criteria. Some of these steps are mandatory (hospital, file type) and others are not (date range, export criteria).
Finally go to step 5 (right hand of screen) to indicate what data items you want your export to contain. Please note that step 5 can be carried out before or after steps 1-4.

Please contact the STAG team at nss.isdstag@nhs.net for advice on exporting.

Step 1 – Export Hospital(s)

Click in the box(es) to the left of the hospital you want to export data from. A tick sign will now appear in this box. Please note that options will be dependent on your access permission. To remove the tick, click on the box again.

If you have access to more than one hospital, then you can use the 'check all' or 'uncheck all' options if appropriate.

Step 2 – Load Export Criteria

Click on the downward arrow to view exports that have already been created. Choose the export you want to repeat and click on the '**load export criteria'** OR if you wish to create new export criteria then leave this box empty and continue to Step 3 - **Export criteria.**

*Please note that this field will be empty until you have saved at least one export criteria.

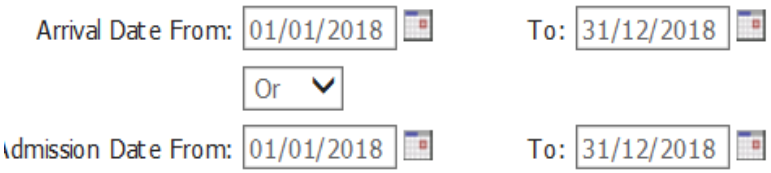
Step 3 – Export Criteria

If you want to limit your export to a date range, then you can choose from the options described below. If you do not want to limit the export to a date range, then leave these fields empty.

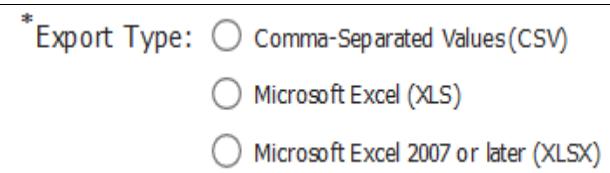
Arrival date from/to: the arrival date is the date a patient attended the Emergency Department (EnterED is the field name). If you want to review patients who attended in January 2018 – enter 01012018 and 31012018 or use the calendars. Please note that eSTAG will automatically add the forward slash to the date if you enter this manually and that the year should contain four numbers eg 2018.

Admission date from/to: the admission date is the date the patient was admitted to the hospital.

If you want to review ALL patients who attended your hospital within a given timeframe, you can do this by entering the arrival and admission from/to dates and selecting '**or**' between the arrival and admission date fields – see below.



Now Choose the export type by clicking on the radio button beside your favoured file type – see below.



Save criteria name - If you have chosen to an export already available via 'Load export criteria', then this field will have been populated with the export name.
If you are creating new export conditions, please give this a name if you wish to re-create these criteria at a later time, based on either the same or different timeframe.

Count records to export- clicking on this will give you the number of records that meet the criteria chosen.
This can be selected at any stage of building the export.

Step 4 – Add new export condition

Tab – if you wish to narrow your export to only contain a defined patient cohort then this section will allow you to do this. Firstly, decide what cohort you want to look at and then choose which tab you will find this information in eg if you want to export data on major trauma patients, go to the injury score tab where this information (ISS) is collected and stored.
Field – the field button allows you to choose which field you want to use for your cohort. In the earlier example in 'tab', you would click on ISSScore to find major trauma patients.
Operator – operator gives you various options that may or may not be relevant to your search criteria. In the earlier example (major trauma patients), their ISSScore should be > 15 therefore choose' **>'** for operator.
The operators LIKE and NOT LIKE will allow you to use wildcards e.g. using the POSTCODE field

LIKE EH%	will return all postcodes beginning EH
LIKE %9EB	will return all postcodes ending 9EB
LIKE EH%EB	will return all postcodes beginning EH and ending EB

Using NOT LIKE will return postcodes which don't meet the above.

Value – the value will either be empty (to allow you to enter a value), or contain options from a list eg Yes/No. Choose or enter the relevant information. In our earlier example you would enter 15.

Now click on the green plus sign + to add this condition.
If you want to add other conditions then start again by entering firstly the tab, field, function and value. Please note that function may be greyed out if it is not applicable.

Export conditions
This shows a list of export conditions that have been chosen for this particular export. New conditions can be added in the above section 'add new export conditions' and conditions can be removed (by clicking on the red cross to the right of the condition).

Step 5 – Select fields to export

This section allows you to choose all the data you want to include in your export.
Click in the square box to the left of the tab to include all data items from that tab. If you only want to include some fields from a tab, click on the + button on the right of the tab name and then click on the relevant box (es).

***Please note that STAG recommend that personal information (name, CHI, DOB) is used in extracts with caution, remembering to adhere to Health Board confidentiality and information governance policies.**
A patient ID (which is non-identifiable) is often a useful alternative and this can be used to search for the patient record in eSTAG within the search page, if more information is required

at a later time or during a review meeting. The Patient ID is found on the 'Patient tab' within the export.
**** see 'compatibility mode' in Section 2 for instructions on how to improve screen formatting if text is shown over more than one line.**

Export Data
Once you have completed all the export criteria and fields to export, click on '**Export Data'**. You will have an option to either open or save the export.
If you have forgotten to add data items to the export, close the export in xls and go back to export page and add any additions and then export data again.

New export – Click this if you want to clear all the export options and start a new export.

Delete a saved export
Select an export and click on load export criteria. You should now see a red cross next to the save button. Click on this to delete a saved export.

Rename a saved export
Select an export to load, change the name and click save.
This will create a copy but you can then delete the old export.

Data field names and data descriptions

Please note that not all data items are available in the eSTAG extract.

Description and field name	Field name	Data
Patient Details		
CHI number	CHI	Numerical
Surname	Surname	Text
Forename	Forename	Text
Date of birth	DOB	date format
Gender (at birth)	Sex	1 = Male 2 = Female
Patient ID	Patient_ID	Unique ID generated by eSTAG
Incident		
Date of incident	IncidentDate	Date format
Time of incident	IncidentTime	Time format
Incident postcode available	IncidentPostcodeAvail	01 = Yes 02 = At sea (Scottish coastline) 03 = Mountain/hills 66 = Out with Scotland 77 = Not known 99 = Not recorded
Incident postcode	Incidentpostcode	postcode format
Population Density	PopDens	TBC
Incident location	Locus	01 = Place of residence 02 = Transport area 03 = Business area (non-specific) 03A = Business area - industrial/construction 03B = Business area - farm 03C = Business area - commercial area 04 = School/educational area 05 = Sports/recreational area 06 = Medical service area 77 = Unknown 98 = Other specified 99 = Not recorded
Type of Injury	InjuryType	1 = Blunt 2 = Penetrating 3 = Blunt and penetrating 99 = Not recorded

Description and field name	Field name	Data
Mechanism of Injury	InjuryMech	1 = Moving vehicle (Transport) 3 = (Old) Fall > 2m 4 = (Old) Fall ≤ 2m 5 = Other 7 = Crushing force 9 = Mechanical threat to breathing 10 = Drowning/near drowning 11 = Piercing/penetrating 12 = Contact with animal/object 13 = Contact with person 14 = Unknown 15 = Blast 16 = Shooting 17 = Fall on same level – use from 01/06/2020 18 = Fall from height – used from 01/06/2020 99 = Not recorded
Type of moving vehicle incident	MVAType	1 = Moving vehicle versus moving vehicle 2 = Moving vehicle versus pedestrian 3 = Moving vehicle versus other 99 = Not recorded
Patients position in moving vehicle accident	MVAPat	1 = Driver 2 = Passenger - front seat 3 = Passenger - rear seat 4 = Pedestrian 5 = Motor cyclist 6 = Pedal cyclist 7 = Mass transport 8 = Other – motorised 9 = Other – non-motorised 99 = Not recorded
Injury intent	InjIntent	1 = Non intentional 2 = Alleged assault 3 = Suspected self-harm 4 = Other 5 = Intent inconclusive 6 = Sport 7 = Medical condition 99= Not recorded
Type of sport injury	SportType	1 = Football 2 = Rugby 3 = Horse riding 4 = Cycling/mountain biking 5 = Skateboarding/rollerblading 6 = Athletics 7 = Motorised (eg motocross) 8 = Snow related 9 = Racket sport 10 = Height eg rock climbing/paragliding 11 = Other sport 12 = Trampolining 13 = Toy vehicle (non-motorised) 14 = Toy vehicle (motorised) 15 = Water sport 99 = Not recorded

Description and field name	Field name	Data
Additional incident information	Alcohol Toxicity PsychDisturb (Old) MassInc Major Incident declared Pregnancy Inpatient Mountain Rescue Team Coastguard RNLI	0 = No 1 = Yes
MIU or Other		
Did the patient attend a MIU or other facility (listed) prior to attending ED?	MIU	0 = No 1 = Yes
MIU/Other (Name)	NonStagHosp	ISD Hospital code
Mode of arrival to MIU/Other	MIUMOA	1 = Self 2 = SAS Ambulance (road) 99 = Not recorded
SAS Incident No.	MIUSASNo	N
Date SAS called	MIUCallStartDate	Date format
Time SAS called	MIUCallStartTime	Time format
Date of arrival at MIU/Other	NonStagDate	Date format
Time of arrival at MIU/other	NonStagTime	Time format
Date of departure from MIU/Other	NonStagDepartDate	Date format
Time of departure from MIU/other	NonStagDepartTime	Time format
Pre-hospital		
Mode of arrival to ED	MOA	1 = Self 2 = Ambulance (road) SAS only 3 = Air directly to hospital site 4 = Air to non-hospital site + road ambulance 5 = Ambulance (road) Pre-hospital medical team 6 = NHS England Ambulance 7 = in-patient 99 = Not recorded
Air Transfer by	AirTrans	1 = SAS 2 = Pre hospital Medical Team (SAS) 3 = Other 4 = Armed forces 5 = Coastguard 99 = Not recorded
SAS Incident No.	SASNo	N
Date SAS called	CallStartDate	Date format
Time SAS called	CallStartTime	Time format

Description and field name	Field name	Data
SAS Trauma Triage Tool	SASTTT	0 = No 1 = Yes
Triaged to	TriageDecision	1 = MTC 2 = TUC 3 = ED
Achievable in 45 minutes	Achievable45	0 = No 1 = Yes 2 = Override
Not achievable reason	NotAchievable	1 = Distance 2 = No aircraft 3 = Weather 4 = Patient condition 5 = Other
Override reason	OverrideReason	1 = Clinical judgement 2 = Trauma Desk advice
Pre-alert	SASStandby	Date and time format
Division	SASDivision	East Central, North, South East, South West, West Central.
Hospital		
Emergency Department		
Seen in ED	SeenED	0 = No 1 = Yes
Date of arrival in ED	EnterDate	Date format
Time of arrival in ED	EnterTime	Time format
Pre-alert	Standby	0 = No 1 = Yes 99 = Not recorded
Patient management type	Area	1 = Resus 3 = Major 4 = Minor 99 = Not recorded
Re-triaged to Resus	Retriage	0 = No 1 = Yes 99 = Not recorded
Re-triage date	RetriageDate	Date format
Re-triage time	RetriageTime	Time format
Date of departure from ED	DepartDate	Date format
Time of departure from ED	DepartTime	Time format

Description and field name	Field name	Data
Destination from ED	Dest	1 = Ward 2 = ITU 3 = Theatre (operation performed) 4 = Mortuary 5 = Other hospital 8 = HDU 9 = Radiology 10 = Theatre (no operation) 11 = Interventional radiology 99 = Not recorded
Other hospital (destination)	OtherDest	1 = Ward 2 = ITU 3 = Theatre (operation performed) 4 = Mortuary 8 = HDU 9 = Radiology 10 = Theatre (no operation) 11 = Interventional radiology 12 = ED 99 = Not recorded
Ultimate destination	UltDest	1 = Ward 2 = ITU 4 = Mortuary 5 = Other hospital 8 = HDU 99 = Not recorded
Theatre (no operation) details	TheatreNoOp	1 = Splinting 2 = Pain control 3 = Holding area 4 = Operation no longer necessary 5 = Manipulation 6 = Other 99 = Not recorded
ED Review		
Consultant present on arrival of patient (immediate review)	ConsultLed	0 = No 1 = Yes 99 = Not recorded

Description and field name	Field name	Data
Consultant Specialty	ConsultLedSpec	1 = Emergency Medicine 2 = Anaesthetics 3 = Cardiothoracic surgery 4 = Intensive Care Medicine 6 = Paediatric ICM 7 = General surgery 8 = Trauma and orthopaedic surgery 9 = Neurosurgery 11 = Major Trauma Service 12 = Vascular surgery 19 = Paediatric surgery 20 = Other 21 = Paediatric EM 22 = Paediatric Anaesthetics 23 = Paediatric Cardiothoracic surgery 24 = Paediatric Trauma and orthopaedic surgery 25 = Paediatric Neurosurgery 26 = Paediatric Major Trauma Service 99 = Not recorded
Review by Dr or Advanced Practitioner in ED	ReviewedED	0 = No 1 = Yes
Date of arrival	ArrivedDate	Date format
Time of arrival	ArrivedTime	Time format
Grade	Grade	1 = Consultant or Associate Specialist (on consultant rota) 2 = Specialty Dr or Associate Specialist (NOT on consultant rota) 3 = Specialist Trainee 4-8 4 = Specialist Trainee 3 5 = Specialist Trainee 1 - 2 or GP, Foundation Year 2 7 = Foundation Year 1 10 = Advanced Nurse Practitioner 11 = Physicians Associate 12 = Nurse Consultant 99 = Not recorded

Description and field name	Field name	Data
Specialty	Spec	1 = Emergency Medicine 2 = Anaesthetics 3 = Cardiothoracic surgery 4 = Intensive Care Medicine 6 = Paediatric ICM 7 = General surgery 8 = Trauma and Orthopaedic surgery 9 = Neurosurgery 10 = Radiology 11 = Major Trauma Service 12 = Vascular surgery 13 = Oral and maxillofacial surgery 14 = Plastic surgery 15 = Otolaryngology (ENT) 16 = Urology 17 = Ophthalmology 18 = Spinal injuries 19= Paediatric surgery 20 = Other 21 = Paediatric EM 22 = Paediatric Anaesthetics 23 = Paediatric Cardiothoracic surgery 24 = Paediatric Trauma and orthopaedic surgery 25 = Paediatric Neurosurgery 26 = Paediatric Radiology 27= Paediatric Major Trauma Service 28 = Paediatric Oral and maxillofacial surgery 29 = Paediatric Plastic surgery 30 = Paediatric Otolaryngology (ENT) 31 = Paediatric Urology 32 = Paediatric Ophthalmology 99 = Not recorded
Was the patient reviewed by a more senior Doctor whilst in ED?	SeniorDr	0 = No 1 = Yes 99 = Not recorded
Review type	SeniorDrReview	1 = Reviewed in person 2 = By telephone ONLY 3 = Face to face discussion 99 = Not recorded
Date of review	ArrivedDateSenior	Date format
Time of review	ArrivedTimeSenior	Time format
Grade	GradeSenior	1 = Consultant or Associate Specialist (on consultant rota) 2 = Specialty Dr or Associate Specialist (NOT on consultant rota) 3 = Specialist Trainee 4-8 4 = Specialist Trainee 3 5 = Specialist Trainee 1 - 2 or GP, Foundation Year 2 99 = Not recorded

Description and field name	Field name	Data
Specialty	SpecSenior	1 = Emergency Medicine 2 = Anaesthetics 3 = Cardiothoracic surgery 4 = Intensive Care Medicine 6 = Paediatric ICM 7 = General surgery 8 = Trauma and Orthopaedic surgery 9 = Neurosurgery 10 = Radiology 11 = Major Trauma Service 12 = Vascular surgery 13 = Oral and maxillofacial surgery 14 = Plastic surgery 15 = Otolaryngology (ENT) 16 = Urology 17 = Ophthalmology 18 = Spinal injuries 19= Paediatric surgery 20 = Other 21 = Paediatric EM 22 = Paediatric Anaesthetics 23 = Paediatric Cardiothoracic surgery 24 = Paediatric Trauma and orthopaedic surgery 25 = Paediatric Neurosurgery 26 = Paediatric Radiology 27= Paediatric Major Trauma Service 28 = Paediatric Oral and maxillofacial surgery 29 = Paediatric Plastic surgery 30 = Paediatric Otolaryngology (ENT) 31 = Paediatric Urology 32 = Paediatric Ophthalmology 99 = Not recorded
Trauma Team Activation	TraumaTeam	0 = No 1 = Yes, prior to arrival 2 = Yes, on arrival 3 = Yes, time not documented 4 = Not recorded
Trauma Team Type	TraumaTeamType	1 = Tier 1 - ED team 2 = Tier 2 - Enhanced 3 = Tier 3 – Full/Code Red 99 = Not recorded
Normal residence		

Description and field name	Field name	Data
Patients normal residence (day of incident)	NormRes	1 = Private residence 2 = Residential institution 3 = Temporary residence 4 = NHS Healthcare provider 5 = Private healthcare provider 6 = Other 7 = Not known 8 = No fixed abode 99 = Not recorded
Postcode	PostCode	postcode format
Admission details		
First hospital (name)	FirstHosp	list of all hospitals in Scotland with ED (AND TYPE) to be supplied once final decision from MTOG has been made
First hospital (type)	FirstHospType	1 = Major Trauma Centre 2 = Trauma Unit 3 = Local Emergency Hospital
Trauma Network	Network	North of Scotland (ARI, DGE, RACH, BFW, CGH, RHI, BHO, GBH); South East (CGH, VHK, RIE, SJH, RHSC, WGH) East (NWD, PRI); West of Scotland (LIDGH, UHA, UHC, DGRI, GCH, FVRH, GJNH, GRI, IRH, RAH, RHC, QEUH, HHEK, MHA, WH, WIH). Please note that FVRH and DGRI will sometimes transfer to SE Network; and this will be reflected in Hospital 2 and network 2. All networks will transfer patients to WOS network for Spinal Injuries Unit.
Was the patient admitted to this hospital?	Admit	0 = No 1 = Yes 99 = Not recorded
Date of admission	FirstHospDate	Date format
Time of admission	FirstHospTime	Time format
Admitted under (Specialty)	AdmitSpec	1 = Major Trauma Service 2 = General surgery 3 = Trauma and orthopaedic surgery 4 = Neurosurgery 5 = Spinal Injuries 6 = Intensive Care Medicine 7 = Vascular surgery 8 = Oral and maxillofacial surgery 9 = Plastic surgery 10 = Cardiothoracic surgery 11 = Medicine (not otherwise listed) 12 = Emergency Medicine 13 = Otolaryngology (ENT) 14 = Ophthalmology 15 = Urology

Description and field name	Field name	Data
		16 = Other 17 = Paediatric ICM 18 = Paediatric EM 19= Paediatric surgery 20 = Paediatric Cardiothoracic surgery 21 = Paediatric Trauma and orthopaedic surgery 22 = Paediatric Neurosurgery 24= Paediatric Major Trauma Service 25 = Paediatric Oral and maxillofacial surgery 26 = Paediatric Plastic surgery 27 = Paediatric Otolaryngology (ENT) 28 = Paediatric Urology 29 = Paediatric Ophthalmology 30 = Paediatric Medicine 31 = Psychiatry 32 = Stroke medicine 33 = Neurology 99 = Not recorded
other specialties involved in care	AdmitSpec1-5	1 = Major Trauma Service 2 = General surgery 3 = Trauma and orthopaedic surgery 4 = Neurosurgery 5 = Spinal Injuries 6 = Intensive Care Medicine 7 = Vascular surgery 8 = Oral and maxillofacial surgery 9 = Plastic surgery 10 = Cardiothoracic surgery 11 = Medicine (not otherwise listed) 12 = Emergency Medicine 13 = Otolaryngology (ENT) 14 = Ophthalmology 15 = Urology 16 = Other 17 = Paediatric ICM 18 = Paediatric EM 19= Paediatric surgery 20 = Paediatric Cardiothoracic surgery 21 = Paediatric Trauma and orthopaedic surgery 22 = Paediatric Neurosurgery 24= Paediatric Major Trauma Service 25 = Paediatric Oral and maxillofacial surgery 26 = Paediatric Plastic surgery 27 = Paediatric Otolaryngology (ENT) 28 = Paediatric Urology 29 = Paediatric Ophthalmology 30 = Paediatric Medicine 31 = Psychiatry 32 = Stroke medicine 33 = Neurology 34 = Pain team 35 = Anaesthetics (not ICM)

Description and field name	Field name	Data
		36 = Rehabilitation Medicine 88 = No other specialties involved in care 99 = Not recorded
Neurosurgery and/or SIU referral		
Referral to Neurosurgery from this hospital	SpecRefNeuro	0 = Not referred 1 = Yes 2 = No, as referred prior to arrival at this hospital 99 = Not recorded
Referral date	SpecRefDateNeuro	
Referral source	SpecRefSourceNeuro	1 = ED 2 = Other transient area eg theatre, interventional radiology, radiology 3 = Following admission to this hospital 4 = Pre ED 99 = Not recorded
Referral request accepted	SpecRefDecisionNeuro	0 = No 1 = Yes 99 = Not recorded
Referral to Spinal Injuries Unit from this hospital	SpecRefSIU	0 = Not referred 1 = Yes 2 = No, as referred prior to arrival at this hospital 99 = Not recorded
Referral date	SpecRefDateSIU	
Referral source	SpecRefSourceSIU	1 = ED 2 = Other transient area eg theatre, interventional radiology, radiology 3 = Following admission to this hospital 4 = Pre ED 99 = Not recorded
Referral request accepted	SpecRefDecisionSIU	0 = No 1 = Yes 99 = Not recorded
Transfer details		
Was the patient transferred to another hospital from this hospital	TransOut	0 = No 1 = Yes 99 = Not recorded

Description and field name	Field name	Data
Transfer out reason	**TransReason**	1 = MTC care 2 = Regional/National specialty 3 = Critical Care bed 4 = Repatriation (STAG hospital) 5 = Repatriation (Non STAG hospital) 6 = Other reason 7 = Out with Scotland 8 = Rehabilitation (STAG hospital) 9 = Rehabilitation (Non STAG hospital) 99 = Not recorded
Transfer out (type)	TransOutType	1 = Direct from ED 2 = Following admission to a hospital bed 3 = Direct from theatre 4 = Direct from Radiology or Interventional Radiology 99 = Not recorded
Single point of contact used	SPOC	0 = No 1 = Yes 99 = Not recorded
HB of non-STAG hospital	NonSTAGHB	1 = NHS Ayrshire and Arran 2 = NHS Borders 3 = NHS Dumfries and Galloway 4 = NHS Fife 5 = NHS Forth Valley 6 = NHS Grampian 7 = NHS GG&C 8 = NHS Highland 9 = NHS Lanarkshire 10 = NHS Lothian 11 = NHS Tayside 12 = NHS Western Isles
Non-STAG hospital Name	NonSTAGTrans	ISD hospital code
Transfer by	Transby	1 = SAS Ambulance 2 = Non SAS Ambulance 3 = Self 99 = Not recorded
SAS Incident number (for inter hospital transfer)	SASNoTransfer	Number
Date of departure	**DepartFirstHospDate**	Date format
Time of departure	DepartFirstHospTime	Time format
Journey type	JourneyTypeTrans1MTC	Classifies records by the type of journey undertaken by a Resource (i.e. Admission, Discharge, Inter-Hospital Transfer)
Date and time SAS called to transfer patient to MTC	CallStartDTTrans1MTC	Date and time format

Description and field name	Field name	Data
Date and time SAS left scene	ResourceLeftSceneDTTrans1MTC	Date and time format
SAS Division	SASDivisionTrans1MTC	East Central, North, South East, South West, West Central.
Transfer hospital one	All data have the prefix Trans then named as above	
Transfer hospital two and more	All data have the prefix Trans and the suffix 2. The suffix would be 3, 4 etc. depending on the number of transfers.	
Observations and blood tests		
Respiratory rate (per minute)	RR	1-2 digit numbers
O_2 sats (%)	O2Sats	2-3 digit numbers
Heart rate (beats per minute)	HR	3 digit numbers
Systolic BP (mmHg)	SBP	2-3 digit numbers OR un-recordable
Diastolic BP (mmHg)	DBP	2-3 digit numbers OR un-recordable
Mean Arterial Pressure (mmHg)	MAP	
Eye opening response	GCSE	1 = None 2 = To pain 3 = To voice 4 = Spontaneous
Verbal response (patient is > 5 years old)	GCSV	1 = None 2 = Incomprehensible sound (inconsolable, agitated) 3 = Inappropriate word (inconsistently consolable, moaning) 4 = Confused (cries but is consolable, inappropriate interactions) 5 = Orientated (smiles, orientated to sounds, follows objects, interacts)
Verbal response (patient is < or = 5 years old)	GCSV5	1 = None 2 = Inconsolable, agitated 3 = Inconsistently consolable, moaning 4 = Cries but is consolable, inappropriate interactions 5 = Smiles, orientated to sounds, follows objects, interacts 99 = Not recorded
Motor response	GCSM	1 = None 2 = Extension 3 = Flexion 4 = Withdrawal 5 = Localises to pain 6 = Obeys command
GCS Total	GCSTotal	Range 3-15

Description and field name	Field name	Data
Pupil size available	PupilSize	0 = No 1 = Yes 2=No, but documented as PEARL
Pupil size (left)	PupilSizeLeft	Range 1-10 OR closed
Pupil size (right)	PupilSizeRight	Range 1-10 OR closed
Pupil reactivity (left)	PupilReactLeft	1 = Brisk 2 = Sluggish 3 = Absent 99 = Not recorded
Pupil reactivity (right)	PupilReactRight	2 = Brisk 2 = Sluggish 3 = Absent 99 = Not recorded
Temperature (centigrade)	Temp	NN.N
Patient weight (Kgs)	Weight	N
Weight actual or estimated	WeightActualEstimate	1 = Actual 2 = Estimated 99 = Not recorded
Date of coagulation screen	CoagDate	Date format
Time of coagulation screen	CoagTime	Time format
APTT ratio	APTTratio	N
APTT seconds	APTTSec	N
PT ratio	Ptratio	N
PT Seconds	PTSec	N
TCT ratio	TCTratio	N
Fibrinogen value (g/L)	Fibrinogen	N
Blood gas available	ABGs	0 = No 1 = Yes
Date of blood gas	ABGsDate	Date format
Time of blood gas	ABGsTime	Time format
Arterial, venous or capillary	AorV	1= arterial 2= venous 3 = capillary 99 = not recorded
pH	pH	N
H+ ion	Hion	N
PaO_2 (kPa)	PO2	N
$PaCO_2$ (kPa)	PCO2	N
$Fi0_2$	$Fi0_2$	N.NN
Base excess	BE	N
HCO_3 (mmol/L)	HCO3	N
Date of lactate	LactateDate	Date format
Time of lactate	LactateTime	Time format

Description and field name	Field name	Data
Lactate result (mmol/L)	Lactate	N
Imaging		
Imaging performed	Imaging	0 = No 1 = Yes 99 = Not recorded
Plain X-ray	PlainXR	0 = No 1 = Yes 99 = Not recorded
Date of plain x-ray	PlainXRDate	Date format
Time of plain x-ray	PlainXRTime	Time format
Body region	PlainBodArea1Head PlainBodArea2Chest PlainBodArea3Abdo PlainBodArea4Extremity PlainBodArea5SpineAll PlainBodArea6Pelvis PlainBodArea7Face PlainBodArea8CSpine PlainBodArea9TSpine PlainBodArea10LSpine	0 = No 1 = Yes
CT Scan	CTScan	0 = No 1 = Yes 99 = Not recorded
Date of CT scan	CTScanDate	Date format
Time of CT scan	CTScanTime	Time format
Body region (CT)	CTBodArea1Head CTBodArea2Chest CTBodArea3Abdo CTBodArea4Extremity CTBodArea5SpineAll CTBodArea6Pelvis CTBodArea7Face CTBodArea8CSpine CTBodArea9TSpine CTBodArea10LSpine	0 = No 1 = Yes
CT written report	CTScanWritten	0 = No 1 = Yes
Date of written report	CTScanWrittenDate	Date format
Time of written report	CTScanWrittenTime	Time format

Description and field name	Field name	Data
Ultrasound scan in ED	USS	0 = No 1 = Yes 99 = Not recorded
eFAST or FAST scan in ED	Efast	0 = No 1 = Yes 99 = Not recorded
Interventions		
Code Red activation	CodeRed	0 = No 1 = Yes 99 = Not recorded
Major Haemorrhage Protocol activated in ED	MajorHaem	0 = No 1 = Yes 99 = Not recorded
Blood products	BloodProduct	0 = No 1 = Yes 99 = Not recorded
Blood product started in	BloodStart	1 = Pre hospital (includes MIU/Other) 2 = ED 3 = Location after ED 99 = Not recorded
Date started (first blood product)	BloodDate	Date format
Time started (first blood product)	BloodTime	Time format
Blood product type	BloodType	1=RBC 2=FFP 3=Cryoprecipitate 4=platelets 5 = Autologous transfusion 99 = Not recorded
Pre-hospital blood products (volume)	PreHospBlood	allow four numbers
Blood products in ED	EDBlood	0 = No 1 = Yes 99= Not recorded
Blood products in ED (volume)	EDBloodVol	0 = No 1 = Yes 99 = Not recorded
Tranexamic acid (TXA)	TXA	0 = No 1 = Yes 99 = Not recorded

Description and field name	Field name	Data
TXA started in	TXAStarted	1 = Pre hospital (includes MIU/Other) 2 = ED 3 = Location after ED 99 = Not recorded
Date started (TXA)	TXADate	Date format
Time started (TXA)	TXATime	Time format
Pre-hospital IV fluid given	IVFluid	0 = No 1 = Yes 99= Not recorded
Pre-hospital IV fluid volume (crystalloid/ colloid)	IVFluidVol	allow four numbers
IV fluids in ED	EDIVFluid	0 = No 1 = Yes 99 = Not recorded
IV fluids in ED volume	EDIVFluidVol	mls
IV antibiotics (AXB)	IVAbx	0 = No 1 = Yes 99 = Not recorded
IV AXB started in	IVAbxStarted	1 = Pre hospital (includes MIU/Other) 2 = ED 3 = Location after ED 99 = Not recorded
Date started (IV AXB)	IVAbxDate	Date format
Time started (IV AXB)	IVAbxTime	Time format
Patient intubated in pre-hospital or ED	Intubat	0 = No 1 = Yes 99 = Not recorded
Intubation location	IntubatLoc	1 = ED 2 = Pre Hospital 99 = Not recorded
Date of Intubation	IntubatDate	Date format
Time of intubation	IntubatTime	Time format
Intubated by	IntubatBy	1 = Doctor 2 = Paramedic 3 = Advanced Practitioner 99 = Not recorded

Description and field name	Field name	Data
Grade	IntubatGrade	1 = Consultant 2 = Specialty Dr/Associate Specialist 3 = Specialist Trainee 4-8 4 = Specialist Trainee 3 5 = Specialist Trainee 1 - 2 or GP, Foundation Year 2 6 = Clinical Assistant 8 = Locum 99 = Not recorded
Speciality	IntubatSpec	1 = Emergency Medicine 2 = Anaesthetics 5 = Pre hospital Emergency Medicine 6 = PICU 7 = Intensive Care Medicine 20 = Other 99 = Not recorded
Anaesthetic drugs given	IntubatAnDrugs	0 = No 1 = Yes 99 = Not recorded
Thoracotomy	ThoracotomyED	0 = No 1 = Yes 99 = Not recorded
Thoracotomy performed by	ThoracotomyBy	1 = Emergency Medicine 2 = Cardiothoracic 3 = Other 4 = Pre hospital 99 = Not recorded
Interventional Radiology (IR)	IR	0 = No 1 = Yes 99 = Not recorded
Date of IR	IRDate	Date format
Time of IR	IRTime	time format
Pelvic binder	PelvicBinder	0 = No 1 = Yes 99 = Not recorded
Where pelvic binder applied	PelvicBinderLoc	1 = ED 2 = Pre-hospital 99 = Not recorded
Date applied	PelvicBinderDate	Date format
Time applied	PelvicBinderTime	time format
Theatre		
Operation performed	Theatre	0 = No 1 = Yes 99 = Not recorded
Date of operation	TheatreDate	Date format
Time of operation	TheatreTime	Time format

Description and field name	Field name	Data
Anaesthetic Grade	AnaesGrade	1 = Consultant 2 = Specialty Dr/Associate Specialist 3 = Specialist Trainee 4-8 4 = Specialist Trainee 3 5 = Specialist Trainee 1 - 2 OR Foundation Year 2 8 = Locum 9 = No anaesthetist present 99 = Not recorded
Operation type	OpType	1 = Orthopaedic 2 = Neurosurgery 5 = Other 6 = Plastic surgery 7 = Vascular 8 = Maxillo facial 9 = Spinal surgery 10 = General Surgery 11 = Cardiothoracic 12 = Urology 13 = ENT 14 = Ophthalmology 15 = Paediatric Orthopaedics 16 = Paediatric Neurosurgery 17 = Paediatric Plastic Surgery 18 = Paediatric Vascular Surgery 19 = Paediatric Maxillo facial 20 = Paediatric General Surgery 21 = Paediatric Cardiothoracic 22 = Paediatric Urology 23 = Paediatric ENT 24 = Paediatric Ophthalmology 99 = Not recorded
Surgeon grade	SurgGrade	1 = Consultant 2 = Specialty Dr/Associate Specialist 3 = Specialist Trainee 4-8 4 = Specialist Trainee 3 5 = Specialist Trainee 1 - 2, Foundation Year 2 8 = Locum 99 = Not Recorded
Was a laparotomy performed during this operation?	Laparotomy	0 = No 1 = Yes 99 = Not recorded
Was a laparoscopy performed during this operation?	Laparoscopy	0 = No 1 = Yes 99 = Not recorded
Was a thoracotomy performed during this operation?	Thoracotomy	0 = No 1 = Yes 99 = Not recorded
Injury scoring		
Age (years)	Age	N

Description and field name	Field name	Data
Age (months)	AgeMon	N
Injury description	ClinDescrip	Text
Source (AIS)	AISSource	1 = Post-mortem 2 = CT scan 3 = Surgery 4 = MRI Scan 5 = X-ray 6 = Clinical 7 = Ultra Sound Scan 99 = Not recorded
AIS Code 2005 (2008 update)	AISCode	N
Score	AISScore	1-6
Region	AISRegion	1 = Head and Neck 2 = Face 3 = Chest 4 = Abdomen 5 = Extremity 6 = External
AIS code description	AISDescrip	Text
Record of pre-existing medical condition(s)	PMHEvidence	0 = No 1 = Yes 99 = Not recorded
Pre-existing medical condition detail	PMH	See Appendix 3
Pre-existing weighting	PMHWeighting	text
Open fracture (long bones)	OpenLimb	0 = No 1 = Yes
ISS Score	ISSScore	range from 0-75
Ps12	Ps12	%
Ps17	Ps 17	%
Derived data items – these data items have been derived by the STAG Analyst to allow cohorts of patients to be identified easily. See Top tips under NHeadInj and HiHead that describe when to use these.	Trauma level	Level of trauma: 1 = "Minor (ISS < 9)" 2 = "Moderate (ISS 9 - 15)" 3 = "Major (ISS > 15)" 99 = "To be recorded".
	NHeadInj	Number of head injuries (excluding spinal): AIS Region = 1 and (AIS Code < 600099 or AIS Code > 650699). Top tip To export data on patients with a head injury, use this to identify the cohort eg NHeadinj ≥ 1 will identify all patients who have at least one head AIS code. To do this, in step 4 of export (add new export condition), enter: • Tab - **injury score** • Field - **NHeadInj**

Description and field name	Field name	Data
		• Operator - **>=** • Value – **1** • Then click on **add condition.**
	NFaceInj	Number of Face Injuries: AIS Region = 2.
	NChestInj	Number of chest injuries (excluding spinal): AIS Region = 3 and (AIS Code < 600099 or AIS Code > 650699).
	NAbdoInj	Number of abdominal injuries (excluding spinal): AIS Region = 4 and (AIS Code < 600099 or AIS Code > 650699).
	NExtremityInj	Number of extremity injuries: AIS Region = 5.
	NExternalInj	Number of external injuries: AIS Region = 6.
	NCSpineInj	Number of cervical (head/neck) spinal injuries: AIS Region = 1 and (AIS Code ≥ 600099 and AIS Code ≤ 650699).
	NTSpineInj	Number of thoracic (chest) spinal injuries: AIS Region = 3 and (AIS Code ≥ 600099 and AIS Code ≤ 650699).
	NLSpineInj	Number of lumbar (abdomen) spinal injuries: AIS Region = 4 and (AIS Code ≥ 600099 and AIS Code ≤ 650699).
	HiHead	Highest head/neck injury score (including spinal): (Note that **HiHead2** excludes spine) Highest scoring injury in AIS Region = 1. Top tip This looks for the highest AIS for head and c spine. Use this to identify patients with a head and c spine injury. If you only want to export severe head and c spine injury, use HiHead ≥ 3. To do this, in step 4 of export (add new export condition), enter: • Tab - **injury score** • Field - **HiHead** • Operator - **>=** • Value – **3** Then click on **add condition.**
	HiFace	Highest facial injury score: Highest scoring injury in AIS Region = 2.

Description and field name	Field name	Data
	HiChest	Highest chest injury score (including spinal): (Note that **HiChest2** excludes spine) Highest scoring injury in AIS Region = 3.
	HiAbdo	Highest abdominal injury score (including spinal): (Note that **HiAbdo2** excludes spine) Highest scoring injury in AIS Region = 4.
	HiExtremity	Highest extremity injury score: Highest scoring injury in AIS Region = 5.
	HiExternal	Highest extremity injury score: Highest scoring injury in AIS Region = 6.
	HiSpinal	Highest spinal injury score: Highest scoring injury in (AIS Region = 1 or 3 or 4 and AIS Code ≥ 600099 and AIS Code ≤ 650699).
	HiHead2	Highest head/neck injury score (excluding spinal): Highest scoring injury in AIS Region = 1 and excluding spinal injuries.
	HiChest2	Highest chest injury score (excluding spinal): Highest scoring injury in AIS Region = 31 and excluding spinal injuries..
	HiAbdo2	Highest abdominal injury score (excluding spinal): Highest scoring injury in AIS Region = 41 and excluding spinal injuries..
	PSOUTCOME12 + 17	Probability of survival Ps12 and patient outcome: 1 = Outcome = dead and Ps <0.75 or outcome = alive and Ps >75) 2 = Patient died with higher survival probability (> 0.75) 3 = Patient survived with lower survival probability (< 0.75) 99 = Ps - To be confirmed.
	PSGROUP12	Probability of Survival Group, Ps12: 1 = "0.0 - 0.25" 2 = "0.25 - 0.45" 3 = "0.45 - 0.65" 4 = "0.65 - 0.80" 5 = "0.80 - 0.90" 6 = "0.90 - 0.95" 7 = "0.95 - 1.00" 99 = "To be confirmed".

Description and field name	Field name	Data
	PSGROUP17	Probability of Survival Group, Ps17: 1 = "0.0 - 0.25" 2 = "0.25 - 0.45" 3 = "0.45 - 0.65" 4 = "0.65 - 0.80" 5 = "0.80 - 0.90" 6 = "0.90 - 0.95" 7 = "0.95 - 1.00" 99 = "To be confirmed".
Outcome		
Outcome	Outcome	0 = Dead 1 = Alive
Date of discharge	DOD	date format
Time of death	TOD	time format
Post mortem examination	PM	1 = PM received 2 = Awaiting PM 3 = PM not required 4 = PM not available
End of life care decision taken	EOLC	0 = No 1 = Yes 99 = Not recorded
Date of agreement	EOLCDate	
Decision made	EOLCBy	1 = Before injury occurred 2 = In ED 3 = After admission to hospital 99 = Not recorded
Discharged to	FinalDischarge	1 = Private residence 2 = Residential institution 3 = Temporary residence 4 = Ongoing rehabilitation in hospital 5 = Ongoing acute care in hospital 6 = Hospital out with Scotland 7 = Private healthcare provider 8 = Terminal care facility 9 = Other 10 = Psychiatric facility 99 = Not recorded
Rehabilitation facility	RehabType	1 = Spinal Injuries Unit, Glasgow 5 = Brain injury 6 = MSK 7 = Elderly 8 = General 99 = Not recorded 2 = (old) Regional Specialist 3 = (old) Local Specialist 4 = (old) Non Specialist
LOS (days) Total	TotalLOS	1-30 days
ITU stay (audit period)	ITUStay	0 = No 1 = Yes

Description and field name	Field name	Data
Date admitted to ITU	ITUDOA	Date format
Date discharged from ITU	ITUDOD	Date format
ITU (type)	ITUType	1 = General 2 = Neurological 3 = General/Neurological 4 = Cardiothoracic 5 = Paediatrics 99 = Not recorded
ITU WWunit code	WWCodeITU	TBC
ITU WW key	WWKeyITU	number
LOS (ITU) Total	ITU	
HDU stay (audit period)	HDUStay	0 = No 1 = Yes
Date admitted to HDU	HDUDOA	Date format
Date discharged from HDU	HDUDOD	Date format
HDU (type)	HDUType	1 = General 2 = Neurological 3 = Surgical 4 = Cardiothoracic 5 = Renal 6 = Transplant 7 = Obstetric 8 = Paediatric 9 = Medical 99 = Not recorded
HDU WWunit code	WWCodeHDU	TBC
HDU WW key	WWKeyHDU	number
LOS (HDU) Total	HDU	
Spinal Injuries Unit (SIU) stay	SIUStay	0 = No 1 = Yes
Date admitted to SIU	SIUDOA	Date format
Date discharged from SIU	SIUDOD	Date format
LOS (SIU)	SIU	N
Non accidental injury	NAI	0 = No 1 = Yes 2 = Suspected 99 = Not recorded
Rehabilitation Plan	RehabPlan	0 = No 1 = Yes 2 = Not required
Date of Rehabilitation Plan	RehabPlanDate	Date format

Description and field name	Field name	Data
Presence of physical factors	PhysicalFactors	0 = No 1 = Yes 3 = (old) Not appropriate 4 = Not assessed 99 = Not recorded
Presence of cognitive/mood factors	CognitiveMoodFactors	0 = No 1 = Yes 3 = (old) Not appropriate 4 = Not assessed 99 = Not recorded
Presence of psychosocial factors	PsychSocFactors	0 = No 1 = Yes 3 = (old) Not appropriate 4 = Not assessed 99 = Not recorded
Patient/carer approached about PROMs programme	PROMs	0 = No 1 = Yes 99 = Not recorded
Agreement to participate in PROMs programme	PROMsPermission	1 = Permission given by Parent, legal guardian or NOK 2 = Permission given by Patient 3 = Permission not given by parent, legal guardian or NOK 4 = Permission not given by patient 99 = Not recorded
Date of agreement (PROMs)	PROMsDate	Date format
Person involved in permission (Type)	PROMsBy	1 =STAG Local Coordinator 2 = Rehabilitation Coordinator 3 = Trauma Coordinator 4 = Medical staff 5 = Nursing staff 6 = AHP staff **7 = Other** 99 = Not recorded
Local review	LocalReview	0 = No 1 = Yes 2 = Highlight to STAG Lead 99 = Not recorded
Local review reason	LocalReviewReason	1 = Review of death 2 = Review of KPI compliance 3 = Review of patient pathway 4 = QI work 5 = Other 6= More than one reason 7 = Review of major trauma patient
Discharge patient from audit	DischargeAudit	0 = No 1 = Yes

Description and field name	Field name	Data
KPI tab		
1.1 Pre hospital triage	KPI1P1	0 = not met 1 = met 88 = not applicable
1.2 Pre alert	KPI1P2	0 = not met 1 = met 88 = not applicable
1.3 Diversion to lower level of care	KPI1P3	0 = not met 1 = met 88 = not applicable
2.1.1 Consultant led reception (> 16 Years)	KPI2P1P1ADULT	0 = not met 1 = met 88 = not applicable
2.1.1 Consultant led reception (age ≤16 years and arrival time between 08.00-23.59)	KPI2P1P1PAEDS_1	0 = not met 1 = met 88 = not applicable
2.1.1 Consultant review within 30 minutes (age ≤16 years and arrival time between 00.01-07.59)	KPI2P1P1PAEDS_2	0 = not met 1 = met 88 = not applicable
2.1.2 Consultant review with one hour (age > 16)	KPI2P1P2	0 = not met 1 = met 88 = not applicable
2.2 Time to major trauma centre care	KPI2P2	0 = not met 1 = met 88 = not applicable
2.3 Time to secondary transfer	KPI2P3	0 = not met 1 = met 88 = not applicable
2.4.1 Time to CT head	KPI2P4P1	0 = not met 1 = met 88 = not applicable
2.4.2 Time to CT head written report	KPI2P4P2	0 = not met 1 = met 88 = not applicable
2.5 MTC care for patients with severe head injury	KPI2P5	0 = not met 1 = met 88 = not applicable
2.6 Management of open long bone fractures	KPI2P6	0 = not met 1 = met 88 = not applicable
2.7 TXA in patients with severe haemorrhage	KPI2P7	0 = not met 1 = met 88 = not applicable
2.8 Specialist care (Major trauma service)	KPI2P8	0 = not met 1 = met 88 = not applicable
3.1.1 Assessment of rehabilitation needs	KPI3P1P1	0 = not met 1 = met 88 = not applicable

Description and field name	Field name	Data
3.1.2 Time to assessment of rehabilitation needs	KPI3P1P2	0 = not met 1 = met 88 = not applicable
3.2 Functional outcome (PROMs)	KPI3P2	0 = not met 1 = met 88 = not applicable
KPI Failed tab **change request has been submitted to change name to Derived data**		
Seen by a consultant in ED	CONSULTATTEND	0 = No 1 = Yes
Seen by a consultant within 30 minutes (age ≤ 16 years)	PAEDSCONSULTATTEND30MIN	0 = No 1 = Yes
Seen by a consultant within one hour	CONSULTATTENDWITHINONEHR	0 = No 1 = Yes
Transferred to a MTC within 24 hours	TRANSFERTOMTCWITHIN24HR	0 = No 1 = Yes
Transfer to MTC in days	TRANSFERTOMTCINDAYS	Time in days
Secondary transfer (by SAS) is within 4 hours (time of call to time of departure)	SECONDARYTRANSFERWITHIN4HRS	0 = No 1 = Yes
Time to death in days	TIMETODEATHINDAYS	Time in days
Died within one hour of arrival at first hospital	DEATHIN1HR	0 = No 1 = Yes
Head injury coded as AIS head ≥ 3	AISHEAD3PLUS	0 = No 1 = Yes
Head CT performed	HEADCT	0 = No 1 = Yes
Date of first head CT	HEADCTDATE	Date field
Time of first head CT	HEADCTTIME	Time field
Time from arrival in ED to first head CT	TIME2HEADCTINHR	Time in hours
Head CT within one hour of arrival in first hospital	HEADCTWITHIN1HR	1 = head CT within one hour 2 = head CT but > one hour 3 = No CT head 4 = Head CT but timing unknown. Note if record has 0 then same as 3. This was an error that has now been fixed.

Description and field name	Field name	Data
Time to head CT report in hours	TIME2HEADCTREPORTIN1HR	Time in hours
Head CT scan report within one hour	HEADCTSCANREPORTWITHIN1HR	0 = No 1 = Yes
Time to IV antibiotics in hours (from first contact with emergency services)	TIME2IVABXINHR	Time in hours
Open long bone fracture (AIS coding)	AISOPENLIMB	0 = No 1 = Yes
IV antibiotics within three hours	IVABXWITHIN3HR	0 = No 1 = Yes
Time to Tranexamic acid (TXA) in hours (from first contact with emergency services)	TIME2TXAINHR	Time in hours
TXA within three hours	TXAWITHIN3HR	0 = No 1 = Yes
Time to Rehabilitation Plan in days (from arrival at first hospital)	TIMETOREHABPLANINDAYS	Time in days
Rehabilitation Plan within three days	REHABPLANWITHIN3DAYS	0 = No 1 = Yes
Abdominal injury coded as AIS ≥ 3	AISABDO3PLUS	0 = No 1 = Yes
Thoracic injury coded as AIS ≥ 3	AISTHORACIC3PLUS	0 = No 1 = Yes
Thoracic injury coded as AIS ≥ 2	AISTHORACIC2PLUS	0 = No 1 = Yes
Skull injury (AIS 1-6)	AISSKULL	0 = No 1 = Yes
Spinal injury coded as AIS ≥ 3	AISSPINE3PLUS	0 = No 1 = Yes
Head injury (AIS 1-6)	AISHEAD	0 = No 1 = Yes
Pelvic injury (AIS 1-6)	AISPELVIC	0 = No 1 = Yes
One or more KPI not met	KPIFAILED	0 = No 1 = Yes

Description and field name	Field name	Data
Time to consultant	TIME2CONSULTANT	Time in xx

Local and national questions

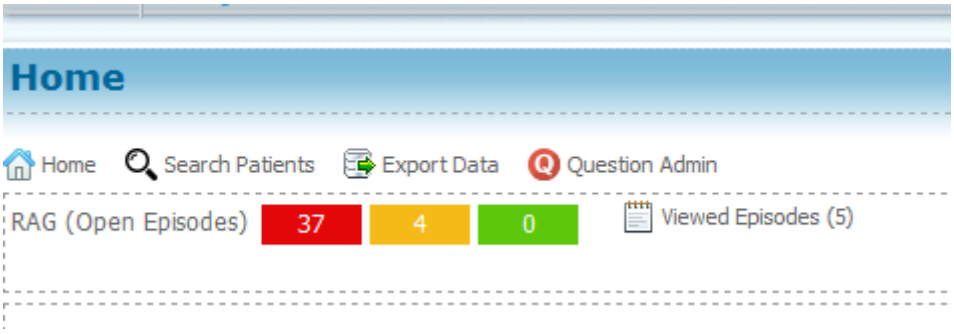
A function has been added to allow the Local Audit Coordinators the ability to set up sprint audits for their hospital or Health Board (local questions) and the STAG team in ISD to set up sprint audits in one or more hospitals (national questions) in Scotland.

A maximum of five local and five national questions can be asked at any one point in time. National questions will be agreed by the STAG Steering Group. Local questions should be agreed with the STAG Clinical Lead for each hospital it affects.

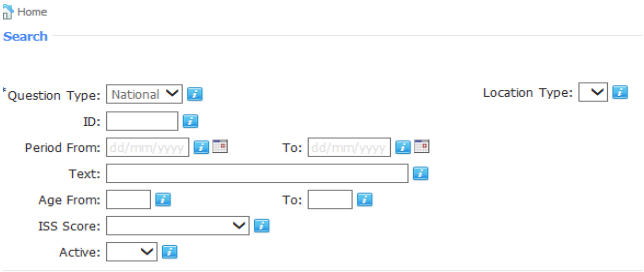
Questions will be asked if a patient enters the hospital within the timeframe the question has been set. If a patient enters the hospital more than one time within the timeframe, the question will only be asked once.

Viewing set up questions

Questions that have been set up can be viewed from the home page by clicking the Question Admin button (see screenshot below).



This opens up a set of criteria (see screenshot below):



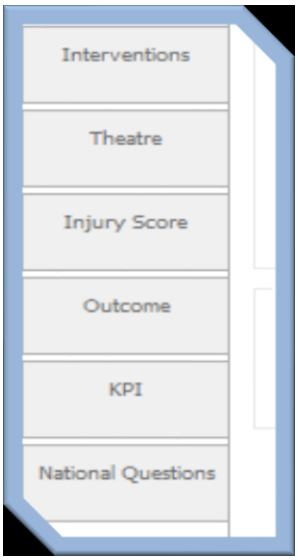
- Question type – enter national or local from drop down list. This is the only mandatory field THEREFORE do not complete any other search criteria if you want to look at all local or national questions.
- ID – questions all have a unique ID. If you know this, then you can use this to identify the question.
- Period from – enter the date range if you are looking for a specific date.
- Text – This is the text used in the question. You can enter a word if you do not know the full question eg enter Trauma to bring back all questions with trauma in the text.
- Age from – some questions may be limited to particular age groups. You can use this if you only want to look at questions related to a specific age group.
- ISS Score – search questions by ISS score. Some questions may be limited to a particular ISS group.

- Active – an active question will be asked whereas an inactive question will not be asked eg if entering a record after the question is inactivated (and the patient was treated within the question period), the question will not be asked whereas if the question was still active then it would.

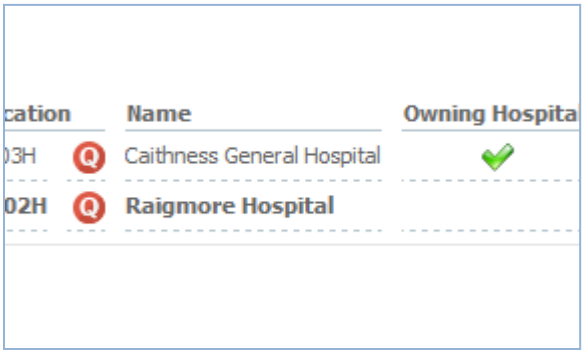
After you have completed the search criteria, click on search questions.

Completing a national or local question within a patient record

National questions will appear in a tab below the KPI tab in the patient record. This tab will only appear when a national question has been set up, and the timeframe is within the patient stay. All questions are mandatory and the record cannot be closed until it is answered. The only two options to limit the cohort the question is asked to are ISS and/or age.



Local questions will appear within the Hospital tab at the bottom of the hospital page. The patient journey section at the top of the Hospital tab will show a Q in a red circle to indicate that there is a local question. All questions are mandatory and the record cannot be closed until it is answered. The only two options to limit the cohort the question is asked to are ISS and/or age.



Setting up a local question

Please contact STAG Central team for instructions.

Exporting data from local and national questions

Data for national and local questions can be exported as normal within the export facility. Each question has a unique ID to help with analysis as patients may have a question in different columns within the export eg patient A had questions 1-5 completed and patient B (who was admitted two days later) had

questions 2-6 completed. If you are interested in the answers to question 2 then these will appear in two different columns but can be identified by the question name and ID.
Please contact the STAG Central team for advice if needed.

Appendix 1: MIU/Other Facilities in Scotland

Health Board	MIU/Other Name	ISD Location code
NHS Ayrshire & Arran	Arran War Memorial Hospital	A101H
	Girvan Community Hospital	A216H
	Lady Margaret Hospital, Millport	A110H
NHS Borders	Hawick Community Hospital	B105H
	Hay Lodge Hospital, Peebles	B118H
	Kelso Hospital	B114H
	The Knoll Hospital, Duns	B103H
NHS Dumfries & Galloway	Castle Douglas Community Hospital	Y101H
	Kirkcudbright Cottage Hospital	Y106H
	Moffat Community Hospital	Y109H
	Newton Stewart Hospital	Y110H
NHS Fife	Adamson Hospital, Cupar	F708H
	Queen Margaret Hospital, Dunfermline	F805H
	St Andrews Community Hospital	F709H
NHS Forth Valley	Stirling Community Hospital	V201H
NHS Grampian	Aboyne Hospital	N151H
	Chalmers Hospital, Banff	N337H
	Fleming Cottage Hospital, Aberlour	N451H
	Forres Health & Care Centre	N683C
	Fraserburgh Hospital	N334H
	Insch & District War Memorial Hosp.	N332H
	Inverurie Hospital	N331H
	Jubilee Hospital, Huntly	N335H
	Kincardine Community Hospital	N494H
	Peterhead Community Hospital	N333H
	Seafield Hospital, Buckie	N431H
	Stephen Cottage Hospital, Dufftown	N432H
	Turner Memorial Hospital, Keith	N433H
	Turriff Cottage Hospital	N336H
NHS Greater Glasgow & Clyde	Stobhill Hospital, Glasgow	G207H
	Vale of Leven General Hospital	C206H
	New Victoria Hospital, Glasgow	G306H
	West Glasgow	G516H
NHS Highland	Aviemore Health Centre	H227B
	Campbeltown Hospital	C122H
	County Community Hospital Invergordon	H219H
	Cowal Community Hospital, Dunoon	C106H
	Dunbar Hospital, Thurso	H101H

Health Board	MIU/Other Name	ISD Location code
	Ian Charles Hospital, Grantown-on-Spey	H210H
	Islay Hospital	C108H
	Lawson Memorial Hospital, Sutherland	H106H
	Mackinnon Memorial Hospital, Skye	H214H
	Mid-Argyll Community Hospital and Integrated Care Centre	C006G
	Mull and Iona Community Hospital	H227H
	Nairn Town and County Hospital	H208H
	Portree Hospital	H215H
	Ross Memorial Hospital, Dingwall	H217H
	Victoria Hospital, Rothesay	C113H
	Kello Hospital, Biggar	L206H
NHS Lanarkshire	Lady Home Hospital, Douglas	L207H
	Edington Cottage Hospital, North Berwick	S108H
NHS Lothian	Western General Hospital, Edinburgh	S116H
	Arbroath Infirmary	T304H
	Blairgowrie & Rattray Cottage Hospital	T209H
	Brechin Infirmary	T305H
	Crieff Community Hospital	T316H
	Links Health Centre, Montrose	T357C
	Pitlochry Community Hospital	T320H
	St Margaret's Hospital, Auchterarder	T205H
NHS Tayside	Whitehills Hospital, Forfar	T313H
	St Brendans Hospital, Barra	W106H
NHS Western Isles	Uist & Barra Hospital	W108H

http://www.isdscotland.org/Products-and-Services/Data-Definitions-and-References/National-Reference-Files

Appendix 2: Hospitals with an ED and/or Regional Specialty

Health Board	Hospital Name	ISD Location code
NHS Ayrshire and Arran	University Hospital Ayr	A210H
	University Hospital Crosshouse, Kilmarnock	A111H
NHS Borders	Borders General Hospital	B120H
NHS Dumfries and Galloway	Dumfries and Galloway Royal Infirmary	Y146H
	Galloway Community Hospital	Y144H
NHS Fife	Victoria Hospital, Kirkcaldy	F704H
NHS Forth Valley	Forth Valley Royal Hospital, Larbert	V217H
NHS Grampian	Aberdeen Royal Infirmary	N101H
	Dr Gray's Hospital, Elgin	N411H
	Royal Aberdeen Children's Hospital	N121H
NHS Greater Glasgow and Clyde	Glasgow Royal Infirmary	G107H
	Inverclyde Royal Hospital	C313H
	Royal Alexandra Hospital, Paisley	C418H
	Royal Hospital for Children, Glasgow	G513H
	Queen Elizabeth University Hospital, Glasgow	G405H
NHS Highland	Belford Hospital, Fort William	H212H
	Caithness General Hospital	H103H
	Lorn and Islands Hospital, Oban	C121H
	Raigmore Hospital, Inverness	H202H
NHS Lanarkshire	Hairmyres Hospital, East Kilbride	L302H
	Monklands DGH, Airdrie	L106H
	Wishaw General Hospital	L308H
NHS Lothian	Royal Infirmary of Edinburgh	S314H
	St John's Hospital, Livingston	S308H
	Royal Hospital for Sick Children, Edinburgh	S225H
	Royal Hospital for Children and Young Adults	S319H Due to open 2021
	Western General Hospital, Edinburgh (Neuro)	S116H
NHS Orkney	Balfour Hospital, Kirkwall	R101H R103H from 14/06/2019
NHS Shetland	Gilbert Bain Hospital, Lerwick	Z102H
NHS Scotland	Golden Jubilee National Hospital (Cardiothoracic)	D102H
NHS Tayside	Ninewells Hospital, Dundee	T101H
	Perth Royal Infirmary	T202H
NHS Western Isles	Western Isles Hospital, Stornoway	W107H

Note: Hospitals with a Regional Specialty but no ED are highlighted in blue.

Appendix 3: Pre-existing medical conditions

The pre-existing medical conditions listed are used as part of the Ps17 methodology. See the Injury score page for more details.

Conditions	Export code	Classification	Weight
Ear - diseases of	001		
Eyes - diseases of	002		
Migraine	003		
Mute	004		
Obesity	005		
Skin conditions	006		
STD	007		
Other - ENT	008	Not classified	0
Adrenal disease	140		
Anorexia/bulimia	01		
hypercholesterolemia	02		
Hypertension	03		
Metabolic NFS	04		
MRSA	05		
Other	06		
Other - infections and parasitic diseases	07		
Other - metabolic diseases	08		
Pituitary disease	09		
Pregnancy AT TIME OF INJURY	010		
Splenectomy	011		
Thyroid disease	012	Other	0
IHD	10		
Myocardial infarction	11	MI	2
Cerebrovascular disease	20		
Intracerebral haemorrhage (non-traumatic)	21		
Stroke/CVA	22		
Subarachnoid haemorrhage	23		
TIA	24	Cerebral vascular accident	1
Vertebrobasilar disease	25		
Atrial fibrillation	30		
Cardiomyopathy	31		
Carditis NFS	32		
Other - heart disease	33		
Valvular heart disease	34	Heart failure	4
Arthritis	40		
Osteoarthritis	41		
Rheumatoid arthritis	42		
Rheumatology NFS	43		
Connective tissue disease	44		
Lupus (SLE)	48		
Musculoskeletal and connective tissue disorder	45	Connective tissue disorder	0

Conditions	Export code	Classification	Weight
Other - nervous system	46		
Parkinson's disease	47		
Dementia	50	Dementia	3
Diabetes insipidus	60		
Diabetes mellitus - type 1 insulin dependant	61		
Diabetes mellitus - type 2 non-insulin dependant	62	Diabetes	2
Liver disease	70	Liver disease	9
Crohn's/colitis/diverticulitis	80		
GU NFS	81		
Lower GI	82		
Other - GU	83		
Ulcer	84		
Upper GI	85	GU diseases/GI disease	0
Aortic aneurysm and dissection	90		
DVT	91		
Other - circulatory disease	92		
PE	93		
Peripheral vascular disease	94		
Vasculitis NFS	95	Vascular disease	2
Asthma	100		
Bronchiectasis	101		
COPD	102		
Cystic fibrosis	103		
Fibrosis NFS	104		
Other - respiratory	105		
TB	106	Pulmonary disease	0
Cancer of bone & cartilage	110		
Cancer of digestive organs	111		
Cancer of genital organs & urinary tract	112		
Cancer of lip, oral cavity & pharynx	113		
Cancer of mesolithial & soft tissues	114		
Cancer of lymphoid, haematopoietic and related tissue	115		
Cancer of respiratory & intrathoracic organs	116		
Cancer of the breast	117		
Cancer of the eye, brain & other parts of the CNS	118		
Cancer of the skin	119		
Cancer of the thyroid & other endocrine glands	1110		
Other - cancer	1111	Cancer	2
Secondary cancer of other sites	250		
Secondary cancer of respiratory & digestive organs	251		
Secondary cancer of the lymph nodes	252	Secondary cancers	10
Spina bifida/previous spinal cord injury	130	Paraplegia	0
Chronic kidney disease, stage 1	141	Renal disease	4

Conditions	Export code	Classification	Weight
Chronic kidney disease, stage 2	142		
Chronic kidney disease, stage 3	143		
Chronic kidney disease, stage 4	145		
Chronic kidney disease, stage 5	146		
Other - kidney	147		
Leukaemia	150		
Lymphoma	151	Haematological malignancy	
Multiple myeloma	152		8
HIV/AIDS	170	HIV	2
Deliberate self-harm	180		
Depression	181		
Drug addiction	182		
Mental and behavioural conditions - other	183		
Mental disability	184		
Neurosis	185		
Personality disorder	186		
Psychosis	187		
Schizophrenia	188	Mental health	1
Anaemia	190		
Blood/immune disease NFS	191		
Coagulopathy	192		
Haemophilia	193		
Myelodysplasia	194		
Other - blood/immune diseases	195		
Thyrombocytopenia	196		
Thyrombocytosis	197		
Von Williebrand disease	198	Blood conditions	1
Brittle bone disease	200		
Major joint replacement	201		
Osteoporosis	202		
Paget's disease	203		
Congenital malformation of the MSK system	204		
Degenerative spinal disease	205	Bone conditions	0
Cerebral palsy	210		
Degenerative disease of the nervous system	211		
Epilepsy	212		
Multiple sclerosis	213	Neurological disorders	
Nervous system NFS	214		0
Alcohol abuse	220	Alcohol abuse	4

Appendix 4: List of Abbreviations and Glossary of Terms

Admission	Admission to a hospital bed
AIS	Abbreviated Injury Scale (numerical code given to describe trauma injuries)
Attendance	The presence of a patient in an ED service seeking medical attention
DBP	Diastolic Blood Pressure
ED	Emergency Department
GCS	Glasgow coma scale
HDU	High Dependency Unit
HR	Heart rate
ITU	Intensive Therapy Unit
ISD	Information Services Division
ISS	Injury Severity Score (used to allocate numerical score to indicate the severity of injuries)
IV	Intra venous
IV ABx	IV antibiotics
LAC	Local Audit Coordinator
MAP	Mean arterial pressure
NSS	NHS National Services Scotland
Ps12/17	TARN Probability of Survival Version 12 and 17
QAM	Quality Assurance Manager
RC	Regional Coordinator
RR	Respiratory rate
SBP	Systolic blood pressure
TARN	Trauma Audit & Research Network
TXA	Tranexamic acid