



# BQIP

## Burn Quality Improvement Program

American Burn Association  
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Chicago, IL 60606

Version 2.3  
July 2016

# **BURN QUALITY IMPROVEMENT PROGRAM**

## **Outcome and Process Measures of Care**

### **July 2015**

The purpose of the Burn Quality Improvement Program (BQIP) is to support and supplement ongoing Quality Improvement efforts at Burn Centers. It is based on data that is collected and reported by participating Burn Centers on the patients they care for. Some of that data is already collected and reported to the National Burn Repository. BQIP includes additional data elements that serve as measures of the processes of care provided by the Burn Center and others that are measures of various outcomes. When possible, particularly in the case of infectious outcomes, CDC definitions are used in an attempt to be consistent with the definitions used by most hospitals. Data elements are reported electronically to the ABA which then collates, summarizes, and analyzes them. The results of these analyses will be combined with those from other burn centers and reported in such a way as to demonstrate the variability in the measures between burn centers. All results will be de-identified with respect to individual patients and to the reporting Burn Centers. A Burn Center specific report will also be prepared and distributed to each participating Burn Center Director. In this report the specific results for the specific Burn Center will be identified. It is hoped that the Burn Director might use these analyses to evaluate further the Quality of Care of his or her Burn Center.

This document defines variables that relate to the processes or outcomes of burn care that are not currently included in data submissions to the NBR. It is an extension of the National Burn Data Standard in format and layout.

### **July 2016**

Based on an initial experience involving 28 Pilot Test Burn Centers, this document (v 2.3) was modified from the 2015 version (v 2.2).

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## ACUTE (ADULT) RESPIRATORY DISTRESS SYNDROME (ARDS)

Data Format [combo] single-choice

*National Element*

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### Collection Criterion:

#### Definition

ARDS is an acute and often-severe failure of lung function that is often characterized by:

- PaO<sub>2</sub> / FiO<sub>2</sub> ratio of ≤ 300mmHg with PEEP ≥ 5cm H<sub>2</sub>O

And

- Abnormal frontal chest x-ray with diffuse infiltrates in one or both lungs,

And

- An **absence** of clearly demonstrable intravascular volume overload as signified by pulmonary wedge pressure of > 18mmHg or global end diastolic index of > 850 or other objective indicators of intravascular volume such as Echocardiography.

#### Field Values

Yes

Days following injury (Free text)

No

#### Additional Information

#### Data source Hierarchy

Medical chart

#### Associated Edit Checks

Rule ID	Level	Message
	1	Invalid value
	4	Blank, required field

## VENTILATOR ASSOCIATED PNEUMONIA

Data Format [combo] single-choice

*National Element*

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### Collection Criterion:

#### Definition

Ventilator-associated pneumonia is a pneumonia where the patient is on mechanical ventilator for > 2 calendar days on the date of event, with day of ventilator placement being Day 1, and the ventilator was in place on the date of event or the day before. If the patient is admitted or transferred into a facility on a ventilator, the day of admission is considered Day 1.

Patients with pneumonia meet the following criteria:

#### A) Clinically Defined Pneumonia

Two or more serial chest imaging test results with at least one of the following: new or progressive and persistent infiltrate, consolidation, cavitation, or pneumatoceles, in infants  $\leq$  1 year old **AND** at least one of the following:

1. Fever ( $>38^{\circ}\text{C}$  or  $100.4^{\circ}\text{F}$ )
2. Leukopenia ( $<4000$  WBC/ $\text{mm}^3$ ) or leukocytosis ( $\geq 12,000$  WBC/ $\text{mm}^3$ )
3. For adults  $\geq 70$  years old, altered mental status with no other recognized cause

**AND** at least two of the following

1. New onset of purulent sputum or change in character of sputum or increased respiratory secretions/increased suctioning requirements
2. New onset or worsening of cough, dyspnea or tachypnea
3. Rales or bronchial breath sounds
4. Worsening gas exchange (Oxygen desaturations, increased oxygen requirements, or increased ventilator demand)

For infants  $\leq$  1 year old the following alternate criteria may be used:

Worsening gas exchange (Oxygen desaturations (pulse oximetry  $< 94\%$ ), increased oxygen requirements, or increased ventilator demand)

**And** at least 3 of the following:

1. Temperature instability
  2. Leukopenia ( $<4000$  WBC/ $\text{mm}^3$ ) or leukocytosis ( $\geq 15,000$  WBC/ $\text{mm}^3$ ) and  $\geq 10\%$  band forms
  3. New onset of purulent sputum or change in character of sputum or increased respiratory secretions/increased suctioning requirements
  4. Apnea, tachypnea, nasal flaring with retraction of chest wall or nasal flaring with grunting
  5. Wheezing, rales or rhonchi
  6. Cough
-

7. Bradycardia (<100 beats/min) or tachycardia (>170 beats/min)

For children  $\geq 1$  year old or  $\leq 12$  years old the following alternate criteria may be used:

At least 3 of the following:

1. Fever (>38C or 100.4F)
2. Leukopenia (<4000 WBC/mm<sup>3</sup>) or leukocytosis ( $\geq 12,000$  WBC/mm<sup>3</sup>)
3. New onset of purulent sputum or change in character of sputum or increased respiratory secretions/increased suctioning requirements
4. New onset or worsening cough, or dyspnea, apnea or tachypnea
5. Rales or bronchial breath sounds
6. Worsening gas exchange (Oxygen desaturations (pulse oximetry < 94%), increased oxygen requirements, or increased ventilator demand)

#### **B) Laboratory confirmed pneumonia**

Two or more serial chest imaging test results with at least one of the following: new or progressive and persistent infiltrate, consolidation, cavitation, or pneumatoceles, in infants  $\leq 1$  year old **AND** at least one of the following:

1. Fever (>38C or 100.4F)
2. Leukopenia (<4000 WBC/mm<sup>3</sup>) or leukocytosis ( $\geq 12,000$  WBC/mm<sup>3</sup>)
3. For adults  $\geq 70$  years old, altered mental status with no other recognized cause

**AND** at least one of the following:

1. New onset of purulent sputum or change in character of sputum or increased respiratory secretions/increased suctioning requirements
2. New onset or worsening of cough, dyspnea or tachypnea
3. Rales or bronchial breath sounds
4. Worsening gas exchange (Oxygen desaturations, increased oxygen requirements, or increased ventilator demand)

**AND** at least one of the following:

1. Positive growth in blood culture not related to another source of infection
2. Positive growth in culture of pleural fluid
3. Positive quantitative culture from BAL or protective sputum brushing
4.  $\geq 5\%$  BAL-obtained cells contain intracellular bacteria on Gram's stain
5. Positive quantitative culture of lung tissue
6. Histological exam shows at least one of the following evidences of pneumonia
7. Abscess formation or foci of consolidation with intense PMN accumulation in bronchioles or alveoli
8. Evidence of lung parenchyma invasion by fungal hyphae or pseudohyphae

For cases of viral, legionella, mycoplasma, borddetella and chlamydia the following laboratory criteria should be used:

At least one of the following:

1. Positive culture of virus, legionella or chlamydia from respiratory secretions
2. Positive non culture diagnostic laboratory test of respiratory secretions or tissue for virus, Chlamydia, Mycoplasma, Legionella or Borddetella (EIA, FAMA, PCR, shell viral assay, micro-IF)
3. Fourfold rise in paired sera (IgG) for pathogen
4. Fourfold rise in Legionella pneumophila serogropu I antibody titer to >1:128 in paired acute and convalescent sera by indirect IFA
5. Detection of Legionella serogroup I antigens in urine by RIA or EIA

### Field Values

Yes

No

### Additional Information

Based on CDC /NHSN definition. For further detail please see:  
[www.cdc.gov/nhsn/PDFs/pscManual/6pscVAPcurrent.pdf](http://www.cdc.gov/nhsn/PDFs/pscManual/6pscVAPcurrent.pdf)

### Data source Hierarchy

### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## UNPLANNED INTUBATION

Data Format [combo] single-choice

*National Element*

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### Collection Criterion:

### Definition

Patient requires placement of an endotracheal tube and mechanical or assisted ventilation because of the onset of respiratory or cardiac failure manifested by severe respiratory distress, hypoxia, hypercarbia, or respiratory acidosis. In patients who were intubated in the field or Emergency Department, or those intubated for surgery, unplanned intubation occurs if they require reintubation for respiratory failure any time after extubation.

### Field Values

1. Yes
  - a. Respiratory failure
  - b. Unplanned extubation
  - c. Failed extubation
2. No

### Additional Information

### Data source Hierarchy

### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field



## DEEP VEIN THROMBOSIS (DVT)

Data Format [combo] single-choice

*National Element*

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### Collection Criterion:

### Definition

The formation, development, or existence of a blood clot or thrombus within the vascular system, which may be coupled with inflammation. This diagnosis must be confirmed by a venogram, ultrasound, or CT. The patient must be treated with anticoagulation therapy and/or placement of a vena cava filter or clipping of the vena cava.

### Field Values

1. Yes
2. No

### Additional Information

**DVT refers specifically to thrombus in one or more of the popliteal, femoral, iliac, brachial, subclavian, or axillary veins and the inferior vena cava.**

### Data source Hierarchy

Hospital Chart

### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## VENOUS THROMBOEMBOLISM (VTE)

Data Format [combo] single-choice

*National Element*

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### Collection Criterion:

### Definition

Lodging of a blood clot in a pulmonary artery with subsequent obstruction of blood supply to the lung parenchyma. The blood clots usually originate from the deep leg veins or the pelvic venous system.

The condition must be confirmed by either a V-Q scan interpreted as high probability of pulmonary embolism or a positive pulmonary angiogram, CT angiogram, echocardiogram or on autopsy.

### Field Values

1. Yes
2. No

### Additional Information

#### Data source Hierarchy

Hospital Chart

### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## ACUTE KIDNEY INJURY

Data Format [combo] single-choice

National Element

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### Collection Criterion:

#### Definition

A patient who did not require chronic renal replacement therapy prior to injury, who has worsening renal dysfunction after injury **requiring renal replacement therapy**. If the patient or family refuses treatment, the condition is still considered to be present if a combination of oliguria and creatinine are present.

AKI (stage 3) is an abrupt (within a 48 hour period) reduction of kidney function defined as:

- Increase in SCr of more than or equal to 3x baseline

Or

- Increase in SCr to  $\geq 4\text{mg/dl}$  ( $\geq 353.6\mu\text{mol/l}$ )

Or

- Initiation of renal replacement therapy

Or

- Patients  $>18$  years, decrease in  $eGFR$  to  $< 35\text{ ml/min per }1.73\text{ m}^2$ .

And

- Reduction in urine output of  $< 0.3\text{ ml/kg/hr}$  for  $\geq 24$  hrs.

Or

- Anuria for  $\geq 12$  h

#### Field Values

Yes

No

#### Additional Information

#### Data source Hierarchy

#### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
	1	Invalid value
	4	Blank, required field

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## CENTRAL LINE ASSOCIATED BLOOD STREAM INFECTION (CLABSI)

Data Format [combo] single-choice

*National Element*

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### Collection Criterion:

#### Definition

A laboratory-confirmed bloodstream infection (LCBI) where central line was in place for >2 calendar days on the date of event, with day of device placement being Day 1 and the central line was in place on the date of event or the day before.

A laboratory confirmed bloodstream infection must meet one of the following criteria:

#### Criteria 1:

Patient has a recognized pathogen cultured from one or more blood **and** organism is not related to an infection at another site

#### Criteria 2:

Patient has at least one of the following signs or symptoms: fever (>38C), chills or hypotension

#### **AND**

Organism cultured from blood is not related to an infection at another site

#### **AND**

if the culture documents a commensal organism (diphtheroids, bacillis, coagulase-negative staphylococci, viridans group streptococci) the same organism is cultured from two or more blood cultures drawn on separate occasions.

#### Criteria 3:

Patient is ≤1 year of age has at least one of the following signs or symptoms: fever (>38C), hypothermia (<36C), apnea, or bradycardia

#### **AND**

Organism cultured from blood is not related to an infection at another site

#### **AND**

the same commensal organism (diphtheroids, bacillis, coagulase-negative staphylococci, viridans group streptococci) is cultured from two or more blood cultures drawn on separate occasions.

### Field Values

Yes

No

### Additional Information

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Based on CDC /NHSN definition. For further detail please see:  
[www.cdc.gov/nhsn/PDFs/pscManual/4PSC\\_CLABScurrent.pdf](http://www.cdc.gov/nhsn/PDFs/pscManual/4PSC_CLABScurrent.pdf)

### Data source Hierarchy

Medical chart

### Associated Edit Checks

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## CATHETER ASSOCIATED URINARY TRACT INFECTION (CAUTI)

Data Format [combo] single-choice

*National Element*

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### Collection Criterion:

#### Definition

*Symptomatic Urinary Tract Infection (SUTI) (The definition excludes asymptomatic bacteruria)*

A symptomatic catheter related urinary tract infection must meet at least 1 of the following criteria:

#### **Criteria 1:**

Patient had an indwelling urinary catheter in place for > 2 days on the date of event (day of device placement = Day 1) **AND** was either present on the date of event or removed the day prior to event

#### **And**

At least 1 of the following signs or symptoms with no other recognized cause:

Fever (> 38C), suprapubic tenderness, costovertebral angle pain or tenderness, urinary urgency, urinary frequency or dysuria

#### **And**

A urine culture with no more than 2 species of organisms, at least one of which is a bacteria of  $\geq 100,000$  CFU.ml.

#### **Criteria 2:**

Patient is  $\leq 1$  year of age with an indwelling urinary catheter in place for > 2 days on the date of event (day of device placement = Day 1) **AND** was either present on the date of event or removed the day prior to event

#### **AND**

Patient has at least one of the following signs or symptoms:

Fever (>38C), hypothermia (<36C), apnea, bradycardia, lethargy, vomiting, or suprapubic tenderness

#### **AND**

Patient has a urine culture with no more than two species or organisms, at least one of which is a bacteria of  $\geq 100,000$  CFU/ml.

#### **Criteria 3 (Asymptomatic, catheter-associated UTI)**

Patient with an indwelling urinary catheter has no signs or symptoms of a symptomatic UTI according to age

**AND**

Has a urine culture with no more than 2 species of organisms at least one of which is a bacteria of  $\geq 100,000$  CFU/ml.

**AND**

Patient has a positive blood culture with at least one matching bacteria to the urine culture or matching commensal organism (diphtheroids, bacillis, coagulase-negative staphylococci, viridans group streptococci) that is cultured from two or more blood cultures drawn on separate occasions

**Field Values**

Yes

No

**Additional Information**

Based on CDC /NHSN definition. For further detail please see:  
[www.cdc.gov/nhsn/PDFs/pscManual/7pscCAUTIcurrent.pdf](http://www.cdc.gov/nhsn/PDFs/pscManual/7pscCAUTIcurrent.pdf)

**Data source Hierarchy****Associated Edit Checks**

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## SEPSIS / SEVERE SEPSIS (NTDB DEFINITION)

Data Format [combo] single-choice

*National Element*

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### Collection Criterion:

#### Definition

Sepsis and/or Severe Sepsis defined as **bacteremia** with an obvious source of infection and two or more of the following clinical signs:

1. Temp >38° C or <36° C
2. WBC count >12,000/mm<sup>3</sup>, or > 20%immature (source of infection)
3. Hypotension – (Severe Sepsis)
4. Evidence of hypo perfusion, such as low blood pressure, low urine output; cool extremities; weak peripheral pulse. (Severe Sepsis)
5. Elevated lactate > 3; serum bicarbonate < 20; or Altered mental status.

#### Field Values

Yes (sepsis)

Yes (severe sepsis)

No

#### Additional Information

#### Data source Hierarchy

Medical chart

#### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field



## SEPSIS / SEVERE SEPSIS (ABA CONSENSUS DEFINITION)

Data Format [combo] single-choice

*National Element*

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### Collection Criterion:

#### Definition

A patient must have a documented infection as defined by:

1. Culture positive infection; or
2. Pathologic tissue source identified; or
3. Clinical response to antimicrobials

**AND** three of the following:

I. Temperature  $\geq 39^{\circ}$  or  $\leq 36.5^{\circ}\text{C}$

II. Progressive tachycardia

A. Adults  $\geq 110$  bpm

B. Children 2 SD above age-specific norms (85% age-adjusted max heart rate)—use local hospital mean/SD

III. Progressive tachypnea

A. Adults  $\geq 25$  bpm not ventilated

i. Minute ventilation  $\geq 12$  l/min ventilated

B. Children 2 SD above age-specific norms (85% age-adjusted max respiratory rate)

IV. Thrombocytopenia (will not apply until 3 days after initial resuscitation)

A. Adults  $\leq 100,000/\text{mcl}$

B. Children  $\geq 2$  SD below age-specific norms

V. Hyperglycemia (in the absence of pre-existing diabetes mellitus)

A. Untreated plasma glucose  $\geq 200$  mg/dl or equivalent mM/L

B. Insulin resistance—examples include

i.  $\geq 7$  units of insulin/hr intravenous drip (adults)

ii. Significant resistance to insulin ( $\geq 25\%$  increase in insulin requirements over 24 hours)

VI. Inability to continue enteral feedings  $\geq 24$  hours

A. Abdominal distension

B. Enteral feeding intolerance (residual 150 ml/hr in children or two times feeding rate in adults)

C. Uncontrollable diarrhea ( $\geq 2500$  ml/d for adults or  $\geq 400$  ml/d in children)

### Field Values

Yes (sepsis)

Yes (severe sepsis)

No

### Additional Information

**For age-specific norms please use your local hospital normal values.**

### Data source Hierarchy

Medical chart

### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
	1	Invalid value
	4	Blank, required field

## DECUBITUS ULCER

Data Format [combo] single-choice

*National Element*

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### Collection Criterion:

#### Definition

Tissue loss resulting from pressure exerted by an external object on the patient's skin or by the patient's weight against a surface. The ulcer is staged according to the depth of tissue loss: If the patient has more than one ulcer due to pressure, use this field variable to describe the most severe one.

Stage 1: Intact skin with non-blanching erythema

Stage 2: Partial thickness skin loss or blistering that is **not** due to tape or adhesive.

Stage 3: Full thickness loss of skin. Subcutaneous fat may be visible but not muscle or bone.

Stage 4: Full thickness tissue loss with exposure of muscle or bone.

#### Field Values

Yes

Stage 1

Stage 2

Stage 3

Stage 4

Associated with device or dressing?

In burned tissue?

No

#### Additional Information

##### Data source Hierarchy

Medical chart

#### Associated Edit Checks

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## TIME TO 95% WOUND CLOSURE

Data Format [text]

*National Element*

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### Collection Criterion:

#### Definition

The time following injury for the patient to achieve 95% wound closure-including both burned areas and donor sites. This may occur while the patient is being followed in the outpatient clinic.

#### Field Values

Free text (Days)

> 90 days

#### Additional Information

Wound closure is defined as complete epithelialization with no further need for dressings intended to facilitate wound closure. It may be necessary to estimate the date of 95% wound closure if the wound heals between discharge and follow-up outpatient visits or between outpatient visits.

#### Data source Hierarchy

#### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## TOTAL CRYSTALLOID IN FIRST 24 HOURS FOLLOWING INJURY

Data Format [text]

*National Element*

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### Collection Criterion:

#### Definition

The total volumes (in ml) of crystalloid fluids received from time of injury – estimate to closes hour – to 24 hours following injury, including fluids administered prior to treatment at the burn center. Round to the closest 100 ml. If total fluids in first 24 hours were less calculated maintenance, enter 0. If patient was admitted after first 24 hours following injury and pre-admission records are unavailable indicate Not Available.

#### Field Values

Total crystalloid (Free text) (ml)

Not Available (Pre-hospital resuscitation records not available)

#### Additional Information

These data include fluids administered prior to admission to the burn center. Therefore, it may be necessary to review pre-hospital records including EMS and other transport notes to provide that exact volume or estimated volume administered.

#### Data source Hierarchy

1. Hospital chart
2. ED Admission Form
3. Billing Sheet / Medical Records Coding Summary Sheet
4. Triage Form / Trauma Flow Sheet
5. EMS Run Sheet
6. ED Nurses Notes

#### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## TOTAL COLLOID IN FIRST 24 HOURS FOLLOWING INJURY

Data Format [text]

*National Element*

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### Collection Criterion:

#### Definition

The total volumes (in ml) of colloid fluids received from time of injury – estimate to closes hour – to 24 hours following injury, including colloid administered prior to treatment at the burn center. Round to the closest 100 ml. Colloid includes Albumin (all concentrations), hydroxyethyl starch, other starch fluid and non-blood product colloid. If no colloid was administered, enter 0. If patient was admitted after first 24 hours following injury and pre-admission records are unavailable indicate Not Available.

#### Field Values

Total colloid (Free text) (ml)

Not available (Pre-hospital resuscitation records not available)

#### Additional Information

These data include fluids administered prior to admission to the burn center. Therefore, it may be necessary to review pre-hospital records including EMS and other transport notes to provide the exact volume or estimated volume administered.

#### Data source Hierarchy

1. Hospital chart
2. ED Admission Form
3. Billing Sheet / Medical Records Coding Summary Sheet
4. Triage Form / Trauma Flow Sheet
5. EMS Run Sheet
6. ED Nurses Notes

#### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## TOTAL BLOOD PRODUCTS IN FIRST 24 HOURS FOLLOWING INJURY

Data Format [text]

*National Element*

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### Collection Criterion:

#### Definition

The total volumes of blood products received from time of injury to 24 hours following injury including fluids administered prior to treatment at the burn center. If no blood products were administered, enter 0. If patient was admitted after first 24 hours following injury and pre-admission records are unavailable indicate Not Available.

#### Field Values

Whole blood (ml)

Packed red blood cells (ml)

Platelets (ml)

Fresh Frozen Plasma (ml)

Cryoprecipitate (ml)

Other (Free text) (ml)

Not Available (Pre-hospital resuscitation records not available)

#### Additional Information

These data include fluids administered prior to admission to the burn center. Therefore, it may be necessary to review pre-hospital records including EMS and other transport notes to provide the exact volume or estimated volume administered.

#### Data source Hierarchy

1. Hospital chart
2. ED Admission Form
3. Billing Sheet / Medical Records Coding Summary Sheet
4. Triage Form / Trauma Flow Sheet
5. EMS Run Sheet
6. ED Nurses Notes

#### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

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## TOTAL CRYSTALLOID FLUID FROM HOURS 25 TO 48 FOLLOWING INJURY

Data Format [text]

*National Element*

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### Collection Criterion:

#### Definition

The total volume of crystalloid fluid received from hour 25 to hour 48 following injury. Round to the closest 100 ml. If total fluids in first 48 hours were less than calculated maintenance, enter 0. If patient was admitted after first 48 hours following injury and pre-admission records are unavailable indicate Not Available.

#### Field Values

Total crystalloid (ml):

Not Available (Pre-hospital resuscitation records not available)

#### Additional Information

These data include fluids administered prior to admission to the burn center. Therefore, it may be necessary to review pre-hospital records including EMS and other transport notes to provide the exact volume or estimated volume administered.

#### Data source Hierarchy

1. Hospital chart
2. ED Admission Form
3. Billing Sheet / Medical Records Coding Summary Sheet
4. Triage Form / Trauma Flow Sheet
5. EMS Run Sheet
6. ED Nurses Notes

#### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field



## TOTAL COLLOID FROM HOURS 25 TO 48 FOLLOWING INJURY

Data Format [text]

*National Element*

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### Collection Criterion:

#### Definition

The total volumes (in ml) of colloid fluids received from 25 hours to 48 hours following injury. Round to the closest 100 ml. Colloid includes Alubmin (all concentrations), hydroxyethyl starch, other starch fluid and non-blood product colloid. If no colloid was administered, enter 0. If patient was admitted after 48 hours following injury and pre-admission records are unavailable indicate Not Available.

#### Field Values

Total colloid volume (cc)

Not Available (Pre-hospital resuscitation records not available)

#### Additional Information

These data include fluids administered prior to admission to the burn center. Therefore, it may be necessary to review pre-hospital records including EMS and other transport notes to provide the exact volume or estimated volume administered.

#### Data source Hierarchy

1. Hospital chart
2. ED Admission Form
3. Billing Sheet / Medical Records Coding Summary Sheet
4. Triage Form / Trauma Flow Sheet
5. EMS Run Sheet
6. ED Nurses Notes

#### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## TOTAL BLOOD PRODUCTS FROM HOURS 25 TO 48 FOLLOWING INJURY

Data Format [text]

*National Element*

---

### Collection Criterion:

#### Definition

The total volume of blood products received from hour 25 to hour 48 following injury. If no blood products were administered, enter 0. If patient was admitted after 48 hours following injury and pre-admission records are unavailable indicate Not Available.

#### Field Values

Whole blood (ml)

Packed red blood cells (ml)

Platelets (ml)

Fresh Frozen Plasma (ml)

Cryoprecipitate (ml)

Other (Free text) (ml)

Not available (Pre-hospital resuscitation records not available)

#### Additional Information

These data include fluids administered prior to admission to the burn center. Therefore, it may be necessary to review pre-hospital records including EMS and other transport notes to provide the exact volume or estimated volume administered.

#### Data source Hierarchy

1. Hospital chart
2. ED Admission Form
3. Billing Sheet / Medical Records Coding Summary Sheet
4. Triage Form / Trauma Flow Sheet
5. EMS Run Sheet
6. ED Nurses Notes

#### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

---

## TOTAL URINE OUTPUT IN FIRST 24 HOURS FOLLOWING INJURY

Data Format [text]

*National Element*

---

### Collection Criterion:

#### Definition

The total urine output in the first 24 hours following injury. This includes urine output recorded prior to burn center admission. If volume was not quantified (such as in the case of “full diaper”) enter not quantified.

#### Field Values

Free text (ml)

Not quantified

Glucose > 200 mg/dl or > 11.1 mmol/l (at any time during first 24 hours)

Yes

No

N/A—glucose level was not obtained

#### Additional Information

These data include urine output recorded prior to admission to the burn center. Therefore, it may be necessary to review pre-hospital records including EMS and other transport notes to provide the exact volume or estimated volume of urine output.

#### Data source Hierarchy

1. Hospital chart
2. ED Admission Form
3. Billing Sheet / Medical Records Coding Summary Sheet
4. Triage Form / Trauma Flow Sheet
5. EMS Run Sheet
6. ED Nurses Notes

#### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## TOTAL URINE OUTPUT FROM HOUR 25 TO HOUR 48 FOLLOWING INJURY

Data Format [text]

*National Element*

---

### Collection Criterion:

#### Definition

The total urine output in from hour 25 to hour 48 following injury. If volume was not quantified (such as in the case of “full diaper”) enter not quantified.

#### Field Values

Free text (ml)

Not quantified

Glucose > 200 mg/dl or > 11.1 mmol/l (at any time during hour 25 through 48)

Yes

No

N/A (glucose level not obtained)

#### Additional Information

These data include urine output recorded prior to admission to the burn center. Therefore, it may be necessary to review pre-hospital records including EMS and other transport notes to provide the exact volume or estimated volume of urine output.

#### Data source Hierarchy

1. Hospital chart
2. ED Admission Form
3. Billing Sheet / Medical Records Coding Summary Sheet
4. Triage Form / Trauma Flow Sheet
5. EMS Run Sheet
6. ED Nurses Notes

#### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## ADMISSION WEIGHT

Data Format [text]

*National Element*

---

### Collection Criterion:

#### Definition

The patient's admission weight (in kg) is the first measured and recorded weight for the patient following admission. The first recorded weigh could be on the pre-hospital records or the emergency department records.

The estimated dry weight at time of injury may be equal to first measured weight or estimated based on measured weight which is corrected for fluids given prior to measurement.

#### Field Values

Free text (kg)

First Measured weight (kg)

Estimated dry weight at time of injury (kg)

#### Additional Information

This value should reflect the dry weight of the patient.

#### Data source Hierarchy

1. Hospital chart
2. Patient report
3. ED Admission Form
4. Billing Sheet / Medical Records Coding Summary Sheet
5. Triage Form / Trauma Flow Sheet
6. EMS Run Sheet
7. ED Nurses Notes

## ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## DISCHARGE WEIGHT

Data Format [text]

*National Element*

---

### Collection Criterion:

#### Definition

The last patient weight measured and recorded in the medical record prior to discharge.

#### Field Values

Free text (kg)

Date of discharge weight measurement.

Discharge weight (kg)

#### Additional Information

This weight may have been recorded days to weeks prior to discharge, but if this is the final recorded weight in the chart then this should be reported.

#### Data source Hierarchy

Hospital Chart

#### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## VENOUS THROMBOSIS PROPHLYAXIS

Data Format [text]

*National Element*

---

### Collection Criterion:

#### Definition

Low dose anticoagulant prophylaxis against venous thrombosis, such as subcutaneous unfractionated heparin, pneumatic compression devices, or Low molecular weight heparin (e.g. Lovenox).

#### Field Values

Yes – Received continuously throughout hospitalization

No – Did not receive prophylaxis continuously throughout hospitalization

Yes – Was receiving prophylaxis at time of diagnosis of DVT or PTE

No – Was not receiving prophylaxis at time of diagnosis of DVT or PTE

Not Applicable – No diagnosis of DVT or PTE was made during hospitalization

### Additional Information

#### .Data source Hierarchy

Hospital Chart

### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## DAYS TO RETURN TO SCHOOL OR WORK, IF APPLICABLE

Data Format [text]

*National Element*

---

### Collection Criterion:

#### Definition

Number of days between discharge from the burn center and return to work or school.  
The return can be part time or full time.

#### Field Values

Free text (days)

Did not return to work or school within one year of injury.

Not Applicable (if a patient does not work or attend school)

#### Additional Information

#### Data source Hierarchy

1. Outpatient clinic chart
2. Patient or parent report

#### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field



## DATE / TIME OF FIRST BURN WOUND EXCISION

Data Format [text]

*National Element*

---

### Collection Criterion:

#### Definition

The date and time when the patient underwent the first burn wound excision surgery. This specifically refers to escharectomy or amputation performed to remove burn eschar. This does not include wound care or debridement performed in the operating room prior to application of biological dressings or other wound coverings.

#### Field Values

Date

Time

#### Additional Information

#### Data source Hierarchy

### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## SCREEN FOR DELIRIUM

Data Format [combo] single-choice

*National Element*

---

### Definition

Delirium refers to an altered state of cognitive function.

Delirium may be diagnosed by ICU-CAM assessment and should be present for at least 48 consecutive hours.

The patient underwent screening by a health care professional for signs and symptoms of Delirium during the hospital admission.

### Field Values

Yes

If yes, did the patient screen positive?

Yes

No

No

### Additional Information

This field is for the occurrence of delirium at any time during the hospitalization. In order to meet the criteria for delirium, symptoms must be present for 48 consecutive hours.

### Data source Hierarchy

Medical chart

### Associated Edit Checks

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## SCREEN FOR ASD / PTSD

Data Format [text]

*National Element*

---

### Collection Criterion:

#### Definition

The patient underwent screening by a psychologist, social worker or other health care professional for signs and symptoms of ASD/PTSD during the hospital admission.

#### Field Values

Yes

If yes, did the patient screen positive?

Yes

If yes, was a referral made to a mental health professional?

Yes

No

No

No

#### Additional Information

This information should be ascertained from the medical record.

#### Data source Hierarchy

#### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field

## SCREEN FOR MAJOR DEPRESSION

Data Format [combo] single-choice

*National Element*

---

### Collection Criterion:

#### Definition

The patient underwent screening by a psychologist, social worker or other health care professional for major depression. Please note that if the patient had a diagnosis of major depression then this should be indicated by selecting the “pre-injury major depression” option.

#### Field Values

Pre-injury major depression

Yes

No

Patient screened for Depression

Yes – Patient screened

If yes, did the patient screen positive?

Yes

No

If yes, was a referral made to a mental health professional?

Yes

No

No – Patient not screened

#### Additional Information

This information should be ascertained from the medical record. The recommended screening tool would be the PHQ-2 which could be easily administered by the bedside nurse or social worker.

#### Data source Hierarchy

#### ASSOCIATED EDIT CHECKS

Rule ID	Level	Message
1		Invalid value
4		Blank, required field