

Development of Clinical Quality and Performance
Indicators for Emergency Medical Services in the Low
to Middle Income Setting: The South African
perspective

Data Dictionary and Minimum Data Standards
(V3 2019)

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Abbreviations

ACS – Acute Coronary Syndrome
AED – Automated External Defibrillator
ALS – Advanced Life Support
APGAR – Activity, Pulse, Grimace, Appearance, Respiration
APO – Acute Pulmonary Oedema
BBA – Born before arrival
BP – Blood pressure
CPD – Continued professional development
CPR – Cardiopulmonary resuscitation
CT – Computed tomography
CVA – Cerebrovascular accident
ECG – Electrocardiogram
EMS – Emergency Medical Service
EtCO₂ – End tidal carbon dioxide
ETI – Endotracheal intubation
ETT – Endotracheal tube
FAST – Face Arm Speech Time
GCS – Glasgow Coma Scale
GTN – Glyceryl trinitrate
HEMS – Helicopter Emergency Medical Service
IO – Intra-osseous
IOD – Injury on duty
IV – Intra-venous
MAP – Mean arterial pressure
mmHg – Millimetres mercury
ODD – Oesophageal detection device
OHCA – Out of hospital cardiac arrest
PCI – Percutaneous coronary intervention
PEA – Pulseless electrical activity
PEFR – Peak expiratory flow rate
POC – Point of care
ROSC – Return of spontaneous circulation
RSI – Rapid sequence intubation
SPC – Statistical process control
SpO₂ – Capillary oxygen saturation
STEMI – ST elevation myocardial infarction
TIA – Transient ischaemic attack
TXA – Tranexamic acid
VF – Ventricular fibrillation
VT – Ventricular tachycardia

Background

Information plays a pivotal role in promoting improvements in the safety and quality of patient care. Quality and performance measurement promote accountability to all stakeholders including the public, service users, clinicians and the Government by facilitating informed decision-making and safe, high quality and reliable care through monitoring, analysing and communicating the degree to which healthcare organisations meet key goals. Accurate performance measurement is dependent on information that is of good quality, comparable, and can be shared within the health sector. Quality Indicators (QIs) play an important role in the performance measurement process by helping to identify and appropriately measure levels of service quality and performance.

In and of themselves, QIs cannot improve quality, however, they effectively act as flags or alerts to identify good practice, provide comparability within and between similar services, where there are opportunities for improvement and where a more detailed investigation of standards is warranted. The ultimate goal of QIs is to contribute to the provision of a high quality, safe and effective service that meets the needs of service users. Data used to support QIs should be standardised, with uniform definitions, to ensure that it is collected consistently and that it supports the measurement process, facilitating meaningful comparison. This can be achieved through the development of a minimum data set (MDS) containing a list of standardised data to support performance measurement with QIs. The purpose of this document is to provide guidance for the development of QIs and associated MDSs to monitor healthcare quality.

The methodology used in the development of the QIs described in this document is outlined in Figure 1, reprinted with permission by the National Quality Forum (Copyright ©2013 National Quality Forum).

Scope

The purpose of this study is to identify a series of QIs applicable to the South African EMS context. The outcome will provide services across the country with a pool of QIs that can be referenced for the purposes of monitoring quality and performance and identifying areas for improvement.

The indicators defined in this document have been developed following a review of the scientific literature, supplemented by input from experts in prehospital quality from the USA, UK and South Africa. Each QI is presented in the same format so as to standardize data capture and monitoring (See Table 1)

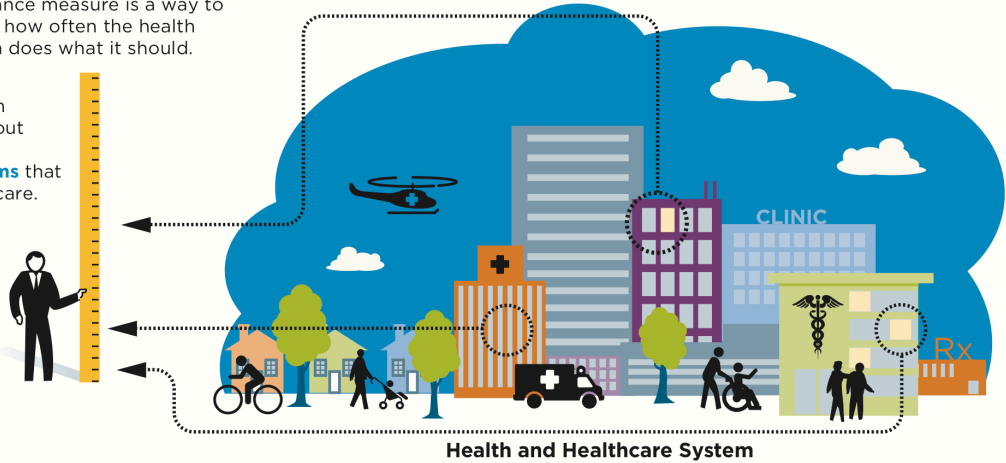
Figure 1: QI development methodology

NATIONAL QUALITY FORUM Understanding Performance Measures: Anatomy and Types

WHAT IS A PERFORMANCE MEASURE?

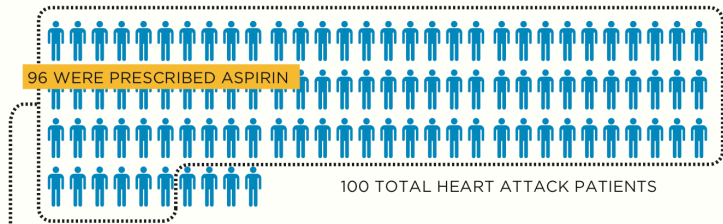
A healthcare performance measure is a way to calculate whether and how often the health and healthcare system does what it should.

Measures are based on scientific evidence about **processes, outcomes, perceptions, or systems** that relate to high-quality care.



CONSTRUCTING A MEASURE

The result of a measure is usually shown as a ratio or a percentage, and allows for comparison to other providers and benchmarking against national and local performance.



MEASURE FORMULA

$$\frac{\text{NUMERATOR}}{\text{DENOMINATOR}} = \text{RESULT} \%$$

NUMERATOR: # WHO HAD A SPECIFIC TREATMENT
DENOMINATOR: # ELIGIBLE FOR TREATMENT

MEASURE EXAMPLE

$$\frac{96 \text{ HEART ATTACK PATIENTS WERE APPROPRIATELY PRESCRIBED ASPIRIN AT DISCHARGE}}{100 \text{ TOTAL HEART ATTACK PATIENTS}} = 96\%$$


EXAMPLE: Once a person has had a heart attack, taking aspirin daily has been shown to reduce the chance of having a second one. Guidelines tell physicians to prescribe aspirin to all patients leaving the hospital after treatment.

TYPES OF PERFORMANCE MEASURES

STRUCTURAL MEASURES

ASSESS HEALTHCARE INFRASTRUCTURE

EXAMPLE: The percentage of physicians in a practice who have systems to track and follow patients with diabetes.

PROCESS MEASURES

ASSESS STEPS THAT SHOULD BE FOLLOWED TO PROVIDE GOOD CARE

EXAMPLE: The percentage of patients with diabetes who have had an annual eye exam in the last year.

OUTCOME MEASURES

ASSESS THE RESULTS OF HEALTHCARE THAT ARE EXPERIENCED BY PATIENTS

EXAMPLE: The percentage of diabetes patients who are blind or have compromised vision.

Table 1: Data definitions

Definition	Basic description/purpose of the QI
Category	Primary area of focus of the QI
Subcategory	Secondary area, within the Category that the QI is focused
Measure Type	Structure, process or outcome
Target Population	Category level population on whom the quality indicator is measured/applied
Unit of Analysis	EMS component under study/assessment for quality and performance
Numerator Statement	Description of the subset of the Subcategory population on whom the quality indicator is measured/applied
Denominator Statement	Description of the Subcategory level of population on whom the quality indicator is measured/applied
Case Mix/Risk Adjustment	Suggested differentiation amongst the denominator population for greater accuracy (i.e.: stratification)
Exclusion Criteria	Denominator cases to be excluded when applying the QI
Measure Calculation	The equation for calculating the QI
Numerical Reporting Format	Suggested format in which the numerical results should be reported
Graphical Reporting Format	Suggested format in which the results should be displayed/visualised
Reported Indicator	Suggested output in which results should be described
Data Source	Suggested data source to obtain the data required for calculating the QI
Suggested Reporting Period	Time frame, number of successive cases or other grouping strategies cases should be aggregated for reporting purposes
Recommended Review Period	Suggested time period at which the QI should be reviewed for validity and feasibility

Section 1: Clinical Category

Part 1: Acute Coronary Syndromes/ST Elevation Myocardial Infarction

Part 2: Acute Pulmonary Oedema

Part 3: Airway Management

Part 4: Anaphylaxis

Part 5: Asthma/Bronchoconstriction

Part 6: Burns

Part 7: General

Part 8: Hypoglycaemia

Part 9: Neonates/Paediatrics

Part 10: Obstetrics

Part 11: Out of Hospital Cardiac Arrest

Part 12: Pain Management

Part 13: Seizures

Part 14: Stroke/CVA/TIA

Part 15: Trauma

Section 1: Clinical Category

Part 1: Acute Coronary Syndromes/ST Elevation Myocardial Infarction

- C-AS-P-1 Patients with a provisional diagnosis of ACS/STEMI who had an ALS practitioner in attendance
- C-AS-P-2 Patients with a provisional diagnosis of ACS/STEMI who had a set of defined cardiac risk factors assessed and recorded
- C-AS-P-3 Patients with a provisional diagnosis of ACS/STEMI who had a 12 lead ECG obtained
- C-AS-P-4 Patients with a provisional diagnosis of ACS/STEMI who were administered Aspirin
- C-AS-P-5 Patients with a provisional diagnosis of ACS/STEMI who were administered GTN
- C-AS-P-6 Patients with a provisional diagnosis of ACS/STEMI who were assessed for suitability for thrombolysis by defined checklist
- C-AS-P-7 Patients with a provisional diagnosis of ACS/STEMI who were administered prehospital thrombolysis
- C-AS-P-8 Patients with a provisional diagnosis of ACS/STEMI who were transported directly to a Facility with PCI capabilities
- C-AS-P-9 Patients with a provisional diagnosis of ACS/STEMI who had EMS activation of the receiving Cath lab
- C-AS-P-10 Patients who received/met all components of a defined ACS/STEMI composite bundle score
(A bundle indicator is a grouped indicator composed of several individual indicators - to be defined at the user's discretion)

C-AS-P-1 Patients with a provisional diagnosis of ACS/STEMI who had an ALS practitioner in attendance

Measure Code	C-AS-P-1
Definition	Patients with a provisional diagnosis of ACS/STEMI who had an ALS practitioner in attendance
Category	Clinical
Subcategory	ACS/STEMI
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of ACS/STEMI who had an ALS practitioner in attendance
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of ACS/STEMI
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of ACS/STEMI who had an ALS practitioner in attendance
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-AS-P-2 Patients with a provisional diagnosis of ACS/STEMI who had a set of defined cardiac risk factors assessed and recorded

Measure Code	C-AS-P-2
Definition	Patients with a provisional diagnosis of ACS/STEMI who had a set of defined cardiac risk factors assessed and recorded
Category	Clinical
Subcategory	ACS/STEMI
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of ACS/STEMI who had a set of defined cardiac risk factors assessed and recorded
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of ACS/STEMI
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of ACS/STEMI who had a set of defined cardiac risk factors assessed and recorded
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-AS-P-3 Patients with a provisional diagnosis of ACS/STEMI who had a 12 lead ECG obtained

Measure Code	C-AS-P-3
Definition	Patients with a provisional diagnosis of ACS/STEMI who had a 12 lead ECG obtained
Category	Clinical
Subcategory	ACS/STEMI
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of ACS/STEMI who had a 12 lead ECG obtained
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of ACS/STEMI
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients 12 lead ECG monitoring not available Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of ACS/STEMI who had a 12 lead ECG obtained
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-AS-P-4 Patients with a provisional diagnosis of ACS/STEMI who were administered Aspirin

Measure Code	C-AS-P-4
Definition	Patients with a provisional diagnosis of ACS/STEMI who were administered Aspirin
Category	Clinical
Subcategory	ACS/STEMI
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of ACS/STEMI who were administered Aspirin
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of ACS/STEMI
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Contraindication to Aspirin Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of ACS/STEMI who were administered Aspirin
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-AS-P-5 Patients with a provisional diagnosis of ACS/STEMI who were administered GTN

Measure Code	C-AS-P-5
Definition	Patients with a provisional diagnosis of ACS/STEMI who were administered GTN
Category	Clinical
Subcategory	ACS/STEMI
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of ACS/STEMI who were administered GTN
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of ACS/STEMI
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Contraindication to GTN Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of ACS/STEMI who were administered GTN
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-AS-P-6 Patients with a provisional diagnosis of ACS/STEMI who were assessed for suitability for thrombolysis by defined checklist

Measure Code	C-AS-P-6
Definition	Patients with a provisional diagnosis of ACS/STEMI who were assessed for suitability for thrombolysis by defined checklist
Category	Clinical
Subcategory	ACS/STEMI
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of ACS/STEMI who were assessed for suitability for thrombolysis by defined checklist
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of ACS/STEMI
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients transported by EMS personnel with a provisional diagnosis of ACS/STEMI
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-AS-P-7 Patients with a provisional diagnosis of ACS/STEMI who were administered prehospital thrombolysis

Measure Code	C-AS-P-7
Definition	Patients with a provisional diagnosis of ACS/STEMI who were administered prehospital thrombolysis
Category	Clinical
Subcategory	ACS/STEMI
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of ACS/STEMI who were administered prehospital thrombolysis
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of ACS/STEMI found to be suitable for thrombolysis administration by defined assessment criteria
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Patient not suitable for thrombolysis Contraindication to thrombolytic Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of ACS/STEMI who were administered prehospital thrombolysis
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-AS-P-8 Patients with a provisional diagnosis of ACS/STEMI who were transported directly to a Facility with PCI capabilities

Measure Code	C-AS-P-8
Definition	Patients with a provisional diagnosis of ACS/STEMI who were transported directly to a Facility with PCI capabilities
Category	Clinical
Subcategory	ACS/STEMI
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of ACS/STEMI who were transported directly to a Facility with PCI capabilities
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of ACS/STEMI
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of ACS/STEMI who were transported directly to a Facility with PCI capabilities
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-AS-P-9 Patients with a provisional diagnosis of ACS/STEMI who had EMS activation of the receiving Cath lab

Measure Code	C-AS-P-9
Definition	Patients with a provisional diagnosis of ACS/STEMI who had EMS activation of the receiving Cath lab
Category	Clinical
Subcategory	ACS/STEMI
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of ACS/STEMI who had EMS activation of the receiving Cath lab
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of ACS/STEMI
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Insufficient reporting data No Cath lab facility available
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of ACS/STEMI who had EMS activation of the receiving Cath lab
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-AS-P-10 Patients who received/met all components of a defined ACS/STEMI composite bundle score

Measure Code	C-AS-P-10
Definition	Patients who received/met all components of a defined ACS/STEMI composite bundle score
Category	Clinical
Subcategory	ACS/STEMI
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients who received/met all components of a defined ACS/STEMI composite bundle score
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of ACS/STEMI
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients who received/met all components of a defined ACS/STEMI composite bundle score
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

Section 1: Clinical Category

Part 2: Acute Pulmonary Oedema

- C-Apo-P-1 Patients with a provisional diagnosis of APO who were administered GTN
- C-Apo-P-2 Total number of patients with a provisional diagnosis of APO who received CPAP
- C-Apo-P-3 Patients with a provisional diagnosis of APO who had a 12 lead ECG obtained

C-Apo-P-1 Patients with a provisional diagnosis of APO who were administered GTN

Measure Code	C-Apo-P-1
Definition	Patients with a provisional diagnosis of APO who were administered GTN
Category	Clinical
Subcategory	Acute pulmonary oedema
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of APO
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Contraindication to GTN Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of APO who were administered GTN
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Apo-P-2 Patients with a provisional diagnosis of APO who received CPAP

Measure Code	C-Apo-P-2
Definition	Patients with a provisional diagnosis of APO who received CPAP
Category	Clinical
Subcategory	Acute pulmonary oedema
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of APO
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls Drowning/Near-drowning patients
Exclusion Criteria	Paediatric patients Contraindication to CPAP administered Intubated patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Total number of patients with a provisional diagnosis of APO who received CPAP
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Apo-P-3 Patients with a provisional diagnosis of APO who had a 12 lead ECG obtained

Measure Code	C-Apo-P-3
Definition	Patients with a provisional diagnosis of APO who had a 12 lead ECG obtained
Category	Clinical
Subcategory	Acute pulmonary oedema
Clinical Pathway/Service Pathway	Clinical > APO > 12 lead ECG obtained
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of APO
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of APO who had a 12 lead ECG obtained
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

Section 1: Clinical Category

Part 3: Airway Management

- C-Am-P-1 Patients who received a pre-ETI paralytic, following which there was a decrease in SpO₂ > 10% from baseline /or decrease below 70% overall
- C-Am-P-2 Patients successfully intubated by EMS personnel where EtCO₂ monitoring was used post ETI
- C-Am-P-3 Patients successfully intubated via RSI by EMS personnel where a paralytic agent was administered post-ETI
- C-Am-P-4 Patients successfully intubated by EMS personnel where a sedative agent was administered post-ETI
- C-Am-P-5 Patients successfully intubated by EMS personnel where a mechanical ventilator was used post-ETI for ventilation
- C-Am-P-6 Patients in whom ETI was attempted by EMS personnel who had an alternative airway inserted as a final airway
- C-Am-P-7 Patients in whom ETI was attempted by EMS personnel who had a surgical airway inserted
- C-Am-P-8 Patients successfully intubated by EMS personnel with an EtCO₂ < 30 mmHg or > 50 mmHg post-ETI > 10 mins during EMS care
- C-Am-P-9 Patients in whom RSI with ETI was unsuccessful when attempted by EMS personnel
- C-Am-P-10 Patients in whom Non-RSI ETI was unsuccessful when attempted by EMS personnel
- C-Am-P-11 Patients in whom RSI with ETI was successful when attempted by EMS personnel
- C-Am-P-12 Total number of patients successfully intubated via RSI by EMS personnel
- C-Am-P-13 Patients who received/met all components of the defined Airway management composite bundle score
(A bundle indicator is a grouped indicator composed of several individual indicators - to be defined at the user's discretion)

C-Am-P-1 Patients who received a pre-ETI paralytic, following which there was a decrease in SpO2 > 10% from baseline /or decrease below 70% overall

Measure Code	C-Am-P-1
Definition	Patients who received a pre-ETI paralytic, following which there was a decrease in SpO2 > 10% from baseline/or decrease below 70% overall
Category	Clinical
Subcategory	Airway management
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Region Service
Numerator Statement	Total number of patients who received a pre-ETI paralytic, following which there was a decrease in SpO2 > 10% from baseline/or decrease below 70% overall
Denominator Statement	Total number of patients who received a pre-ETI paralytic
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls Successful ETI Unsuccessful ETI
Exclusion Criteria	OHCA patients Contraindication to the paralytic administered Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	Patients who received a pre-ETI paralytic, following which there was a decrease in SpO2 > 10% from baseline

Development of Clinical Quality and Performance Indicators for Emergency Medical Services in the Low to Middle Income Setting: The South African perspective

Data Source	Patient Report Form Airway Register
Suggested Reporting Period	Weekly Monthly Quarterly Annually
Recommended Review Period	Three years

C-Am-P-1 Patients successfully intubated by EMS personnel where EtCO₂ monitoring was used post ETI

Measure Code	C-Am-P-1
Definition	Patients successfully intubated by EMS personnel where EtCO ₂ monitoring was used post ETI
Category	Clinical
Subcategory	Airway management
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Region Service
Numerator Statement	Total number of patients successfully intubated by EMS personnel where EtCO ₂ monitoring was used post ETI
Denominator Statement	Total number of patients successfully intubated by EMS personnel
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	OHCA patients Failed ETI Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients successfully intubated by EMS personnel where EtCO ₂ monitoring was used post ETI
Data Source	Patient Report Form Airway Register
Suggested Reporting Period	Weekly Monthly Quarterly Annually

Development of Clinical Quality and Performance Indicators for Emergency Medical Services in the Low to Middle Income Setting: The South African perspective

Recommended Review Period	Three years
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C-Am-P-3 Patients successfully intubated via RSI by EMS personnel where a paralytic agent was administered post-ETI

Measure Code	C-Am-P-3
Definition	Patients successfully intubated via RSI by EMS personnel where a paralytic agent was administered post-ETI
Category	Clinical
Subcategory	Airway management
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Region Service
Numerator Statement	Total number of patients successfully intubated via RSI by EMS personnel where a paralytic agent was administered post-ETI
Denominator Statement	Total number of patients successfully intubated by via RSI by EMS personnel
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	OHCA patients Failed ETI Non-RSI ETI Contraindication to the paralytic administered Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients successfully intubated via RSI by EMS personnel where a paralytic agent was administered post-ETI
Data Source	Patient Report Form Airway Register

Development of Clinical Quality and Performance Indicators for Emergency Medical Services in the Low to Middle Income Setting: The South African perspective

Suggested Reporting Period	Weekly Monthly Quarterly Annually
Recommended Review Period	Three years

C-Am-P-4 Patients successfully intubated by EMS personnel where a sedative agent was administered post-ETI

Measure Code	C-Am-P-4
Definition	Patients successfully intubated by EMS personnel where a sedative agent was administered post-ETI
Category	Clinical
Subcategory	Airway management
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Region Service
Numerator Statement	Total number of patients successfully intubated by EMS personnel where a sedative agent was administered post-ETI
Denominator Statement	Total number of patients successfully intubated by EMS personnel
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	OHCA patients Failed ETI Contraindication to the sedative administered
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients successfully intubated by EMS personnel where a sedative agent was administered post-ETI
Data Source	Patient Report Form Airway Register
Suggested Reporting Period	Weekly Monthly Quarterly Annually

Development of Clinical Quality and Performance Indicators for Emergency Medical Services in the Low to Middle Income Setting: The South African perspective

Recommended Review Period	Three years
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C-Am-P-5 Patients successfully intubated by EMS personnel where a mechanical ventilator was used post-ETI for ventilation

Measure Code	C-Am-P-5
Definition	Patients successfully intubated by EMS personnel where a mechanical ventilator was used post-ETI for ventilation
Category	Clinical
Subcategory	Airway management
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Region Service
Numerator Statement	Total number of patients successfully intubated by EMS personnel where a mechanical ventilator was used post-ETI for ventilation
Denominator Statement	Total number of patients successfully intubated by EMS personnel
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	OHCA patients Failed ETI Insufficient reporting data
Measure Calculation	$\text{Numerator/Denominator} \times 100 = \%$
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients successfully intubated by EMS personnel where a mechanical ventilator was used post-ETI for ventilation
Data Source	Patient Report Form Airway Register

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Suggested Reporting Period	Weekly Monthly Quarterly Annually
Recommended Review Period	Three years

C-Am-P-6 Patients in whom ETI was attempted by EMS personnel who had an alternative airway inserted as a final airway

Measure Code	C-Am-P-6
Definition	Patients in whom ETI was attempted by EMS personnel who had an alternative airway inserted as a final airway
Category	Clinical
Subcategory	Airway management
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Region Service
Numerator Statement	Total number of patients in whom ETI was attempted by EMS personnel who had an alternative airway inserted as a final airway
Denominator Statement	Total number of patients where ETI was attempted by EMS personnel
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	OHCA patients Patients where the alternative airway was the primary method of airway insertion Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients in whom ETI was attempted by EMS personnel who had an Alternative airway inserted as a final airway
Data Source	Patient Report Form Airway Register

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Suggested Reporting Period	Weekly Monthly Quarterly Annually
Recommended Review Period	Three years

C-Am-P-7 Patients in whom ETI was attempted by EMS personnel who had a surgical airway inserted

Measure Code	C-Am-P-7
Definition	Patients in whom ETI was attempted by EMS personnel who had a surgical airway inserted
Category	Clinical
Subcategory	Airway management
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Region Service
Numerator Statement	Total number of patients in whom ETI was attempted by EMS personnel who had a surgical airway inserted
Denominator Statement	Total number of patients where ETI was attempted by EMS personnel
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	OHCA patients Patients where the Surgical Airway was the primary method of airway insertion Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients in whom ETI was attempted by EMS personnel who had a Surgical airway inserted
Data Source	Patient Report Form Airway Register

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Suggested Reporting Period	Weekly Monthly Quarterly Annually
Recommended Review Period	Three years

C-Am-P-8 Patients successfully intubated by EMS personnel with an EtCO₂ < 30 mmHg or > 50 mmHg post-ETI > 10 mins during EMS care

Measure Code	C-Am-P-8
Definition	Patients successfully intubated by EMS personnel with an EtCO ₂ < 30 mmHg or > 50 mmHg post-ETI > 10 mins during EMS care
Category	Clinical
Subcategory	Airway management
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Region Service
Numerator Statement	Total number of patients successfully intubated by EMS personnel with an EtCO ₂ < 30 mmHg or > 50 mmHg post-ETI > 10 mins during EMS care
Denominator Statement	Total number of patients successfully intubated by EMS personnel
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	OHCA patients Failed ETI Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients successfully intubated by EMS personnel with an EtCO ₂ < 30 mmHg or > 50 mmHg post-ETI > 10 mins during EMS care
Data Source	Patient Report Form Airway Register

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Suggested Reporting Period	Weekly Monthly Quarterly Annually
Recommended Review Period	Three years

C-Am-P-9 Patients in whom RSI with ETI was unsuccessful when attempted by EMS personnel

Measure Code	C-Am-P-9
Definition	Patients in whom RSI with ETI was unsuccessful when attempted by EMS personnel
Category	Clinical
Subcategory	Airway management
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Region Service
Numerator Statement	Total number of patients in whom RSI with ETI was unsuccessful when attempted by EMS personnel
Denominator Statement	Total number of patients in whom RSI with ETI was attempted by EMS personnel
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	OHCA patients Where the Alternative airway was the primary method of airway insertion Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients in whom RSI with ETI was unsuccessful when attempted by EMS personnel
Data Source	Patient Report Form Airway Register

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Suggested Reporting Period	Weekly Monthly Quarterly Annually
Recommended Review Period	Three years

C-Am-P-10 Patients in whom Non-RSI ETI was unsuccessful when attempted by EMS personnel

Measure Code	C-Am-P-10
Definition	Patients in whom Non-RSI ETI was unsuccessful when attempted by EMS personnel
Category	Clinical
Subcategory	Airway management
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Region Service
Numerator Statement	Total number of patients in whom Non-RSI ETI was unsuccessful when attempted by EMS personnel
Denominator Statement	Total number of patients in whom Non-RSI ETI was attempted by EMS personnel
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	OHCA patients Where the Alternative airway was the primary method of airway insertion Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients in whom Non-RSI ETI was unsuccessful when attempted by EMS personnel
Data Source	Patient Report Form Airway Register
Suggested Reporting Period	Weekly Monthly Quarterly Annually

Recommended Review Period	Three years
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C-Am-P-11 Patients in whom RSI with ETI was successful when attempted by EMS personnel

Measure Code	C-Am-P-11
Definition	Patients in whom RSI with ETI was successful when attempted by EMS personnel
Category	Clinical
Subcategory	Airway management
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Region Service
Numerator Statement	Total number of patients in whom RSI with ETI was successful when attempted by EMS personnel
Denominator Statement	Total number of patients in whom RSI with ETI was attempted by EMS personnel
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	OHCA patients Failed ETI Where the Alternative airway was the primary method of airway insertion
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients in whom RSI with ETI was successful when attempted by EMS personnel
Data Source	Patient Report Form Airway Register
Suggested Reporting Period	Weekly Monthly Quarterly Annually

Development of Clinical Quality and Performance Indicators for Emergency Medical Services in the Low to Middle Income Setting: The South African perspective

Recommended Review Period	Three years
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C-Am-P-12 Patients successfully intubated via RSI by EMS personnel

Measure Code	C-Am-P-12
Definition	Patients successfully intubated via RSI by EMS personnel
Category	Clinical
Subcategory	Airway management
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Region Service
Numerator Statement	Total number of patients successfully intubated via RSI by EMS personnel
Denominator Statement	Total number of patients transported by EMS
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	OHCA patients Failed ETI Where the Alternative airway was the primary method of airway insertion Insufficient reporting data
Measure Calculation	$\text{Numerator/Denominator} \times 1000 = \text{EMS RSI ETIs per 1000 EMS patient transports}$
Numerical Reporting Format	Per 1000 EMS patient transports
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	EMS RSI ETIs per 1000 EMS patient transports
Data Source	Patient Report Form Airway Register
Suggested Reporting Period	Weekly Monthly Quarterly Annually
Recommended Review Period	Three years

Development of Clinical Quality and Performance Indicators for Emergency Medical Services in the Low to Middle Income Setting: The South African perspective

C-Am-P-13 Patients who received/met all components of the defined Airway management composite bundle score

Measure Code	C-Am-P-13
Definition	Patients who received/met all components of the defined Airway management composite bundle score
Category	Clinical
Subcategory	Airway management
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Region Service
Numerator Statement	Total number of patients who received/met all components of the defined Airway management composite bundle score
Denominator Statement	Determined based on Airway Management bundle composite score items
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls Successfully ETI Unsuccessful ETI
Exclusion Criteria	OHCA patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients who received/met all components of the defined Airway Management composite bundle score
Data Source	Patient Report Form Airway Register

Development of Clinical Quality and Performance Indicators for Emergency Medical Services in the Low to Middle Income Setting: The South African perspective

Suggested Reporting Period	Weekly Monthly Quarterly Annually
Recommended Review Period	Three years

Section 1: Clinical Domain

Part 4: Anaphylaxis

- C-An-P-1 Patients with a provisional diagnosis of Anaphylaxis and evidence of bronchoconstriction documented who were administered a B2 agonist
- C-An-P-2 Patients with a provisional diagnosis of Anaphylaxis and evidence of bronchoconstriction documented who were administered an anticholinergic bronchodilator
- C-An-P-3 Patients with a provisional diagnosis of Anaphylaxis who were administered an antihistamine
- C-An-P-4 Patients with a provisional diagnosis of Anaphylaxis who were administered a corticosteroid
- C-An-P-5 Patients with a provisional diagnosis of Anaphylaxis and signs of a severe systemic response recorded who were administered IM Adrenaline

C-An-P-1 Patients with a provisional diagnosis of Anaphylaxis and evidence of bronchoconstriction documented who were administered a B2 agonist

Measure Code	C-An-P-1
Definition	Patients with a provisional diagnosis of Anaphylaxis and evidence of bronchoconstriction documented who were administered a B2 agonist
Category	Clinical
Subcategory	Anaphylaxis
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of Anaphylaxis and evidence of bronchoconstriction documented
Case Mix/Risk Adjustment	Adult patients Paediatric patients Systolic BP < 90 mmHg systolic for > 10 mins
Exclusion Criteria	Contraindication to the Antihistamine administered Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Anaphylaxis and evidence of bronchoconstriction documented who were administered a B2 agonist
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-An-P-2 Patients with a provisional diagnosis of Anaphylaxis and evidence of bronchoconstriction documented who were administered an anticholinergic bronchodilator

Measure Code	C-An-P-2
Definition	Patients with a provisional diagnosis of Anaphylaxis and evidence of bronchoconstriction documented who were administered an anticholinergic bronchodilator
Category	Clinical
Subcategory	Anaphylaxis
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of Anaphylaxis and evidence of bronchoconstriction documented
Case Mix/Risk Adjustment	Adult patients Paediatric patients Systolic BP < 90 mmHg systolic for > 10 mins
Exclusion Criteria	Contraindication to the Antihistamine administered Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Anaphylaxis and evidence of bronchoconstriction documented who were administered an anticholinergic bronchodilator
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-An-P-3 Patients with a provisional diagnosis of Anaphylaxis who were administered an antihistamine

Measure Code	C-An-P-3
Definition	Patients with a provisional diagnosis of Anaphylaxis who were administered an antihistamine
Category	Clinical
Subcategory	Anaphylaxis
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of Anaphylaxis
Case Mix/Risk Adjustment	Adult patients Paediatric patients Systolic BP < 90 mmHg systolic for > 10 mins
Exclusion Criteria	Contraindication to the Antihistamine administered Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Anaphylaxis who were administered an antihistamine
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-An-P-4 Patients with a provisional diagnosis of Anaphylaxis who were administered a corticosteroid

Measure Code	C-An-P-4
Definition	Patients with a provisional diagnosis of Anaphylaxis who were administered a corticosteroid
Category	Clinical
Subcategory	Anaphylaxis
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Denominator Statement	Total number of patients transported by EMS personnel with a provisional diagnosis of Anaphylaxis
Case Mix/Risk Adjustment	Adult patients Paediatric patients Systolic BP < 90 mmHg systolic for > 10 mins
Exclusion Criteria	Contraindication to the Corticosteroid administered Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Anaphylaxis who were administered a corticosteroid
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-An-P-5 Patients with a provisional diagnosis of Anaphylaxis and signs of a severe systemic response recorded who were administered IM Adrenaline

Measure Code	C-An-P-5
Definition	Patients with a provisional diagnosis of Anaphylaxis and signs of a severe systemic response recorded who were administered IM Adrenaline
Category	Clinical
Subcategory	Anaphylaxis
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Denominator Statement	Total number of patients transported by EMS with a provisional diagnosis of Anaphylaxis and signs of a severe systemic response recorded
Case Mix/Risk Adjustment	Adult patients Paediatric patients Systolic BP < 90 mmHg systolic for > 10 mins
Exclusion Criteria	Contraindication to Adrenaline Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Anaphylaxis and signs of a severe systemic response recorded who were administered IM Adrenaline
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

Section 1: Clinical Category

Part 5: Asthma/Bronchoconstriction

- C-AB-P-1 Patients with a provisional diagnosis of Asthma/Bronchoconstriction with lung sounds assessed and documented (pre-and post-treatment)
- C-AB-P-2 Patients with a provisional diagnosis of Asthma/Bronchoconstriction with a SpO₂ documented (pre-and post-treatment)
- C-AB-P-3 Patients with a provisional diagnosis of Asthma/Bronchoconstriction who were administered a B2 agonist bronchodilator
- C-AB-P-4 Patients with a provisional diagnosis of Asthma/Bronchoconstriction who were administered an anticholinergic bronchodilator
- C-AB-P-5 Patients with a provisional diagnosis of Asthma/Bronchoconstriction who were administered a corticosteroid
- C-AB-P-6 Patients with a provisional diagnosis of Asthma/Bronchoconstriction recorded with documented severe wheezes/silent chest/BP < 90 mmHg systolic BP who was administered IM Adrenalin administration
- C-AB-P-7 Patients who received/met all components of the defined Asthma/bronchoconstriction composite bundle score (A bundle indicator is a grouped indicator composed of several individual indicators - to be defined at the user's discretion)

C-AB-P-1 Patients with a provisional diagnosis of Asthma/Bronchoconstriction with lung sounds assessed and documented (pre-and post-treatment)

Measure Code	C-AB-P-1
Definition	Patients with a provisional diagnosis of Asthma/Bronchoconstriction with lung sounds assessed and documented (pre-and post-treatment)
Category	Clinical
Subcategory	Asthma/Bronchoconstriction
Measure Type	Process
Target Population	Adult Paediatric Medical
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of Asthma/Bronchoconstriction with lung sounds assessed and documented (pre-and post-treatment)
Denominator Statement	Total number of patients with a provisional diagnosis of Asthma/Bronchoconstriction
Case Mix/Risk Adjustment	Adult patients Paediatric patients
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Asthma/Bronchoconstriction with lung sounds assessed and documented (pre-and post-treatment)
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-AB-P-2 Patients with a provisional diagnosis of Asthma/Bronchoconstriction with a SpO2 documented (pre-and post-treatment)

Measure Code	C-AB-P-2
Definition	Patients with a provisional diagnosis of Asthma/Bronchoconstriction with a SpO2 documented (pre-and post-treatment)
Category	Clinical
Subcategory	Asthma/Bronchoconstriction
Measure Type	Process
Target Population	Adult Paediatric Medical
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of Asthma/Bronchoconstriction with a SpO2 documented (pre-and post-treatment)
Denominator Statement	Total number of patients with a provisional diagnosis of Asthma/Bronchoconstriction
Case Mix/Risk Adjustment	Adult patients Paediatric patients
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Asthma/Bronchoconstriction with a SpO2 documented (pre-and post-treatment)
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-AB-P-3 Patients with a provisional diagnosis of Asthma/Bronchoconstriction who were administered a B2 agonist bronchodilator

Measure Code	C-AB-P-3
Definition	Patients with a provisional diagnosis of Asthma/Bronchoconstriction who were administered a B2 agonist bronchodilator
Category	Clinical
Subcategory	Asthma/Bronchoconstriction
Measure Type	Process
Target Population	Adult Paediatric Medical
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of Asthma/Bronchoconstriction who were administered a B2 agonist bronchodilator
Denominator Statement	Total number of patients with a provisional diagnosis of Asthma/Bronchoconstriction
Case Mix/Risk Adjustment	Adult patients Paediatric patients
Exclusion Criteria	Contraindication to Salbutamol Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Asthma/Bronchoconstriction who were administered a B2 agonist
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-AB-P-4 Patients with a provisional diagnosis of Asthma/Bronchoconstriction who were administered an anticholinergic bronchodilator

Measure Code	C-AB-P-4
Definition	Patients with a provisional diagnosis of Asthma/Bronchoconstriction who were administered an anticholinergic bronchodilator
Category	Clinical
Subcategory	Asthma/Bronchoconstriction
Measure Type	Process
Target Population	Adult Medical
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of Asthma/Bronchoconstriction who were administered an anticholinergic bronchodilator
Denominator Statement	Total number of patients with a provisional diagnosis of Asthma/Bronchoconstriction
Case Mix/Risk Adjustment	Adult patients Paediatric patients
Exclusion Criteria	Contraindication to Ipratropium bromide Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Asthma/Bronchoconstriction who were administered an anticholinergic bronchodilator
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-AB-P-5 Patients with a provisional diagnosis of Asthma/Bronchoconstriction who were administered a corticosteroid

Measure Code	C-AB-P-5
Definition	Patients with a provisional diagnosis of Asthma/Bronchoconstriction who were administered a corticosteroid
Category	Clinical
Subcategory	Asthma/Bronchoconstriction
Measure Type	Process
Target Population	Adult Medical
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of Asthma/Bronchoconstriction who were administered a corticosteroid
Denominator Statement	Total number of patients with a provisional diagnosis of Asthma/Bronchoconstriction
Case Mix/Risk Adjustment	Adult patients Paediatric patients
Exclusion Criteria	Contraindication to the Corticosteroid administered Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Asthma/Bronchoconstriction who were administered a corticosteroid
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-AB-P-6 Patients with a provisional diagnosis of Asthma/Bronchoconstriction recorded with documented severe wheezes/silent chest/BP < 90 mmHg systolic BP who were administered IM Adrenalin

Measure Code	C-AB-P-6
Definition	Patients with a provisional diagnosis of Asthma/Bronchoconstriction recorded with documented severe wheezes/silent chest/BP < 90 mmHg systolic BP who were administered IM Adrenalin
Category	Clinical
Subcategory	Asthma/Bronchoconstriction
Measure Type	Process
Target Population	Adult Paediatric Medical
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of Asthma/Bronchoconstriction recorded with documented severe wheezes/silent chest/BP < 90 mmHg systolic BP who were administered IM Adrenalin
Denominator Statement	Total number of patients with a provisional diagnosis of Asthma/Bronchoconstriction
Case Mix/Risk Adjustment	Adult patients Paediatric patients
Exclusion Criteria	Contraindication to Adrenaline Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Asthma/Bronchoconstriction recorded with documented severe wheezes/silent chest/BP < 90 mmHg systolic BP who were administered IM Adrenalin
Data Source	Patient Report Form

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Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-AB-P-7 Patients who received/met all components of the defined Asthma/bronchoconstriction composite bundle score

Measure Code	C-AB-P-7
Definition	Patients who received/met all components of the defined Asthma/bronchoconstriction composite bundle score
Category	Clinical
Subcategory	Asthma/Bronchoconstriction
Measure Type	Process
Target Population	Adult Paediatric Medical
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients who received/met all components of the defined Asthma/bronchoconstriction composite bundle score
Denominator Statement	Determined based on Asthma/bronchoconstriction composite bundle score items
Case Mix/Risk Adjustment	Adult patients Paediatric patients
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients who received/met all components of the defined Asthma/bronchoconstriction composite bundle score
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

Section 1: Clinical Domain

Part 6: Burns

- C-Bu-P-1 Patients with a provisional diagnosis of Burns with burns dressings applied
- C-Bu-P-2 Patients with a provisional diagnosis of Burns with body surface area and burns type assessed and recorded

C-Bu-P-1 Patients with a provisional diagnosis of Burns with burns dressings applied

Measure Code	C-Bu-P-1
Definition	Patients with a provisional diagnosis of Burns with burns dressings applied
Category	Clinical
Subcategory	Burns
Measure Type	Process
Target Population	Adult Paediatric Trauma
Unit of Analysis	Clinician Shift Base Service
Denominator Statement	Total number of patients with a provisional diagnosis of Burns
Case Mix/Risk Adjustment	Adult patients Paediatric patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Burns with burns dressings applied
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Bu-P-2 Patients with a provisional diagnosis of Burns with body surface area and burns type assessed and recorded

Measure Code	C-Bu-P-2
Definition	Patients with a provisional diagnosis of Burns with body surface area and burns type assessed and recorded
Category	Clinical
Subcategory	Burns
Measure Type	Process
Target Population	Adult Paediatric Trauma
Unit of Analysis	Clinician Shift Base Service
Denominator Statement	Total number of patients with a provisional diagnosis of Burns
Case Mix/Risk Adjustment	Adult patients Paediatric patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Burns with body surface area and burns type assessed and recorded
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

Section 1: Clinical Category

Part 7: General

- C-Ge-S-1 Serviceable suction unit devices available per defined area and/or time period
- C-Ge-S-2 Serviceable 3 lead ECG monitoring devices available per defined area and/or time period
- C-Ge-S-3 Serviceable 12 lead ECG monitoring devices available per defined area and/or time period
- C-Ge-S-4 Serviceable portable oxygen cylinders available per defined area and/or time period
- C-Ge-S-5 Serviceable Defibrillator/AED devices available per defined area and/or time period
- C-Ge-S-6 Serviceable mechanical ventilators available per defined area and/or time period
- C-Ge-P-1 Patients with reduced level of consciousness with a blood glucose measured
- C-Ge-P-2 Patients with a recorded SpO₂ < 95% who were administered supplemental Oxygen
- C-Ge-P-3 Patients with a provisional diagnosis recorded

C-Ge-S-1 Serviceable suction unit devices available per defined area and/or time period

Measure Code	C-Ge-S-1
Definition	Serviceable suction unit devices available per defined area and/or time period
Category	Clinical
Subcategory	General
Measure Type	Structure
Target Population	Shift Base Service
Unit of Analysis	Shift Base Service
Numerator Statement	Total number of serviceable suction unit devices available per defined area and/or time period
Denominator Statement	Total number of in-service vehicles per equivalent defined area and/or time period
Case Mix/Risk Adjustment	ALS units Non-ALS units
Exclusion Criteria	Insufficient reporting data
Measure Calculation	$\text{Numerator/Denominator} \times 100 = \text{Rate per 100 vehicles}$
Numerical Reporting Format	Per 100 vehicles
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	Serviceable suction unit devices available per 100 vehicles
Data Source	Vehicle checklist Capital equipment storeroom checklist
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ge-S-2 Serviceable 3 lead ECG monitoring devices available per defined area and/or time period

Measure Code	C-Ge-S-2
Definition	Serviceable 3 lead ECG monitoring devices available per defined area and/or time period
Category	Clinical
Subcategory	General
Measure Type	Structure
Target Population	Shift Base Service
Unit of Analysis	Shift Base Service
Numerator Statement	Total number of serviceable 3 lead ECG monitoring devices available per defined area and/or time period
Denominator Statement	Total number of in-service vehicles per equivalent defined area and/or time period
Case Mix/Risk Adjustment	ALS units Non-ALS units
Exclusion Criteria	Insufficient reporting data
Measure Calculation	$\text{Numerator/Denominator} \times 100 = \text{Rate per 100 vehicles}$
Numerical Reporting Format	Per 100 vehicles
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	Serviceable 3 lead ECG monitoring devices per 100 vehicles
Data Source	Vehicle checklist Capital equipment storeroom checklist
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ge-S-3 Serviceable 12 lead ECG monitoring devices available per defined area and/or time period

Measure Code	C-Ge-S-3
Definition	Serviceable 12 lead ECG monitoring devices available per defined area and/or time period
Category	Clinical
Subcategory	General
Measure Type	Structure
Target Population	Shift Base Service
Unit of Analysis	Shift Base Service
Numerator Statement	Total number of serviceable 12 lead ECG monitoring devices available per defined area and/or time period
Denominator Statement	Total number of in-service vehicles per equivalent defined area and/or time period
Case Mix/Risk Adjustment	ALS units Non-ALS units
Exclusion Criteria	Insufficient reporting data
Measure Calculation	$\text{Numerator/Denominator} \times 100 = \text{Rate per 100 vehicles}$
Numerical Reporting Format	Per 100 vehicles
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	Serviceable 12 lead ECG monitoring devices available per 100 vehicles
Data Source	Vehicle checklist Capital equipment storeroom checklist
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ge-S-4 Serviceable portable oxygen cylinders available per defined area and/or time period

Measure Code	C-Ge-S-4
Definition	Serviceable portable oxygen cylinders available per defined area and/or time period
Category	Clinical
Subcategory	General
Measure Type	Structure
Target Population	Shift Base Service
Unit of Analysis	Shift Base Service
Numerator Statement	Total number of serviceable portable oxygen cylinders available per defined area and/or time period
Denominator Statement	Total number of in-service vehicles per equivalent defined area and/or time period
Case Mix/Risk Adjustment	ALS units Non-ALS units
Exclusion Criteria	Insufficient reporting data
Measure Calculation	$\text{Numerator/Denominator} \times 100 = \text{Rate per 100 vehicles}$
Numerical Reporting Format	Per 100 vehicles
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	Serviceable portable oxygen cylinders available per 100 vehicles
Data Source	Vehicle checklist Capital equipment storeroom checklist
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ge-S-5 Serviceable Defibrillator/AED devices available per defined area and/or time period

Measure Code	C-Ge-S-5
Definition	Serviceable Defibrillator/AED devices available per defined area and/or time period
Category	Clinical
Subcategory	General
Measure Type	Structure
Target Population	Shift Base Service
Unit of Analysis	Shift Base Service
Numerator Statement	Total number of serviceable Defibrillator/AED devices available per defined area and/or time period
Denominator Statement	Total number of in-service vehicles per equivalent defined area and/or time period
Case Mix/Risk Adjustment	ALS units Non-ALS units
Exclusion Criteria	Insufficient reporting data
Measure Calculation	$\text{Numerator/Denominator} \times 100 = \text{Rate per 100 vehicles}$
Numerical Reporting Format	Per 100 vehicles
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	Serviceable Defibrillator/AED devices per 100 vehicles
Data Source	Vehicle checklist Capital equipment storeroom checklist
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ge-S-6 Serviceable mechanical ventilators available per defined area and/or time period

Measure Code	C-Ge-S-6
Definition	Serviceable mechanical ventilators available per defined area and/or time period
Category	Clinical
Subcategory	General
Measure Type	Structure
Target Population	Shift Base Service
Unit of Analysis	Shift Base Service
Numerator Statement	Total number of serviceable mechanical ventilators available per defined area and/or time period
Denominator Statement	Total number of in-service vehicles per equivalent defined area and/or time period
Case Mix/Risk Adjustment	Nil
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = Rate per 100 vehicles
Numerical Reporting Format	Per 100 vehicles
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	Serviceable mechanical ventilators available per 100 vehicles
Data Source	Vehicle checklist Capital equipment storeroom checklist
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ge-P-1 Patients with reduced level of consciousness with a blood glucose measured

Measure Code	C-Ge-P-1
Definition	Patients with reduced level of consciousness with a blood glucose measured
Category	Clinical
Subcategory	General
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with reduced level of consciousness with a blood glucose measured
Denominator Statement	Total number of patients with reduced level of consciousness
Case Mix/Risk Adjustment	Adult patients Paediatric patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	Patients with reduced level of consciousness with blood glucose measurement
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ge-P-2 Patients with a recorded SpO2 < 95% who were administered supplemental Oxygen

Measure Code	C-Ge-P-2
Definition	Patients with a recorded SpO2 < 95% who were administered supplemental Oxygen
Category	Clinical
Subcategory	General
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a recorded SpO2 < 95% who were administered supplemental Oxygen
Denominator Statement	Total number of patients with SpO2 < 95%
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls ACS/STEMI patients APO patients
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a recorded SpO2 < 95% who were administered supplemental Oxygen
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ge-P-3 Patients with a provisional diagnosis recorded

Measure Code	C-G-P-3
Definition	Patients with a provisional diagnosis recorded
Category	Clinical
Subcategory	General
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis recorded
Denominator Statement	Total number of patients transported by EMS
Case Mix/Risk Adjustment	Nil
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with reduced level of consciousness with blood glucose measurement
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

Section 1: Clinical Domain

Part 8: Hypoglycaemia

- C-Hy-P-1 Patients with a blood glucose level < 5 mmol who were administered Glucose
- C-Hy-P-2 Blood glucose measurement post intervention

C-Hy-P-1 Patients with a blood glucose level < 5 mmol who were administered Glucose

Measure Code	C-Hy-P-1
Definition	Patients with a blood glucose level < 5 mmol who were administered Glucose
Category	Clinical
Subcategory	Hypoglycaemia
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Denominator Statement	Total number of patients with a blood glucose level < 5 mmol recorded
Case Mix/Risk Adjustment	Adult patients Paediatric patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a blood glucose level < 5 mmol who were administered Glucose
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Hy-P-2 Patients with a blood glucose level measured and recorded following Glucose administration

Measure Code	C-Hy-P-2
Definition	Patients with a blood glucose level measured and recorded following Glucose administration
Category	Clinical
Subcategory	Hypoglycaemia
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Denominator Statement	Total number of patients with Glucose administered
Case Mix/Risk Adjustment	Adult patients Paediatric patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a blood glucose level measured and recorded following Glucose administration
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

Section 1: Clinical Category

Part 9: Neonates/Paediatrics

- C-NP-P-1 One min APGAR score assessed and recorded for new-born patients
- C-NP-P-2 Five min APGAR score assessed and recorded for new-born patients
- C-NP-P-3 Paediatric patients with Croup who were administered oral/inhaled steroids
- C-NP-P-4 Paediatric patients with Croup who were administered nebulised Adrenalin
- C-NP-P-5 Patient transportation to a facility with specialist Paediatric capabilities/resources

C-NP-P-1 One min APGAR score assessed and recorded for new-born patients

Measure Code	C-NP-P-1
Definition	One min APGAR score assessed and recorded for new-born patients
Category	Clinical
Subcategory	Neonate/Paediatric
Measure Type	Process
Target Population	Paediatric patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of newborn patients with a one min APGAR score assessed and recorded
Denominator Statement	Total number of new-born patients treated and/or transported
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Non-Neonate patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Neonatal patients with a one min APGAR score assessed and recorded
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-NP-P-2 Five min APGAR score assessed and recorded for new-born patients

Measure Code	C-NP-P-2
Definition	Five min APGAR score assessed and recorded for new-born patients
Category	Clinical
Subcategory	Neonate/Paediatric
Measure Type	Process
Target Population	Paediatric patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of newborn patients with a five min APGAR score assessed and recorded
Denominator Statement	Total number of new-born patients treated and/or transported
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Non-Neonate patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Neonatal patients with a five min APGAR score assessed and recorded
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-NP-P-3 Paediatric patients with Croup who were administered oral/inhaled steroids

Measure Code	C-NP-P-3
Definition	Paediatric patients with Croup who were administered oral/inhaled steroids
Category	Clinical
Subcategory	Neonate/Paediatric
Measure Type	Process
Target Population	Paediatric patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of paediatric patients with Croup who were administered oral/inhaled steroids
Denominator Statement	Total number of Paediatric patients with Croup
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Adult patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Paediatric patients with Croup who were administered oral/inhaled steroids
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-NP-P-4 Paediatric patients with Croup who were administered nebulised Adrenalin

Measure Code	C-NP-P-4
Definition	Paediatric patients with Croup who were administered nebulised Adrenalin
Category	Clinical
Subcategory	Neonate/Paediatric
Measure Type	Process
Target Population	Paediatric patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of paediatric patients with Croup who were administered nebulised Adrenalin
Denominator Statement	Total number of Paediatric patients with Croup
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Adult patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Paediatric patients with Croup who were administered nebulised Adrenalin
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-NP-P-5 Patient transportation to a facility with specialist Paediatric capabilities/resources

Measure Code	C-NP-P-5
Definition	Patient transportation to a facility with specialist Paediatric capabilities/resources
Category	Clinical
Subcategory	Neonate/Paediatric
Measure Type	Process
Target Population	Paediatric patients Medical patients Trauma patients
Unit of Analysis	Shift Base Service
Numerator Statement	Total number of patient transports to a facility with specialist Paediatric capabilities/resources
Denominator Statement	Total number of Paediatric patients treated and/or transported by EMS personnel
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls defined location criteria (i.e.: Urban vs Rural etc.)
Exclusion Criteria	Adult patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Paediatric patients transported by EMS delivered to facility with Paediatric care resources
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

Section 1: Clinical Domain

Part 10: Obstetrics

- C-Ob-P-1 Obstetric patients who deliver prior to EMS arrival
- C-Ob-P-2 Obstetric patients with postpartum haemorrhage who were administered TXA
- C-Ob-P-3 Obstetric patients with a provisional diagnosis of Eclampsia or Pre-eclampsia who were administered Mag sulphate
- C-Ob-P-4 Obstetric patients who deliver during EMS care

C-Ob-P-1 Obstetric patients who deliver prior to EMS arrival

Measure Code	C-Ob-P-1
Definition	Obstetric patients who deliver prior to EMS arrival
Category	Clinical
Subcategory	Obstetric
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Shift Base Service
Denominator Statement	Total number of Obstetric patients transported by EMS
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Non-Obstetric patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Obstetric patients who deliver prior to EMS arrival (BBA)
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ob-P-2 Obstetric patients with postpartum haemorrhage who were administered TXA

Measure Code	C-Ob-P-2
Definition	Obstetric patients with postpartum haemorrhage who were administered TXA
Category	Clinical
Subcategory	Obstetric
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Denominator Statement	Total number of Obstetric patients with postpartum haemorrhage transported by EMS
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Non-Obstetric patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Obstetric patients with postpartum haemorrhage who were administered TXA
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ob-P-3 Obstetric patients with a provisional diagnosis of Eclampsia or Pre-eclampsia who were administered Mag sulphate

Measure Code	C-Ob-P-3
Definition	Obstetric patients with a provisional diagnosis of Eclampsia or Pre-eclampsia who were administered Mag sulphate
Category	Clinical
Subcategory	Obstetric
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Denominator Statement	Total number of Obstetric patients with a provisional diagnosis of Eclampsia or Pre-eclampsia
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Non-Obstetric patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Obstetric patients with a provisional diagnosis of Eclampsia or Pre-eclampsia who were administered Mag sulphate
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ob-P-3 Obstetric patients who deliver during EMS care

Measure Code	C-Ob-P-3
Definition	Obstetric patients who deliver during EMS care
Category	Clinical
Subcategory	Obstetric
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Shift Base Service
Denominator Statement	Total number of Obstetric patients transported by EMS
Case Mix/Risk Adjustment	Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Non-Obstetric patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Obstetric patients who deliver during EMS care
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

Section 1: Clinical Category

Part 11: Out of Hospital Cardiac Arrest

- C-Ca-P-1 Patients with a provisional diagnosis of OHCA with a witnessed collapse documented
- C-Ca-P-2 Patients with a provisional diagnosis of OHCA who received documented bystander CPR
- C-Ca-P-3 Patients with a provisional diagnosis of OHCA who received documented telephonic CPR advice
- C-Ca-P-4 Patients with a provisional diagnosis of OHCA with VF/VT as first presenting rhythm on arrival of EMS
- C-Ca-P-5 Patients with a provisional diagnosis of OHCA with Asystole/PEA as first presenting rhythm on arrival of EMS
- C-Ca-P-6 Patients with a provisional diagnosis of OHCA intubated with an alternative airway device
- C-Ca-P-7 Patients with a provisional diagnosis of OHCA for whom resuscitation was cancelled prior to arrival at hospital
- C-Ca-P-8 Patients with a provisional diagnosis of OHCA who were transported to hospital (incl. ROSC and Non-ROSC patients)
- C-Ca-P-9 Patients with a provisional diagnosis of OHCA with ROSC at hospital handover
- C-Ca-P-10 Patients with a provisional diagnosis of OHCA with VF/VT at hospital handover
- C-Ca-P-11 Patients with a provisional diagnosis of OHCA with Asystole/PEA at hospital handover
- C-Ca-P-12 Patients with a provisional diagnosis of OHCA with survival to Emergency Centre discharge
- C-Ca-O-1 Patients with a provisional diagnosis of OHCA with survival to hospital discharge

C-Ca-P-1 Patients with a provisional diagnosis of OHCA with a witnessed collapse documented

Measure Code	C-Ca-P-1
Definition	Patients with a provisional diagnosis of OHCA with a witnessed collapse documented
Category	Clinical
Subcategory	OHCA
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of OHCA with a witnessed collapse documented
Denominator Statement	Total number of patients with a provisional diagnosis of OHCA recorded
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients
Exclusion Criteria	Secondary (Transfer) calls Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of OHCA with a witnessed collapse documented
Data Source	Patient Report Form OHCA Registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ca-P-2 Patients with a provisional diagnosis of OHCA who received documented bystander CPR

Measure Code	C-Ca-P-2
Definition	Patients with a provisional diagnosis of OHCA who received documented bystander CPR
Category	Clinical
Subcategory	OHCA
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Service
Numerator Statement	Total number of patients with a provisional diagnosis of OHCA who received documented bystander CPR
Denominator Statement	Total number of patients with a provisional diagnosis of OHCA recorded
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients
Exclusion Criteria	Secondary (Transfer) calls Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of OHCA who received documented bystander CPR
Data Source	Patient Report Form OHCA Registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ca-P-3 Patients with a provisional diagnosis of OHCA who received documented telephonic CPR advice

Measure Code	C-Ca-P-3
Definition	Patients with a provisional diagnosis of OHCA who received documented telephonic CPR advice
Category	Clinical
Subcategory	OHCA
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Call Centre staff Shift Service
Numerator Statement	Total number of patients with a provisional diagnosis of OHCA who received documented telephonic CPR advice
Denominator Statement	Total number of patients with a provisional diagnosis of OHCA recorded
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients
Exclusion Criteria	Secondary (Transfer) calls Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of OHCA who received documented telephonic CPR advice
Data Source	Patient Report Form OHCA Registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ca-P-4 Patients with a provisional diagnosis of OHCA with VF/VT as first presenting rhythm on arrival of EMS

Measure Code	C-Ca-P-4
Definition	Patients with a provisional diagnosis of OHCA with VF/VT as first presenting rhythm on arrival of EMS
Category	Clinical
Subcategory	OHCA
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of OHCA with VF/VT as first presenting rhythm on arrival of EMS
Denominator Statement	Total number of patients with a provisional diagnosis of OHCA recorded
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients
Exclusion Criteria	Secondary (Transfer) calls Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of OHCA with VF/VT as first presenting rhythm on arrival of EMS
Data Source	Patient Report Form OHCA Registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ca-P-5 Patients with a provisional diagnosis of OHCA with Asystole/PEA as first presenting rhythm on arrival of EMS

Measure Code	C-Ca-P-5
Definition	Patients with a provisional diagnosis of OHCA with Asystole/PEA as first presenting rhythm on arrival of EMS
Category	Clinical
Subcategory	OHCA
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of OHCA with Asystole/PEA as first presenting rhythm on arrival of EMS
Denominator Statement	Total number of patients with a provisional diagnosis of OHCA recorded
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients
Exclusion Criteria	Secondary (Transfer) calls Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of OHCA with Asystole/PEA as first presenting rhythm on arrival of EMS
Data Source	Patient Report Form OHCA Registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ca-P-6 Patients with a provisional diagnosis of OHCA intubated with an alternative airway device

Measure Code	C-Ca-P-6
Definition	Patients with a provisional diagnosis of OHCA intubated with an alternative airway device
Category	Clinical
Subcategory	OHCA
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of OHCA intubated with an alternative airway device
Denominator Statement	Total number of patients with a provisional diagnosis of OHCA recorded
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients
Exclusion Criteria	Secondary (Transfer) calls Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of OHCA intubated with an alternative airway device
Data Source	Patient Report Form OHCA Registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ca-P-7 Patients with a provisional diagnosis of OHCA for whom resuscitation was cancelled prior to arrival at hospital

Measure Code	C-Ca-P-7
Definition	Patients with a provisional diagnosis of OHCA for whom resuscitation was cancelled prior to arrival at hospital
Category	Clinical
Subcategory	OHCA
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of OHCA for whom resuscitation was cancelled prior to arrival at hospital
Denominator Statement	Total number of patients with a provisional diagnosis of OHCA recorded
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients
Exclusion Criteria	Secondary (Transfer) calls Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of OHCA for whom resuscitation was cancelled prior to arrival at hospital
Data Source	Patient Report Form OHCA Registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ca-P-8 Patients with a provisional diagnosis of OHCA who were transported to hospital

Measure Code	C-Ca-P-8
Definition	Patients with a provisional diagnosis of OHCA who were transported to hospital
Category	Clinical
Subcategory	OHCA
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of OHCA who were transported to hospital
Denominator Statement	Total number of patients with a provisional diagnosis of OHCA recorded
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients
Exclusion Criteria	Secondary (Transfer) calls Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of OHCA who were transported to hospital (incl. ROSC and Non-ROSC patients)
Data Source	Patient Report Form OHCA Registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ca-P-9 Patients with a provisional diagnosis of OHCA with ROSC at hospital handover

Measure Code	C-Ca-P-9
Definition	Patients with a provisional diagnosis of OHCA with ROSC at hospital handover
Category	Clinical
Subcategory	OHCA
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of OHCA with ROSC at hospital handover
Denominator Statement	Total number of patients with a provisional diagnosis of OHCA recorded
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients
Exclusion Criteria	Secondary (Transfer) calls Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of OHCA with ROSC at hospital handover
Data Source	Patient Report Form OHCA Registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ca-P-10 Patients with a provisional diagnosis of OHCA with VF/VT at hospital handover

Measure Code	C-Ca-P-10
Definition	Patients with a provisional diagnosis of OHCA with VF/VT at hospital handover
Category	Clinical
Subcategory	OHCA
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of OHCA with VF/VT at hospital handover
Denominator Statement	Total number of patients with a provisional diagnosis of OHCA recorded
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients
Exclusion Criteria	Secondary (Transfer) calls Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of OHCA with VF/VT at hospital handover
Data Source	Patient Report Form OHCA Registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ca-P-11 Patients with a provisional diagnosis of OHCA with Asystole/PEA at hospital handover

Measure Code	C-Ca-P-11
Definition	Patients with a provisional diagnosis of OHCA with Asystole/PEA at hospital handover
Category	Clinical
Subcategory	OHCA
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of OHCA with Asystole/PEA at hospital handover
Denominator Statement	Total number of patients with a provisional diagnosis of OHCA recorded
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients
Exclusion Criteria	Secondary (Transfer) calls Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of OHCA with Asystole/PEA at hospital handover
Data Source	Patient Report Form OHCA Registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ca-P-12 Patients with a provisional diagnosis of OHCA with survival to Emergency Centre discharge

Measure Code	C-Ca-P-12
Definition	Patients with a provisional diagnosis of OHCA with survival to Emergency Centre discharge
Category	Clinical
Subcategory	OHCA
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of OHCA with survival to Emergency Centre discharge
Denominator Statement	Total number of patients with a provisional diagnosis of OHCA recorded
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients
Exclusion Criteria	Secondary (Transfer) calls Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of OHCA with survival to EC discharge
Data Source	Patient Report Form OHCA Registry hospital patient data
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Ca-O-1 Patients with a provisional diagnosis of OHCA with survival to hospital discharge

Measure Code	C-Ca-O-1
Definition	Patients with a provisional diagnosis of OHCA with survival to hospital discharge
Category	Clinical
Subcategory	OHCA
Measure Type	Outcome
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of OHCA with survival to hospital discharge
Denominator Statement	Total number of patients with a provisional diagnosis of OHCA recorded
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients
Exclusion Criteria	Secondary (Transfer) calls Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of OHCA with survival to hospital discharge
Data Source	Patient Report Form OHCA Registry hospital patient data
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

Section 1: Clinical Category

Part 12: Pain Management

- C-Pm-P-1 Patients with level of Pain measured via defined pain score
- C-Pm-P-2 Patients with a defined pain score threshold who were administered analgesia
- C-Pm-P-3 Patients with level of pain measured via defined pain score following analgesia administration

C-Pm-P-1 Patients with level of pain measured via defined pain score

Measure Code	C-Pm-P-1
Definition	Patients with level of pain measured via defined pain score
Category	Clinical
Subcategory	Pain Mx
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with level of pain measured via defined pain score
Denominator Statement	Total number of patients transported by EMS
Case Mix/Risk Adjustment	Adult patients Paediatric patients Trauma patients Primary (Community) calls Secondary (Transfer) calls ACS/STEMI patients Burns patients
Exclusion Criteria	Patients unable to convey level of pain Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with level of Pain measured via defined pain score
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Pm-P-2 Patients with a defined pain score threshold who were administered analgesia

Measure Code	C-Pm-P-2
Definition	Patients with a defined pain score threshold who were administered analgesia
Category	Clinical
Subcategory	Pain Mx
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a defined pain score threshold who were administered analgesia
Denominator Statement	Total number of patients with level of pain \geq defined pain score threshold
Case Mix/Risk Adjustment	Adult patients Paediatric patients Trauma patients Primary (Community) calls Secondary (Transfer) calls ACS/STEMI patients Burns patients
Exclusion Criteria	Patients unable to convey level of pain Patients not administered analgesia Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a defined pain score threshold who were administered analgesia
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Pm-P-3 Patients with level of pain measured via defined pain score following analgesia administration

Measure Code	C-Pm-P-3
Definition	Patients with level of pain measured via defined pain score following analgesia administration
Category	Clinical
Subcategory	Pain Mx
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with level of pain measured via defined pain score following analgesia administration
Denominator Statement	Total number of patients who received analgesia by EMS personnel
Case Mix/Risk Adjustment	Adult patients Paediatric patients Trauma patients Primary (Community) calls Secondary (Transfer) calls ACS/STEMI patients Burns patients
Exclusion Criteria	Patients unable to convey level of pain Patients not administered analgesia Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with level of pain measured via defined pain score following analgesia administration
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

Section 1: Clinical Category

Part 13: Seizures

- C-Se-P-1 Patients with a provisional diagnosis of Seizures with a blood glucose measured and recorded
- C-Se-P-2 Patients with a provisional diagnosis of Seizures who were administered a benzodiazepine for ongoing Seizures

C-Se-P-1 Patients with a provisional diagnosis of Seizures with a blood glucose measured and recorded

Measure Code	C-Se-P-1
Definition	Patients with a provisional diagnosis of Seizures with a blood glucose measured and recorded
Category	Clinical
Subcategory	Seizures
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of Seizures with a blood glucose measured and recorded
Denominator Statement	Total number of patients with a provisional diagnosis of Seizures
Case Mix/Risk Adjustment	Adult patients Paediatric patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Seizures with a blood glucose measured and recorded
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Se-P-2 Patients with a provisional diagnosis of Seizures who were administered a benzodiazepine for ongoing Seizures

Measure Code	C-Se-P-2
Definition	Patients with a provisional diagnosis of Seizures who were administered a benzodiazepine for ongoing Seizures
Category	Clinical
Subcategory	Seizures
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of Seizures who were administered a benzodiazepine for ongoing Seizures
Denominator Statement	Total number of patients with a provisional diagnosis of Seizures
Case Mix/Risk Adjustment	Adult patients Paediatric patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Seizures who were administered a benzodiazepine for ongoing Seizures
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

Section 1: Clinical Category

Part 14: Stroke/CVA/TIA

- C-SCT-P-1 Patients with a provisional diagnosis of Stroke/CVA/TIA with a blood glucose measured and recorded
- C-SCT-P-2 Patients with a provisional diagnosis of Stroke/CVA/TIA with a Stroke screening assessment performed (e.g.: FAST)
- C-SCT-P-3 Patients with a provisional diagnosis of Stroke/CVA/TIA with serial blood pressure measurements recorded (X3)
- C-SCT-P-4 Patients with a provisional diagnosis of Stroke/CVA/TIA delivered to a specialist Stroke Centre
- C-SCT-P-5 Patients with a provisional diagnosis of Stroke/CVA/TIA with direct delivery to CT scan
- C-SCT-P-6 Patients who received/met all components of the defined Stroke/CVA/TIA composite bundle score

C-SCT-P-1 Patients with a provisional diagnosis of Stroke/CVA/TIA with a blood glucose measured and recorded

Measure Code	C-SCT-P-1
Definition	Patients with a provisional diagnosis of Stroke/CVA/TIA with a blood glucose measured and recorded
Category	Clinical
Subcategory	Stroke/CVA/TIA
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of Stroke/CVA/TIA with a blood glucose measured and recorded
Denominator Statement	Total number of patients with a provisional diagnosis of Stroke/CVA/TIA
Case Mix/Risk Adjustment	Adult patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Stroke/CVA/TIA with a blood glucose measured and recorded
Data Source	Patient Report Form Stroke Register
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-SCT-P-2 Patients with a provisional diagnosis of Stroke/CVA/TIA with a Stroke screening assessment performed (e.g.: FAST)

Measure Code	C-SCT-P-2
Definition	Patients with a provisional diagnosis of Stroke/CVA/TIA with a Stroke screening assessment performed (e.g.: FAST)
Category	Clinical
Subcategory	Stroke/CVA/TIA
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of Stroke/CVA/TIA with a Stroke screening assessment performed (e.g.: FAST)
Denominator Statement	Total number of patients with a provisional diagnosis of Stroke/CVA/TIA
Case Mix/Risk Adjustment	Adult patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Stroke/CVA/TIA with a Stroke screening assessment performed (e.g.: FAST)
Data Source	Patient Report Form Stroke Register
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-SCT-P-3 Patients with a provisional diagnosis of Stroke/CVA/TIA with serial blood pressure measurements recorded (X3)

Measure Code	C-SCT-P-3
Definition	Patients with a provisional diagnosis of Stroke/CVA/TIA with serial blood pressure measurements recorded (X3)
Category	Clinical
Subcategory	Stroke/CVA/TIA
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of Stroke/CVA/TIA with serial blood pressure measurements recorded (X3)
Denominator Statement	Total number of patients with a provisional diagnosis of Stroke/CVA/TIA
Case Mix/Risk Adjustment	Adult patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Stroke/CVA/TIA with serial Blood pressure measurements recorded (X3)
Data Source	Patient Report Form Stroke Register
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-SCT-P-4 Patients with a provisional diagnosis of Stroke/CVA/TIA delivered to a specialist Stroke Centre

Measure Code	C-SCT-P-4
Definition	Patients with a provisional diagnosis of Stroke/CVA/TIA delivered to a specialist Stroke Centre
Category	Clinical
Measure Type	Outcome
Target Population	Adult patients Medical patients
Unit of Analysis	Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of Stroke/CVA/TIA with serial blood pressure measurements recorded (X3)
Denominator Statement	Total number of patients with a provisional diagnosis of Stroke/CVA/TIA
Case Mix/Risk Adjustment	Adult patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Stroke/CVA/TIA delivered to a specialist Stroke Centre
Data Source	Patient Report Form Stroke Register
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-SCT-P-5 Patients with a provisional diagnosis of Stroke/CVA/TIA with direct delivery to CT scan

Measure Code	C-SCT-P-5
Definition	Patients with a provisional diagnosis of Stroke/CVA/TIA with direct delivery to CT scan
Category	Clinical
Subcategory	Stroke/CVA/TIA
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Shift Base Service
Numerator Statement	Total number of patients with a provisional diagnosis of Stroke/CVA/TIA with direct delivery to CT scan
Denominator Statement	Total number of patients with a provisional diagnosis of Stroke/CVA/TIA
Case Mix/Risk Adjustment	Adult patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Patients delivered to receiving facility without CT scan facilities Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a provisional diagnosis of Stroke/CVA/TIA with direct delivery to CT scan
Data Source	Patient Report Form Stroke Register
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-SCT-P-6 Patients who received/met all components of the defined Stroke/CVA/TIA composite bundle score

Measure Code	C-SCT-P-6
Definition	Patients who received/met all components of the defined Stroke/CVA/TIA composite bundle score
Category	Clinical
Subcategory	Stroke/CVA/TIA
Measure Type	Process
Target Population	Adult patients Medical patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients who received/met all components of the defined Stroke/CVA/TIA composite bundle score
Denominator Statement	Total number of patients with a provisional diagnosis of Stroke/CVA/TIA
Case Mix/Risk Adjustment	Adult patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Paediatric patients Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients who received/met all components of the defined Stroke composite bundle score
Data Source	Patient Report Form Stroke Register
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

Section 1: Clinical Category

Part 15: Trauma

- C-Tr-P-1 Patients designated as a trauma case with entrapment on scene documented
- C-Tr-P-2 Patients designated as a trauma case with a BP < 90 mmHg
- C-Tr-P-3 Patients designated as a trauma case with partial/full amputation who had a tourniquet applied
- C-Tr-P-4 Patients designated as a trauma case with a femur fracture and traction splint use
- C-Tr-P-5 Patients designated as a trauma case with a BP < 90 mmHg who were administered TXA
- C-Tr-P-6 Patients designated as a trauma case with direct transportation to a specialist Trauma Centre

C-Tr-P-1 Patients designated as a trauma case with entrapment on scene documented

Measure Code	C-Tr-P-1
Definition	Patients designated as a trauma case with entrapment on scene documented
Category	Clinical
Subcategory	Trauma
Measure Type	Process
Target Population	Adult patients Paediatric patients Trauma patients
Unit of Analysis	Shift Base Service
Numerator Statement	Total number of patients designated as a trauma case with entrapment on scene documented
Denominator Statement	Total number of patients designated as trauma
Case Mix/Risk Adjustment	Adult patients Paediatric patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Medical patients (i.e.: Non-trauma patients) Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients designated as a trauma case with entrapment on scene recorded
Data Source	Patient Report Form Trauma registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Tr-P-2 Patients designated as a trauma case with a BP < 90 mmHg

Measure Code	C-Tr-P-2
Definition	Patients designated as a trauma case with a BP < 90 mmHg
Category	Clinical
Subcategory	Trauma
Measure Type	Process
Target Population	Adult patients Paediatric patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients designated as a trauma case with a BP < 90 mmHg
Denominator Statement	Total number of patients designated as trauma
Case Mix/Risk Adjustment	Adult patients Paediatric patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Medical patients (i.e.: Non-trauma patients) Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients designated as a trauma case with a BP < 90 mmHg
Data Source	Patient Report Form Trauma registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Tr-P-3 Patients designated as a trauma case with partial/full amputation who had a tourniquet applied

Measure Code	C-Tr-P-3
Definition	Patients designated as a trauma case with partial/full amputation who had a tourniquet applied
Category	Clinical
Subcategory	Trauma
Measure Type	Process
Target Population	Adult patients Paediatric patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients designated as a trauma case with partial/full amputation who had a tourniquet applied
Denominator Statement	Total number of patients designated as trauma with partial/full amputation
Case Mix/Risk Adjustment	Adult patients Paediatric patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Medical patients (i.e.: Non-trauma patients) Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients designated as a trauma case with partial/full amputation who had a tourniquet applied
Data Source	Patient Report Form Trauma registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Tr-P-4 Patients designated as a trauma case with a femur fracture and traction splint use

Measure Code	C-Tr-P-4
Definition	Patients designated as a trauma case with a femur fracture and traction splint use
Category	Clinical
Subcategory	Trauma
Measure Type	Process
Target Population	Adult patients Paediatric patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients designated as a trauma case with a femur fracture and traction splint use
Denominator Statement	Total number of patients designated as trauma with a femur fracture
Case Mix/Risk Adjustment	Adult patients Paediatric patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Medical patients (i.e.: Non-trauma patients) Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients designated as a trauma case with a femur fracture and traction splint use
Data Source	Patient Report Form Trauma registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Tr-P-5 Patients designated as a trauma case with a BP < 90 mmHg who were administered TXA

Measure Code	C-Tr-P-5
Definition	Patients designated as a trauma case with a BP < 90 mmHg who were administered TXA
Category	Clinical
Subcategory	Trauma
Measure Type	Process
Target Population	Adult patients Paediatric patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients designated as a trauma case with a BP < 90 mmHg who were administered TXA
Denominator Statement	Total number of patients designated as a trauma case with a BP < 90 mmHg
Case Mix/Risk Adjustment	Adult patients Paediatric patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Medical patients (i.e.: Non-trauma patients) Insufficient reporting data Contraindication to TXA administration
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients designated as a trauma case with a BP < 90 mmHg who were administered TXA
Data Source	Patient Report Form Trauma registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

C-Tr-P-6 Patients designated as a trauma case with direct transportation to a specialist Trauma Centre

Measure Code	C-Tr-P-6
Definition	Patients designated as a trauma case with direct transportation to a specialist Trauma Centre
Category	Clinical
Subcategory	Trauma
Measure Type	Process
Target Population	Adult patients Paediatric patients Trauma patients
Unit of Analysis	Shift Base Service
Numerator Statement	Total number of patients designated as a trauma case with direct transportation to a specialist Trauma Centre
Denominator Statement	Total number of patients designated as trauma
Case Mix/Risk Adjustment	Adult patients Paediatric patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Medical patients (i.e.: Non-trauma patients) Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients designated as a trauma case with direct transportation to a specialist Trauma Centre
Data Source	Patient Report Form Trauma registry
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

Section 2: Non-clinical Category

Part 1: Adverse/Sentinel Events

Part 2: Communications

Section 2: Non-clinical Category

Part 1: Adverse/Sentinel Events

- N-ASE-SE-1 Number of defined patient deaths while in EMS care per 10000 patient encounters
- N-ASE-SE-2 Number of defined Adverse Events reported during EMS care
- N-ASE-SE-3 Number of defined equipment/technical failures reported during EMS care
- N-ASE-SE-4 Number of accidental or unexpected extubations reported during EMS care
- N-ASE-SE-5 Number of patients with a decrease in GCS of 3 or more points during EMS care
- N-ASE-SE-6 Number of defined failed intubation attempts
- N-ASE-SE-7 Total number of patient injury reports during EMS care
- N-ASE-SE-8 Number of EMS staff on-duty injury reports
- N-ASE-SE-9 Number of defined medication errors during EMS care

N-ASE-SE-1 Number of defined patient deaths while in EMS care per 10000 patient encounters

Measure Code	N-ASE-SE-1
Definition	Number of defined patient deaths while in EMS care per 10000 patient encounters
Category	Non-Clinical
Subcategory	Adverse/Sentinel Event
Measure Type	Sentinel event
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patient deaths while in EMS care
Denominator Statement	Total number patients treated and/or transported by EMS
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Patients declared dead on arrival of EMS Insufficient reporting data
Measure Calculation	Numerator/Denominator X 10000
Numerical Reporting Format	Per 10000 patient encounters
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	Deaths per 1000 patient encounters
Data Source	Patient Report Form Death in Care Register
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

N-ASE-SE-2 Number of defined Adverse Events reported during EMS care

Measure Code	N-ASE-SE-2
Definition	Number of defined Adverse Events reported during EMS care
Category	Non-Clinical
Subcategory	Adverse/Sentinel Event
Measure Type	Sentinel event
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of defined Adverse Events reported during EMS care
Denominator Statement	Total number patients treated and/or transported by EMS
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 1000
Numerical Reporting Format	Per 1000 patient encounters
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	Adverse Event rate per 1000 patient encounters
Data Source	Patient Report Form Adverse Event Register Trigger Tool
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

N-ASE-SE-3 Number of defined equipment/technical failures reported during EMS care

Measure Code	N-ASE-SE-3
Definition	Number of defined equipment/technical failures reported during EMS care
Category	Non-Clinical
Subcategory	Adverse/Sentinel Event
Measure Type	Sentinel event
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Shift Base Service
Numerator Statement	Total number of defined equipment/technical failures reported during EMS care
Denominator Statement	Total number patients treated and/or transported by EMS
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 1000
Numerical Reporting Format	Per 1000 patient encounters
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	Equipment/technical failure rate per 1000 patient encounters
Data Source	Patient Report Form Adverse Event Register
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

N-ASE-SE-4 Number of accidental or unexpected extubations reported during EMS care

Measure Code	N-ASE-SE-4
Definition	Number of accidental or unexpected extubations reported during EMS care
Category	Non-Clinical
Subcategory	Adverse/Sentinel Event
Measure Type	Sentinel event
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of accidental or unexpected extubations reported during EMS care
Denominator Statement	Total number of intubated patients where intubation was initiated by and/or maintained by EMS
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Accidental or unexpected extubations reported during EMS care
Data Source	Patient Report Form Airway Register
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

N-ASE-SE-5 Number of patients with a decrease in GCS of 3 or more points during EMS care

Measure Code	N-ASE-SE-5
Definition	Number of patients with a decrease in GCS of 3 or more points during EMS care
Category	Non-Clinical
Subcategory	Adverse/Sentinel Event
Measure Type	Sentinel event
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patients with a decrease in GCS of 3 or more points during EMS care
Denominator Statement	Total number patients treated and/or transported by EMS
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Patients with a decrease in GCS of 3 or more points during EMS care
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

N-ASE-SE-6 Number of defined failed intubation attempts

Measure Code	N-ASE-SE-6
Definition	Number of defined failed intubation attempts
Category	Non-Clinical
Subcategory	Adverse/Sentinel Event
Measure Type	Sentinel event
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of defined failed intubation attempts
Denominator Statement	Total number of intubated patients where Intubation was attempted by EMS personnel
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Failed intubation attempts
Data Source	Patient Report Form Airway Register
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

N-ASE-SE-7 Total number of patient injury reports during EMS care

Measure Code	N-ASE-SE-7
Definition	Total number of patient injury reports during EMS care
Category	Non-Clinical
Subcategory	Adverse/Sentinel Event
Measure Type	Sentinel event
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of patient injury reports during EMS care
Denominator Statement	Total number patients treated and/or transported by EMS
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 1000
Numerical Reporting Format	Per 1000 patient encounters
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	Patient injuries per 1000 patient encounters
Data Source	Patient Report Form Adverse Event Register
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

N-ASE-SE-8 Number of EMS staff on-duty injury reports

Measure Code	N-ASE-SE-8
Definition	Number of EMS staff on-duty injury reports
Category	Non-Clinical
Subcategory	Adverse/Sentinel Event
Measure Type	Sentinel event
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of EMS staff on-duty injury reports
Denominator Statement	Total number patients treated and/or transported by EMS
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 1000
Numerical Reporting Format	Per 1000 patient encounters
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	EMS staff on-duty injuries per 1000 patient encounters
Data Source	Patient Report Form Adverse Event Register IOD Reports
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

N-ASE-SE-9 Number of defined medication errors during EMS care

Measure Code	N-ASE-SE-9
Definition	Number of defined medication errors during EMS care
Category	Non-Clinical
Subcategory	Adverse/Sentinel Event
Measure Type	Sentinel event
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Clinician Shift Base Service
Numerator Statement	Total number of defined medication errors during EMS care
Denominator Statement	Total number patients treated and/or transported by EMS
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 1000
Numerical Reporting Format	Per 1000 patient encounters
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	Medication errors per 1000 patient encounters
Data Source	Patient Report Form Adverse Event Register
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

Section 2: Non-clinical Category

Part 2: Communications

- N-CD-S-1 Number of cases compliant with defined ALS Dispatch criteria
- N-CD-S-2 Number of cases with call processing time within defined limits
- N-CD-S-4 Number of Service Call Centre calls received per defined time period
- N-CD-S-5 Number of Service Call Centre calls received per 10000 population
- N-CD-S-6 Number of unanswered/missed calls to the Service Call Centre
- N-CD-P-1 Number of Cases with a delay in dispatch and/or response time waiting for a police/security escort

N-CD-S-1 Number of cases compliant with defined ALS Dispatch criteria

Measure Code	N-CD-S-1
Definition	Number of cases compliant with defined ALS Dispatch criteria
Category	Non-clinical
Subcategory	Communications/Dispatch
Measure Type	Structure
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Call Centre staff Shift Service
Numerator Statement	Total number of cases compliant with defined ALS Dispatch criteria
Denominator Statement	Total number of cases with ALS Dispatch
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls Completed cases Stood down cases
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Cases compliant with defined ALS Dispatch criteria
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

N-CD-S-2 Number of cases with call processing time within defined limits

Measure Code	N-CD-S-2
Definition	Number of cases with call processing time within defined limits
Category	Non-clinical
Subcategory	Communications/Dispatch
Measure Type	Structure
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Call Centre staff Shift Service
Numerator Statement	Total number of cases with call processing time within defined limits
Denominator Statement	Total number of calls to the Service Call Centre
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls Completed cases Stood down cases
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Cases with call processing time within defined limits
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

N-CD-S-4 Number of Service Call Centre calls received per defined time period

Measure Code	N-CD-S-4
Definition	Number of Service Call Centre calls received per defined time period
Category	Non-clinical
Subcategory	Communications/Dispatch
Measure Type	Structure
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Call Centre staff Shift Service
Numerator Statement	Total number of Service Call Centre calls received per defined time period
Denominator Statement	N/A
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator
Numerical Reporting Format	Number
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	Number of Service Call Centre calls received per defined time period
Data Source	Service Call Centre data
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

N-CD-S-5 Number of Service Call Centre calls received per 10000 population

Measure Code	N-CD-S-5
Definition	Number of Service Call Centre calls received per 10000 population
Category	Non-clinical
Subcategory	Communications/Dispatch
Measure Type	Structure
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Call Centre staff Shift Service
Numerator Statement	Total number of Service Call Centre calls received per defined area and/or time period
Denominator Statement	Total population per equivalent defined area
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 10000
Numerical Reporting Format	Per 10,000 citizens
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	Service Call Centre calls received per 10000 population
Data Source	Service Call Centre data
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

N-CD-S-6 Number of unanswered/missed calls to the Service Call Centre

Measure Code	N-CD-S-6
Definition	Number of unanswered/missed calls to the Service Call Centre
Category	Non-clinical
Subcategory	Communications/Dispatch
Measure Type	Structure
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Call Centre staff Shift Service
Numerator Statement	Total number of unanswered/missed calls to the Service Call Centre
Denominator Statement	Total number of calls to the Service Call Centre
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Primary (Community) calls Secondary (Transfer) calls
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Calls to the Service Call Centre unanswered/missed
Data Source	Patient Report Form
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years

N-CD-P-1 Number of Cases with a delay in dispatch and/or response time waiting for a police/security escort

Measure Code	N-CD-P-1
Definition	Number of Cases with a delay in dispatch and/or response time waiting for a police/security escort
Category	Non-clinical
Subcategory	Communications/Dispatch
Measure Type	Process
Target Population	Adult patients Paediatric patients Medical patients Trauma patients
Unit of Analysis	Call Centre staff Shift Service
Numerator Statement	Total number of Cases with a delay in dispatch and/or response time waiting for a police/security escort
Denominator Statement	Total number patients treated and/or transported by EMS
Case Mix/Risk Adjustment	Adult patients Paediatric patients Medical patients Trauma patients Completed cases Stood down cases
Exclusion Criteria	Insufficient reporting data
Measure Calculation	Numerator/Denominator X 100 = %
Numerical Reporting Format	Percentage (%)
Graphical Reporting Format	Run chart (min 10 data points) SPC chart (min 20 data points)
Reported Indicator	% Cases with a delay in dispatch and/or response time waiting for a police/security escort
Data Source	Patient Report Form Service Call Centre data
Suggested Reporting Period	Monthly Quarterly Annually
Recommended Review Period	Three years