



BURN AND TRAUMA				
NO	INDICATOR	DIMENSION	STANDARD	HOSPITAL REPORTING FREQUENCY
1	Turnaround time from booking OT for crash laparotomy to surgery within ( $\leq$ ) 60 minutes	Customer Centeredness	$\geq 90\%$	3 Monthly
2	Survival rate of trauma with ISS score less than 15 (ISS $\leq 15$ )	Clinical Effectiveness	$\geq 95\%$	3 Monthly
3	Percentage of trauma laparotomy without complications	Safety	$\geq 90\%$	3 Monthly



Indicator 1	:	Departmental
Discipline	:	Trauma Surgery
Name of indicator	:	Turnaround time from booking OT for crash laparotomy to surgery within ( $\leq$ ) 60 minutes
Dimension of Quality	:	Customer centeredness
Rationale	:	<ol style="list-style-type: none"> <li>1. In a hypotensive patient due to exsanguinating intraabdominal bleeding, urgent surgical intervention for haemostasis is required. Crash laparotomy to arrest the bleeding is part of the resuscitative process for these patients.</li> <li>2. This indicator needs to be monitored as a delay from making a call to OT and time of surgical intervention can affect patient's survival.</li> </ol>
Definition of Terms	:	<b>Crash laparotomy:</b> An urgent laparotomy that needs to be carried out for surgical haemostasis in a hypotensive patient due to exsanguinating intraabdominal bleed
Criteria	:	<p><b>Inclusion:</b></p> <ol style="list-style-type: none"> <li>1. All haemodynamically unstable patients due to intraabdominal bleed seen in Emergency Department indicated for urgent laparotomy</li> <li>2. All haemodynamically unstable patient due to intraabdominal bleed seen in ICY or ward indicated for urgent laparotomy after failed non-operative management.</li> </ol> <p><b>Exclusion:</b></p> <ol style="list-style-type: none"> <li>1. All patients who require laparotomy for peritonitis and are hemodynamically stable</li> <li>2. All patient referred on table for trauma laparotomy</li> </ol>
Type of indicator	:	Rate-based process indicator
Numerator	:	Number of crash laparotomies performed within ( $\leq$ ) 60 minutes of making a call to OT
Denominator	:	Total number of crash laparotomies
Formula	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
Standard	:	$\geq 90\%$
Data Collection	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data will be collected in ICU/ wards that cater for the above condition.</li> <li>2. <b>Who:</b> Data will be collected by assigned paramedic of the department/ unit.</li> <li>3. <b>How frequent:</b> 3 monthly data collection.</li> <li>4. <b>Who should verify:</b> Data will be verified by Head of Department or any assigned Senior Specialist</li> <li>5. <b>How to collect:</b> Full Data is suggested to be collected from OT notes/ patient's case note.</li> </ol>
Remarks	:	

Indicator 2	:	Departmental
Discipline	:	Trauma Surgery
Name of indicator	:	Survival rate of trauma with Injury Severity Score less than 15 (ISS $\leq$ 15)
Dimension of Quality	:	Clinical Effectiveness
Rationale	:	<ol style="list-style-type: none"> <li>1. Injury Severity Score (ISS) is widely used severity scoring system for trauma and is practised internationally.</li> </ol>



		<ol style="list-style-type: none"> <li>2. Patient with an ISS score of less than 15 are classified as minor trauma.</li> <li>3. Patients with minor trauma injuries have a very good prognosis.</li> <li>4. This indicator needs to be monitored as a drop in survival rate is suggestive of suboptimal care received by the patients.</li> </ol>
<b>Definition of Terms</b>	:	<b>The Injury Severity Score (ISS):</b> An anatomical scoring system that provides an overall severity score for patients with multiple injuries.
<b>Criteria</b>	:	<p><b>Inclusion:</b></p> <ol style="list-style-type: none"> <li>1. In-patients mortality in all trauma patients admitted with an ISS score less than 15 (ISS ≤15)</li> <li>2. All patients with an ISS score &lt; 15 who are discharged and brought in dead due to trauma related causes</li> </ol> <p><b>Exclusion:</b></p> <ol style="list-style-type: none"> <li>1. Death of patients with minor trauma who present late to hospital or were transferred in after a period of hospitalization in another facility.</li> <li>2. Death of patients sustaining minor trauma not related directly to trauma</li> </ol>
<b>Type of indicator</b>	:	Rate-based outcome indicator
<b>Numerator</b>	:	Number of patients with ISS ≤15 who survived
<b>Denominator</b>	:	Number of patients with ISS ≤15
<b>Formula</b>	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
<b>Standard</b>	:	≥ 95%
<b>Data Collection</b>	:	<ol style="list-style-type: none"> <li>1. <b>Where:</b> Data collected in wards that cater for the above condition.</li> <li>2. <b>Who:</b> Data will be collected by assigned paramedic of the department/ unit.</li> <li>3. <b>How frequent:</b> 3 monthly data collection.</li> <li>4. <b>Who should verify:</b> Data will be verified by Head of Department or any assigned Senior Specialist</li> <li>5. <b>How to collect:</b> Full Data is suggested to be collected from registration book/ patients note.</li> </ol>
<b>Remarks</b>	:	

<b>Indicator 3</b>	:	Departmental
<b>Discipline</b>	:	Trauma Surgery
<b>Name of indicator</b>	:	<b>Percentage of laparotomy for trauma without complications</b>
<b>Dimension of Quality</b>	:	Safety
<b>Rationale</b>	:	<ol style="list-style-type: none"> <li>1. Any complications arising from trauma laparotomy will lead to more morbidity and mortality to the patient.</li> <li>2. It is in accordance with national and international policies of the 'Safe Surgery Safe Life' initiative.</li> </ol>
<b>Definition of Terms</b>	:	<b>Trauma laparotomy:</b> Any laparotomy done for intraabdominal injury
<b>Criteria</b>	:	<p><b>Inclusion:</b></p> <ol style="list-style-type: none"> <li>1. All trauma laparotomies done with complications: List of complications:             <ol style="list-style-type: none"> <li>i. Iatrogenic bowel injury</li> <li>ii. Iatrogenic solid organ injury</li> <li>iii. Iatrogenic abdominal vascular injury</li> </ol> </li> </ol>



		<ul style="list-style-type: none"> <li>iv. Anastomotic leak post bowel anastomosis</li> <li>v. Miss obvious major injuries – solid organ or bowel injuries</li> <li>vi. Bleeding post splenectomy</li> </ul> <p><b>Exclusion:</b></p> <ul style="list-style-type: none"> <li>1. All trauma laparotomies done by other facilities and transferred in for further management</li> <li>2. Non trauma related / medical complications like myocardial infarction, respiratory failure, acute kidney injury</li> </ul>
<b>Type of indicator</b>	:	Rate-based outcome indicator
<b>Numerator</b>	:	Number of trauma laparotomy cases performed without complications
<b>Denominator</b>	:	Total number of laparotomy for trauma cases performed
<b>Formula</b>	:	$\frac{\text{Numerator}}{\text{Denominator}} \times 100\%$
<b>Standard</b>	:	≥ 90%
<b>Data Collection</b>	:	<ul style="list-style-type: none"> <li>1. <b>Where:</b> Data collected in ICU / wards that cater for the above condition.</li> <li>2. <b>Who:</b> Data will be collected by assigned paramedic of the department/ unit.</li> <li>3. <b>How frequent:</b> 3 monthly data collection.</li> <li>4. <b>Who should verify:</b> Data will be verified by Head of Department or any assigned Senior Specialist</li> <li>5. <b>How to collect:</b> Full Data is suggested to be collected from OT notes/ record.</li> </ul>
<b>Remarks</b>	:	