

Principle standards reported by the National Emergency Laparotomy Audit (NELA)

Data is collected to report on a variety of standards. The decision over whether to include certain standards is guided by consideration of its role in improving outcomes for patients, quality assurance and quality improvement, balanced against burden of data collection. Advice is also taken from NELA's Clinical Reference Group of stakeholder professionals and lay members.

Standard benchmarked by NELA	Details of the source of standard reported	Source of Standards	Thresholds	Associated Process Measure
Hospitals which admit patients as emergencies must have access to both conventional radiology and CT scanning 24 hours per day with immediate reporting	Whenever general and regional anaesthesia is administered, there is access to an appropriate range of laboratory and radiological services	RCS USC	Green: ≥85% Amber: 55 – 84% Red: <55%	Proportion of all emergency laparotomy patients who received a preoperative CT report by an in-house consultant radiologist
	The delivery of quality clinical care is dependent on access to supporting facilities. Rapid access to CT imaging/US scanning and lab analyses are critical to the efficient diagnosis, resuscitation and prioritisation of these patients	ASGBI EGS		
	Clinicians treating acutely & critically ill patients should have timely access to a radiologist when their skill is likely to aid diagnosis and/or provide therapeutic intervention	Standard 2, Standards for providing a seven-day acute care diagnostic radiology service www.rcr.ac.uk		
	All radiological reports should be produced, read and acted upon in a timely fashion, best to serve the patients' needs	Standard 1, Standards for the communication of radiological reports & fail-safe alert notification		
	Hospital in-patients must have 7-day access to diagnostic services that are consultant directed &	Standard 6, NHS seven-day clinical standards 2017		

	reported: within 1 hour for critical patients, 12 hours for urgent patients. ¹			
An assessment of mortality risk should be made explicit to the patient and recorded clearly on the consent form and in the medical record	Each patient should have their risk of death assessed at the beginning & end of surgery to determine the optimum location for postoperative care	RCS HRSP	Green: ≥85% Amber: 55 – 84% Red: <55%	Proportion of patients in whom a risk assessment was documented preoperatively
	High-risk surgical patients should have their expected risk of death estimated and documented prior to intervention, with due adjustments made in planning of urgency of care, seniority of staff involved & postoperative care	ACSA 1.1.3.3 GPAS 2.5.23 GPAS 5.3.21 GPAS 2.5.24		
	There should be a formalised integrated pathway for unscheduled adult general surgical care including an explicit assessment of mortality risk clearly recorded on the consent form and in the medical records	NCEPOD Knowing the Risk 2017 GPAS 5.5.24		
Trusts should ensure theatre access matches need and ensure prioritisation of access is given to emergency surgical patients ahead of elective patients whenever necessary	Trusts should ensure emergency theatre access matches need, and priority is given to emergency surgical patients ahead of elective patients	RCS HRSP	Green: ≥85% Amber: 55 – 84% Red: <55%	Proportion of patients arriving in theatre within a time appropriate for the urgency of surgery
	Hospitals accepting undifferentiated patients requiring immediate treatment are equipped and staffed 24/7 to manage the likely range of surgical emergencies	RCS USC		
	All hospitals admitting emergency general surgical patients should have a dedicated, fully staffed theatre available at all times for this clinical work load	ASGBI EGS		
	Adequate emergency theatre time is provided throughout the day to minimise delays and avoid emergency surgery being undertaken out of hours	RCS USC		
	An escalation plan for theatre capacity for the deferment of elective activity to accommodate emergency surgery should be in place	ACSA 1.1.1.8 (GPAS 5.5.45)		

¹ Critical patients are considered to be those for whom the test will alter their management at that time. Urgent patients are considered those for whom the test will alter their management but not necessarily that day (NHS seven-day services clinical standards 2017)

	Surgical patients often require complex management and delay worsens outcomes. The adoption of an escalation strategy which incorporates defined time-points is advised	RCS HR		
	Patients with intra-abdominal pathology and organ dysfunction should be operated on within first 6 hours of organ dysfunction	RCS HR		
Each high-risk case should be reviewed by a consultant surgeon, anaesthetist, intensivist	Each high risk patient should have the active input of consultant surgeon and consultant anaesthetist.	RCS HR	Green: ≥85% Amber: 55 – 84% Red: <55%	Proportion of patients with a preoperative risk of death ≥5% who had input from a consultant surgeon and consultant anaesthetist prior to surgery
	The perioperative anaesthetic care of ASA 3 patients and above who require immediate major surgery is directly supervised by a consultant anaesthetist			Proportion of patients with a preoperative risk of death ≥5% who had input from a consultant surgeon prior to surgery
	Anaesthetists in training should discuss high-risk patients with consultant colleagues. The consultant should ensure that the patient is cared for by an anaesthetist with the expertise required for that particular situation.	Association of Anaesthetists: Preoperative Assessment and patient preparation, the role of the anaesthetist 2010		Proportion of patients with a preoperative risk of death ≥5% who had input from a consultant anaesthetist prior to surgery
	All patients should be assessed before anaesthesia by an appropriately trained doctor	GPAS 1.1.1		Proportion of patients with a preoperative risk of death ≥5% who had input from a consultant intensivist prior to surgery
	When patients being considered for operative intervention have a predicted in-hospital mortality greater than 25% by any measure, including frailty, they should be assessed preoperatively in person by a consultant surgeon, consultant anaesthetist and critical care consultant.	HRGSP 2018		
	When high-risk patients are being considered for surgery in the setting of severe life-limiting disease, shared decision making should be supported by a	HRGSP 2018		

	consultant surgeon, consultant anaesthetist and critical care consultant			
Each high-risk case should have a consultant surgeon, anaesthetist present in theatre during surgery	To facilitate the optimal care of high-risk patients, systems should be in place to ensure the presence of a consultant surgeon and anaesthetist in the operating theatre for patients with an estimated mortality >5%	GPAS 5.3.21 ACSA1.1.3.3	Green: ≥85% Amber: 55 – 84% Red: <55%	Proportion of patients with a preoperative risk of death ≥5% for whom a consultant surgeon and consultant anaesthetist were present in theatre
	Surgery on high-risk patients should be conducted in the presence of a consultant surgeon and consultant anaesthetist, with their names clearly recorded on the operation note. They should be present for the timeout, and sign out.	Updated recommendations on the perioperative care of the HRGSP 2018		
	A consultant surgeon is present for all high-risk cases with a predicted mortality >5%	Updated recommendations on the perioperative care of the HRGSP 2018		Proportion of patients with a preoperative risk of death ≥5% for whom a consultant surgeon was present in theatre
	Patients designated as high-risk are managed wither directly, or under direct supervision of a consultant anaesthetist	ACSA standard 1.1.3.3		Proportion of patients with a preoperative risk of death ≥5% for whom a consultant anaesthetist was present in theatre
All high-risk patients should be admitted to critical care	Patients with an end-of-operation predicted hospital mortality ≥5% by any measure should be transferred from theatre directly to critical care	Updated recommendations on the perioperative care of HTGSP 2018	Green: ≥85% Amber: 55 – 84% Red: <55%	Proportion of patients with a postoperative risk of death of ≥5% who were directly admitted to critical care postoperatively
	Given the high incidence of postoperative complications demonstrated in the review of high-risk patients, and the impact this has on outcomes there is an urgent need to address postoperative care and ensure sufficient critical care beds are available.	NCEPOD Knowing the Risk 2011		Proportion of patients with a postoperative risk of death ≥10% who were directly admitted to critical care postoperatively

All high-risk patients should have consultant-delivered care AND be admitted direct to critical care postoperatively (BPT metrics)	Derived from standards noted above	Derived from sources noted above	Minimum threshold: 80%	Proportion of high-risk patients (risk of death of $\geq 5\%$) with consultant surgeon and anaesthetist present in theatre AND admitted to critical care postoperatively
Each patient aged over 65 and frail or 80 or over should have multidisciplinary input that includes early involvement of geriatrician teams	Arrangements are in place for the multidisciplinary management of older patients	ACSA 1.1.3.2	Green: $\geq 80\%$ Amber: 50 – 79% Red: $< 50\%$	Proportion of patients aged 65 or over and frail or 80 or over who were assessed by a care of the older person specialist
	Older patients undergoing immediate & high-risk surgery should be assessed for frailty using an established tool/scoring system	ACSA 1.1.3.2 GPAS 2.3.17		
	Patients over age 65 should have their frailty assessed	Updated recommendations on the perioperative care of the HRGSP 2018		
	Clear protocols for the postoperative management of elderly patients undergoing abdominal surgery should be developed which include appropriate routine review by a geriatrician consultant and nutritional assessment	NCEPOD An Age old problem, 2010		
	Older people's care should receive the support/services to meet their individual needs at the right time	NSF Older People – service framework standard 2		
Assessment of frailty using a validated scoring system in all patients aged over 65	Patients with frailty are at increased risk of adverse postoperative outcome. Older patients undergoing high-risk surgery should be assessed for frailty using an established tool or scoring system.	GPAS 1.3.17	Not RAG rated, advisory only	No associated process measure, advisory only
	Patients aged over 65 years should have their level of frailty assessed and recorded within four hours of admission or transfer	Recommendation 2 HRGSP 2018		
Timeliness of antibiotic administration	To facilitate optimal care of high-risk patients, systems should be in place to assess patients for presence of sepsis and severe sepsis; policies for management of sepsis (including early administration of antibiotics) should be in place	GPAS 5.3.21	Not RAG rated, advisory only	No associated process measure, advisory only

	All patients under general surgeon should be screened & monitored for sepsis using NEWS 2 and the results documented	Updated recommendations on the perioperative care of the HRGSP 2018		
	The Sepsis 6 care bundle should be implemented within 1 hour in all patients with suspected sepsis. Patients should be managed jointly with the critical care team	Updated recommendations on the perioperative care of the HRGSP 2018		
	Patients with sepsis should receive broad spectrum antibiotics within a maximum of one hour	Surviving Sepsis Campaign Updated recommendations on the perioperative care of the HRGSP 2018		
Unplanned returns to theatre			Not RAG rated, advisory only	No associated process measure, advisory only
Unplanned critical care admissions			Not RAG rated, advisory only	No associated process measure, advisory only
Postoperative length of stay			Not RAG rated, advisory only	No associated process measure, advisory only
Tranexamic Acid		NICE Guideline NG24, Nov 2015. Blood Transfusion. Recommendation 1.1.5	Not RAG rated, advisory only	No associated process measure, advisory only

Notes

Consultants are defined as doctors on the Specialist Register, CCT holders, and those recognised as being equivalent in the view of the relevant Royal College. (As per NHS seven day services clinical standards, Sept 2017 <https://www.england.nhs.uk/wp-content/uploads/2017/09/seven-day-service-clinical-standards-september-2017.pdf>)

High-risk patients are those with a predicted risk of mortality within 30 days that is $\geq 5\%$, OR any indicator of frailty when a recognised frailty assessment tool is used.

References/Links

https://www.rcr.ac.uk/system/files/publication/field_publication_files/bfcr1514_seven-day_acute.pdf

https://www.rcr.ac.uk/system/files/publication/field_publication_files/bfcr164_failsafe.pdf

<https://www.rcoa.ac.uk/sites/default/files/documents/2019-08/ACSA-STDSFULL-2019.pdf>

<https://www.rcoa.ac.uk/safety-standards-quality/guidance-resources/guidelines-provision-anaesthetic-services>

<https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/service-framework-for-older-people-summary-of-standards.pdf>

<https://www.nice.org.uk/guidance/ng24/chapter/Recommendations>

Other standards documents can be downloaded here: <https://www.nela.org.uk/Standards-Documents#pt>