ANZELA-QI DATASET & HELPFILE v14.0

Australia and New Zealand Emergency Laparotomy Audit - Quality Improvement

Notes to assist data entry

Data capture and recording

It is the universal experience that the best time to record a large part of the data is in theatre. Most information will be readily available and easily recallable. If the data is collected retrospectively, even a day or so later, much will not be easily located, nor accurately remembered. It is also much more time consuming. A case will not be included in any analysis until closed so the discharge data needs to be recorded timeously. A closed case applies to form completion status being updated to closed in REDCap once minimum fields required have been completed. If the patient is still in hospital at the time of analysis, the case will be included in the analysis.

In almost all cases patients will only need one form completed for each admission. Additional operations after the initial Emergency Laparotomy (EL) will be a planned or unplanned operation. In these cases the original form should be updated to include data about the planned or unplanned return to theatre. A new form only needs to be created if the patient is transferred after one EL and then has a second EL in a second hospital.

Prospective/retrospective data collection

Do not record retrospectively obtained or calculated data as if it was available prospectively. The aim of Quality Improvement (QI) processes is to document data prospectively so it can then be used to change individual patient care. If the data was not available at the time of decision making it cannot have been used to assist in the decision and should not be retrospectively entered as if it was prospectively available. For example, if the CT scan report was not available pre-operatively, but later became available, do not record it as being prospectively available. In particular if the NELA risk assessment was calculated after the Emergency Laparotomy the risk should be recorded as being calculated retrospectively.

Transfers

It is anticipated that the number and proportion of patients transferred in ANZELA-QI (estimated 15% to 30%) will be much greater than in NELA. This will be an important difference to document. However, the reasons and timing of the transfers will be many and varied and difficult to record in detail in the audit. The following notes are provided to ensure consistency of data entry:

1. The fundamental requirement is that the hospital where the EL was undertaken should complete the ANZELA-QI data form. Each ANZELA-QI case records one patient, per hospital, per admission, per EL. Second operation in that hospital should be recorded as planned and/or unplanned operations and not a new/second Emergency Laparotomy. Any subsequent admissions and subsequent ELs for that patient require a separate new ANZELA-QI record.
2. ***If the patient does not have an EL in hospital A but is transferred to hospital B for the purposes of undergoing an EL***, then receiving hospital B should complete the ANZELA-QI data form. The mode of admission into hospital B should be recorded as a transfer. As there was no EL in hospital A no data is required from them.
3. ***If the patient undergoes an EL in hospital A and is then transferred to hospital B*** (for any reason) then hospital A where the EL was undertaken should complete the ANZELA-QI data form. The mode of discharge should be recorded as a transfer. If there is no further surgery in hospital B then it does not have to record any data.
4. Some patients will undergo an EL in hospital A, be transferred to hospital B and then undergo a second operation. The documentation required in receiving hospital B will depend on the individual patient treatment circumstances:
    a. ***If a transferred patient undergoes a second planned operation in*** hospital B (e.g. removal of packs, planned washout *etc*) then hospital B does not have to record any data. The discharge question in the ANZELA-QI form completed by hospital A will record the patient was transferred.
    b. ***If a transferred patient undergoes a second, unplanned operation hospital B that is a complication of the first EL*** in hospital A (e.g. anastomotic leak) hospital B will not need to complete a second ANZELA-QI form. The discharge question in the ANZELA-QI form completed by hospital A will record the patient was transferred, as will the admission question in hospital B.

c. ***If a transferred patient undergoes a second unplanned EL (not a planned or unplanned operation as above) in hospital B that is for a new event not directly connected to the original EL*** then receiving hospital B will need to complete a second ANZELA-QI form. The discharge question in the ANZELA-QI form completed by hospital A will record the patient was transferred, as will the admission ANZELA-QI question in hospital B. ANZELA-QI will link the forms.

ANZELA-QI would welcome feedback on difficulties related to data capture of the transferred patient as there is likely to be variation in experiences at different hospitals.

Clinician seniority
For the purposes of this program the standard of care for determining seniority is a consultant. In some hospitals there will be senior staff who in many ways act as a consultant in all but name. However, unless appointed as a consultant they should not be entered as such. See the guides below. ANZELA-QI would welcome feedback as there is likely to be variation

Data completeness
Do not leave questions unanswered i.e. blank. If a field is left blank interpretation is difficult and it greatly degrades the data quality. If the answer is not known enter 'unknown'.

Case ascertainment
Every EL needs to be documented so the true denominator is known. Missing cases will degrade the analysis. It is likely the best method is for the PI at each hospital to check the theatre register weekly. Post-operative rounds and hand over meetings are an ideal time to ensure full case ascertainment and to also check data completeness.

Patients with an acute abdomen who do not have an Emergency Laparotomy
There are patients who present with an acute abdomen and who satisfy the ANELA-QI inclusion, but do not undergo surgery referred to as NoLaps. The reasons for this may include age, fragility, advanced malignancy, medical co-morbidities, care capped to not include surgery, patient wishes *etc*. Traditionally these patients have not been included in other EL audits and this was recognised as an important gap in the data. These patients are by definition high-risk and while it may be entirely appropriate for them not to undergo an EL, their exclusion may substantially and favourably bias any analysis. ANZELA-QI has now started collecting the data on these patients. A reduced number of fields need to be completed for these patients. These patients will be referred from variable sources and many will not be admitted to a surgical ward (for example, terminal malignant small bowel obstruction in an oncology ward, or an aged, frail patient on a geriatric ward). Similarly, NELA also started collecting data on NoLaps in 2024. They will be lost unless registered on the ANZELA-QI database immediately. ANZELA-QI would welcome feedback around any difficulties with recognising and recording non-operative cases.

NELA Patient Audit Dataset

NELA Participant Manual

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
Numbered for ease of reference	*The field in the NELA participation manual. Numbers in parentheses are based on*	*Section of the dataset grouped by purpose e.g. 'patient demographics'*	*On-screen field name*	*Values able to be selected/entered (including lookup number where relevant)*	*General guidance on how to answer the question*	*Guidance on how to answer for NZ cases only*

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
	NELA but not identical.					
DM1	[1.1]	Demographics	NHI (New Zealand)	[AAANNNN]		
DM1	[1.1]	Demographics	Medicare number (Australia)	[N(11)]		Not applicable
DM2	1.3	Demographics	Hospital Record Number	[free text]		Not applicable
DM2a		Demographics	Hospital Identifier	[free text		
DM3	1.7	Demographics	Last name	[free text]		
DM4	1.5	Demographics	Sex	1 – Male 2 – Female 3 – Intersex or indeterminate 4 – Not stated/inadequately described		
DM5	1.4	Demographics	Date of Birth	[DD/MM/YYYY]		
DM6		Demographics	Ethnicity [multi-pick]	1 – Aboriginal 2 – Torres Strait Islander 3 – Maori 4 – Pacific Peoples 5 – Any other ethnicity 6 – Unknown		As recorded in Patient Information Management System (PIMS/IPMS)
DM7	1.4	Demographics	[auto-calculated] Age on admission]	[NNN]	**Automatically calculated**	

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
PR1		Admission Data For All Patients	Did the patient meet the inclusion/exclusion criteria for surgery and have an EL?	1 – Yes 2 – No: medical **co-morbidity** reasons: risk of surgery too great 3 – No: **Pathology** too advanced (e.g. disseminated malignancy) 4 – No: **rapid death** during work-up 5 –No: **patient/family wishes** to limit care including Advanced Health Care Directive 6- Unknown	If 'yes' is chosen the remainder of the form should be completed. The No-Lap are important, but the initial question was badly framed. If No, then we do not need to record any data other than field below. However, complete NELA score, ASA score, Goals of Care field and the last page (discharge). So, if alive the discharge date and location and if died date of death	
PR2	1.9	Admission Data For All Patients	Date and time the patient first arrived at this Hospital/emergency department **Data required for Clinical Care Standard 8b**	[DD/MM/YYYY] Date not known [HH:MM] Time not known	Arrival time is 1st presentation to hospital where the EL was undertaken. It is intended to reflect the time at which the patient's care became the responsibility of the hospital where the EL is undertaken. **Clinical Care Standard 8b**	
PR3	1.10	Admission Data For All Patients	The nature of this admission	1 – Elective 2 – Emergency 3 – Unknown	This refers to the admission to the hospital where the EL is undertaken. If the patient was an inter-hospital transfer and the EL undertaken before the patient was transferred then the referring hospital should enter the data. If the patient was transferred and then had the EL, the receiving hospital should enter the data.	

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
PR4		Admission Data For All Patients	[conditional field: PR2 = Emergency] Was this a readmission within 30 days for a previous EL?	1 – Yes 2 – No 3 – Unknown		
PR5	[1.10b]	Admission Data For All Patients	Where did the patient first present at the hospital? **Data required for Clinical Care Standard 1a**	1 – Emergency Dept 2 – ASU/Ward 3 – Room/clinic 4 – Other 5 – Unknown [free text field for comments]	This is to record the place where the patient first arrived at the hospital where the EL is undertaken **Clinical Care Standard 1a**	Single point of entry (ED) should be recorded for New Zealand. There is a separate question re: route of admission that is collected in NZ only.
PR6	[1.12]		Residence before hospital admission	1 – Own Home 2 – Sheltered living 3 – Residential Care 4 – Nursing Home 5 – Rehabilitation facility 6 – Other		
PR3a		Admission Data For All Patients	Was this admission a transfer from another hospital?	1 – Yes 2 – No 3 – Unknown	This question records whether the patient was transferred into the hospital where the EL was undertaken	
PR3b		Admission Data For All Patients	[conditional field: PR3a = Yes] Which hospital was the patient transferred from?	[free text field for comments]		
PR3c		Admission Data For All Patients	If transferred, date and time of arrival in referring (original) hospital	[DD/MM/YYYY] Date not known [HH:MM] Time not known	Include a comment that the data and time will normally be in the copy of the referring hospital notes	
PR7	[1.11]	Admission Data For All Patients	Specialty of initial admission	1 – General Surgery 2 – General Medicine 3 – Gastroenterology (if separate from GenMed) 4 – Older People's Health 5 – Obstetrics and Gynaecology 6 – Orthopaedics 7 – Other [free text]		

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
PR8	[2.1]	Admission Data For All Patients	Date and time first seen by surgeon in this hospital in relation to the initial assessment of acute abdomen	[DD/MM/YYYY] Date not known [HH:MM] Time not known Not seen	This refers to the admission into the hospital where the EL is undertaken. 'Surgical team' refers to any member of the surgical team, recognising a junior member of the team is a proxy for the consultant. For acute general surgical admissions, detail the first surgical review following admission. For in-patients referred to the surgical team by different specialties, please detail the first surgical review following referral. For patients having emergency surgery as a complication of previous surgery, use the time that the decision was made that they needed a re-operation.	Taken as the time stamp of first completion of the Electronic Assessment Form (EAF).
PR8		Admission Data For All Patients	Sub-specialty of admitting consultant surgeon	1 – Colorectal 2 – Upper Gastrointestinal (GI) 3 – Hepato-pancreato-biliary (HPB) +/- transplant 4 – Breast and/or endocrine 5 – Rural 6 – Trauma 7 – General Surgeon with no special interest 8 – Other (please specify) [free text]		
PR9	2.7	Admission Data For All Patients	Was an abdominal CT scan performed in the preoperative period as part of the diagnostic work-up? **Data required for Clinical Care Standard 2a**	1 – Yes 2 – No 3 – Unknown	**Clinical Care Standard 2a**	

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
PR9a	2.7a1	Admission Data For All Patients	[conditional field: PR9=Yes] Where was the abdominal CT scan done?	1 – In this hospital 2 – Before arrival in this hospital 3 - Unknown	Rephased for transfers	
PR10	2.7b	Admission Data For All Patients	[conditional field: PR9 = Yes] Date and time of CT scan **Data required for Clinical Care Standard 2a**	[DD/MM/YYYY] Date not known [HH:MM] Time not known	**Clinical Care Standard 2a**	
PR11	[2.7a]	Admission Data For All Patients	[conditional field: PR9 = Yes] Date and time of CT report by consultant	[DD/MM/YYYY] Date not known [HH:MM] Time not known	Report can be verbal or written. Problem is that if transferred, the new hospital will not know	
PR12		Admission Data For All Patients	[conditional field: PR9 = Yes and PR11] Date and time radiologist verbally communicated CT scan results to the referring or responsible clinician **Data required for Clinical Care Standard 2a**	[DD/MM/YYYY] Date not known [HH:MM] Time not known	**Clinical Care Standard 2a**	
PR13	[2.2]	Admission Data For All Patients	[conditional on PR1 = Yes] Date and time the decision to operate was made. **Data required for Clinical Care Standard 5a**	[DD/MM/YYYY] Date not known [HH:MM] Time not known Unknown	**Clinical Care Standard 5a**	= Time stamp when form is entered into PIMS/IPMS (or Theatre Administration System, TAS, where a separate one exists)
PR14		Admission Data For All Patients	Was there an assessment of EL patients aged 65 years and older by a geriatrician or an appropriate physician **Clinical Care Standard 8b**	1 – Yes 2 – No 3 – Unknown 4 – Assessed by General Physician 5 – No - assessment done postoperatively	**'Appropriate physician'** means a geriatrician or general physician skilled in the perioperative care of older adults in most settings. In rural settings, an 'appropriate physician' may also be a	

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
					general practitioner or a rural generalist skilled in the perioperative care of older adults. Clinical Care Standard 8b	
PR15		Admission Data For All Patients	Date and time of perioperative geriatric assessment **Data required for Clinical Care Standard 8b**	[DD/MM/YYYY] Date not known [HH:MM] Time not known	**Clinical Care Standard 8b**	
PR16		Admission Data For All Patients	Were goals of care discussed and documented before surgery using a locally endorsed form, for EL patients aged 65 years and older ? **Clinical Care Standard 4a**	1 – Yes 2 – No 3 – Unknown	Only include if recorded pre-operatively AND documented in the notes. The aim of documenting GoC is that they are available to others, for example during a review out of hours. **'Locally endorsed form'** means a form locally endorsed by the health service or hospital, that documents a patient's goals of care during a hospital admission and escalation or non-escalation (limitations) of medical treatment. To be included in the numerator, a patient's goals of care must be documented in a locally endorsed form and the form must be in the patient's healthcare record. **Clinical Care Standard 4a**	Not applicable

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
SE1	[2.11a]	Sepsis	Was sepsis suspected **at time of initial admission into this hospital**?	1 – Yes 2 – No 3 – Other diagnosis suspected requiring antibiotics 4 – Unknown	The assessment of sepsis can be by any means and by any team. For example, patients will be admitted via ED and sepsis suspected on the basis of an EWS, specific blood tests (e.g. lactate), clinical impression undertaken by ED staff. Do not retrospectively enter 'yes'.	Not applicable. qSOFA score will be used for this.
SE2	2.11	Sepsis	If sepsis suspected at time of initial hospital admission, by what criteria?	1 – Clinical assessment only 2 – EWS (any score) 3 – Lactate 4 – Other [free text]		Drop down that only appears if PR15 is Yes.
SE3		Sepsis	Date and time of sepsis assessment	[DD/MM/YYYY] Date not known [HH:MM] Time not known Not done		Drop down that only appears if PR13 is Yes
SE4	2.10	Sepsis	What was the date and time of the first dose of IV antibiotics following presentation to this hospital?	[DD/MM/YYYY] Date not known [HH:MM] Time not known Not administered	Many patients will be admitted via ED and the antibiotics may have been administered before surgical review. If the patient was not originally admitted under surgery, please use date and time of antibiotic administration following referral to the surgeon. If the surgery is a complication	

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
					of a previous procedure within the same admission, use date/time of 1st dose since the first procedure.	
SE5		Sepsis	Was the lactate level available to the surgeon at the time of first surgical review? **Clinical Care Standard 1a**	1 – Yes 2 – No 3 – Unknown	'**Was available**' means that the results from the blood lactate levels were in the patients's healthcare record before the commencement of the patient's first surgical review. **Clinical Care Standard 1a**	"Yes" = where Time stamp of lactate level pre-dating time stamp of first EAF completion. "No" = where there is no Lactate or the time stamp is post EAF
SE6	3.5	Sepsis	[conditional field: SE5=Yes] What was the most recent preoperative value for blood lactate – may be arterial or venous (mmol/l)? **Data required for Clinical Care Standard 1a**	[Mmol/L]	**Clinical Care Standard 1a**	
SE7	[2.11d]	Sepsis	[conditional on PR1 = Yes] Was sepsis suspected **at the time the decision for surgery was made**?	1 – Yes 2 – No 3 – Unknown		
SE8		Sepsis	If sepsis suspected **at the time the decision for surgery was made** by what criteria?	1 – Clinical assessment only 2 – EWS (any score) 3 – Lactate 4 – Other		Drop down that only appears if PR12 is Yes
ORS1	[3.1 & 3.2]	Operative risk stratification	Prior to surgery, was the risk of death for the patient calculated using validated mortality risk prediction tool and entered into the medical record?	1 – Yes, **calculated** pre-operatively 2 – No, **calculated** and entered into the medical record post-operatively 3 – No, calculated but not entered into medical record	Australia: use the NELA score, not P-POSSUM, SORT, NSQUIP or another score. New Zealand: use P-POSSUM	New Zealand: use P-POSSUM

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
			Clinical Care Standard 3a **Data required for Clinical Care Standard 6a, 6b, and 7a**	4 – No 5 – Unknown	**Clinical Care Standard 3a, 6a, 6b and 7a.**	
ORS2		Operative risk stratification	Which validated mortality risk prediction tool was used to calculate the preoperative mortality risk?	1 – NELA 2 – PNELA 3 – NSQIP 4 – SORT 5 – NZRisk 6 – Other specify		
ORS3	3.1	Operative risk stratification	[conditional on RS1 = 1 or 2] [Australia only] What was the pNELA mortality score (%)? **Clinical Care Standard 3a** **Data required for Clinical Care Standard 3a, 6a, 6b and 7a**	[free text field]	Please enter the exact percentage score. This will give flexibility to 'group' scores in different ways. For example, ≥50 or ≥60 etc **Clinical Care Standard 3a, 6a, 6b, 7a.**	
ORS4		Operative risk stratification	Was documentation of postoperative critical care discussion with a consultant intensivist before surgery for patients with a preoperative mortality risk ≥10% recorded? **Clinical Care Standard 7a**	1 – Yes 2 – No 3 – Unknown	Clinical Care Standard 7a	
ORS5		Operative risk stratification	What was the patient's ASA grade on admission?	1 – A normal healthy patient 2 – A patient with mild systemic disease 3 – A patient with severe systemic disease which limits activity, but is not incapacitating 4 – A patient with an incapacitating systemic disease that is not a constant threat to life		

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
				5 – A moribund patient who is not expected to survive 24 hours, with or without an operation 6 – A brain-dead patient for organ donation 7 – Unknown		
ORS6	[2.12a]	Operative risk stratification	[conditional field: DM9 >65] For patients aged 65 years and older, was frailty assessment done using a validated tool and documented before surgery? **Clinical Care Standard 3b**	1 – Yes 2 – No 3 – No, frailty assessment completed post-operatively 4 – Unknown	**Clinical Care Standard 3b**	
ORS7	[2.12a]	Operative risk stratification	[conditional field: ORS5=Yes] What was the preoperative frailty index? **Data required for Clinical Care Standard 3b**	1 – Very Fit, , fittest for age, exercise regularly 2 – Well- no active disease symptoms, exercise occasionally 3 – Managing Well - medical problems well controlled, not regularly active beyond routine walking 4 – Vulnerable - symptoms limit activities, “slowed up” 5 – Mildly Frail - evident slowing, need help with higher order ADLs (heavy housework, transportation, finances) 6 – Moderately Frail - need help with some personal care (bathing/dressing), all outside activities and keeping house 7 – Severely Frail - completely dependent for personal care 8 – Very Severely Frail - approaching end of life 9 – Terminally Ill - life expectancy < 6 months 10 – Unknown	Use the Rockwood score. See attached figure **Clinical Care Standard 3b**	

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
ORS8		Operative risk stratification	[conditional field: DM9 >65] For patients aged 65 years and older, was cognitive impairment and delirium identified and documented preoperatively using brief validated tools such as the 4AT?	1 – Yes 2 – No, assessment completed postoperatively 3 – No 4 – Unknown	Use 4AT tool. See attached pdf	
ORS9	[3.22]	Operative risk stratification	[conditional on PR1 = Yes] According to the surgical urgency **WITHIN HOW MANY MAXIMUM HOURS** was the procedure intended to occur? **Data required for Clinical Care Standard 5a**	[free text integer] [free text comments box]	This is the urgency as determined by the surgeon at the time the decision is made. There is at present no consistent emergency surgery 'urgency categorisation' across Australia or New Zealand with at least five versions available. There is current work to create a uniform categorisation. Therefore, at present you are required to enter a whole integer. This can later be grouped for the relevant state and may aid the discussion around a uniform urgency categorisation. For some patients this may be after a period of time in hospital. For example, SBO that does not settle. In these cases, the overall time to surgery will be calculated from the time of admission to time of first surgeon review, or time of operation. **Clinical Care Standard 5a**	Where the category is a range of hours, enter the maximum number of hours in the category: e.g. "Within 2-6 hours" on surgical booking form = "6" for ANZELA-QI

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
OP1	5.1	Operative	[conditional on PR1 = Yes] Is this the first surgical procedure of this admission?	1 – Yes 2 – No 3 – Other [free text comments]	If the patient had an operation was discharged and then admitted to the same or another hospital and undergoes an EL that is the first operation of this admission.	
OP2	5.2	Operative	[conditional on PR1 = Yes] Preoperative indication for surgery as on the **surgical booking form**. [multi-select] 'Select all options that apply'	Abdominal abscess Anastomotic leak Abdominal wound dehiscence Abdominal compartment syndrome Acidosis Bile leak Chyle leak Colitis Foreign body Gastric band complication Haemobilia Haemorrhage Hernia - hiatus Hernia - incarcerated Hernia - incisional Hernia - internal Iatrogenic injury Intestinal fistula Intussusception Ischaemia Necrosis Obstruction - Small bowel Obstruction - Large bowel Perforation Peritonitis Phlegmon/inflammatory mass Planned relook Pneumoperitoneum Pseudo-obstruction	More than one option can be selected. Note that this relates to the pre-operative indication for surgery and may differ from the operative findings Options below are recorded in NELA but not in ANZELA-QI. Now added, Gastric outlet obstruction Lap Bad removal Other	

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
				Sepsis Volvulus Other		
OP2a	5.4	Operative	Was this an open/laparoscopy procedure?	1 – Laparoscopically throughout 2 – Laparoscopic converted to open 3 – Open throughout 4 – Unknown	Included in NELA and we should add to make it clear that laparoscopy is included	
OP3	2.2	Operative	[conditional on PR1 = Yes] Date and time of theatre booking	[DD/MM/YYYY] Date not known [HH:MM] Time not known Unknown		Time stamp when form is first entered into PIMS/IPMS/TAS
OP4	[4.1]	Operative	[conditional on PR1 = Yes] Date and time of procedure **Data required for Clinical Care Standard 5a**	1 – Knife to skin 2 – Wheels in then [DD/MM/YYYY] [HH:MM] Time not known	The preferred time is knife to skin (KTS) and will be recordable when data is collected timeously. For data collected retrospectively KTS may be not be so easy to identify. 'Wheels in' is when the patient enters the operating theatre itself, not theatre complex or anaesthetic room. **Clinical Care Standard 5a**	Time stamp of Knife to Skin from PIMS/IPMS/TAS
OP5		Pre-operative	Sub-specialty of operating consultant surgeon	1 – Colorectal 2 – Upper Gastrointestinal (GI) 3 – Hepato-pancreato-biliary (HPB)+/- transplant 4 – Breast and/or endocrine 5 – Rural 6 – Trauma 7 – General Surgeon with no special interest		

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
OP6	4.2	Operative	[conditional on PR1 = Yes] Most senior surgeon in theatre **Clinical Care Standard 6a**	1 – Consultant 2 – Staff grade, other non-consultant grade responsible surgeon or MOSS (NZ Only) 3 – Fellow 4 – SET Training Registrar 5 – Service Registrar or equivalent 6 – Other	Consultant supervision is when the consultant is in theatre (but not necessarily scrubbed) AND free of other commitments. A consultant elsewhere in the theatre complex or hospital is NOT supervising. For ANZELA-QI purposes the definition of a Fellow is a surgeon who holds the FRACS, or, in the case of an overseas surgeon, in a post that would otherwise be held by a person with the FRACS. Surgeons who have a Fellowship but are not appointed as consultants should select option 3. **'Consultant surgeon'** means a surgeon who has been granted specialist registration by Ahpra and the Medical Board of Australia; and has been appointed to a consultant position or equivalent senior position by a healthcare service, reflective of their experience and seniority; and is operating within their locally defined scope of practice. **Clinical Care Standard 6a**	

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
OP7	4.3	Operative	[conditional on PR1 = Yes] Most senior anesthetist in theatre **Clinical Care Standard 6b**	1 – Consultant 2 – Staff grade, other non-consultant grade responsible anaesthetist or MOSS (NZ Only) 3 – Fellow 4 - Advanced trainee (post-final exam) 5 – Advanced trainee (pre-final exam) 6 – Basic trainee 7 – Other	Consultant supervision is when the consultant is in theatre AND free of other commitments. A consultant elsewhere in the theatre complex or hospital is not supervising. For ANZELA-QI purposes the definition of a Fellow is an anaesthetist who is in an ANZCA Provisional Fellowship Training post or overseas equivalent. Anesthetists who have a FANZCA diploma but are not appointed as consultants should select option 3 also. **'Consultant anaesthetist'** means an anaesthetist who has been granted specialist registration by Ahpra and the Medical Board of Australia; and has been appointed to a consultant position or equivalent senior position by a healthcare service, reflective of their experience and seniority. In some rural settings, this may be a rural generalist anaesthetist who has completed accredited advanced skills training in anaesthetics who has been appointed to a consultant, or equivalent senior position, by their healthcare service (or	

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
					who has an equivalent scope of practice). **Clinical Care Standard 6b**	
OP8	5.5	Operative	[conditional on PR1 = Yes] Main operative findings 'Select all options that apply'	Abscess Abdominal Compartment Syndrome Abdominal wall dehiscence Adhesions Anastomotic leak Bile leak Chyle leak Cancer - localised Cancer - disseminated Cancer - gastric Cancer - colorectal Colitis - ulcerative colitis Colitis – Crohn's Disease Colitis - other Diverticulitis Foreign Body Gallstone Ileus Gastric band complication Haemorrhage – peptic ulcer Haemorrhage – intestinal Haemorrhage – postoperative Hernia - incarcerated Hernia - Internal Intestinal fistula Intestinal ischaemia Intussusception Meckel's diverticulum Necrotising fasciitis Pseudo-obstruction Perforation - peptic ulcer Perforation – small bowel/colonic Stricture Stoma Complications Volvulus	The main operative findings are those that the surgeon, taking all into account, believes are the most clinically relevant. There may be instances where the operative findings are such that, had these findings been known prior to surgery, the patient would not have been included in the audit. However, since they have now had a laparotomy, they are still included. This is why there appear to be some findings/procedures that are under the exclusion criteria. Option below are recorded in NELA but not in ANZELA-QI. Now added - Gastric band complication	

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
				Normal abdomen Other		
OP9	5.6		[conditional on PR1 = Yes] Describe the peritoneal contamination present	1 – None, or reactive serous fluid only 2 – Free gas from perforation +/- minimal contamination 3 – Pus 4 – Bile 5 – Gastro-duodenal contents 6 – Small bowel contents 7 – Faeculant fluid 8 – Faeces 9 – Blood/haematoma		
			What was the relationship between the known pre-operative CT diagnosis and the finding at surgery?	1 – No pre-op CT scan 2 – Good relationship 3 – Poor but acceptable relationship 4 – No relationship 5 – Unknown		
OP10	5.3.a	Operative	[conditional on PR1 = Yes] Primary surgical procedure	Abscess – drainage of abscess/collection Abdominal wall closure following dehiscence Abdominal wall reconstruction Adhesiolysis Anastomosis - repair or revision of Appendicectomy as incidental Biliary reconstruction Cholecystectomy as incidental Colectomy - left (including sigmoid colectomy and anterior resection) Colectomy - right (including ileocaecal resection) Colectomy - subtotal or panproctocolectomy Colectomy - Hartmann's procedure Colectomy - other colorectal resection Debridement	**Option below are recorded in NELA but not in ANZELA-QI. Now added - Gastric band complication**	

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
				Enterotomy Foreign body - removal Gastrectomy - partial or total Gastric band removal/adjustment Gastric surgery - other Haematoma – evacuation Haemostasis Hiatus hernia repair Intestinal bypass Intestinal fistula – repair of Incisional hernia repair – large with bowel resection Incisional hernia repair – large with division of adhesions Laparotomy - Exploratory/relook only Laparostomy formation Meckel's diverticulum - resection Perforation - repair of intestinal perforation Peptic ulcer – suture or repair of perforation Peptic ulcer – oversew of bleed Tumour - resection of other intra-abdominal tumour(s) Small bowel resection Stricturoplasty Stoma - Defunctioning stoma via midline laparotomy Stoma - Revision of stoma via midline laparotomy Volvulus - reduction Washout only Other Not amendable to surgery		
OP11	5.3.b	Operative	[conditional on PR1 = Yes] Secondary surgical procedure	Abscess – drainage of abscess/collection Abdominal wall closure following dehiscence Abdominal wall reconstruction Adhesiolysis Anastomosis - repair or revision of Appendicectomy as incidental Biliary reconstruction		

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
				Cholecystectomy as incidental Colectomy - left (including sigmoid colectomy and anterior resection) Colectomy - right (including ileocaecal resection) Colectomy - subtotal or panproctocolectomy Colectomy - Hartmann's procedure Colectomy - other colorectal resection Debridement Enterotomy Foreign body - removal Gastrectomy - partial or total Gastric band removal/adjustment Gastric surgery - other Haematoma – evacuation Haemostasis Hiatus hernia repair Intestinal bypass Intestinal fistula – repair of Incisional hernia repair – large with bowel resection Incisional hernia repair – large with division of adhesions Laparotomy - Exploratory/relook only Laparostomy formation Meckel's diverticulum - resection Perforation - repair of intestinal perforation Peptic ulcer – suture or repair of perforation Peptic ulcer – oversew of bleed Tumour - resection of other intra-abdominal tumour(s) Small bowel resection Stricturoplasty Stoma - Defunctioning stoma via midline laparotomy Stoma - Revision of stoma via midline laparotomy Volvulus - reduction Washout only Other Not amendable to surgery		

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
OP12	5.3.c	Operative	[conditional on PR1 = Yes] Third/tertiary surgical procedure	Abscess – drainage of abscess/collection Abdominal wall closure following dehiscence Abdominal wall reconstruction Adhesiolysis Anastomosis - repair or revision of Appendicectomy as incidental Biliary reconstruction Cholecystectomy as incidental Colectomy - left (including sigmoid colectomy and anterior resection) Colectomy - right (including ileocaecal resection) Colectomy - subtotal or panproctocolectomy Colectomy - Hartmann's procedure Colectomy - other colorectal resection Debridement Enterotomy Foreign body - removal Gastrectomy - partial or total Gastric band removal/adjustment Gastric surgery - other Haematoma – evacuation Haemostasis Hiatus hernia repair Intestinal bypass Intestinal fistula – repair of Incisional hernia repair – large with bowel resection Incisional hernia repair – large with division of adhesions Laparotomy - Exploratory/relook only Laparostomy formation Meckel's diverticulum - resection Perforation - repair of intestinal perforation Peptic ulcer – suture or repair of perforation Peptic ulcer – oversew of bleed Tumour - resection of other intra-abdominal tumour(s) Small bowel resection Stricturoplasty		

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
				Stoma - Defunctioning stoma via midline laparotomy Stoma - Revision of stoma via midline laparotomy Volvulus - reduction Washout only Other Not amendable to surgery		
PO1	6.24	Postoperative	[conditional on PR1 = Yes] Where did the patient go for **immediate** continued postoperative care following emergency laparotomy ~~surgery~~? **Data required for Clinical Care Standard 7a and 7b**	1 – Ward 2 – ICU/HDU 3 – Died prior to discharge from theatre complex 4 – Other 5 – Unknown	An ICU must be accredited as such and has facilities for complex care such as ventilation, dialysis etc. An HDU has monitored beds, respiratory support short of invasive ventilation, a higher nurse ratio than a normal ward Recovery beds are neither HDU nor ICU. A bed in a ward that is used to monitor higher risk patients is neither HDU nor ICU. **Clinical Care Standard 7a and 7b**	
PO2	7.5	Postoperative	[conditional on PR1 = Yes] Did the patient have unplanned admission to to a higher level of care **from the ward** within 7 days of surgery? **Clinical Care Standard 7b**	1 – Yes 2 – No 3 – Unknown	This refers to within 7 days of the EL. This does not include escalation from an HDU to an ICU, or increased organ support within a combined critical care unit. **'Unplanned admission to critical care'** means admissions to a HDU or ICU following surgery, that were not planned and not documented before admission	

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
					to the ward. An unplanned admission to critical care is within 7 days of admission to the ward following surgery. **Clinical Care Standard 7b**	
PO3		Postoperative	Date at which the patient was moved from a ward to higher level of care within 7 days of surgery **Data required for Clinical Care Standard 7b**	[DD/MM/YYYY] Date not known	**Clinical Care Standard 7b**	
PO4		Post-operative	[conditional on PR1 = Yes] Clavien-Dindo complication grade score at any point during admission	1 – Grade I 2 – Grade II 3 – Grade IIIa 4 – Grade IIIb 5 – Grade IVa 6 – Grade IVb 7 – Grade V 8 – No complications		Not applicable
PO5		Postoperative	In relation to the initial emergency laparotomy within this admission did the patient have either an UNPLANNED or PLANNED return to theatre in the postoperative period?	1 – No 2 – Yes; unplanned return 3 – Yes; planned return 4 – Yes; planned and unplanned return 5 – Unknown		This field only applies if the planned/unplanned operation was after a previous EL. If the previous surgery was an elective operation then this was the EL.
PO6		Postoperative	Was the patient's initial emergency laparotomy performed at this hospital?	1 – Yes 2 – No 3 – Unknown		To drop down is the DS1A above 'Yes'.

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
PO7	7.4a		[conditional on PR1 = Yes] For an UNPLANNED return to theatre following an emergency laparotomy, what was the most significant reason for return?	1 – Anastomotic leak 2 – Abscess 3 – Bleeding or haematoma 4 – Decompression of abdominal compartment syndrome 5 – Bowel obstruction 6 – Abdominal wall dehiscence 7 – Accidental damage to bowel or another organ 8 – Stoma viability or retraction 9 – Other 10 – Unknown 11 – Not applicable	If the original EL was in another hospital, that hospital should have entered the EL data. If this was an EL for a complication of an EL in another hospital then a second form should be completed.	Field has been moved for flow. Drop down depending on answer to DS1A
PO8			For a PLANNED return to theatre following an emergency laparotomy, what was the most significant reason for return?	1 – Removal of packs 2 – Planned washout 3 – Closure of laparostomy 4 – Definitive surgery following for damage limitation EL 5 – Assess first operation (e.g. assess bowel viability) 6 – Other 7 – Unknown		Drop down depending on answer to DS1A
DS1		Discharge	Was the discharge summary sent to the patients' nominated primary care provider at the time of discharge from the hospital? **Clinical Care Standard 9b**	1 – Yes 2 – No 3 – Unknown	*Exclude patients who do not provide consent to share their discharge information. **'A nominated primary healthcare provider'** may be the patient's general practitioner, general practice or Aboriginal Medical Service. **Clinical Care Standard 9b**	

ANZELA Ref.	NELA Ref.	Data Group	Field name	Data Domain	General help for data entry	Notes for NZ only
DS2		Discharge	Status at discharge from hospital	1 – Alive 2 – Dead 3 – Still in hospital at 60 days after admission 4 – Unknown		
DS3	7.4	Discharge	[Conditional field. If DS1 = Alive then:] Date of discharge from hospital	[DD/MM/YYYY] Date not known		Taken from PIMS/IPMS
DS4a		Discharge	[Conditional field. If DS1 = Dead then:] Date of death	[DD/MM/YYYY] Date not known		Taken from PIMS/IPMS
DS4b			[Conditional field. If DS1 = Alive then:] Did the patient return to their pre-hospital residence?	1 – No 2 – Yes 3 – Unknown		
DS5	7.9	Discharge	[Conditional on DS2b= no] Discharge destination, if not returned to pre-hospital residence:	1 – Residential care 2 – Nursing home 3 – Rehabilitation facility (any) 4 – Other Public hospital for ongoing acute care 5 – Private hospital for ongoing acute care 6 – New destination 7 – Unknown		
DS6		Discharge	[Conditional on DS7 = new destination] If Place of discharge 'New destination' - specify	[free text]		