Australian Commission on **Safety and Quality** in Health Care

Clinical Care Standards

Emergency Laparotomy Clinical Care Standard

Information for healthcare services

About the *Emergency Laparotomy Clinical Care Standard*

This information sheet provides a brief guide to the *Emergency Laparotomy Clinical Care Standard* for health care service leaders and administrators to inform them of the policies, procedures, and organisational factors that can enable the delivery of high-quality care for emergency laparotomy.

The goal of the *Emergency Laparotomy Clinical Care Standard* is to drive high-quality and timely assessment, diagnosis and management of patients undergoing emergency laparotomy, and to optimise outcomes including survival, quality of life and functional independence. It also promotes good practice in decision making about treatment, consistent with the patient's preferences, values and goals of care.

The *Emergency Laparotomy Clinical Care Standard* contains:

- nine quality statements describing safe and appropriate care
- a set of indicators to support monitoring and quality improvement.

Monitoring the implementation of this Clinical Care Standard will help organisations to meet some of the requirements of the National Safety and Quality Health Service (NSQHS) Standards.

- See Fact sheet 11 for health service organisations and accrediting agencies: Applicability of Clinical Care Standards.

Quality statement 1. Rapid assessment and escalation

A patient with symptoms suggestive of a time-critical intra-abdominal condition – including infection, perforation, bleeding, obstruction or ischaemia – is rapidly assessed and escalated in line with local protocols. If clinical assessment or initial investigations indicate the patient may need an emergency laparotomy, they are promptly referred for surgical review. In critically ill patients, investigations include blood lactate measurement.

When sepsis is suspected, care is initiated urgently in accordance with the local sepsis pathway and the *Sepsis Clinical Care Standard*.

Implement protocols, procedures and pathways for patients presenting to an emergency care setting, or deteriorating on the ward, that support:

- rapid assessment and escalation of patients with symptoms suggestive of time-critical intra-abdominal conditions
- prompt referral for surgical review when assessment and/or investigations indicate a patient may need an emergency laparotomy
- appropriate investigations including blood lactate measurement for critically unwell patients being referred for surgical review (noting that pending results should not delay urgent referral or review).

Ensure that a sepsis pathway has been locally approved and implemented, and incorporates the essential elements described in the *Sepsis Clinical Care Standard*, such as:

- triggers and timeframes for escalation of care
- guidance on time-sensitive interventions such as
    - Fluid resuscitation and administration of appropriate antimicrobials
    - Source control, including urgent surgical referral when required
- involvement of clinicians with experience in recognising and managing sepsis.

Provide education and training on the time-critical nature of serious intra-abdominal pathologies and the importance of early sepsis recognition and management, including source control.

In services without access to investigations or suitable treatment for serious intra-abdominal conditions, ensure that protocols, procedures and pathways support urgent escalation, shared decision-making and transfer when appropriate. (See Box 2 for further considerations regarding potential patient transfer.)

Measure, review and address potential sources of delay for emergency surgery patients to support continuous quality improvement.

Indicator for local monitoring

Indicator 1a: Proportion of patients who had an emergency laparotomy whose blood lactate levels were available at first surgical review.

Box 1: Implementing the Standard in regional, rural and remote settings

It is acknowledged that hospitals in rural and regional Australia which provide emergency laparotomy care vary considerably in their capacity and capability to perform emergency surgery and provide perioperative care. For services in these settings, interpretation and application of the Clinical Care Standard must reflect local circumstances and prioritise the best interests of individual patients. These services are encouraged to consider how relevant quality statements can be implemented locally in line with the goals of the Clinical Care Standard and the purpose of the quality statement.

The Standard outlines priority components of care to improve processes and outcomes for all patients requiring emergency laparotomy, regardless of where they live. Its intent is not to prevent or discourage the provision of emergency laparotomy in rural and regional settings where a service is equipped and supported to do so, and where this is clinically appropriate. Many services in these settings have established processes and workforce arrangements to enable the delivery of high-quality emergency laparotomy, including systems for transferring high-risk patients, subject to appropriate risk-benefit analysis, to an appropriate location for treatment and/or postoperative critical care.

When considering implementation of the Clinical Care Standard in these settings, services may consider additional strategies, such as strengthening links with referral hospitals and retrieval services, the use of hub-and-spoke models linking larger and smaller health services, and the use of telehealth.

It is also acknowledged that some regional, rural and remote services that would not normally conduct emergency laparotomy surgery may need to provide aspects of care in exceptional circumstances.

Box 2: Transfer and the potential emergency laparotomy patient

For patients with acute abdominal symptoms who may require emergency laparotomy, transfers are a major source of risk, often delaying time-critical care and surgery. A transfer may be considered when access is required for:

- a CT scan or other diagnostic investigations
- surgery, including expertise appropriate to the patient's condition and risk
- critical care including postoperative admission for the high-risk patient.

In some cases, transfer may not be possible or appropriate, or may need to be deferred. The urgency of treatment or source control may necessitate that the emergency laparotomy be performed onsite, with transfer afterwards for further intervention and critical care. A risk-benefit analysis must consider factors such as the stability of the patient and urgency of their condition, the time involved in the earliest possible transfer (or retrieval), and the patient's goals, values and preferences.

When considering transfer

- Escalate decision-making about transfers to senior clinicians within the originating service. Seek advice and support for clinical decision-making, as needed, from the relevant tertiary or other receiving hospital, or retrieval service as appropriate. This should be a consultant-to-consultant peer discussion, and involve multidisciplinary input as needed. If there is no consultant at the originating service, involve the most senior clinician responsible for the patient.

- Assess the patient's risk (informed by their mortality risk score, if possible, in addition to comorbidities, frailty and clinical judgement) to help inform decision-making about transfer and pathways including the need for postoperative admission to critical care (see Quality statement 3).
- Discuss what is involved, and the risks and benefits of transfer, with the patient and their support people or substitute decision-makers to enable informed, shared decision-making. Discussions should include, as appropriate, the risk of experiencing serious complications, the possibility of losing independence or dying away from home, and the likelihood of admission to intensive care. Recognise that transfer may be inconsistent with some patients' goals, preferences or cultural needs; discuss alternative procedures or medical management options as appropriate, which may include palliative and supportive care (see Quality statement 4)
- When considering the appropriate transfer destination, aim to send the patient to a facility where they can access all diagnostic and treatment needs without further transfer. Give early consideration to the most appropriate hospital location for the patient's care following surgery or ICU, which may be their local hospital.

When a decision has been made to transfer a patient

Before transfer, ensure there is discussion between senior clinicians, ideally consultants, within the referring facility and receiving facility, and retrieval service if relevant. The referring and receiving facilities should document relevant discussions, decisions and care plans in the patient's healthcare record.

Ensure that goals of care and limitations on medical treatment have been discussed and are documented in the patient's transfer notes.

Rural and remote health services

While many transfers for emergency laparotomy occur between metropolitan hospitals, transfers from rural and remote facilities are common and further complicated by issues such as distance, time, transportation, loss of continuity of care, and separation from family and community support.

The networks and systems required to facilitate timely, appropriate care for patients in these settings are challenging, complex, diverse, and resource-intensive. Local processes and pathways – including strong connections with tertiary hospitals and retrieval services – are essential to support timely, patient-centred decision-making, coordinated transfer for patients who may need an emergency laparotomy, and appropriate interventions before and during transfer.

Related resources

Critically ill patient transport 2025 (ACEM, ANZCA, CICM)

Quality statement 2. Diagnostic imaging

A patient with symptoms suggestive of a time-critical intra-abdominal condition has a computed tomography (CT) scan as soon as possible, with intravenous contrast unless contraindicated. The radiologist verbally communicates critical findings to the referring or responsible clinician, within one hour of the scan being performed. Acquiring a CT scan should not delay very urgent surgery.

Implement policies, procedures and pathways for potential emergency laparotomy patients that ensure:

- timely and appropriate CT referral and imaging
- access to radiology advice on the appropriate imaging approach, when required
- appropriate communication of critical imaging results including timely, verbal communication of critical findings to the referring and/or responsible clinician, and discussion with the consultant surgeon as needed
- documentation of discussions about results, including who the results were discussed with
- timely availability of images to the referring and/or responsible clinician and continued access to radiology advice to discuss images when required.
- clarity regarding the local scope of practice and roles and responsibilities for radiologists reporting on emergency abdominal CT.

In services where radiology reporting is outsourced, ensure that service agreements support local policies and procedures. These include the timely provision of images and reports, and access to suitably experienced radiologists to advise on test selection if required and to communicate directly about imaging results for urgent surgical cases.

Monitor, review and address potential sources of delay related to imaging for patients undergoing emergency laparotomy to support continuous quality improvement.

In hospitals where CT is not available onsite, ensure that protocols, procedures and pathways support timely escalation, shared decision-making and patient transfer. (See Box 2 for considerations regarding transfer.)

Indicator for local monitoring

Indicator 2a: Proportion of patients who had an emergency laparotomy whose computed tomography scan results were verbally communicated by a radiologist to the referring or responsible clinician, within one hour of the scan being performed.

Quality statement 3. Assessment of risk

A patient being considered for an emergency laparotomy has their risk assessed and documented before surgery, using a locally endorsed, validated mortality risk prediction tool in addition to clinical judgement. In older patients, frailty, cognitive impairment and delirium are identified and documented preoperatively using brief, validated tools.

This information helps inform care pathways, interdisciplinary communication and discussions with patients and those supporting them.

Implement policies, protocols and procedures that ensure that for all patients being considered for emergency laparotomy there is:

- preoperative assessment and documentation of mortality risk using a locally endorsed risk prediction tool in addition to clinical judgement
- preoperative assessment and documentation of frailty, cognitive impairment and delirium for all patients aged 65 years and older – and on an individual basis for younger patients including for Aboriginal and Torres Strait Islander patients aged 45 years and older, and patients with complex healthcare needs
- consistent use of locally endorsed, appropriate tools which might include, for example, the NELA mortality risk calculator, Clinical Frailty Scale (CFS) and the 4AT for delirium
- a shared understanding of roles and responsibilities for conducting and documenting these assessments.

Ensure that the appropriate tools for local use have been agreed by clinicians and incorporated into policies and systems. Provide clinicians with targeted education and training on the use of the locally selected tools.

Where possible, embed risk tools in electronic medical record (EMR) systems to support their consistent use and facilitate ready access.

Ensure that consideration of risk is incorporated into relevant clinical processes and pathways including:

- shared decision-making discussions (about treatment and/or transfer)
- postoperative admission to critical care
- involvement of geriatricians and other appropriate physicians.

Indicators for local monitoring

Indicator 3a: Proportion of patients who had an emergency laparotomy whose risk was assessed using a validated mortality risk prediction tool and documented before surgery.

Indicator 3b: Proportion of patients aged 65 years or older who had an emergency laparotomy, whose frailty was assessed using a validated tool and documented before surgery.

Quality statement 4. Shared decision making and goals of care

When an emergency laparotomy is being considered, there is shared decision making about the patient's treatment plan with the patient and their family, support people or substitute decision-makers as appropriate. The patient's goals of care are discussed and documented before surgery, and updated throughout the perioperative period.

When surgery may be non-beneficial, senior doctors are involved in discussing the likely outcomes, benefits and risks of surgical and non-surgical approaches to support shared decision making.

Implement policies, protocols and procedures that support:

- shared decision-making with patients and their families and/or substitute decision-makers
- discussion and consistent documentation of goals of care and limitations on medical treatment before surgery – especially for older patients and younger complex patients – and re-evaluation of these throughout the perioperative period as required
- structured, shared decision-making involving senior clinicians, about proceeding with an emergency laparotomy when surgery may be non-beneficial
- access to, and appropriate enactment of advance care planning documents
- the use of a locally endorsed goals of care form and ready access to the completed form on patients' healthcare records.

Provide access to structured shared decision-making tools such as the BRAN methodology (Benefits, Risks, Alternatives, do Nothing), and information resources to support communication about treatment with patients and their substitute decision-makers.

Provide access to education and training for clinicians on goals of care discussions and shared decision-making strategies and skills, including communication skills to support sensitive, clear and direct discussions about risk and prognostic issues.

Define and communicate clinicians' roles and responsibilities in relation to shared decision-making and goals of care. Ensure this includes the requirement for senior clinicians to be involved in shared decision-making for patients where surgery may be non-beneficial.

Indicator for local monitoring

Indicator 4a: Proportion of patients aged 65 years or older who had an emergency laparotomy, whose goals of care discussion was documented using a locally endorsed form before surgery.

Quality statement 5. Timely access to surgery

A patient having an emergency laparotomy commences surgery within the timeframe specified by their assigned surgical urgency category.

In hospitals that perform emergency laparotomy the following recommendations apply.

- Consider the targeted strategies needed locally to optimise theatre utilisation and workforce capacity
- Ensure that theatre access and resourcing support timely surgery for patients requiring an emergency laparotomy in accordance with their clinical need and assigned surgical urgency category. Systems should support the prioritisation of critically ill patients for emergency surgery before patients receiving non-critical or elective surgery.
- Ensure that the local sepsis pathway facilitates the urgent surgical referral of patients who may require surgical source control of intra-abdominal sepsis
- Ensure that local escalation processes are in place to support decision-making and accountability to manage demand for theatre and conflicting surgical priorities
- Ensure that local pathways and processes are in place to support timely, patient-centred decision-making, and transfer for higher level care if required.
- Ensure systems and procedures facilitate capture of the date and time of the decision to operate in the patient's healthcare record
- Monitor the demand and timeliness of surgery for patients requiring an emergency laparotomy to inform continuous quality improvement and facilitate planning and appropriate resource allocation. Identify and address sources of delay at all stages of the patient journey.

In hospitals that do not perform emergency laparotomy, ensure that local systems and policies support time-critical decision-making and transfer as appropriate. (See Box 2 for further considerations in relation to transfer.)

Indicator for local monitoring

Indicator 5a: Proportion of patients who had an emergency laparotomy within the timeframe specified by their assigned surgical urgency category.

Quality statement 6. Presence of consultant doctors during surgery

A high-risk emergency laparotomy patient (mortality risk ≥5%) has a consultant surgeon and a consultant anaesthetist present in theatre during their surgery.

The absence of consultants from operating theatres in emergency general surgery is associated with increased patient morbidity and mortality, and increased length of stay.

Implement policies, procedures and rostering arrangements to support the following.

- Ensure a consultant surgeon and consultant anaesthetist are present in theatre for high-risk patients undergoing emergency laparotomy. These consultants should be physically present in theatre and free of other commitments. (See Box 3 for definitions of consultant surgeon and consultant anaesthetist.) Consultant surgeons on the general surgery on-call roster should have adequate experience in gastrointestinal surgery.
- Enable monitoring and review of how frequently consultant doctors are present during surgery, to facilitate quality improvement as appropriate.

In services where a consultant surgeon or consultant anaesthetist is not available locally, ensure arrangements are in place that:

- support escalation, shared decision-making and timely transfer or retrieval – subject to appropriate risk-benefit analysis – of the high-risk emergency laparotomy patient to a facility with a suitably experienced surgical team
- enable local clinicians including rural generalists to access virtual advice and support from senior clinicians at an appropriate tertiary centre to assist with decision-making about the appropriate location for surgery and arrangements for transfer and clinical management.

See Box 1 for discussion about implementing the Standard in regional, rural and remote settings, and Box 2 for further information about transfers.

Box 3: Defining ‘consultant’ for the Emergency Laparotomy Clinical Care Standard

There is some variability across Australia in the use of the terms ‘consultant surgeon’ and ‘consultant anaesthetist’. When they are used in this Standard, they should be considered, respectively, to mean the following.

- **Consultant surgeon**: 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.
- **Consultant anaesthetist**: 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 been appointed to a consultant, or equivalent senior position, by their healthcare service (or who has an equivalent scope of practice).

Indicators for local monitoring

Indicator 6a: Proportion of patients with a preoperative mortality risk ≥5% who had an emergency laparotomy, where a consultant surgeon was present in theatre during surgery.

Indicator 6b: Proportion of patients with a preoperative mortality risk ≥5% who had an emergency laparotomy, where a consultant anaesthetist was present in theatre during surgery.

Quality statement 7. Postoperative critical care

A patient's postoperative critical care needs are considered based on mortality risk, frailty, comorbidities and clinical judgement. A patient with a mortality risk ≥10% is discussed with a consultant intensivist for consideration of direct postoperative admission to critical care.

Implement protocols, procedures and pathways that:

- enable planned postoperative admission to critical care for high-risk patients based on mortality risk, frailty and comorbidities, and clinical judgement
- facilitate discussion with a consultant intensivist, ideally preoperatively, about the need for postoperative critical care – for all patients with a mortality risk ≥10%, and as needed on a case-by-case basis for patients with a mortality risk between 5 and 10%
- ensure documentation of the rationale for decisions not to admit high-risk patients to critical care, to facilitate review and interpretation of data for quality improvement
- facilitate appropriate monitoring of high risk patients not admitted to critical care following emergency laparotomy to ensure prompt recognition and escalation in the event of deterioration in accordance with the *National Safety and Quality Health Service (NSQHS) Standard for Recognising and Responding to Acute Deterioration*.

In services without critical care onsite, ensure that protocols, procedures and pathways facilitate timely shared decision making, and preoperative or postoperative transfer of the high-risk emergency laparotomy patient for critical care when this is in the best interests of the patient, and aligned with their goals of care. (See Box 2 for further considerations regarding transfer.)

Indicators for local monitoring

Indicator 7a: Proportion of patients with a preoperative mortality risk ≥10% who had an emergency laparotomy, with documentation that postoperative critical care was discussed with a consultant intensivist before surgery.

Indicator 7b: Proportion of patients who had an emergency laparotomy, who had an unplanned admission to critical care from the ward.

Quality statement 8. Proactive assessment and collaborative management of the older patient

An older patient who has an emergency laparotomy is proactively assessed and collaboratively managed by an appropriate physician, such as a geriatrician, skilled in the perioperative care of older adults. This assessment occurs as early as practicable and no later than 72 hours following presentation to hospital.

Local systems, pathways and protocols – tailored to service size and complexity, and the needs of the local patient population – should ensure:

- appropriate physicians are involved in the assessment and collaborative management of older patients undergoing emergency laparotomy – including all adult patients aged 65 years and older, and Aboriginal and Torres Strait Islander patients aged 45 years older who may be at increased risk and should be considered on an individual basis
- assessment occurs as early as practicable and no later than 72 hours following presentation to hospital (or as early as appropriate following step-down from postoperative critical care, or for patients having an emergency laparotomy following deterioration on the ward).

'Appropriate physicians' include geriatricians or general physicians, with expertise in the perioperative care of older adults. In regional, rural and remote services, this may include suitably skilled general practitioners or rural generalists, or in some cases appropriate physicians may be consulted remotely.

See Box 1 for discussion about implementing the Clinical Care Standard in regional, rural and remote areas.

To support the collaborative management of older emergency laparotomy patients, local systems, pathways and protocols should also enable:

- the proactive engagement of suitably skilled nursing, pharmacy and allied health professionals such as dietitians and physiotherapists as needed, including in the postoperative phase
- early discharge planning with multidisciplinary input as needed including from the patient's usual clinicians, and access to appropriate subacute and restorative care services
- education and training for clinicians, appropriate to their role, in the care of older surgical patients.

Examples of arrangements that support collaborative management of older patients include perioperative medicine teams and Perioperative Care of Older Persons undergoing Surgery (POPS) services.

Consider, and implement as appropriate, the systems and processes needed to support collaborative management of younger, complex patients who also need comprehensive assessment and co-management by an appropriate physician.

Indicators for local monitoring

Indicator 8a: Evidence of local arrangements that ensure older emergency laparotomy patients are proactively assessed and collaboratively managed by an appropriate physician skilled in the perioperative care of older adults.

The local arrangements should be tailored to service size and complexity and the needs of the local population and specify the processes to:

- Ensure older people who are undergoing emergency laparotomy are assessed by an appropriate physician within 72 hours of presentation to hospital
- Support involvement of appropriate physicians in the collaborative management of older emergency laparotomy patients
- Support implementation and monitoring of the local arrangements.

Indicator 8b: Proportion of patients aged 65 years or older who had an emergency laparotomy, who were assessed within 72 hours of hospital presentation by an appropriate physician.

Quality statement 9. Transition from hospital care

Before a person leaves hospital following an emergency laparotomy, an individualised care plan is developed describing their ongoing care needs. The plan addresses medicines, pain management, nutrition, wound care, and other services and supports needed to optimise recovery and reduce the risk of complications.

The written plan is provided to the patient and their support people before they leave hospital. At the time of discharge, the plan is communicated to the patient's general practice, and to clinicians and other care providers involved in their ongoing care.

Ensure that systems, protocols and procedures are in place to:

- facilitate multidisciplinary input into discharge planning as needed, particularly for older patients, patients with frailty and other patients with complex care needs
- support clinicians to develop an individualised care plan with patients before discharge, addressing the key considerations outlined in Box 4 as appropriate
- refer patients to the relevant services and supports as required
- consider the specific needs of patients who were transferred out of their local area for surgery and/or postoperative management, and who are returning home on discharge, or following a period of rehabilitation.

Ensure that clinical information systems support clinicians in providing the discharge summary and care plan to the patient, and communicating the content to their general practitioner, and other care providers (such as residential aged care facilities, or community aged care providers) at the time of discharge. Enable uploading of information by default to the patient's My Health Record to support appropriate sharing of information on the care provided in hospital and the patient's ongoing care needs.

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Box 4: Key considerations for inclusion in an individualised care plan on discharge

- Contact details of the treating team and other information about what to do if the patient becomes acutely unwell or has questions about their recovery
- Goals for recovery
- Information about medicines (including new or changed medicines) and ongoing pain management strategies
- Guidance on nutrition, wound care and mobilisation
- Guidance on managing comorbidities during recovery, and on managing persistent delirium if present; strategies to prevent complications such as those related to infection or venous thromboembolism
- Rehabilitation equipment needed and contact details for rehabilitation services including referral as required
- Advice on responding to mental health concerns such as anxiety and loss of confidence
- Advice about accessing restorative care and/or multidisciplinary community care if needed, for example through a hospital in the home program or a GP Chronic Condition Management Plan
- Follow-up appointments required, including with the patient's GP and rehabilitation services if relevant, and contact details for appropriate community supports
- For patients who have had sepsis, information on post-sepsis syndrome and available supports (see *Sepsis Clinical Care Standard*, Quality statement 7).

Indicators for local monitoring

Indicator 9a: Evidence of local arrangements for the development of a written individualised care plan for emergency laparotomy patients before discharge from hospital.

The local arrangements should specify the:

- process to involve the patient and their family or support people in development of the care plan
- process to ensure input from multidisciplinary team members in the development of the care plan, when needed
- information that should be documented in the patient's care plan
- process to ensure that the patient's care plan is provided to the patient and directly to their nominated general practitioner or other primary healthcare provider at the time of discharge from hospital, and to their other regular clinicians and care providers
- process for addressing the specific needs of patients who were transferred out of their local area for surgery or rehabilitation
- process to support implementation and monitoring of the local arrangements.

Indicator 9b: Proportion of patients who had an emergency laparotomy, whose discharge summary was sent to their nominated primary healthcare provider at the time of discharge from hospital.

Overall indicators for local monitoring

Indicator 10a: Proportion of patients who had an emergency laparotomy, who had an unplanned readmission to any hospital within 30 days of discharge.

Indicator 10b: Proportion of patients who had an emergency laparotomy who died within 30 days of their surgery.

Indicator 10c: Proportion of patients who had an emergency laparotomy who died within 90 days of their surgery.

For more information

Find out more about the *Emergency Laparotomy Clinical Care Standard* and other resources for consumers, clinicians and healthcare services.

Scan the QR code or see: safetyandquality.gov.au/el-ccs