

14 March 2022

Response to a request for official information

Thank you for your request for official information as transferred from the Ministry of Health and received 22 December 2021 by Nelson Marlborough Health (NMH)¹, followed by the necessary extension of time 10 February 2022 and notice of decision 10 March 2022, where you seek the following information:

1. What are the official Guidelines/procedures for urgent X-rays (24 hour)

NMH response: Please see the attached internal referrer's guideline for *Radiology*, and external referrer's guideline from the Nelson Marlborough *Health Pathways* site.

2. What are the Guidelines/procedures for patients repeatedly admitted to Emergency Department with severe epigastric pain/ and upper right and left quadrant pain

NMH response: Please see the attached NMH guideline *Overnight admissions by ED* (Emergency Department).

3. Guidelines/procedure for investigating possible Colonic Motility Dysfunction/Defecatory Disorders/Anorectal Dysfunction

NMH response: Such a specific case would be investigated by a Colorectal Surgeon and managed with specialist knowledge and experience rather than a protocolised treatment pathway.

This response has been provided under the Official Information Act 1982. You have the right to seek an investigation by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or free phone 0800 802 602. If you have any questions about this decision please feel free to email our OIA Coordinator OIArequest@nmdhb.govt.nz

¹ Nelson Marlborough District Health Board

I trust this information meets your requirements. NMH, like other agencies across the state sector, supports the open disclosure of information to assist the public's understanding of how we are delivering publicly-funded healthcare. This includes the proactive publication of anonymised Official Information Act responses on our website from 10 working days after they have been released. If you feel that there are good reasons why your response should not be made publicly available, we will be happy to consider.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Lexie O'Shea', with a stylized flourish at the end.

Lexie O'Shea
Chief Executive

ATTACHMENT 1: *Radiology guide, and Health Pathway* (1 page)
ATTACHMENT 2: *Overnight admissions by ED guideline* (4 pages)

INTERNAL REFERRERS GUIDE – Radiology

Explanation of waiting time categories and examples:

- **Stat or immediate:** Patients presenting with immediately life threatening conditions including those with compromise of A, B or C. These patients will typically be in emergency or inpatients. Examples of conditions fitting this category are: major trauma, AAA.
- **<4 hours:** Life threatening illnesses that may cause serious morbidity or mortality if not rapidly imaged. Examples of conditions fitting this category are: Suspected PE, suspected abscess or collection.
- **<24 hours - < 2 days:** Imaging (including same day if required) is needed urgently to support prompt diagnosis and treatment. In some cases access to timely imaging may avert the need for admission. Examples of conditions fitting this category are: suspected cord compression, PE, malignancy with possible organ or vessel compromise (e.g. SVCO), acute infection.

EXTERNAL REFERRERS GUIDE – Nelson Marlborough Health Pathways

Seen within 24 hours	<ul style="list-style-type: none"> • When chest X-ray supports immediate patient management and/or treatment in the community, and is crucial to avoid an acute Emergency Department presentation or hospital admission. • Community-acquired pneumonia (CAP). <p>Guidance for chest X-ray in CAP</p> <p>A chest X-ray in patients with an acute lower respiratory tract infection often does not change the management. If pneumonia is suspected clinically, use antibiotics.</p> <p>Consider chest X-ray if:</p> <ul style="list-style-type: none"> ○ the diagnosis is in doubt and a chest X-ray will help in diagnosis and management of the acute illness. ○ atypical presentation. ○ treatment failure. ○ the patient is considered at risk of underlying pathology such as lung cancer. <ul style="list-style-type: none"> • Deterioration after para-pneumonic pleural effusion. • Respiratory tract infection with possible left ventricular failure. • Suspected small pneumothorax.
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X-ray Hip Criteria	
Arrange acute assessment without investigation	<ul style="list-style-type: none"> • Suspected hip fracture – refer acutely to the Emergency Department • Suspected septic arthritis – admit under orthopaedics (adults) or paediatrics
Seen within 24 hours	<ul style="list-style-type: none"> • Suspected slipped upper femoral epiphysis

GENERAL SURGERY - NELSON

Guidelines for overnight admissions by ED RMOs

Assess the patient's stability following initial resuscitation –
 IV fluids to resuscitate (surgical patients are nearly always dry)
 Simple analgesia
 Anti-emetics

Consider the EWS and results of bloods and initial investigations.
 If the patient is stable then you should wait for all these results to be available prior to calling the surgical team to minimise repeated phone calls.

When should you always call the general surgery registrar overnight (between 11pm and 7am)

- ✓ Any patient you think may need IMCU or ICU admission
 Includes all with:

- SIRS = (2+ of the 4)
 - ✓ WCC <4 or >12 x10⁹/L
 - ✓ Heart rate >90bpm
 - ✓ Temp <36 or >38 °C
 - ✓ Resp Rate >20/min or PaCO₂ <32 mmHg

Or:

- qSOFA ≥ 2
 - ✓ Resp Rate ≥22
 - ✓ Change in Mental Status
 - Systolic BP ≤100mmHg

- ✓ Metabolic acidosis on ABG/VBG
- ✓ Patients on immunosuppressants (incl. prednisone) – they can be hard to assess and may be much sicker than they appear
- ✓ All paediatric surgery admissions <10 years old
- ✓ EWS >4 after appropriate IV fluids, pain relief and anti-emetics
- ✓ All Vascular admissions between Tuesday 8am – Wednesday 8am
 - Out of these hours ED should discuss with vascular surgery in Christchurch. If the advice given is to admit to Nelson or admit to Nelson overnight for transfer to Christchurch the following day, this must be discussed with the Nelson General Surgical SMO before admitting to the ward.
- ✓ **If you are unsure!**

The following gives a guide as to common conditions that may NOT need overnight discussion

Gallstones

- Unremitting biliary colic in patient with known or suspected gallstones
 - Admit if still requiring IV or opiate analgesia after a 2-4hr period of observation in ED. NBM and IV Fluids.
- Cholecystitis in a patient with known or suspected gallstones
 - Start IV antibiotics if there are signs of infection (fever or elevated WCC and/or CRP)
- **Caution with cholangitis** (elevated bilirubin + fevers + RUQ pain) – will often have signs of SIRS. Call the registrar if cholangitis is suspected.

Appendicitis

- Likely appendicitis – admit. NBM and IV Fluids.
 - Consider starting IV antibiotics only if patient has a fever $>38^{\circ}\text{C}$
- **Suspected appendicitis should not need CT imaging overnight** – if you think this is warranted because the patient is unwell the registrar should be called

Abscesses

- Subcutaneous abscess not over a joint (Orthopaedics) and not above the jugular notch (ENT) that cannot be drained in ED.
- NBM and IV Antibiotics

Diverticulitis

- Uncomplicated diverticulitis that is CT confirmed or suspected (previous admissions or known diverticulosis on scope/imaging)
 - Admit and start IV antibiotics. NBM and IV Fluids.
- CT scan is usually needed to confirm the diagnosis and rule out complicated diverticulitis (perforation, abscess). **If you think this is warranted overnight because the patient is unwell the registrar should be called**

Lower GI bleeding

- Haemodynamically normal patient with $\text{Hb} > 100$ and a Hb fall of less than 20g/L when compared to a recent test
 - Admit ensuring IV access, coags and G&H sent, a bowel chart and allow clear oral fluids.
- **If transfusion is necessary then the surgical registrar should be called.**
- Upper GI bleeding should be referred to general medicine

Bowel obstruction

- Adhesive small bowel obstruction (partial or complete) with no adverse features. There must be a history of previous abdominal surgery.
 - Always check hernial orifices – **irreducible hernia needs discussion**
 - NBM, IV fluids, should have plain films and an NG placed
 - **Caution if any adverse features are present:** peritonism, fever, significantly elevated WCC, CRP or acidosis – a closed loop obstruction with bowel compromise could be possible. This needs discussion and likely CT imaging overnight
- **Caution with volvulus**, these need discussion and likely attempt at decompression overnight as risk of colonic ischaemia

Pancreatitis

- Mild pancreatitis ((Modified Glasgow Criteria <3) –
 - admit for aggressive IVF resuscitation, measure urine output and broad analgesia options including prn opiates
- **Caution if Modified Glasgow Score ≥ 3 elderly or immunosuppressed or signs of any organ failure** – these patients can be sick and often require IMCU/ICU

Trauma

- Head injury with CT confirming no intracranial haemorrhage or C spine injury. GCS must be 14-15.
 - Admit with hourly Neuro Obs chart.
- Other minor trauma confirmed on CT scan requiring observation
- **Caution penetrating trauma usually requires discussion +/- imaging** as the injury can be more extensive than looks externally
 - If imaging prior to call, please place a radiopaque marker over the entry point
- The mechanism of injury is a key factor. Any trauma with a high energy cause should be discussed with the registrar. Generally falls from a standing height are not high energy. Fall ?cause should be discussed with medicine.

Undifferentiated abdominal pain

- If the patient is not unwell but cannot go home they can be admitted for analgesia, observation and further investigation in the morning
 - Consider treating for gastritis if upper abdominal pain and normal LFTs/lipase
 - If the patient is febrile $>38^{\circ}\text{C}$ send blood, urine (and consider stool) cultures. A single fever is unlikely to need IV antibiotics.
 - Ensure Urine +/- βhCG have been checked

Considerations for the admitting house surgeon

- Many patients will require further imaging or procedures the next morning, if so they should be kept NBM from 0200.

- Prophylactic dose Clexane and TEDS should be charted for all patients unless the presenting complaint is bleeding or they are already on anticoagulants (warfarin/dabigatran). Clexane can still be charted if they are on aspirin.

If you admit a patient to the ward without discussion overnight, please contact the general surgical registrar to handover around 7am.

The overnight admitting house officer will STILL need to be called to admit.

If they are concerned about the patient when they assess, they should call the general surgery registrar.

Appendices

Modified Glasgow Criteria for Pancreatitis

This is just one assessment system for pancreatitis.

40% of patients with three or more factors positive had severe disease whereas pancreatitis was severe in only 6% with less than three factors; in 77% of episodes the clinical course of the disease had been predicted correctly by the scoring system.

Age	>55
Albumin	<32mmol/L
Urea	>16mol/L
WCC	>15mmol/L
PaO2	<8kPA or < 60mmHg on air.
LDH	>600IU/L
Glucose	>10mmol/L
Calcium	<2.0mmol/L

Gut, 1984, 25, 1340-1346 Prognostic factors in acute pancreatitis S L BLAMEY, C W IMRIE, et al. University Department of Surgery and Division of Surgery, Royal Infirmary and University Department of Statistics, Glasgow

qSOFA

The Quick SOFA Score (quickSOFA or qSOFA) was introduced by the Sepsis-3 group in February 2016 as a simplified version of the SOFA Score as an initial way to identify patients at high risk for poor outcome with an infection.

Review: **Crit Care Med 2016 Mar;44(3):e113-21.**A Framework for the Development and Interpretation of Different Sepsis Definitions and Clinical Criteria.

<https://pubmed.ncbi.nlm.nih.gov/26901559>