CHOOSING WISELY

The Radiologists’ Journey

The Royal Australian and New Zealand College of Radiologists®
Wave 1

Launched March 2015
RANZCR (FCR) was one of 5 founding member organisations

Wave 2

Launched March 2016
RANZCR as an example

Wave 3 – soft launch

RANZCR (FRO) recommendations launched
DEVELOPING THE RANZCR LIST

Building on existing research
- RANZCR was completing a project on education around appropriate imaging using validated Clinical Decision Rules

Forming the Recommendations
- Working Party was formed
- Criteria for prioritisation determined
- Recommendations developed

Internal Consultation
- RANZCR Clinical Radiology Membership Consultation
- Faculty of Clinical Radiology Council Approval

External Consultation
- NPS MedicineWise facilitated teleconferences with stakeholders
- Liaising with other Choosing Wisely Partners including ACEM

Recommendations Finalised and Launched
RANZCR recommendations

Most organisations release 5 recommendations. Both RANZCR and ACEM launched 6 recommendations. Recommendations included 2 joint ones between the two Colleges so in total there were only ten individual recommendation across both at the launch.
# WAVE 1 RECOMMENDATIONS

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<th>Recommendation</th>
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<td>1</td>
<td>Don’t request imaging for acute ankle trauma unless indicated by the Ottawa Ankle Rules (localised bone tenderness or inability to weight-bear as defined in the Rules).</td>
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<tr>
<td>2</td>
<td>Don’t request duplex compression ultrasound for suspected lower limb deep venous thrombosis in ambulatory outpatients unless the Wells Score (deep venous thrombosis risk assessment score) is greater than 2, OR if less than 2, D dimer assay is positive.</td>
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<tr>
<td>3</td>
<td>Don’t request any diagnostic testing for suspected pulmonary embolism (PE) unless indicated by Wells Score (or Charlotte Rule) followed by PE Rule-out Criteria (in patients not pregnant). Low risk patients in whom diagnostic testing is indicated should have PE excluded by a negative D dimer, not imaging.</td>
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<td>4</td>
<td>Don’t perform imaging for patients with non-specific acute low back pain and no indicators of a serious cause for low back pain.</td>
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<td>5</td>
<td>Don’t request imaging of the cervical spine in trauma patients, unless indicated by a validated clinical decision rule.</td>
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<tr>
<td>6</td>
<td>Don’t request computed tomography (CT) head scans in patients with a head injury, unless indicated by a validated clinical decision rule.</td>
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Supporting Appropriate Imaging

RANZCR modules on Appropriate Imaging developed into a clinical decision support app

Click on the buttons below to launch the modules.

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<th>RANZCR: Appropriate Imaging Referrals</th>
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<td>Suspected Pulmonary Embolism</td>
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Welcome to RANZCR's Imaging Clinical Decision Rules app.

This is a point of care tool to support the implementation of lessons learned in the RANZCR’s Education Modules for Appropriate Imaging Referrals Project.

Swipe Right to open the menu and select a rule.
PECARN

Inclusion Criteria:
- Age <18 years
- Glasgow Coma Scale (GCS) 14 or 15
- Present to ED within 24 hours of head trauma

Exclusion Criteria:
- Trivial injury mechanisms: ground level falls, walking or running into stationary objects, no signs or symptoms of head trauma other than scalp abrasions and lacerations
- Penetrating trauma
- Known brain tumours
- Pre-existing neurological disorders
- Neuroimaging at an outside hospital before transfer
- Patients with ventricular shunts
- Bleeding disorders

A - for children younger than 2 years

GCS=14 or other signs of altered mental status, or palpable skull fracture

YES to ALL

CT Recommended

Observation versus CT on the basis of other clinical factors including:
- Physician experience
- Multiple versus isolated findings
- Worsening symptoms or signs after emergency department observation
- Age <3 months
- Parental preference

Explanatory Notes:

GCS = Glasgow Coma Scale.
ctIBI = clinically-important traumatic brain injury.
LOC = loss of consciousness.

*Data are from the combined derivation and validation populations.

Other signs of altered mental status: agitation, somnolence, repetitive questioning, or slow response to verbal communication.

Severe mechanism of injury:
- Motor vehicle crash with patient ejection, death of another passenger, or rollover;
- Pedestrian or bicyclist without helmet struck by a motorized vehicle;
- Falls of more than 0.9 m (3 feet) or more than 1.5 m (5 feet) for panel B;
- Head struck by a high-impact object.

$Patients with certain isolated findings (i.e., with no other findings suggestive of traumatic brain injury), such as isolated LOC, isolated headache, isolated vomiting, and certain types of isolated scalp haematomas in infants older than 3 months, have a risk of ctIBI substantially lower than 1%. Risk of ctIBI exceedingly low, generally lower than risk of CT-induced malignancies. Therefore, CT scans are not indicated for most patients in this group.

B - for those aged 2 years and older with GCS scores of 14–15 after head trauma

GCS=14 or other signs of altered mental status, or signs of basilar skull fracture

History of LOC, or history of vomiting, or severe mechanism of injury, or severe headache

YES

CT Recommended

Observation versus CT on the basis of other clinical factors including:
- Physician experience
- Multiple versus isolated findings
- Worsening symptoms or signs after emergency department observation
- Parental preference

NO

CT NOT Recommended

58.3% of population (0.005% risk of ctIBI)

53.3% of population (0.02% risk of ctIBI)

4.4% of population (0.4% risk of ctIBI)

27.7% of population (0.9% risk of ctIBI)

14.0% of population (4.9% risk of ctIBI)

32.0% of population (4.6% risk of ctIBI)

53.3% of population (0.005% risk of ctIBI)

53.3% of population (0.02% risk of ctIBI)

14.0% of population (4.9% risk of ctIBI)

27.7% of population (0.9% risk of ctIBI)

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PARTNERING INSTITUTIONS

• Monash University
• University of NSW
• University of Sydney
• Health Education Australia
• Monash Health
• Australasian College for Emergency Medicine
• Australian Physiotherapy Association
• Calvary Hospital (ACT)
• Griffith University (Qld)
• Health Education and Training Institute (NSW)

• Metro North (Royal Brisbane and Women’s Hospital)
• Rural Health Continuing Education Scheme
• University of Newcastle (NSW)
• University of Queensland (Qld)
• Gold Coast Hospital and Health Service
• Central Adelaide Local Health District
• Royal New Zealand College of General Practitioners