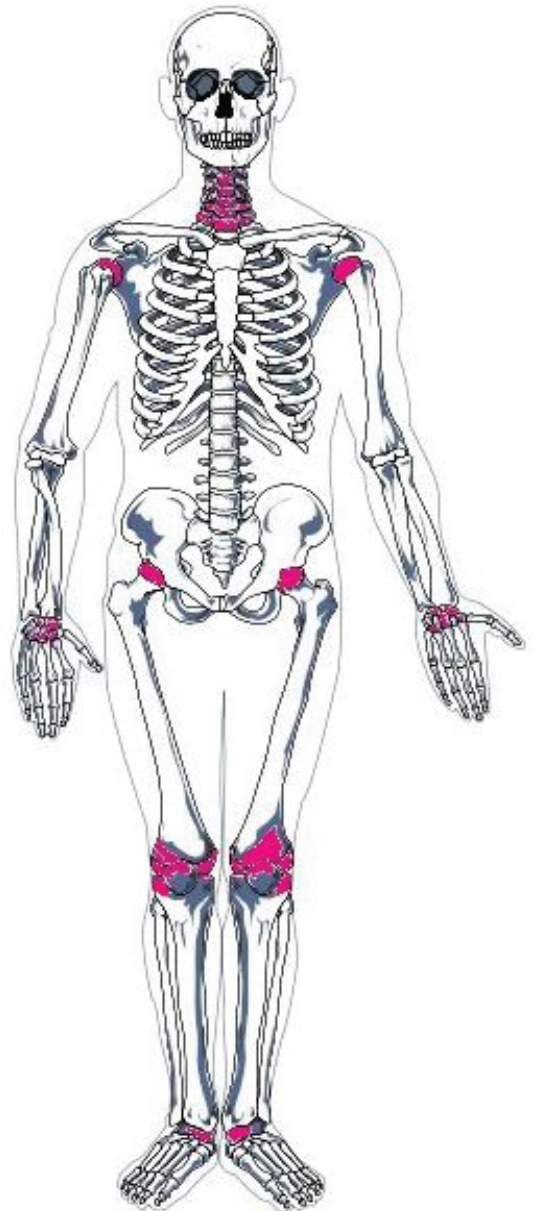




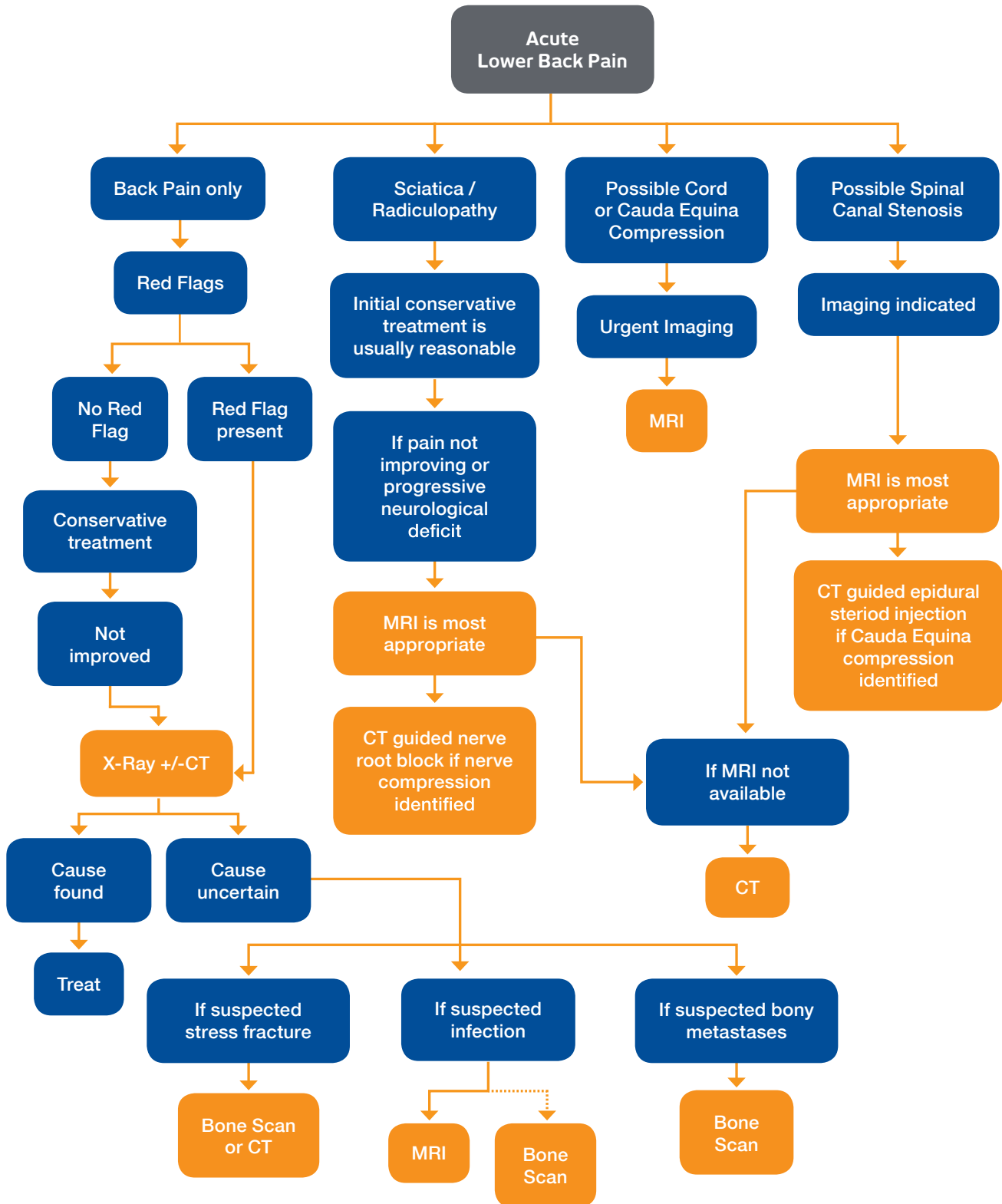
I-MED Radiology Network

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Which Scan
do I request?



Musculoskeletal: Acute Lower Back Pain



Red Flags

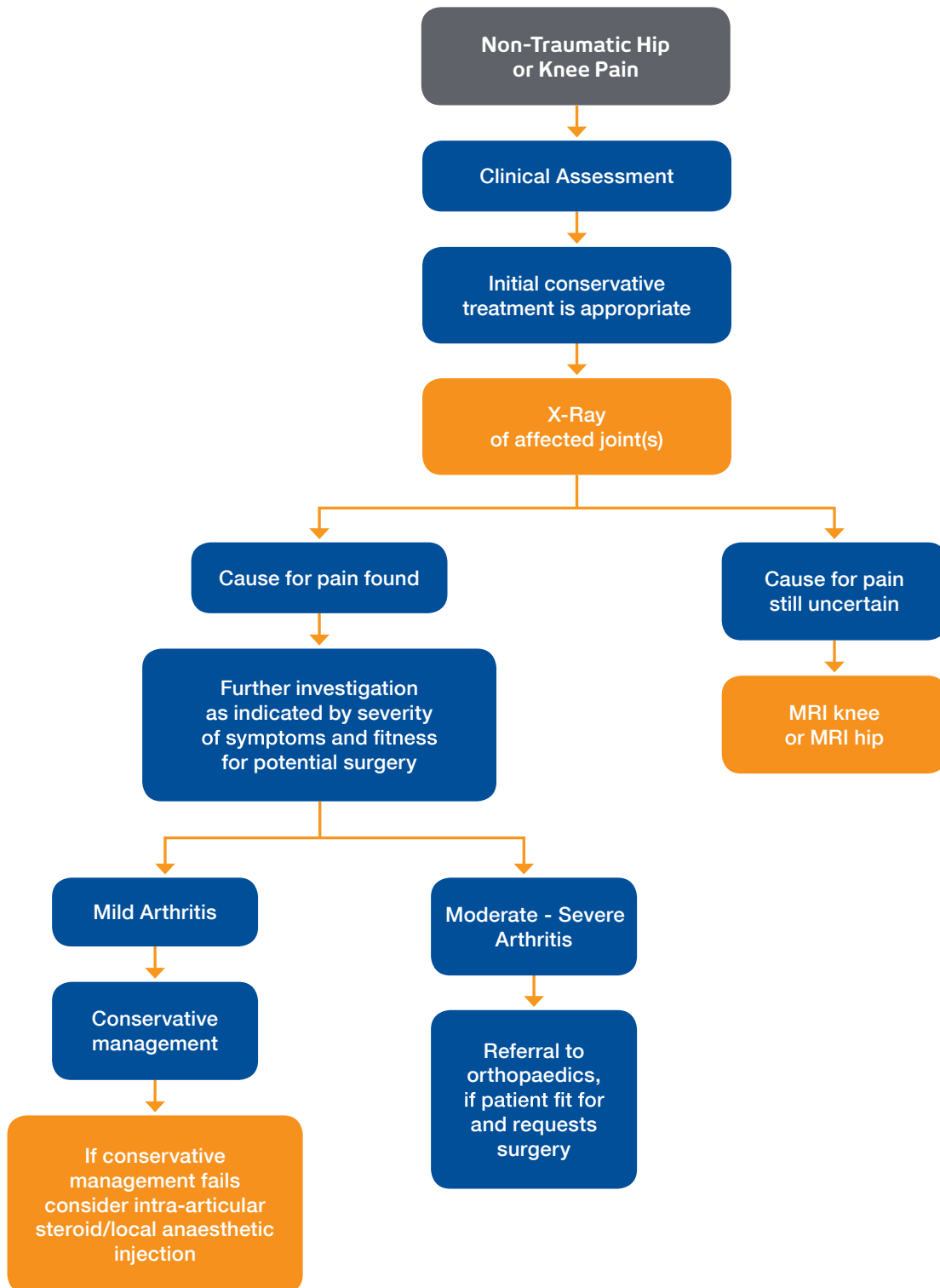
- Age of onset < 20 years or > 55 years
- Recent history of violent trauma
- Constant progressive, non mechanical pain (no relief with bed rest)
- Thoracic pain
- Past medical history of malignant tumour
- Prolonged use of corticosteroids
- Drug/alcohol abuse, immunosuppression, HIV
- Systemically unwell
- Unexplained weight loss
- Widespread neurological symptoms (including cauda equina syndrome)
- Structural deformity
- Fever



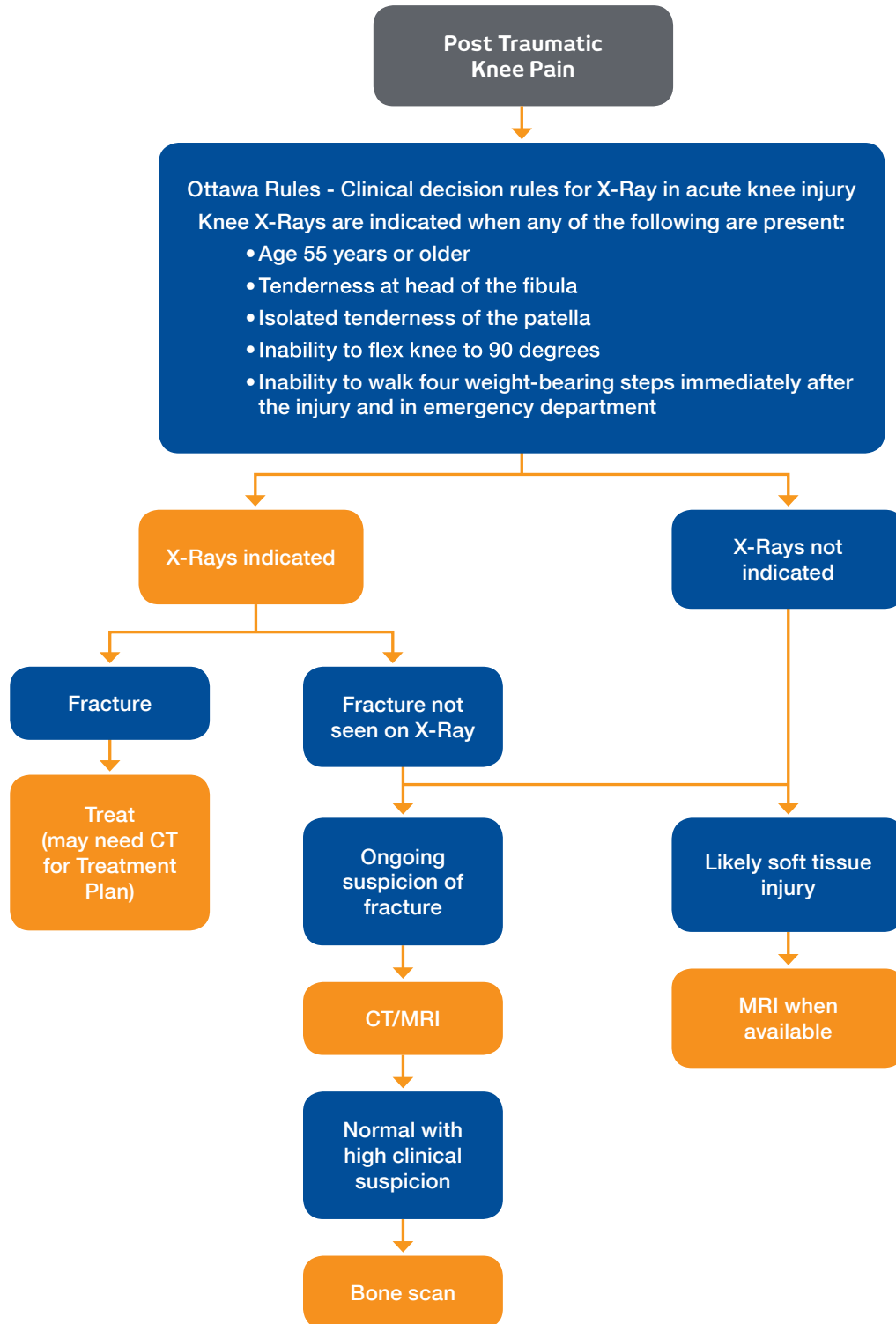
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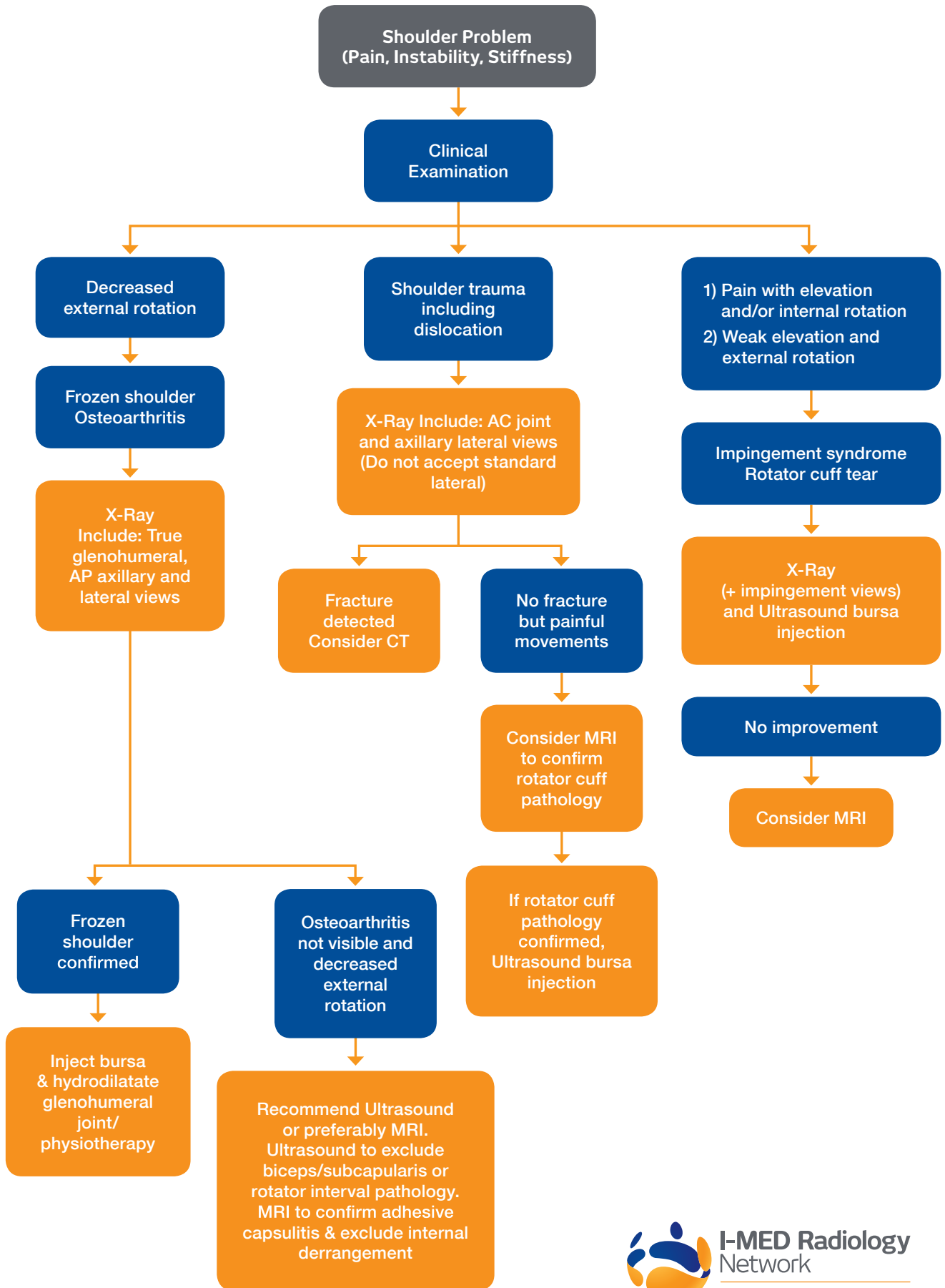
Musculoskeletal: Non Traumatic Hip or Knee Pain



Musculoskeletal: Post Traumatic Knee Pain



Musculoskeletal: Shoulder Problems



Musculoskeletal: Ultrasound Medicare Rebate Guide

Medicare has restricted rebates for shoulder and knee ultrasound. A Medicare rebate is claimable only when one or more of the following clinical indicators is applicable and noted on the referral.

Shoulder Ultrasound

- Evaluation of injury to tendon, muscle or muscle tendon junction
- Rotator (biceps, subscapular, supraspinatus, infraspinatus)
- Biceps subluxation
- Capsulitis and bursitis
- Evaluation of mass including ganglion
- Occult fracture
- Acromioclavicular joint pathology

Knee Ultrasound

- Abnormality of tendons or bursae about the knee
- Meniscal cyst, popliteal fossa cysts, mass or pseudomass
- Nerve entrapment, nerve or nerve sheath tumour
- Injury of collateral ligaments

NB Non specific pain alone is not an accepted Medicare indication.

Possible Cervical Spine Injury

*ACR and EAST guidelines recommend CT spine for all patients where available. RCR and NICE guidelines recommend radiography for lower risk patients

Possible Cervical Spine Injury

Canadian C-Spine Rule

Any high-risk factor that mandates radiography?
Age ≥ 65yr or dangerous mechanism or paraesthesia in extremities

Any low-risk factor that allows safe assessment of range of motion?
Simple rear-end motor vehicle collision or sitting position in ED or ambulatory at any time or delayed (not immediate) onset of neck pain or absence of midline cervical tenderness

Able to rotate neck actively?
45° left and right

No imaging of C-spine needed

Rule not applicable if:
Non-trauma case or GCS <15 or unstable vital signs or age <16 years or acute paralysis or known vertebral disease or previous C spine surgery

NEXUS criteria
Any of the following criteria?

- Posterior midline cervical tenderness
- Evidence of intoxication
- Reduced level of consciousness
- Focal neurological deficit
- Painful distracting injuries

Other conditions requiring CT-Neck

- Transient neurology
- Rheumatoid arthritis
- Ankylosing spondylitis

Imaging required*

Are any of the following present?

- GCS score ≤ 13
- Intubated patients
- Concurrent CT of head or other region required
- Neurologic deficit
- Previous cervical spine surgery
- High risk on Harborview criteria

YES
NO
UNABLE

No

Yes

Decision of CT versus radiography depends on local practice

3-view radiography +/- oblique views

Plain films abnormal or inadequate

CT-Cervical Spine with sagittal coronal reformatted images

Suspected blunt cerebrovascular injury?

Normal

Appropriate management depending on findings

Add on CTA

Examination of cervical spine

Neurological deficit or suspicion of ligament injury or neurological deficit

Go to Suspected Blunt Cerebrovascular Trauma Pathway

Ongoing suspicion of cervical spine injury

No ongoing suspicion of cervical spine injury

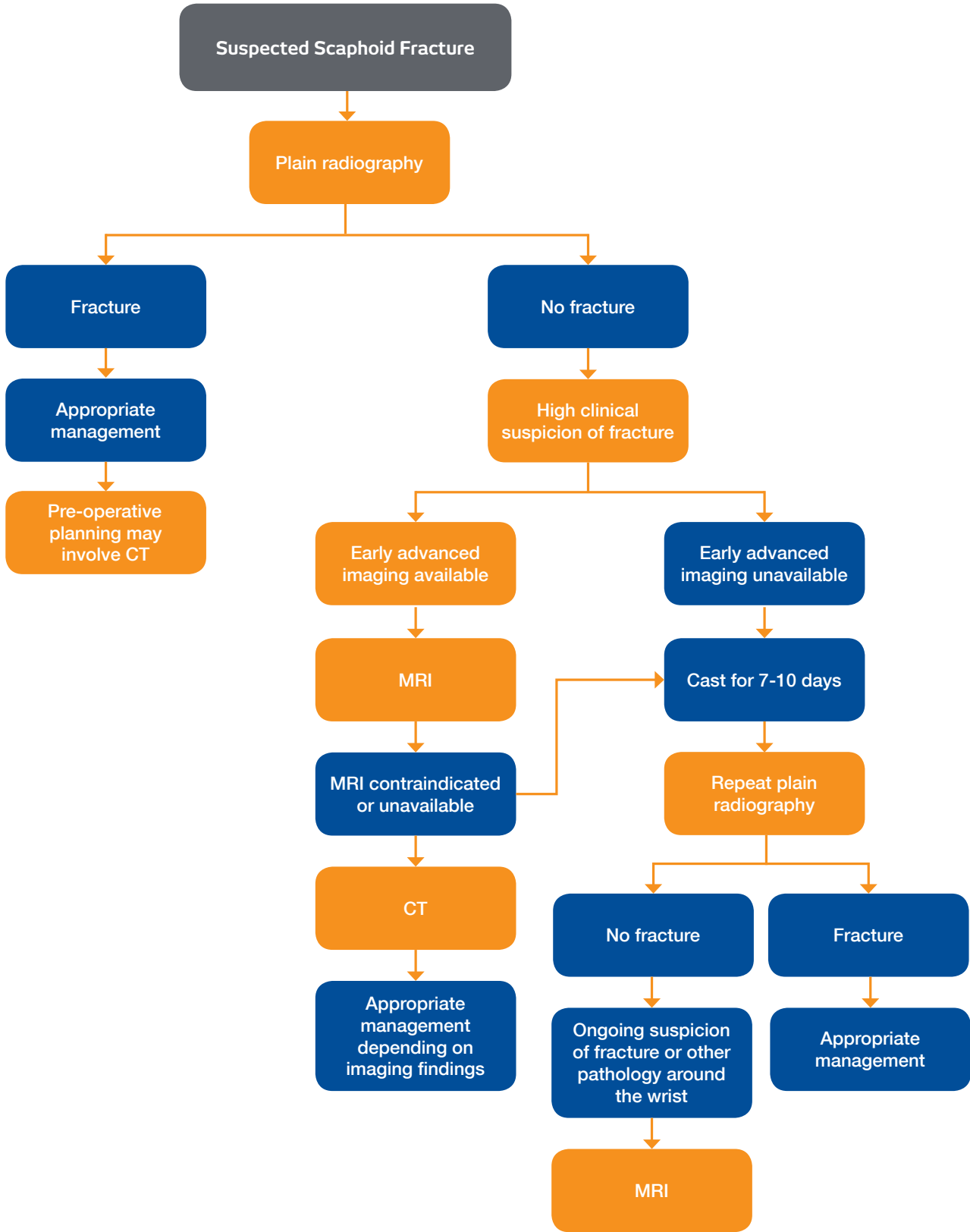
MRI

CT

Clinical follow-up

Source: Government of Western Australia, Department of Health Diagnostic Imaging Pathways endorsed by RANZCR and RACGP. Date Reviewed August 2013 Please note these pathways are subject to review and revision.

Suspected Scaphoid Fracture



Source: Government of Western Australia, Department of Health Diagnostic Imaging Pathways endorsed by RANZCR and RACGP. Date Reviewed August 2013 Please note these pathways are subject to review and revision.



Ankle

Acute Injury

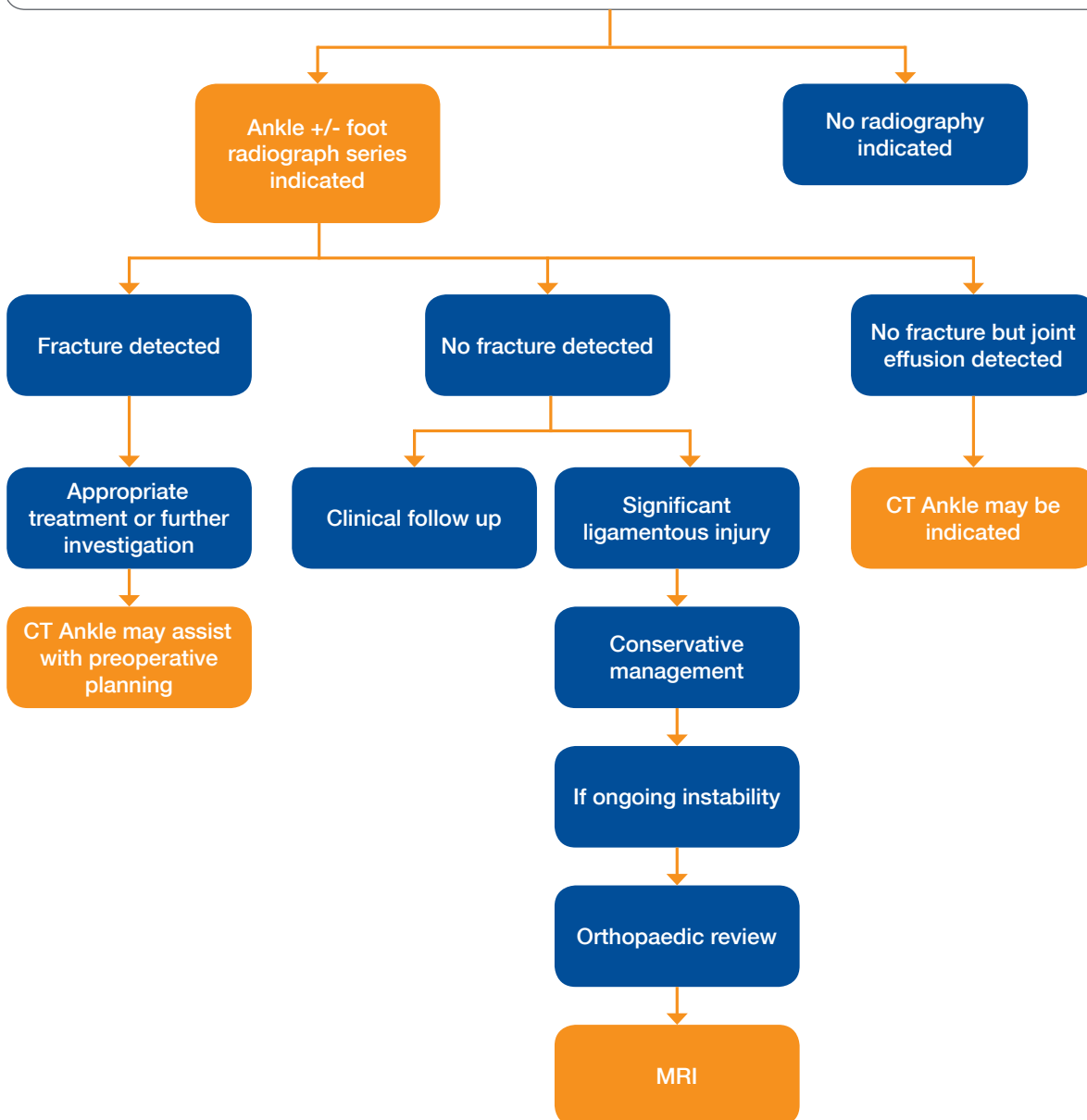
Application of Ottawa Rules

Ankle radiograph series is indicated if there is pain near either of the malleoli AND either of the following findings:

- Inability to weight bear both immediately and in the emergency department (4 steps)
- Bone tenderness at the posterior edge or tip of either malleolus

Foot radiograph series is indicated if there is pain in the midfoot AND either of the following findings:

- Inability to weight bear both immediately and in the emergency department (4 steps)
- Bone tenderness at the navicular or the base of the 5th metatarsal



Temporomandibular Joint (TMJ) Disorder

