Clinical pathways never replace clinical judgement
Care outlined in this clinical pathway must be altered if it is not clinically appropriate for the individual patient

This pathway is designed to support clinicians recognise and manage suspected Acute Rheumatic Fever (ARF) in adult and paediatric patients presenting to the Emergency Department. For use in conjunction with Q-ADDS/CEWT/MEWT and other relevant diagnostic tools/paths

Every person documenting in this clinical pathway must supply a sample of their signature (page 2)

**Screen**

- Presents with any one or more recent or current clinical symptoms:
  - Sore throat
  - Fever
  - Skin sores
  - Painful and/or swollen joint(s)
  - Chorea
  - Erythema marginatum
  - Malaise
  - Well patient under 30 years referred with newly detected murmur and/or ECG changes

- AND

- Patient is from any one or more high-risk groups for ARF/Rheumatic Heart Disease (RHD):
  - Aboriginal and Torres Strait Islander/Pacific Islander/Maori
  - Lives in rural and remote community or metropolitan area with household overcrowding and/or low socio-economic status
  - Previous diagnosis of ARF or RHD
  - Confirm in Queensland RHD register:
    - Yes
    - No

- Consider other groups at risk of ARF/RHD:
  - Age 5–30 years
  - Prior residence in high ARF risk setting
  - Frequent/recent travel to a high risk ARF setting
  - Family or household history of ARF/RHD
  - Migrant or refugee from low socio-economic origin

**Assessment**

- Major criteria (tick all that apply):
  - Carditis (including abnormal echo)
  - Aseptic mono-arthritis, polyarthralgia or polyarthritis
  - Chorea
  - Erythema marginatum
  - Subcutaneous nodules

- Minor criteria (tick all that apply):
  - Monoarthralgia
  - Fever
  - ESR >30mm/hr or CRP >30mg/L
  - Prolonged PR on ECG
    - 3–12 years >0.16 sec
    - 12–16 years >0.18 sec
    - 17+ years >0.20 sec

- Suspect ARF if patient presents with evidence of a preceding GAS infection AND any (minimum) of:
  - Two major criteria
  - One major and two minor criteria
  - Three minor criteria + known ARF/RHD

- If ARF remains likely diagnosis but does not meet criteria by either:
  - One major or one minor manifestation
  - No evidence of preceding GAS infection

- Diagnose as Probable ARF or Possible ARF

- If NO major AND two or less minor criteria, ARF is unlikely. Consider alternative diagnosis (based on presenting clinical symptoms):
  - Joint aspiration M/C/S – for adults with possible septic arthritis (not appropriate for paediatric patients)
  - Copper, ceruloplasmin, antinuclear antibody, drug screen – for choreiform movements
  - Serology and autoimmune markers for arboviral, autoimmune or reactive arthritis

**Mandatory investigations (in ED or by admitting team as per local practice):**

- ECG
- WBC
- ESR
- CRP
- Chest x-ray
- Echocardiogram
- Blood cultures (if febrile)
- Test for sexually transmitted infection
- Antistreptolysin Titer (ASOT)
- Throat swab M/C/S – Group A Streptococcal (GAS)
- Anti DNAse B Titres
- Wound swab (if applicable)

Follow Suspected ARF management pathway (page 2)
Suspected Acute Rheumatic Fever Clinical Pathway

Management

☐ Repeat ECG
☐ ECHO (if not previously done)
☐ Analgesia for symptom relief

Admit ALL patients with suspected initial or recurrent episode of ARF to complete diagnostic investigations, treatment and education:
☐ If clinically unwell and/or presents with severe symptoms, consider transfer to Tertiary facility*
☐ Facilities without available diagnostic testing equipment (e.g. Echocardiography) refer and transfer patient to nearest appropriate facility*
☐ Refer to specialist service as appropriate for your HHS*

☐ Complete notification form for all patients with suspected or confirmed ARF or RHD


Patients with suspected or confirmed ARF should be managed according to the RHD Australia 2020 Guidelines.

For further information:
Download ARF/RHD Australia Diagnosis Calculator Application
www.rhdaustralia.org.au/apps

OR see RHD Australia 2020 Guidelines
www.rhdaustralia.org.au/arf-rhd-guideline

*follow local referral and/or transfer processes

Signature Log
Every person documenting in this pathway must supply a sample of their initials and signature below

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