Common Challenges in Primary Care: Rheumatology Case Management

Thursday 27/11/25
The Education Centre, TPCH

phn BRISBANE NORTH
An Australian Government Initiative

Queensland Government
Metro North Health

Metro North Hospital and Health Service and Brisbane North PHN respectfully acknowledge the Traditional Owners of the land on which our services and events are located. We pay our respects to all Elders past, present and future and acknowledge Aboriginal and Torres Strait Islander people across the State.

AGENDA

6:00pm **Registration, Networking and Dinner**

6:30pm **Welcome Address**

Dr James Martin | GP Liaison Officer, Metro North Health and Brisbane North PHN

6:45pm **Early recognition of rheumatology conditions and next steps**

Dr Veera Srividya Katikireddi | Rheumatologist, The Prince Charles Hospital

7:30pm **Request for advice – case studies**

Dr James Martin | GP Liaison Officer, Metro North Health and Brisbane North PHN

Dr Laurel Young | Staff Specialist, Rheumatology, Redcliffe Hospital

8:30pm **Evaluation & Close**

Dr James Martin | GP Liaison Officer, Metro North Health and Brisbane North PHN

Slides & resources

Queensland Government

Contact us | Newsroom | Events | Resize font | Print

Metro North Health

Search...

Refer your patient | Hospitals & services | Health professionals | Research | Get involved | Careers | About us

Home / Refer your patient / GP and primary care education & events / GP and primary care education

GP and primary care education

Presentations and further resources from past education events

- Caboolture Hospital education
- Cardiology
- Championing Generalism Workshop (updated 2025)
- Diabetes
- Gastroenterology and Hepatology
- Gender Services
- Genetics
- Gynaecology (updated 2024)
- Haematology and Oncology
- Heart Failure
- Immunology & ENT (updated 2024)
- Kidney Health
- Maternity (updated 2025)
- Men's Health (updated 2024)
- Mental Health (updated 2024)
- Neurology
- Orthopaedics (updated 2024)
- Paediatric
- Persistent Pain Management
- Respiratory
- Rheumatology
- Sexual Health
- Skin Cancer (updated 2024)
- Spinal health
- Surgery
- Urology

Contact

Email: MNGPLO@health.qld.gov.au

Refer a patient

Access the referral guidelines to refer a patient.

Call the GP hotline for enquiries about referring on **1300 364 938**

General Practice Liaison Officer Program

0499 112 282

MetroNorthGPLO@health.qld.gov.au

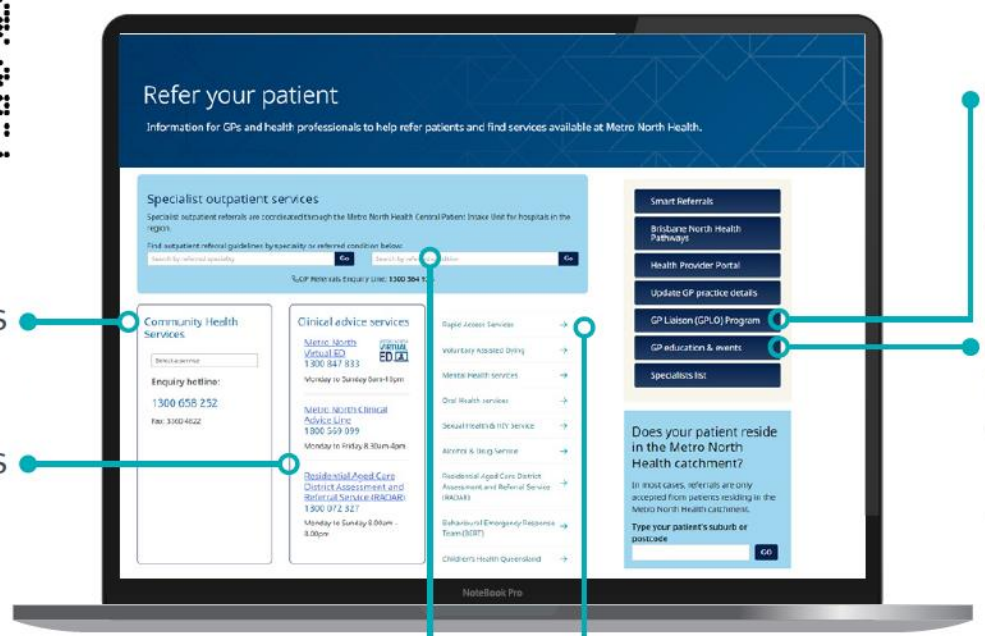
phn BRISBANE NORTH
An Australian Government Initiative

Queensland Government
Metro North Health

Refer Your Patient

is your one stop shop for Metro North Health service information and updates.

Scan the QRcode to Refer Your Patient.



Community Health Services

Clinical advice services and ED alternatives

Referral Guidelines

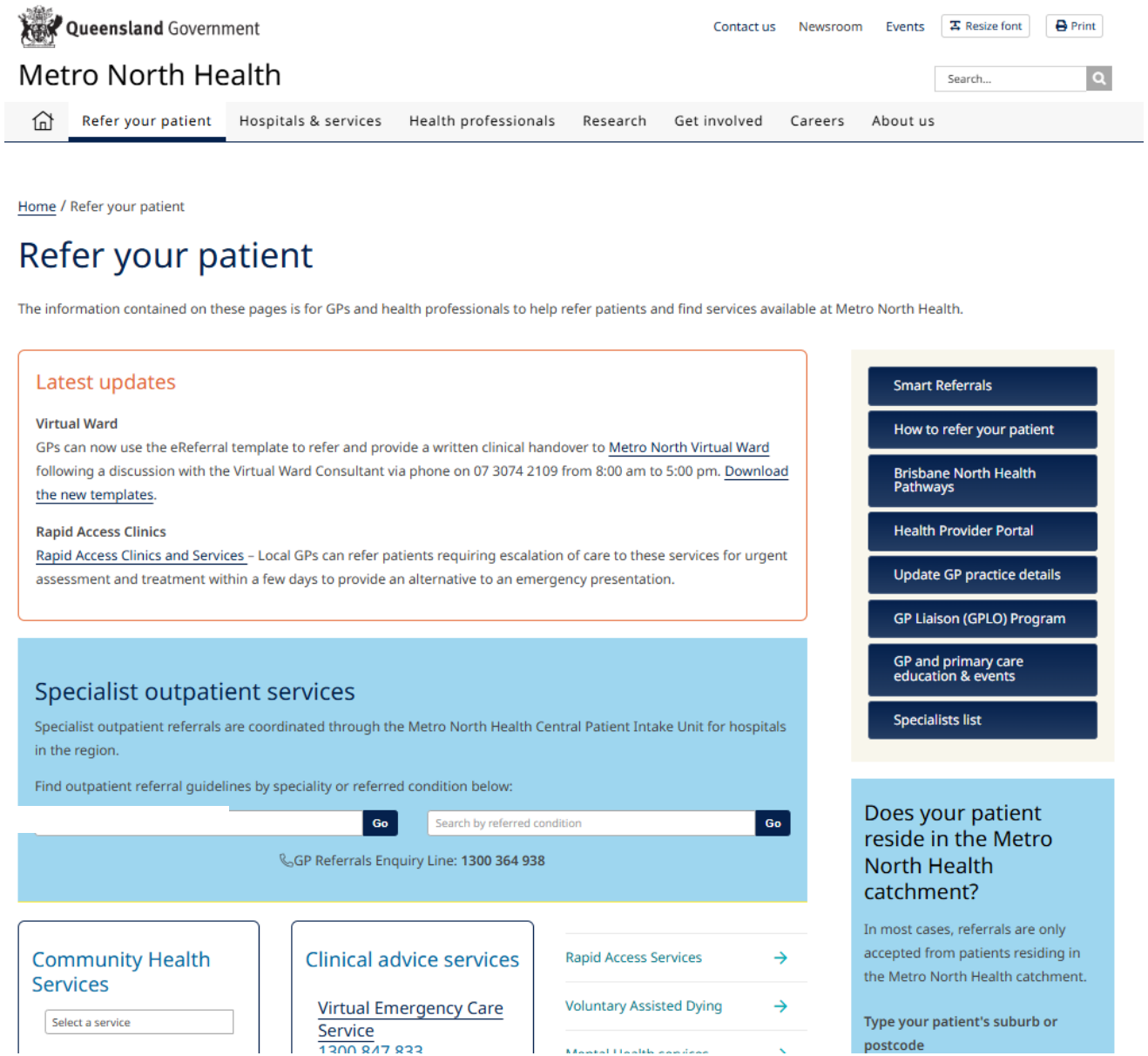
Rapid Access Clinics and Services

GP Liaison Officer Program including:

- contact information
- GP resources

GP Education & events including:

- upcoming GP education events
- Presentations, recordings and resources from past education events


Queensland Government
Contact us
Newsroom
Events
Resize font
Print
Metro North Health
Search...
Refer your patient
Hospitals & services
Health professionals
Research
Get involved
Careers
About us
Home / Refer your patient
Refer your patient
The information contained on these pages is for GPs and health professionals to help refer patients and find services available at Metro North Health.
Latest updates
Virtual Ward
GPs can now use the eReferral template to refer and provide a written clinical handover to Metro North Virtual Ward following a discussion with the Virtual Ward Consultant via phone on 07 3074 2109 from 8:00 am to 5:00 pm. Download the new templates.
Rapid Access Clinics
Rapid Access Clinics and Services – Local GPs can refer patients requiring escalation of care to these services for urgent assessment and treatment within a few days to provide an alternative to an emergency presentation.
Specialist outpatient services
Specialist outpatient referrals are coordinated through the Metro North Health Central Patient Intake Unit for hospitals in the region.
Find outpatient referral guidelines by speciality or referred condition below:
Go
Search by referred condition
Go
GP Referrals Enquiry Line: 1300 364 938
Smart Referrals
How to refer your patient
Brisbane North Health Pathways
Health Provider Portal
Update GP practice details
GP Liaison (GPLO) Program
GP and primary care education & events
Specialists list
Does your patient reside in the Metro North Health catchment?
In most cases, referrals are only accepted from patients residing in the Metro North Health catchment.
Type your patient's suburb or postcode
Community Health Services
Select a service
Clinical advice services
Virtual Emergency Care Service
1300 847 833
Rapid Access Services
Voluntary Assisted Dying

Community HealthPathways

Brisbane North HEALTHPATHWAYS

Access to Brisbane North HealthPathways has changed

Previously
Generic login
(Username: Brisbane, Password: North)

From 18 Nov 25
Users have to create a personal account

New features
- AI-powered Smart Search
- CPD reporting tool

Virtual Emergency Care

Queensland Virtual Hospital
Virtual Emergency Care Service

Clinician service

Open: 7 days
(8am-10pm Monday to Sunday)

Queensland Virtual Hospital – Virtual Emergency Care Service offers alternative pathways that can help avoid your patient waiting in an Emergency Department.

Queensland Health has developed the Virtual Emergency Care Service service to provide primary healthcare providers with access to specialist emergency medicine advice, by telephone or video conferencing with one of our senior FACEM's.

It is a safe, fast and efficient way for you to consult with an emergency physician and use real-time technology to align treatment and ongoing services for your patient.

Virtual Ward

Virtual Ward

The Virtual Ward provides hospital-level care to people in their place of residence.

Welcome to the Metro North Health Virtual Ward

You've been referred to this service based on your medical history and symptoms. This website will outline what to expect during your admission to the virtual ward and what to do next.

A Metro North Virtual Ward clinician will call you on the number you provided within 24 hours of your admission to the virtual ward.

Healthcare coordination
for people with long term medical conditions.

TEAM® CARE COORDINATION

Team Care Coordination is a free service delivered by clinical nurses who work with patients to:

- provide disease, health and community service information
- coordinate health, community and social support services, including My Aged Care and NDIS navigation support
- support the communication between patients, service providers and health professionals.

How GPs refer

- gain patient's verbal consent
- send completed referral and health summary to Team Care Coordination by either:
  - eReferral: via Medical Objects to teamcare (MM4030000FT)
  - Fax: secure fax to 07 3630 7808

Eligibility

Patients are eligible if they:

- have at least one or more chronic complex medical condition
- live in the Metro North catchment
- are not living in a residential aged care facility
- are not receiving other comprehensive support packages or end of life palliative care services.

eReferral templates can be imported from www.brisbanenorthphn.org.au

phn BRISBANE NORTH
An Australian Government Initiative

For more information phone **1800 250 502**
www.brisbanenorthphn.org.au

Team Care Coordination is managed by Brisbane North PHN and is supported financially by Metro North Hospital and Health Service

TEAM® CARE COORDINATION

The Team Care Coordination program is a free service for people over the age of 18 with complex and chronic health conditions. It supports people to remain living at home by improving their self-management and quality of life.

The service is delivered by clinical nurses and allied health that can offer health education and coordination of health and community services. Our team will:

- conduct a face-to-face in-home visit, telehealth, or phone consultation to understand your needs and goals
- offer ongoing support and contact for up to three months, with the possibility of extension if needed
- focus on improving quality of life and self-management.

Queensland Government

Contact us Research Newsroom Support us Resize font Prir

Community and Oral Health
Metro North Health

Search...

Home Healthcare services Locations Health professionals Careers About us

Home / Healthcare Services / Rapid Access to Community Care (RACC)

Rapid Access to Community Care (RACC)

Rapid Access to Community Care (RACC) is a multidisciplinary service (Clinical Nurse and Occupational Therapists) that provides assessment and care for people following a fall at home, or with an exacerbation of a chronic condition, illness or injury, or an inability to physically and/or cognitively manage in their own residence that does not require acute medical attention. The service is an alternative to hospital presentation for people requiring community-based support and can assist to optimise care options and services, particularly for older people without the need for any hospital interaction.

RACC accept direct clinician to clinician referrals via phone primarily from GPs and Queensland Ambulance Service for adult patients requiring rapid community assessment and linkage to established community support. Electronic referrals are also accepted.

Contact us

Phone: 1300 220 922 (clinicians only)
Open: Referrals accepted Monday- Friday 0900-1700

Need help outside hours?

For non-urgent medical issues call MN Virtual ED 1300 847 833

Queensland Government

Contact us Newsroom

Metro North Health

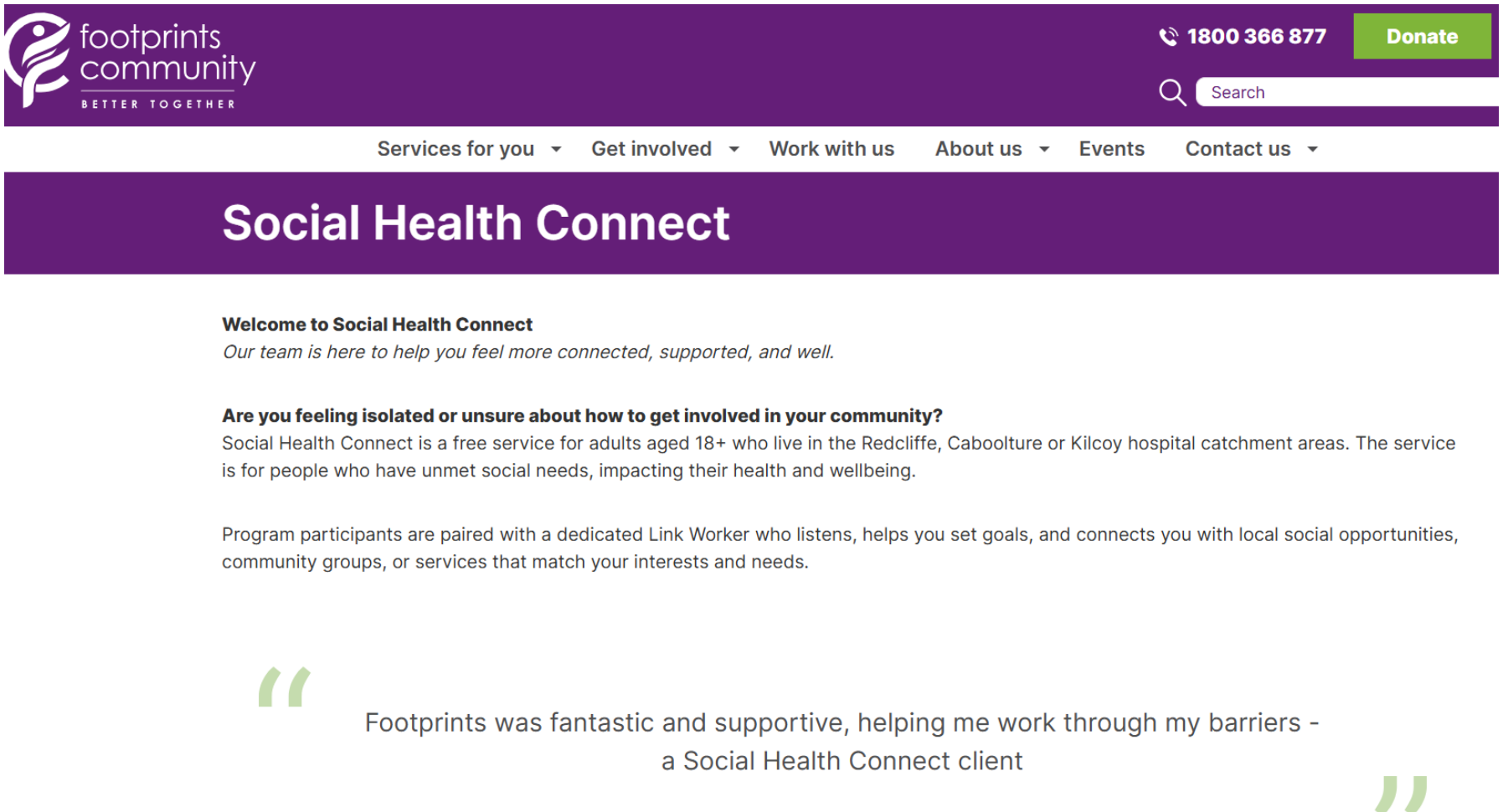
Refer your patient | Hospitals & services | Health professionals | Research | Get involved | C

Home / Hospitals & services / Satellite health centres / Healthy Ageing Assessment and Rehabilitation Team (HAART)

Healthy Ageing Assessment and Rehabilitation Team (HAART)

The Healthy Ageing Assessment and Rehabilitation Team (HAART) is an interdisciplinary team comprised of a range of clinicians with a special interest in the rehabilitation and health of older people living in the community.

The team includes a Clinical Nurse Consultant, Rapid Therapist, Medical Specialist in Rehabilitation, Physiotherapists, Occupational Therapist, Speech Pathologist, Psychologist, Social Work, Dietetics and Pharmacy. Through a collaborative approach, our team is dedicated to providing innovative, patient focussed care that promotes health ageing. Our service is designed to Provide time-limited interdisciplinary assessment and management to prevent avoidable hospital presentations from age related medical conditions.



> Footprints was fantastic and supportive, helping me work through my barriers - a Social Health Connect client

Metro North GP Advice Program

Connecting GPs directly to Metro North specialties.

The Metro North Health GP Advice Program connects GPs to specialist advice from hospital and community clinicians. There are two pathways:

1. Phone advice – Clinical Advice Line
2. Written request for advice – Request for Advice via GP Smart Referrals

Call the Clinical Advice Line, Monday to Friday 8:30am to 4.00pm on

1800 569 099

Note: this is for GPs only and the phone line is not open to patients.

2. Written request for advice – Request for Advice via GP Smart Referrals

Specialty	Catchment*	Exclusion Criteria
Rheumatology	Metro North	• Out of catchment for Metro North • Patients currently seen by Metro North Rheumatology (call Registrar via switch or use "Update Request" in GP Smart Referrals)

Rheumatology conditions – early recognition and next steps

Dr Srividya Katikireddi
Rheumatologist | *The Prince Charles Hospital*

phn BRISBANE NORTH
An Australian Government Initiative
Queensland Government
Metro North Health

Rheumatology conditions – early recognition and next steps

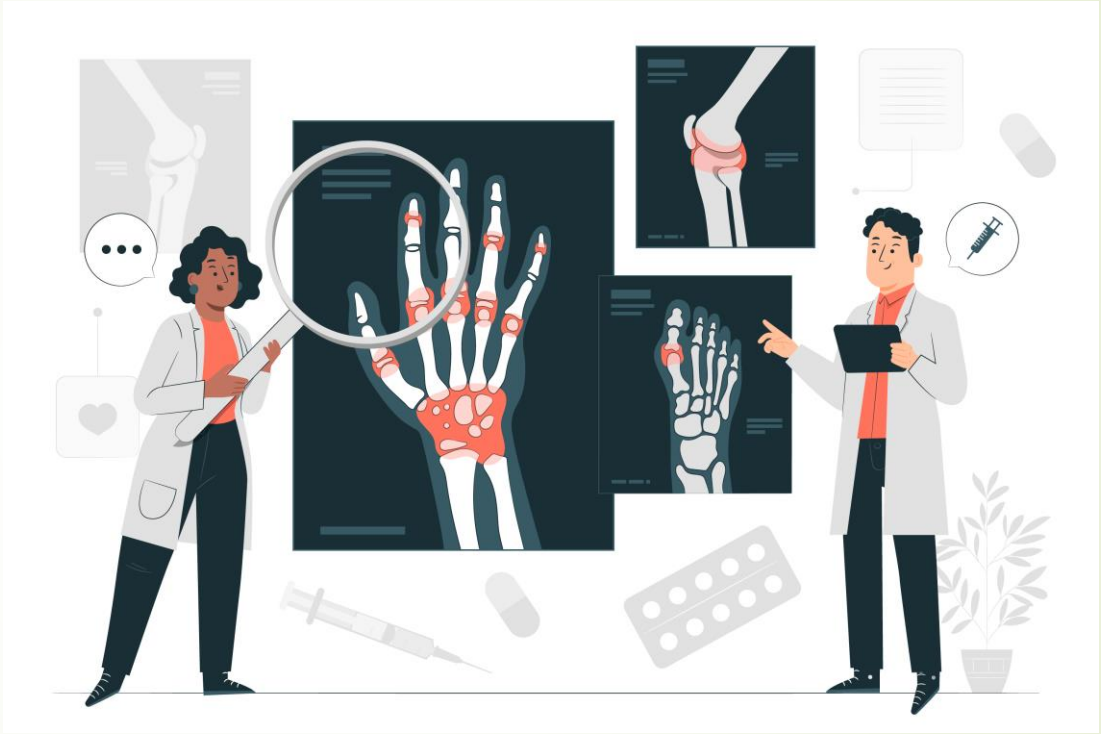
DR SRIVIDYA KATIKIREDDI

RHEUMATOLOGIST

THE PRINCE CHARLES HOSPITAL

Outline

- Case study – Inflammatory Arthritis
- Investigations
- Treatment
- Case Study – Connective Tissue Disorders
- Investigations
- Treatment
- Referral Pathway
- Take home points



Case study 1 – Inflammatory arthritis

Miss SR, 23yo F

L) knee swelling + pain → drained & d/c

No preceding trauma or fever

Recurred 2/12 later

Pain and swelling progressed to other joints

Symmetrical polyarthritis >3/12

Small joints both hands/feet, ankles, knees, wrists, elbows, shoulders

Using Panadol, Ibuprofen & Endone – no relief

Presenting complaint

- Morning stiffness 2 hours
- Increasing lethargy, significantly decreased function of hands
- No rash/malar rash, fever, alopecia, photosensitivity, ulcers
- No Psoriasis/IBD/iritis
- No inflammatory low back pain or gluteal pain

- *What is the differential diagnosis?*

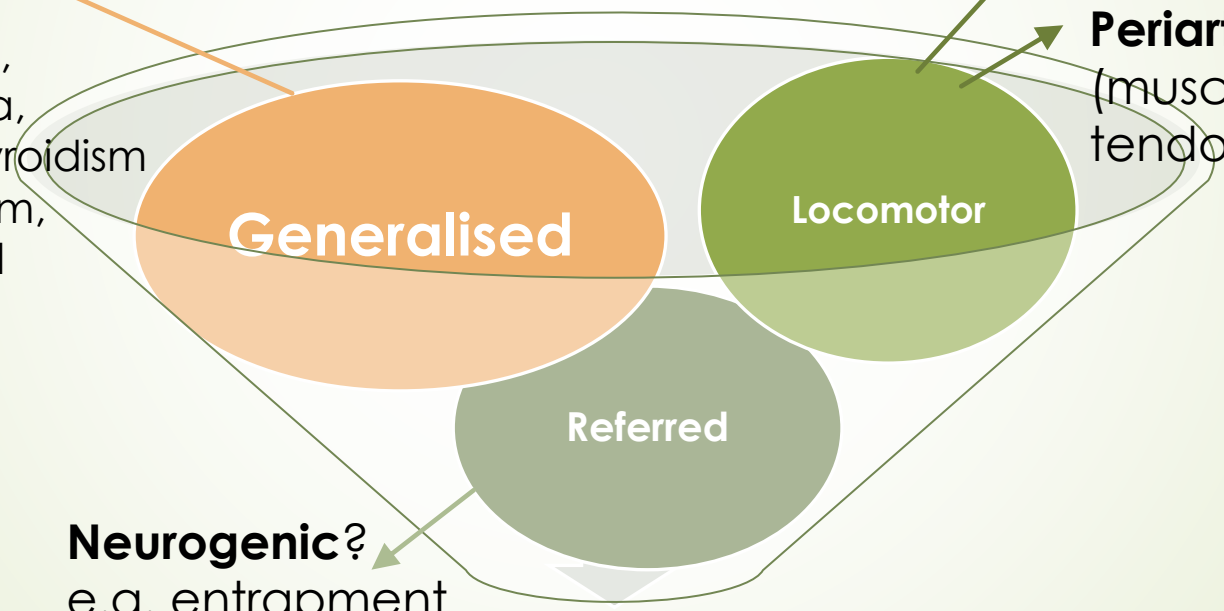
Take home point 1

- ***Inflammatory*** **vs** ***non-inflammatory*** **joint pain**
- Pain at **rest, improved by movement - inflammatory**
- Pain **with activity** and **relieved by rest - non-inflammatory**
- **Morning stiffness >~1hr - inflammatory**

Inflammatory	Non-inflammatory
Morning stiffness > 1hr	"Gelling phenomenon" < 30mins
Boggy, tender swelling	Little to no swelling, non-inflammatory aspirate
Improves with activity, stiffens with rest	Worsens with activity, better with rest
Depends on disease	Weight-bearing joints + hands

Step 1 – Is it Really Joint Pain?

Widespread pain
FMS, PMR,
Malignancy,
Hypermobility,
Osteomalacia,
Hyperparathyroidism
Hypothyroidism,
Drug-induced



True Articular

Periarticular
(muscle,
tendon)?

Neurogenic?
e.g. entrapment
neuropathy,
visceral

Causes of True Joint Pain

Rheumatoid arthritis (seropositive, seronegative)

Inflammatory **connective tissue diseases** (Sjogren's, SLE, SSc, IM, MCTD, UCTD)

Spondyloarthropathies axial and peripheral (ankylosing spondylitis, psoriatic arthritis, enteropathic arthritis, undifferentiated spondyloarthritis)

Crystal arthritis – gout and pseudogout

Infective (get Ortho if septic joint), **Reactive**, **Malignancy** associated

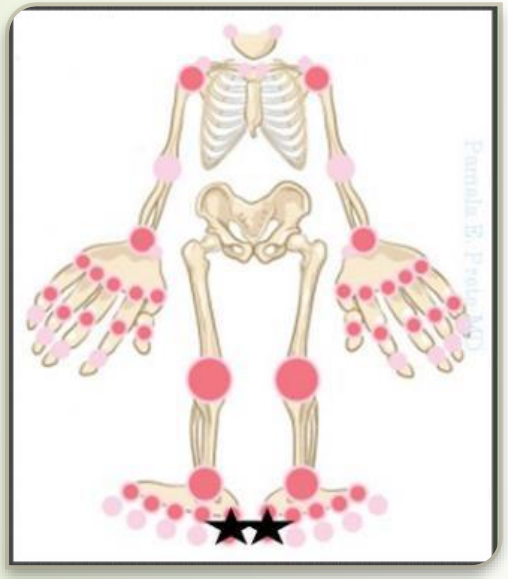
Arthritis accompanying **Systemic disease** – amyloidosis, sarcoidosis, haemochromatosis, haemophilic arthropathy, haemoglobinopathies, IgG4 disease, endocrinopathy

Osteoarthritis

Take home point 2

Different patterns of arthritis = different Diagnosis

Distribution, Arthralgias, & Arthritis



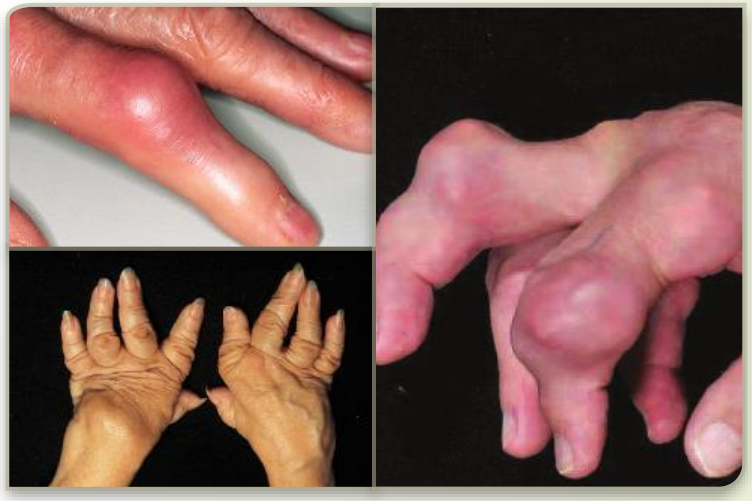
- **Small**, **medium**, **large** joints
- **Mono**arthritis (one joint), **oligo**arthritis (2-4), **poly**arthritis (>5)
- Arthr**algia** (joint pain) vs. arthr**itis** (joint inflammation)
- **Synovitis** – synovial inflammation, feels boggy, swollen, tender, and warm. "**Active Joint**"

Mono- & Oligoarthritis Differentials

- Acute:
  - Septic (bacterial infection), crystal arthritis (gout, pseudogout), haemarthrosis, trauma
- Chronic:
  - Indolent infection (mycobacterial, fungal), pigmented villonodular synovitis, seronegative spondyloarthropathies, malignancy, OA
- Spondyloarthritis eg. Psoriatic arthritis more common
- RA and CTDIA can also present like this

Time course & Distribution

- **Acute** (hours > days), **Subacute** (<6 weeks), **Chronic** (>6 weeks)
- **Persistent**, **intermittent**
- **Isolated**, **migratory**, **additive**
- **Symmetrical** or **asymmetrical**
- **Deforming, non deforming**



Polyarthritis differentials

Acute:	Chronic:
• Infection – usually viral eg. RRV • Polyarticular attack of crystal arthropathy (gout, pseudogout), onset of chronic polyarthritis	• Rheumatoid arthritis (usually symmetrical) • Seronegative spondyloarthritis (usually asymmetrical and oligoarticular) • CTD-assoc. inflammatory arthritis • Primary osteoarthritis

Important Associated Features

Rash – psoriatic, photosensitive, vasculitic, nodules, tophi

Constitutional symptoms – fevers, night sweats, weight loss

- Suggest inflammatory disease but also important differentials of infection or malignancy

Symptoms suggesting **connective tissue disease**: Raynaud's, **ulcers**, alopecia, serositis (**chest or abdominal pain** – pleurisy, pericarditis, peritonitis), dysphagia and reflux, thrombosis, stillbirth, recurrent miscarriage, sicca

Symptoms suggesting **spondyloarthritis**: Red **eyes**, **diarrhoea**, urethritis, dactylitis, inflammatory **back pain**

Preceding infective **illness** – viral arthritis, reactive arthritis

?Penetrating **trauma** to affected joint – suspicious for infection

Breathlessness – interstitial lung disease, pulmonary hypertension

Muscle **weakness** – myositis, usually painless and proximal

RA manifestations

Articular Manifestations	
Evidence of inflammation	Joint tenderness; joints warm but not erythematous; swelling of soft-tissue synovium and synovial fluid
Small-joint involvement	Symmetric involvement of proximal interphalangeal, metacarpophalangeal, and metatarsophalangeal joints; distal interphalangeal joints not usually involved
Functional limitation	Limited range of motion; decreased muscle strength and function around inflamed joints
Extra-articular Manifestations	
Dermatologic	Rheumatoid nodules, vasculitis, drug reactions
Ophthalmologic	Keratoconjunctivitis sicca, episcleritis, scleritis, scleromalacia perforans
Pulmonary	Basilar pulmonary fibrosis, multiple lung nodules, pleuritis, bronchiolitis obliterans organizing pneumonia
Cardiac	Pericarditis, pericardial effusion, valvular defects, conduction defects
Gastrointestinal	Xerostomia, gastritis or peptic ulcer disease from NSAIDs
Renal	Proteinuria if secondary amyloid is present; interstitial disease from NSAIDs and other treatment-related problems
Hepatic	Nodular regenerative hyperplasia, portal fibrosis
Neurologic	Cervical spine instability, peripheral nerve entrapment, mononeuritis multiplex from vasculitis
Hematologic	Lymphadenopathy, splenomegaly, leukopenia (Felty syndrome), malignancy, amyloidosis, cryoglobulinemia, large granular lymphocyte syndrome

PMH/FH/SH

PMH:

- Nil

FH:

- Father, 2 aunts, 1 cousin → Elhers-Danlos Syndrome
- No RA

SH:

- Library assistant – stopped working
- Lives with partner – full time carer for her currently
- Non-smoker
- No ETOH

O/E

- Pale, no rash, no nodules
- Hands: bilateral symmetrical synovitis
  - Swollen 2nd & 3rd MCPs, 2nd & 3rd PIPs; tender all MCPs
- Elbows: tender & swollen
- Knees: tender, decreased ROM
- Ankles: tender & swollen
- MTPs: tender & swollen

Differential Diagnosis

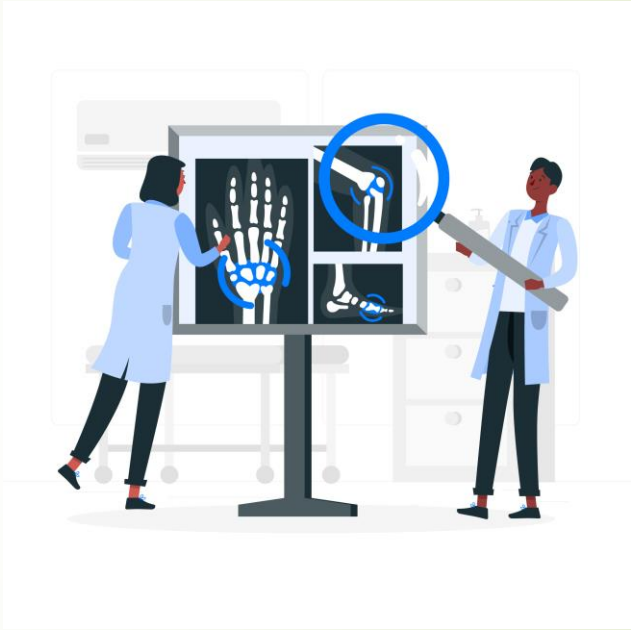
- RA
- Seronegative arthritis
  - Ankylosing spondylitis, PsA, reactive arthritis, IBD
- SLE
- Post viral arthritis

Investigations to order

- FBC, eLFTs
- CRP & ESR
- Viral serology if acute/subacute eg. RRV, BFV
- RF & Anti-CCP
- ANA if symptoms of CTD
- ENA if ANA is positive
- Anti-dsDNA, complement C3/C4, Urine microscopy & PCR if ANA positive
- CK – if myalgia or muscle weakness, rash suggestive of dermatomyositis
- TSH, vit D
- HLA B27 - if seronegative arthritis/spondyloarthritis suspected
- Urine Neisseria Gonorrhoeae/Chlamydia – if reactive arthritis suspected

Investigations to order - Imaging

- X-rays of affected joints – eg. both hands and feet if chronic arthritis
- X-ray lumbosacral spine, AP pelvis and sacroiliac joints – if spondyloarthritis suspected
- CXR – if immunomodulator eg. Methotrexate might be commenced, or excluding infection, or in smoker



Investigations - Bloods

- **Hb: 112** ⬇️
- **MCV: 70** ⬇️
- WCC: 11.7
- **Platelets: 552** ⬆️
- Hep B/C: -ve
- **RF: +ve 40, anti-CCP 20**
- dsDNA: -ve
- C3/C4: N
- **CRP 54** ⬆️
- **ESR 65** ⬆️

Investigations - Imaging

- XRs:
  - Hands: soft tissue swelling; narrowing 3rd MCP joints, periarticular osteoporosis wrist, no periarticular erosions
  - Feet: mid foot – peri-articular osteoporosis; 1st MTPs – hallux vagus deformity; 1st TMTs – periarticular erosions; L) 1st TMT – early joint space narrowing; 2nd & 3rd MTPs – mild joint space narrowing
  - Chest: normal

Initial management

25mg Prednisolone po daily, wean over 6 weeks by 5mg every 1-2 weeks

Ibuprofen, Paracetamol PRN

In general, could use short course of prednisolone initially and wean over 6 weeks if synovitis & especially if raised CRP/ESR

Alter according to severity and response

DMARDs will take several months to be effective

If single joint or a couple could consider HCLA injection

Treatment

- **Conventional DMARDs**
  - Plaquenil – 200-400mg daily (max dose 5mg/kg due to retinopathy risk)
  - Methotrexate – weekly, if SEs or ineffective, consider subcutaneous (max dose 25mg once a week)
  - Sulfasalazine – usual dose 1g bd
  - Leflunomide – 10-20mg daily

Conventional synthetic DMARDs

Methotrexate

- **Contraindicated in pregnancy**
- **Not associated with ILD**
- Needs folate at some point during the week, not day of MTX
- SEs: cytopaenias, rash, nausea/vomiting, ulcers, hair loss, LFT derangement

Leflunomide

- **Contraindicated in pregnancy**
- SEs: cytopaenias, nausea/vomiting, LFT derangement, **peripheral neuropathy**

Hydroxychloroquine

- SEs: nausea/vomiting, **retinal toxicity** (>5 years use) 'bulls eye maculopathy', prolonged QTc
- Evidence of slightly increased risk of cleft palate in pregnancy – but balance risk of active disease

Sulfasalazine

- SEs: **idiopathic agranulocytosis**, allergic reactions, orange urine and tears, rash, gut upset

Monitoring required csDMARDs

Methotrexate, Sulfasalazine & Leflunomide – Bloods minimum every 3 months FBC, eLFTs, CRP, ESR, Rule 3 exemption form, initially monthly

Plaquenil – no specific blood monitoring, suggest check FBC, eLFTs, CRP, ESR every 6 – 9 months including for disease activity, baseline eye review, then annual after 5 years, visual fields, more frequent higher risk eg. renal, increased age

Azathioprine & Mycophenolate – Bloods minimum every 3 months, initially every 4 weeks

Biologic & Targeted Synthetic DMARDs

- **Target particular immune pathways**
- **TNF inhibitors** – Adalimumab, Infliximab, Golimumab, Certolizumab, Etanercept
- **IL-6 inhibitor** – Tocilizumab
- **IL-17A inhibitors** – Secukinumab, Ixekizumab
- IL-12/23 inhibitor – Ustekinumab
- IL-23 inhibitor - Guselkumab
- **Anti-CD20** – Rituximab
- **CTLA4 analogue** - Abatacept
- **JAK inhibitors** – Bariticitinib, Tofacitinib, Upadacitinib

Monitoring Biologics/tsDMARDs

- **Don't give live vaccines** (MMR, Zostavax, Japanese encephalitis virus, Rotavirus); **can provoke non-melanoma skin cancers**
- Generally withheld in infections & preceding large surgeries (data mostly based on an American orthopaedic study of joint replacements)
- **Bloods - Every 6 months** unless also on conventional DMARD, or renal impairment, elevated LFTs etc.
- **CRP and ESR & joint count** required to meet PBS criteria for funding for continued medication – dependent on disease
- Joint count & bloods – evidence of improvement compared to baseline each assessment
- BASDAI – for AS or axial SpA
- **Initial script for 16 weeks**, need to assess after 12 weeks, thereafter **6 month** supply each approval
- Application/script by rheumatologist/clinical immunologist

Case 2 - Connective Tissue Disorders

34 yr old female Mrs CK

Malar rash, oral ulcers, alopecia, joint pains in hands 3 months, no swelling

Acute presentation with chest pain

O/E:

Malar rash, alopecia

Tender PIPs 2-5 bilateral, no swelling

CVS - Dual HS, muffled

ECG – ST elevation & PR segment depression, changes of pericarditis

History

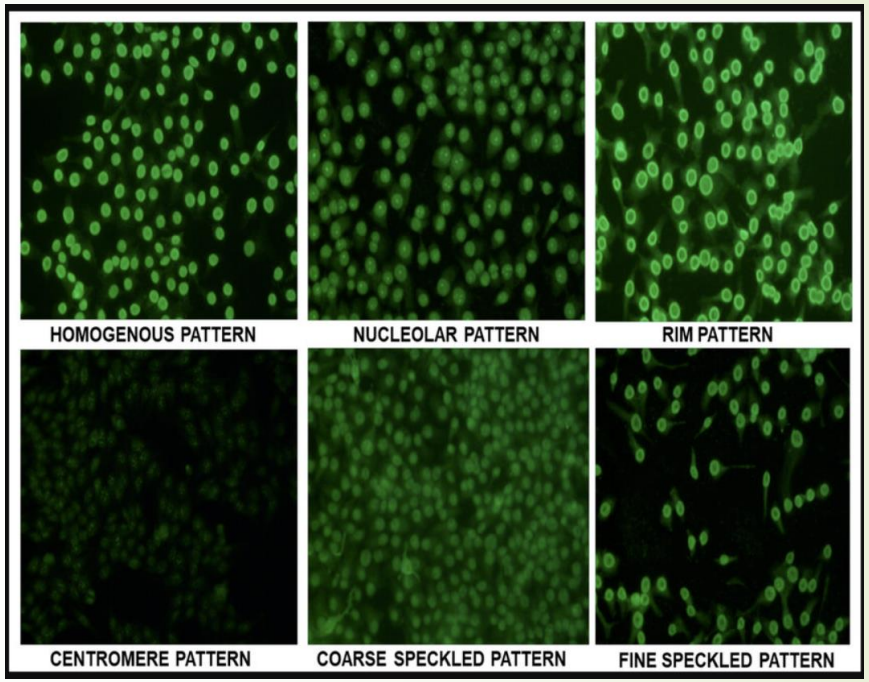
- FH – Mother RA
- SH – smoker, alcohol – 10 units per week, Lives with husband and 1 year old daughter

Investigations to order

- FBC, eLFTs
- CRP & ESR
- RF & Anti-CCP
- ANA
- ENA if ANA is positive
- Anti-dsDNA, complement C3/C4, Urine microscopy & PCR if ANA positive
- ANCA & MPO/PR3 titres
- Imaging – x-rays of affected joints, CXR
- TTE

Blood tests & Urinalysis

- Hb 100 ⬇️, WCC 11
- CRP 60, ESR 50 ⬆️
- ANA 640 homogeneous
- ENA - Ro & La antibodies
- Anti-dsDNA 30 ⬆️
- Complement C3 0.9g/l & C4 0.1g/l low
- Urine microscopy – protein, no RBCs, no casts
- Urine PCR – mildly up 22mg/mmol



Treatment

SLE – Plaquenil, dependent on organ involved eg. joints – Methotrexate, cardiac – mycophenolate or Azathioprine, Rituximab

ANCA vasculitis – Prednisolone initially, dependent on organ involved & type eg. EGPA, GPA

Scleroderma - ?CREST or diffuse Scleroderma, dependent on organ involved, pulmonary hypertension, ILD

Myositis - dependent on type eg. Dermatomyositis, necrotizing immune mediated myopathy – Prednisolone, Methotrexate, Mycophenolate if ILD, IVIG, Rituximab

Referral Pathway

- Via Smart Referrals for public – to Central Processing Centre, Metro North
- Clinical Prioritisation Criteria for Rheumatology – on QLD Health website
- Guide to conditions under scope of Rheumatology & category
- Tests to order eg. bloods, imaging for each condition
- Minimum referral criteria for each condition
- Conditions included: RA, Psoriatic arthritis, Spondyloarthritis, Gout, Connective tissue disorders, GCA, PMR,Osteoarthritis
- Not included – Hypermobility/EDS

Hypermobility/EDS

The International Consortium on Ehlers-Danlos Syndromes & Related Disorders

Diagnostic Criteria for Hypermobile Ehlers-Danlos Syndrome (hEDS)

This diagnostic checklist is for doctors across all disciplines to be able to diagnose EDS

Over-ruled by The Ehlers Danlos Society.

Patient name: _____ DOB: _____ DOV: _____ Evaluator: _____

The clinical diagnosis of hypermobile EDS needs the simultaneous presence of all criteria, 1 **and** 2 **and** 3.

CRITERION 1 – Generalized Joint Hypermobility

One of the following selected:

- ☐ ≥6 pre-pubertal children and adolescents
- ☐ ≥5 pubertal men and woman to age 50
- ☐ ≥4 men and women over the age of 50

Beighton Score: _____/9

If Beighton Score is one point below age- and sex-specific cut off, two or more of the following must also be selected to meet criterion:

- ☐ Can you now (or could you ever) place your hands flat on the floor without bending your knees?
- ☐ Can you now (or could you ever) bend your thumb to touch your forearm?
- ☐ As a child, did you amuse your friends by contorting your body into strange shapes or could you do the splits?
- ☐ As a child or teenager, did your shoulder or kneecap dislocate on more than one occasion?
- ☐ Do you consider yourself "double jointed"?

CRITERION 2 – Two or more of the following features (A, B, or C) must be present

Feature A (five must be present)

- ☐ Unusually soft or velvety skin
- ☐ Mild skin hyperextensibility
- ☐ Unexplained striae distensae or rubae at the back, groins, thighs, breasts and/or abdomen in adolescents, men or pre-pubertal women without a history of significant gain or loss of body fat or weight
- ☐ Bilateral piezogenic papules of the heel
- ☐ Recurrent or multiple abdominal hernia(s)
- ☐ Atrophic scarring involving at least two sites and without the formation of truly papyraceous and/or hemosideric scars as seen in classical EDS
- ☐ Pelvic floor, rectal, and/or uterine prolapse in children, men or nulliparous women without a history of morbid obesity or other known predisposing medical condition
- ☐ Dental crowding and high or narrow palate
- ☐ Arachnodactyly, as defined in one or more of the following: (i) positive wrist sign (Walker sign) on both sides, (ii) positive thumb sign (Steinberg sign) on both sides
- ☐ Arm span-to-height ratio ≥1.05
- ☐ Mitral valve prolapse (MVP) mild or greater based on strict echocardiographic criteria
- ☐ Aortic root dilatation with Z-score ≥+2

Feature A total: _____/12

Feature B

- ☐ Positive family history; one or more first-degree relatives independently meeting the current criteria for hEDS

Feature C (must have at least one)

- ☐ Musculoskeletal pain in two or more limbs, recurring daily for at least 3 months
- ☐ Chronic, widespread pain for ≥3 months
- ☐ Recurrent joint dislocations or frank joint instability, in the absence of trauma

CRITERION 3 – All of the follow prerequisites MUST be met

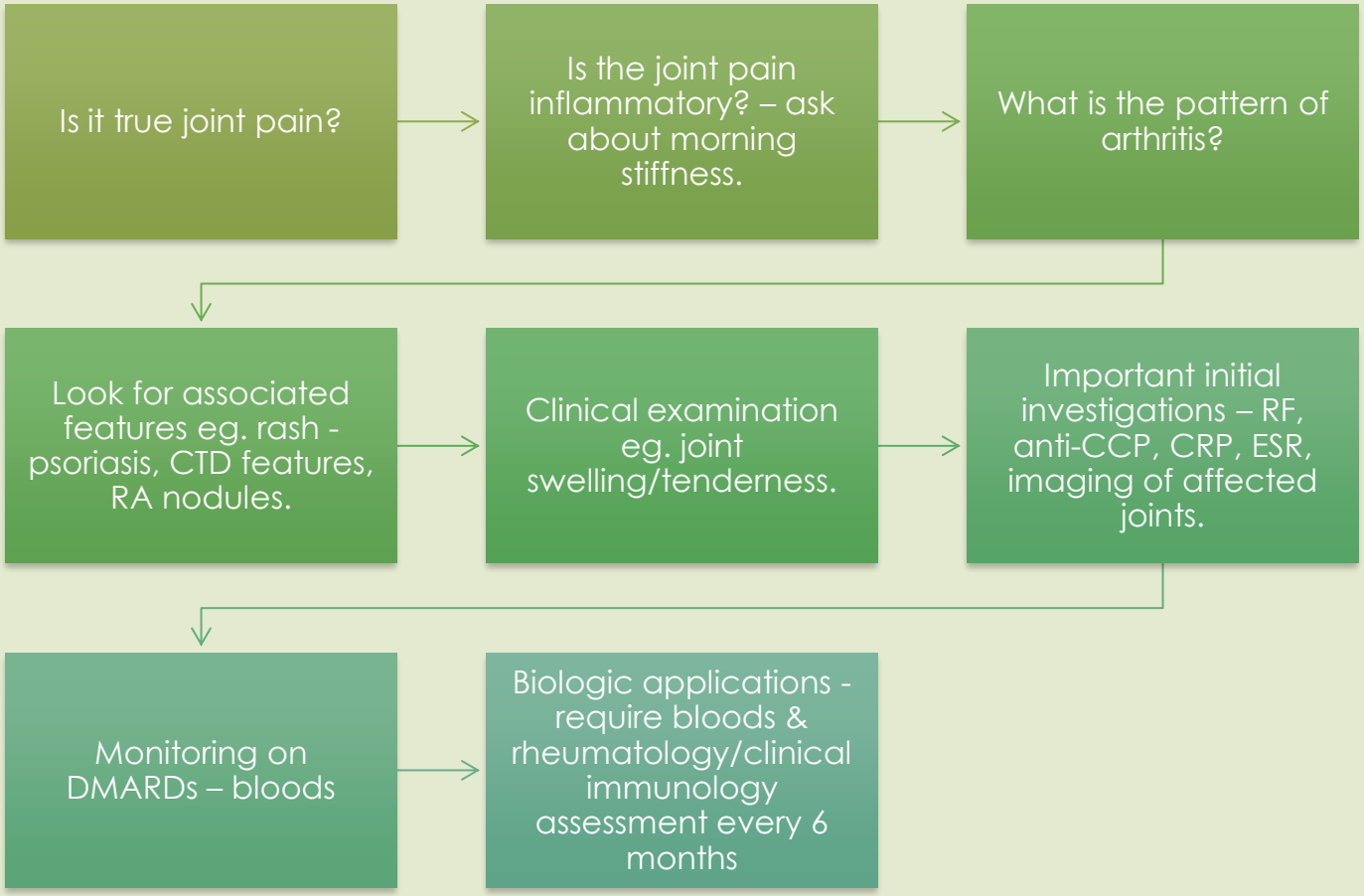
1. Absence of unusual skin fragility, which should prompt consideration of other types of EDS
2. Exclusion of other heritable and acquired connective tissue disorders, including autoimmune rheumatologic conditions. In patients with an acquired CTD (e.g. Lupus, Rheumatoid Arthritis, etc.), additional diagnosis of hEDS requires meeting both Features A and B of Criterion 2. Feature C of Criterion 2 (chronic pain and/or instability) cannot be counted toward a diagnosis of hEDS in this situation.
3. Exclusion of alternative diagnoses that may also include joint hypermobility by means of hypotonia and/or connective tissue laxity. Alternative diagnoses and diagnostic categories include, but are not limited to, neuromuscular disorders (e.g. Bethlem myopathy), other hereditary disorders of the connective tissue (e.g. other types of EDS, Loeys-Dietz syndrome, Marfan syndrome), and skeletal dysplasias (e.g. osteogenesis imperfecta). Exclusion of these considerations may be based upon history, physical examination, and/or molecular genetic testing, as indicated.

Diagnosis: _____

ST VINCENT'S
Better and fairer care. Always.

r care. Always.

Take home points: Inflammatory arthritis



Take home points: Connective Tissue Disorders

If clinical symptoms and signs of CTD eg. rash, oral ulcers, alopecia, Raynaud's, muscle weakness – check ANA

If ANA positive – then check ENA, anti-dsDNA, Complement C3/4, Urine microscopy & PCR

If muscle weakness or myalgia – check CK

Vasculitis features eg. oral/nasal ulcers, fevers, weight loss, cardiac/resp symptoms – check ANCA & MPO/PR3

Early referral to rheumatologist

Can contact rheumatology team if queries

Thank you

- DR SRIVIDYA KATIKIREDDI
- RHEUMATOLOGIST
- THE PRINCE CHARLES HOSPITAL
- CADOGAN MEDICAL, NUNDAH

Community HealthPathways
Brisbane North
Haematology
Hyperbaric Medicine
Immunology
Infectious Diseases
Intellectual and Developmental Disability
Neurology
Oncology
Pain Management
Palliative Care
Rehabilitation Medicine
Renal Medicine
Respiratory
Rheumatology
Ankylosing Spondylitis (AS)
Antinuclear Antibody (ANA) Testing
Autoimmune Connective Tissue Disorders (CTDs)
Disease Modifying Anti-rheumatic Drugs (DMARDs)
Fibromyalgia
Giant Cell Arteritis (GCA) or Temporal Arteritis
Gout and Pseudogout
Inflammatory Arthritis in Adults
Osteoarthritis (OA)
Polymyalgia Rheumatica (PMR)
Rheumatology Requests
Sexual Health
Sleep Medicine
Spinal Cord Impairment (SCI)
Mental Health
Older Adults' Health
Pharmacology
Public Health
Reproductive Health
Specific Populations
Surgical
Women's Health
Our Health System

Inflammatory Arthritis in Adults

Red flags

- Septic arthritis
- Rheumatic fever

Background

About inflammatory arthritis

Assessment

1. Take a history for diagnostic clues. Check:
   - symptoms.
   - risk factors and demographics.
2. If rapid onset of a red, warm, swollen, exquisitely painful joint with reduced range of movement and constitutional symptoms, consider septic arthritis.
3. Examine the patient:
   - Check vital signs.
   - Examine affected and unaffected joints.
   - Check skin – look for signs of psoriasis or other rashes or skin lesions (e.g., discoid or malar rash in systemic lupus erythematosus (SLE), erythema or exanthema of viral arthritis), and check oral mucosa for ulcers (connective tissue disorders e.g., SLE).
   - If recent pharyngitis or group A *Streptococcus* (GAS) skin infection, auscultate the heart for murmurs (indicates rheumatic fever).
   - Check for hepatomegaly or splenomegaly and tenderness on palpation – suggests viral arthritis secondary to hepatitis, dengue, Zika, or Epstein-Barr virus (EBV).
4. Arrange investigations:
   - Laboratory tests
   - Imaging
   - Synovial fluid analysis
5. Consider differential diagnoses. Patients complaining of joint pain without signs of joint inflammation should not be diagnosed with inflammatory arthritis, and other causes of joint pain should be considered (e.g., osteoarthritis (OA), widespread non-specific pain, fibromyalgia):
   - Polyarticular
   - Oligoarticular
   - Monoarticular

Management

1. If suspected septic arthritis, request acute orthopaedic assessment.
2. Manage according to pathway if suspected:
   - Ankylosing Spondylitis (AS)
   - Autoimmune Connective Tissue Disorders (CTDs)
   - Fibromyalgia

Search HealthPathways

Autoimmune Connective Tissue Disorders (CTDs)

This pathway is about autoimmune connective tissue disorders in adults.

Red flags

- B symptoms (fever, night sweats, and weight loss)
- Significant organ dysfunction e.g., significant proteinuria, renal failure, respiratory disease, neuropathy

Background

About autoimmune connective tissue disorders (CTDs)

Assessment

1. Take a history – ask about:
   - symptoms suggesting CTDs.
   - risk factors.
2. Examine the patient. Look for signs of CTDs.
3. Arrange investigations:
   - Pathology:
     - Perform urine dipstick – for proteinuria.
     - Arrange baseline investigations.
     - Only arrange antinuclear antibody (ANA) if strong suspicion of a CTD (i.e., a combination of signs and symptoms of systemic rheumatic disease).
     - Consider additional laboratory investigations guided by specific disorder suspected.
   - Imaging:
     - Consider chest X-ray if signs or symptoms of pleuritis or pericarditis, or B symptoms.
     - Consider ultrasound of salivary glands if gland enlargement.
   - Histology – consider skin biopsy if rash present.
4. Consider differential diagnosis.

Management

1. If patient significantly unwell or with signs or symptoms of significant organ dysfunction, request acute rheumatology assessment.
2. For all other patients with suspected CTD, request non-acute rheumatology assessment.
3. If significant:
   - skin manifestations, request non-acute dermatology assessment.
   - eye symptoms (e.g., iritis, uveitis), request acute ophthalmology assessment.
4. Consider prescribing medications.
5. Provide patient education and discuss lifestyle interventions.
6. Consider preparing a General Practice Chronic Condition Management Plan (GPCCMP).
7. Consider requesting:
   - exercise physiology for tailored exercise program.
   - physiotherapy for physical therapies for pain.

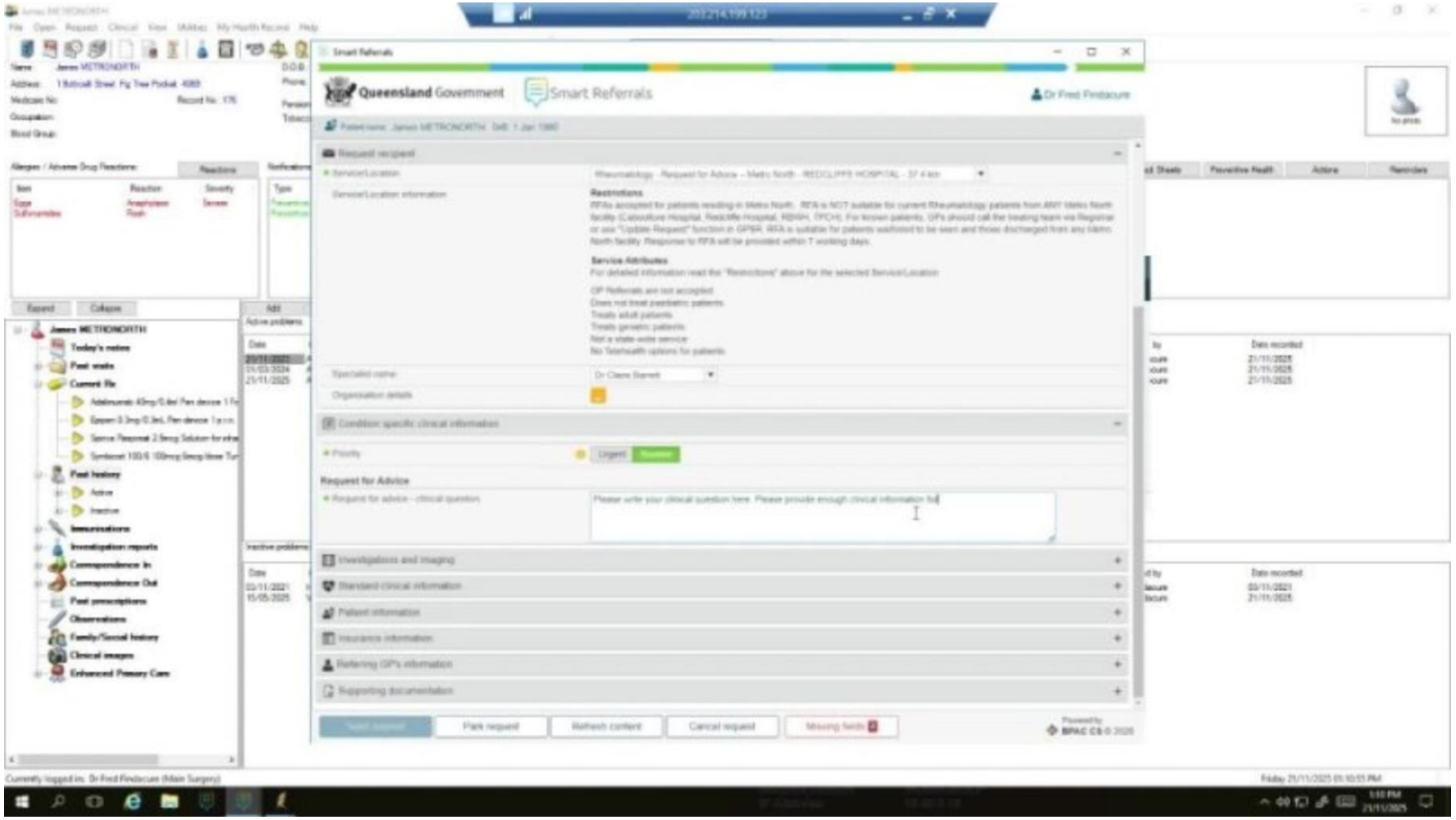
How to:
Request Advice

Dr James Martin
GPLO | Metro North Health & Brisbane North PHN

phn BRISBANE NORTH
An Australian Government Initiative

Queensland Government
Metro North Health

Request for Advice | How to request advice



Request for Advice | Receiving advice

Correspondence inbox:

Queensland Government

Dear

Re:
DOB:
Request Type: Request For Advice
SSRID:

Thank you for your advice request for to the Urology service at Metro North HHS - ROYAL BRISBANE & WOMEN'S HOSPITAL.

A specialist clinician has reviewed the information on the request for advice and has provided the following outcome - Advice provided.

Advice Details:

Regarding the Clinical Question:

Dear Urologist,
I am writing to refer my patient for second opinion regarding recent investigation findings.

Presented for a review of results following investigations for scrotal discomfort, which has since resolved. Reports no nocturia.

Investigations:
Scrotal ultrasound: Normal. No scrotal abnormality. Symmetrical testicular blood flow.
Abdominal/Kidney ultrasound: Mildly enlarged prostate at 47mL. Post-void residual urine volume 56mL. No focal bladder wall thickening.
PSA: 0.63 (Previous result a few years ago was 0.86).

Referral Details:
Requesting a second opinion and advice regarding the mildly enlarged prostate

ROYAL BRISBANE & WOMEN'S HOSPITAL would like to provide the following Advice:

Dear Doctor,

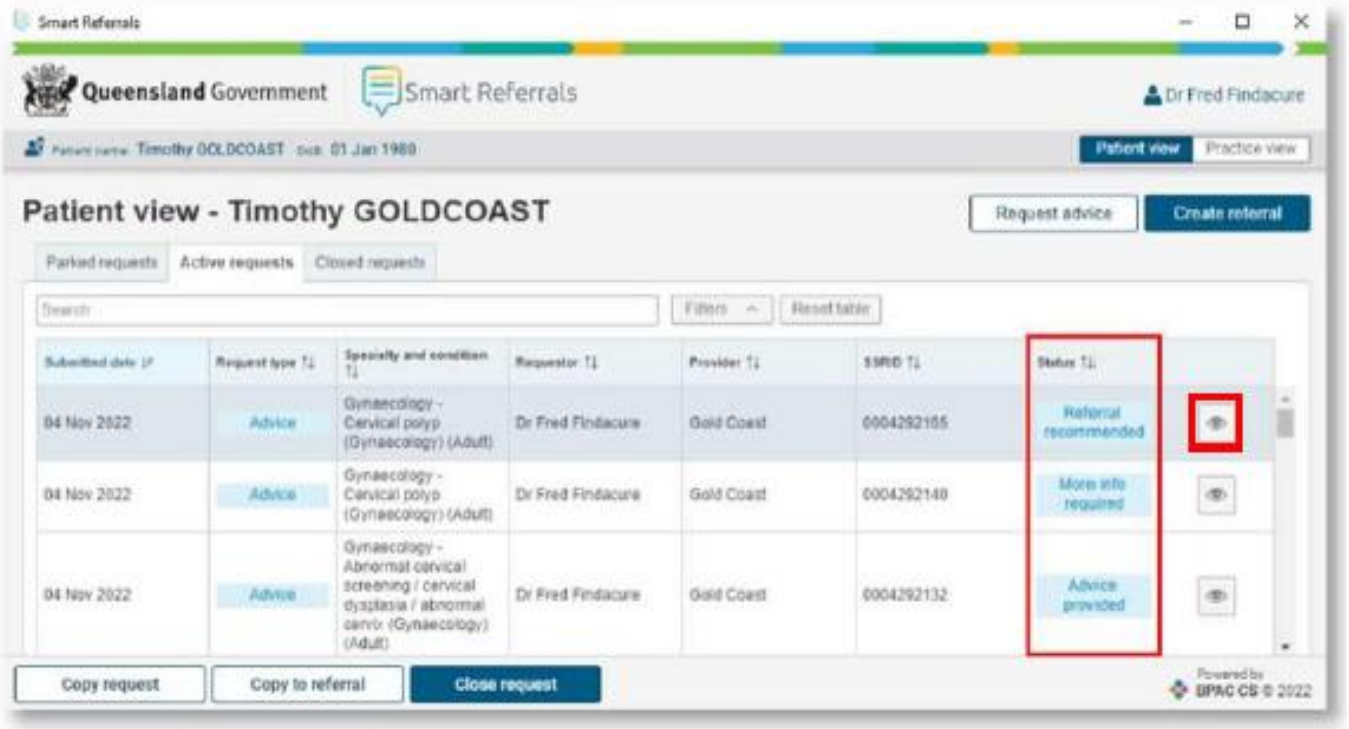
Your request for advice has been reviewed by
She advises your patient's prostate is no cause for concern.

A post void residual less than 100ml is not concerning. The prostate volume has no correlation to cancer risk.

Clinical Advice Provided By:

Please do not hesitate to contact Metro North HHS - ROYAL BRISBANE & WOMEN'S HOSPITAL if you have any questions.

Smart Referrals patient view:



How to: Request for Advice case studies

Dr Laurel Young
Staff Specialist - Rheumatology
Redcliffe Hospital

phn BRISBANE NORTH
An Australian Government Initiative
Queensland Government
Metro North Health

Request for Advice RFAs

Dr Laurel Young

Background

- RFA – request for advice, eConsults
  - Asynchronous
  - Respond on platform

Why would you use RFA?

- Reasons for advice
  - Diagnosis
    - Interpretation of clinical findings
    - Interpretation of prior testing
    - Diagnostic workup
  - Management
    - General management
    - Should I refer?
  - Drug Treatment
    - Indications for initiating therapy
    - Change in dose or stopping drug
    - Adverse effects/Interactions
  - Procedure

Australian study

- Russell et al IMJ 2022
  - PAH endocrine started Nov 2020
  - All within 3 days responses, 92.5% within 24hrs
  - 40 eConsults
  - Average time to do eConsult – 14.2mins
  - Rated 97% excellent by GPs
  - New or additional course of action 68%, confirmed course of action 32%, avoided need for referral 55%

Background

- What happens to the eConsult advice?
  - US and Canadian studies – 65-86% compliance with advice
  - Why not?
    - Belief of another diagnosis
    - Drug recommended already taken
    - eConsult too late

What we have done so far

- Proposed in Rheum stream by Medicine stream lead Dec 2022 – Connecting your Care
- Started in Jun 2023 RDH for Redcliffe postcodes only
- Widened to all of Metro North in Jul 2025
  - Not for known patients – that query should go to team/consultant directly

Patients so far

- 2023 – 5 pts
- 2024 – 19 pts
- 2025 – 5 pts

    - 5 out of area (beyond Metro North), many not Redcliffe in first 2 years
    - 2 known to service already
    - Av days to complete 7.3 (longer in first year), av now 4.6 days
    - 4 nurses responded
    - 2 required referral

Example RFA

- May 2024
  - 38yo male indigenous
  - 6wks numbness in hands and feet – multiple times/day
  - Change in colour of feet (photo taken)
  - Thought to be Raynauds
  - Painful, does not help when changes temperature
  - Not had before
  - ANA 1/1280 speckled

Response

- Could be autoimmune issue with Raynauds but cannot define without review and further blood test
- Told to keep extremities warm especially in winter
- Allow referral

Example of RFA

- May 2024
  - 83yo female
  - Fall 5 wks before, hit head on concrete on L side – did not go to ED
  - Seen 2 wks ago – tender over L zygomatic, temporal area, blurry vision on L eye
  - CT – nad
  - Worsening blurry vision, double vision L eye, tender over temporal region and scalp
  - Pain worse at night – chewing and talking
  - Chronic shoulder and hip pain, never had PMR, previous THR
  - Not responding to NSAIDs, Panadol
  - ? GCA

Response

- Rang GP 6 days after received RFA
  - Has already started pred 50mg/day on day of RFA but did not help headache and no change in vision
  - Had ordered ESR, CRP but still not done
  - Was not RDH catchment (Nanango) – so had to advise to ring for TA biopsy at local service and get bloods ASAP regardless
  - Stay on pred at present

Examples of RFAs

- Feb 2025 – 36yo
  - Joint pain in the small joints of the hand and lower back for the last 5 years – now getting worse. Associated early morning stiffness (EMS) and lasts sometimes all day. Fatigue and facial rashes
  - Bloods ESR 16, RF neg, ANA neg
  - Grandmother ? Inflammatory arthritis (IA)
  - Question - ? IA

Response

- Did not get to me
- Told to refer to Rheum

Example RFA

- Direct question to my colleague for known patient – struggling to get on top of pt's leg ulcers – statis eczema, infection, possible nutritional deficiencies and ? Capillaritis
- Asking if related to RA

Response

Had been seen in clinic 2 days after RFA sent – CN sent letter from clinic directly back to GP

Example RFA

- May 2025
  - 71yo female currently managed with bilateral shoulder and hip pain with possible PMR
  - Initially had headache and blurred vision L eye
  - Treated with pred 15mg/day
  - ESR, CRP normal
  - Doppler temporal and carotid arteries – nad
  - Optometry review nad
  - Ongoing MSK symptoms
  - Awaiting Rheum review – seeing in late Jun 2025
  - Question - ? Continue, taper or cease steroids while waiting review

Response

- Considering normal ESR, CRP – would start weaning pred 2.5mg every wk to 10mg and then 1mg/wk reduction until seen. If worse when weaning pred, repeat bloods and US shoulder and lateral hips to see if degen pathology before Rheum appt

Example RFA

- May 2025
  - Pos ENA in 28yo with back pain, stiffness and Hashimotos
  - LBP – morning, improves with stretching and warming up, significant help with NSAID, radiates to both hips
  - Examination – some pain on forward flexion lumbar spine, some SIJ tenderness
  - ? AS
  - ENA Ro60pos

Response

- 2 problems
  - 1. Ro pos, ANA 1/80 speckled dsDNA neg, Hashimotos.
  - 2. Back pain with some EMS, response to NSAID, HLA B27 neg, ESR, CRP normal, may not be inflammatory and not ENA related
  - Asked if any sicca symptoms
  - With low ANA/ENA may not be significant but if develops sicca sx would send referral to Rheum as may be mild AI disease
  - With back pain – would do SIJ xray and if normal and back pain persists, MRI SIJ – if to be done by specialist – needs referral

Conclusions

1. RFAs have some utility in reducing referrals and waitlists
2. RFAs a means for communication/liaison with GPs – alternative is ringing for advice – harder to get the right person?
3. Expansion of program may highlight to HHS to dedicate FTEs to this service
4. Not suitable for all patients – urgent issues