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Common Challenges in Primary Care: Rheumatology 2021

19 August 2021

General Practice Liaison Officer (GPLO) Program

Acknowledgement

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.

Housekeeping

Welcome

Webinar rules

- Check your mic. is muted and your video is off
- Please write questions in the chat box
- Ensure you stay on line for the 2 hours of the event
    - Evidence of registrant participation is provided to the college for CPD allocation
- Please complete the online evaluation – link provided in the chat
    - Feedback helps us to improve these events
    - Forms are uploaded to the college for recognition of event quality

6.30pm – 6.45pm	**Welcome and GP Liaison Update** Dr James Martin, GP & GP Liaison
6.45pm – 7.30pm	**Rheumatoid Arthritis Essentials & DMARDs in a Nutshell** Dr Claire Barrett, Rheumatologist Redcliffe Hospital
7.30pm – 8.15pm	**Fixing Gout in Primary Care & Inflammatory Back Pain** Dr Phillip Robinson, Rheumatologist RBWH
8.15pm – 8.30pm	**Rheumatology Q&A Session** All speakers

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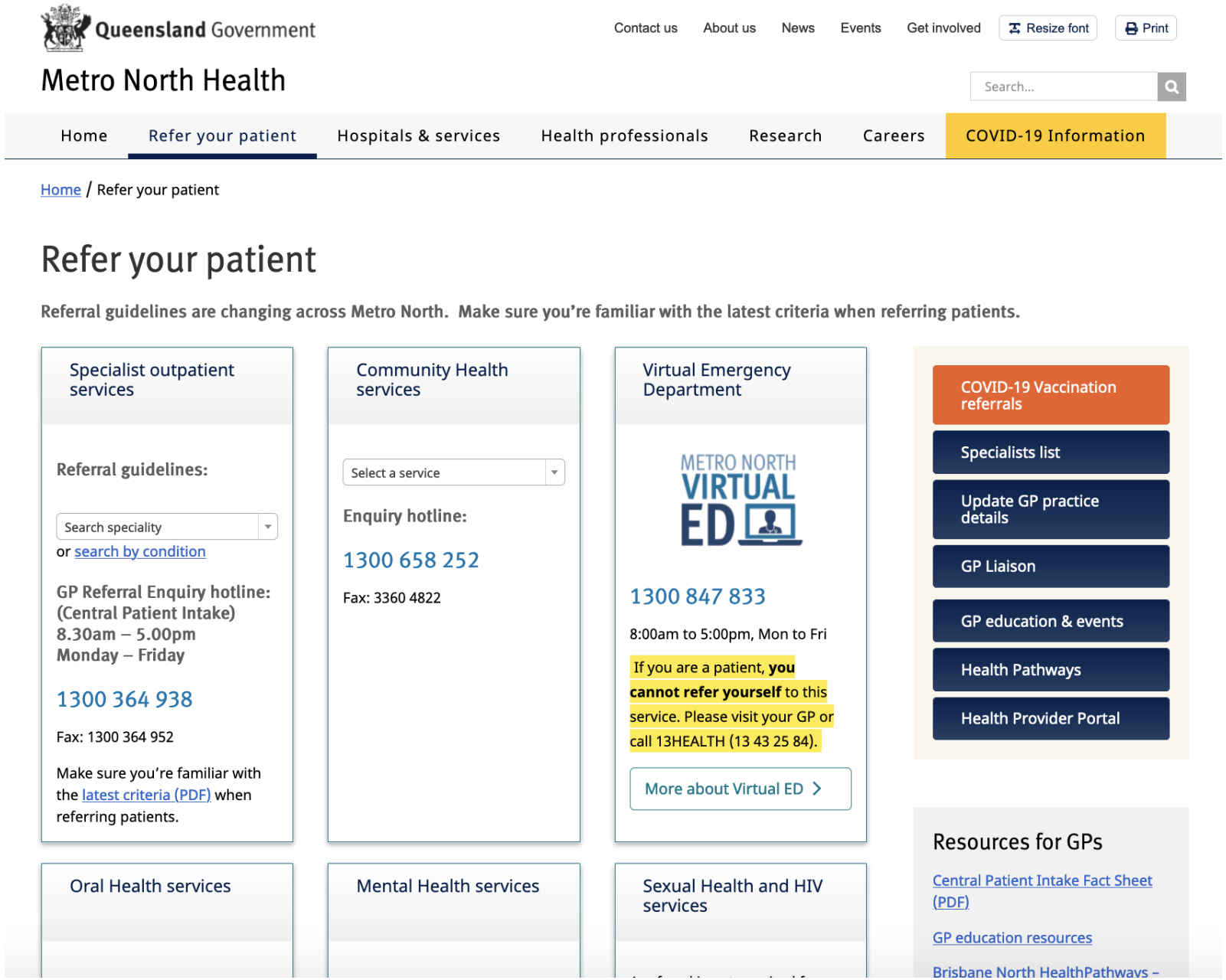
GPLO Update

(how to make better medical practice easier)

Refer Your Patient



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COVID Vaccination Referrals

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Home / Refer your patient / Vaccination referrals

COVID-19 (Coronavirus) Vaccination referrals to Metro North Health

Metro North Health provides vaccination services with Pfizer COVID-19 vaccine (Comirnaty) and AstraZeneca COVID-19 Vaccine across multiple facilities including community clinics, hospital-based clinics and specialist led clinics.

How can your patients get an appointment at a Metro North Health Vaccination Clinic?

Eligible people can now book to receive a COVID-19 vaccine at a Queensland Health vaccination location provided they bring written proof of their eligibility.

Do Metro North Health Vaccination Clinics accept walk-ins?

As at Friday 2 July 2021, we are unable to accept walk-ins for COVID-19 Pfizer vaccine at Metro North Health vaccination clinics unless in an identified priority group. This will be continually reviewed and updated on our Metro North Health Vaccinations information page.

Who are Metro North Health vaccinating?

Metro North Health is vaccinating 1a and 1b cohorts and people 40 years and over. This will be continually reviewed and updated on our Metro North Health Vaccinations information page.

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For the latest COVID-19 vaccine information

Phone: 134 COVID (13 42 68)

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Australian
Eligibility
System

Which patients should I refer to Qld Adult Specialist Immunisation Service (QASIS)?

- Anaphylaxis or generalised allergic reaction (without anaphylaxis) to any component of the COVID-19 vaccine to be administered
- Immediate (within 4 hours) and generalised symptoms of a possible allergic reaction (e.g. urticaria/hives) to a previous dose of a COVID-19 vaccine
- History of anaphylaxis to previous vaccines and/or multiple drugs (injectable and/or oral) where ingredients such as PEG or polysorbate 80 may conceivably be the cause
- Mast cell activation disorder with raised mast cell tryptase needing treatment and has been unable to tolerate previous injections (e.g. flu vaccine) due to recurrent anaphylaxis.
- Patients experiencing severe side effects to first dose of any COVID vaccine.
- Anaphylaxis, thrombosis with thrombocytopenia or other serious adverse event attributed to the first dose of the AstraZeneca COVID-19 vaccine
- History of anaphylaxis to a component of the AstraZeneca COVID-19 vaccine

How do I refer my patient to QASIS?

Send an outpatient referral to MNHHS Central Patient Intake via:

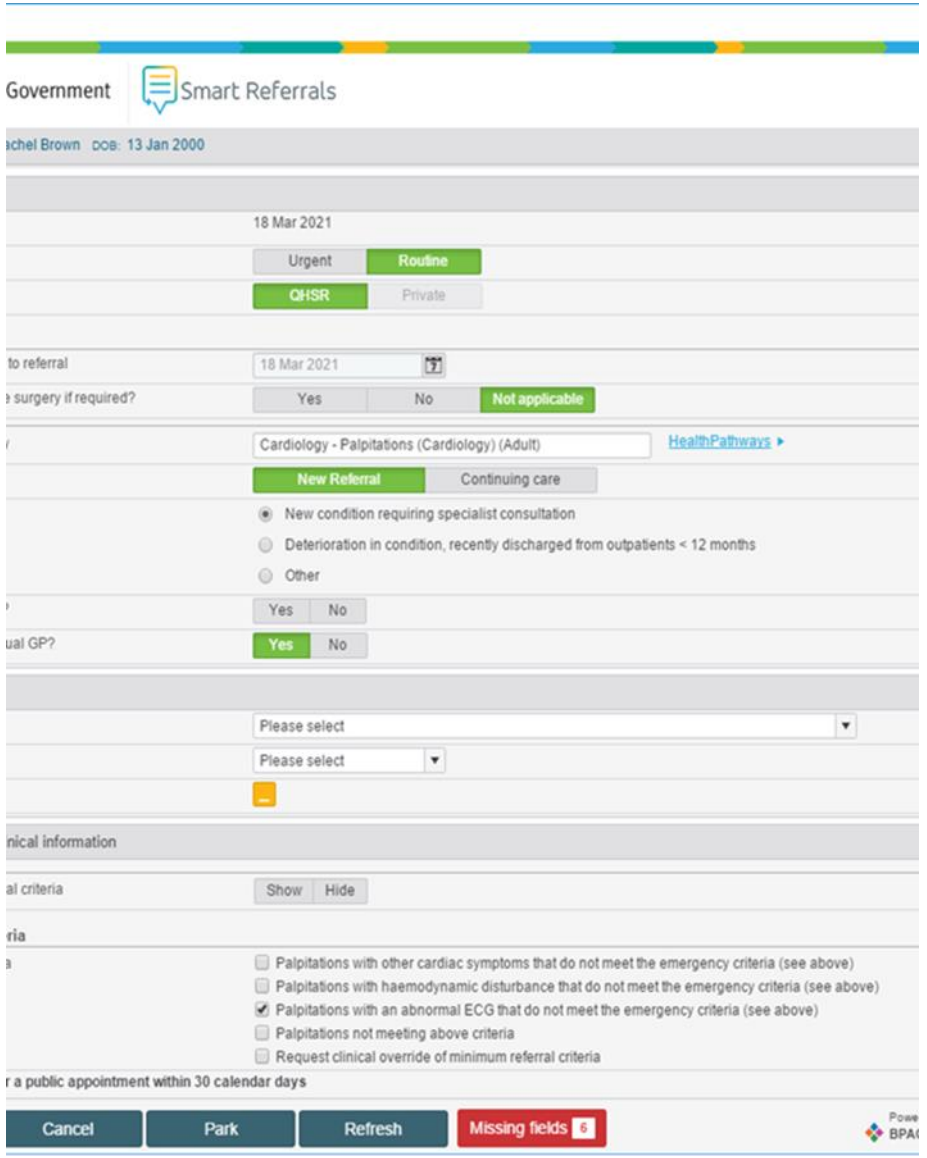
- Medical Objects
- Fax

GP Smart Referrals

- Condition specific templates

  (Altered bowel habit, palpitations…)
- Attach scanned documents

  (PDF, Images)
- Advice on expected wait times
- Track and amend referrals
- All public hospitals and Mater
- UNREJECTABLE!



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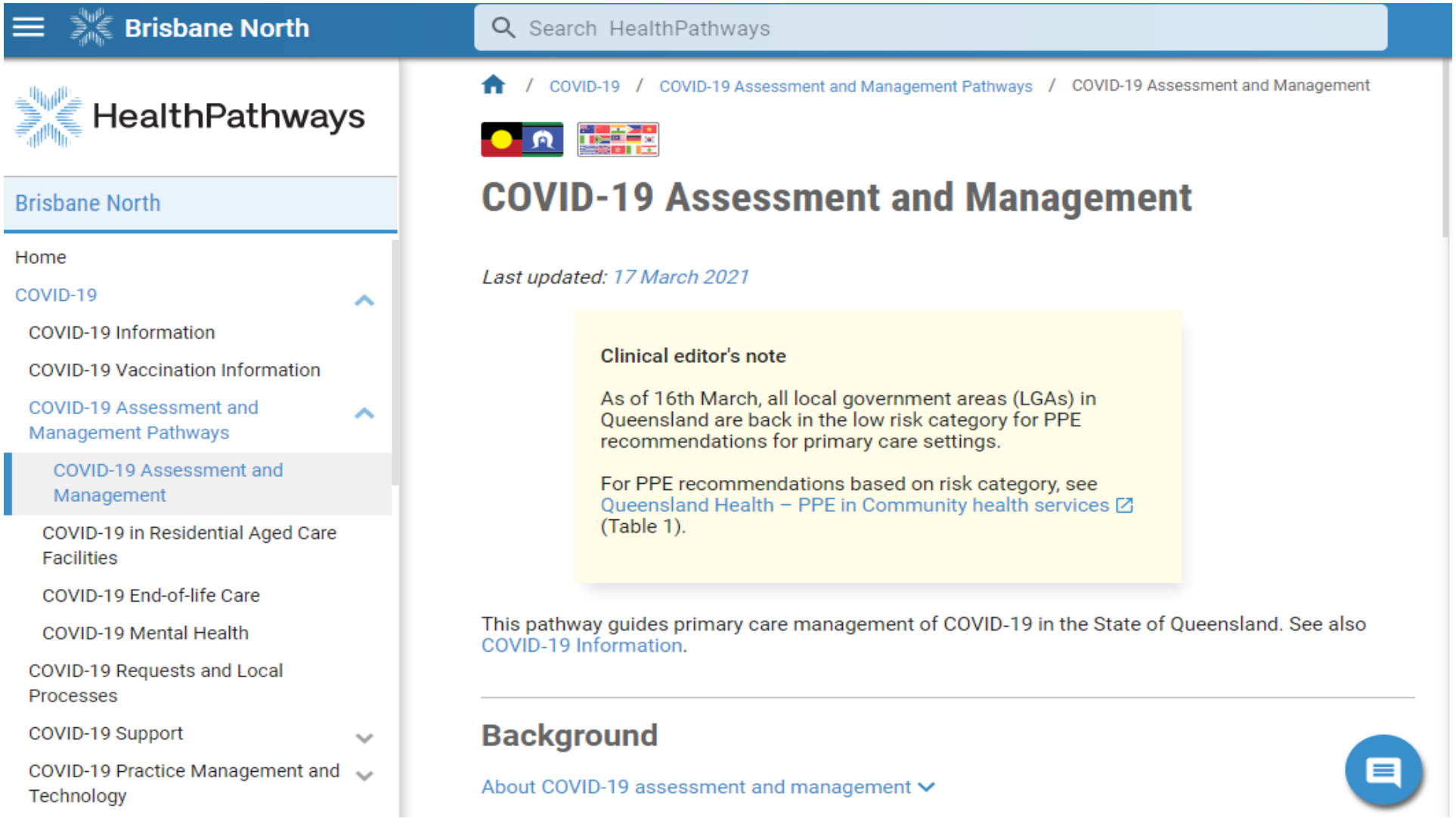
Health Pathways



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Virtual ED

Virtual Emergency Department

Metro North Virtual ED offers alternative pathways that can help avoid your patient waiting in an Emergency Department.

METRO NORTH VIRTUAL ED

1300 847 833

8:00am to 5:00pm, Mon to Fri

(GP's ONLY)

Metro North Hospital and Health Service has developed a Virtual Emergency Department 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.

How to access the service

If you are a patient, **you cannot refer yourself** to this service. Please visit your GP or call 13HEALTH (13 43 25 84).

1. Call 1300 VIRTED (1300 847 833) between 8.00am and 5.00pm weekdays. You will be connected directly to a senior emergency nurse who will rapidly Triage your call.
2. Please have the following information ready **(this will take less than 1 minute)**
   - Clinician's name and phone number
   - An email or other link if you require video consultation
   - The patient's name, date of birth, hospital number (if available) and brief description of the problem
3. You will then be connected directly to an Emergency Specialist.

The Emergency Specialist can assist in many ways:

1. Advice to assist you to continue your patient management within the community
2. Advise on the interpretation of pathology, radiology, ECGs and other investigations
3. Engagement with hospital managed community services such as RADAR and HITH (Hospital in the Home) to support your patient with daily skilled nurse visits
4. Connection to a hospital sub specialist for timely advice
5. The arrangement of an urgent outpatient review in a specialty "hot clinic" all within 48 hours
6. Direct admission to hospital for those patients who do not require urgent ED care
7. Liaison with an Emergency Department specialist when rapid admission and care is required

See the Virtual ED fact sheet for GPs (PDF) for more information.

Consult with an emergency clinician

If you are a patient, *you cannot refer yourself* to this service. Please visit your GP or call 13HEALTH (13 43 25 84).

Hotline: 1300 847 833

Open: 0800 to 1730, Monday to Friday

Email: MNHHSvirtualedadmin@health.qld.gov.au

Health pathways

Access to Health Pathways is free for clinicians in Metro North Brisbane.

For login details email: healthpathways@brisbanenorthphn.org.au

Login to Brisbane North Health Pathways: brisbanenorth.healthpathwayscommunity.org

Resources

Virtual ED fact sheet for GPs (PDF)

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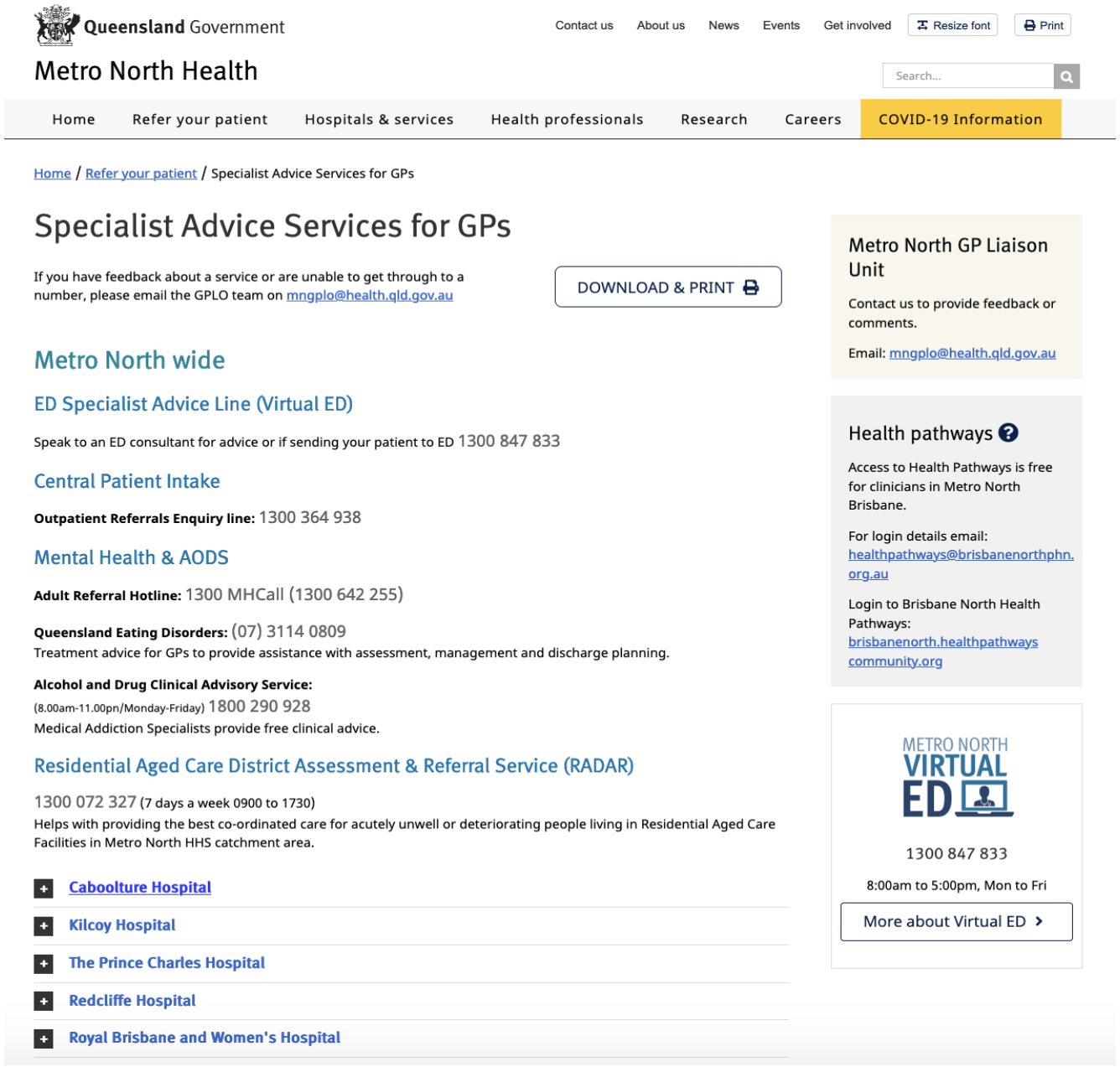
Specialist Advice Services



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Specialist Advice Services for GPs

If you have feedback about a service or are unable to get through to a number, please email the GPLO team on mngplo@health.qld.gov.au

DOWNLOAD & PRINT

Metro North wide

ED Specialist Advice Line (Virtual ED)

Speak to an ED consultant for advice or if sending your patient to ED 1300 847 833

Central Patient Intake

Outpatient Referrals Enquiry line: 1300 364 938

Mental Health & AODS

Adult Referral Hotline: 1300 MHCall (1300 642 255)

Queensland Eating Disorders: (07) 3114 0809
Treatment advice for GPs to provide assistance with assessment, management and discharge planning.

Alcohol and Drug Clinical Advisory Service:
(8.00am-11.00pn/Monday-Friday) 1800 290 928
Medical Addiction Specialists provide free clinical advice.

Residential Aged Care District Assessment & Referral Service (RADAR)

1300 072 327 (7 days a week 0900 to 1730)
Helps with providing the best co-ordinated care for acutely unwell or deteriorating people living in Residential Aged Care Facilities in Metro North HHS catchment area.

- Caboolture Hospital
- Kilcoy Hospital
- The Prince Charles Hospital
- Redcliffe Hospital
- Royal Brisbane and Women's Hospital

Metro North GP Liaison Unit

Contact us to provide feedback or comments.

Email: mngplo@health.qld.gov.au

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More about Virtual ED

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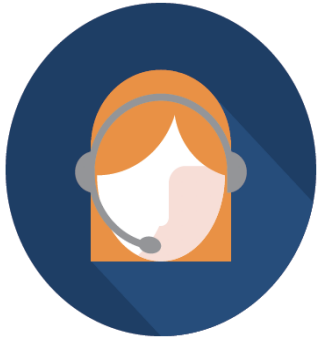
My Mental Health

The **My Mental Health Service Navigation team** can provide information about mental health, suicide prevention and alcohol and other drug treatment services in our region.



The team also support health professionals, consumers and carers making a referral to PHN commissioned services.

Phone: **1800 752 235**
Email: **navigation@brisbanenorthphn.org.au**

Phone and email monitored 8.30 am - 4.30 pm Monday - Friday, excluding public holidays

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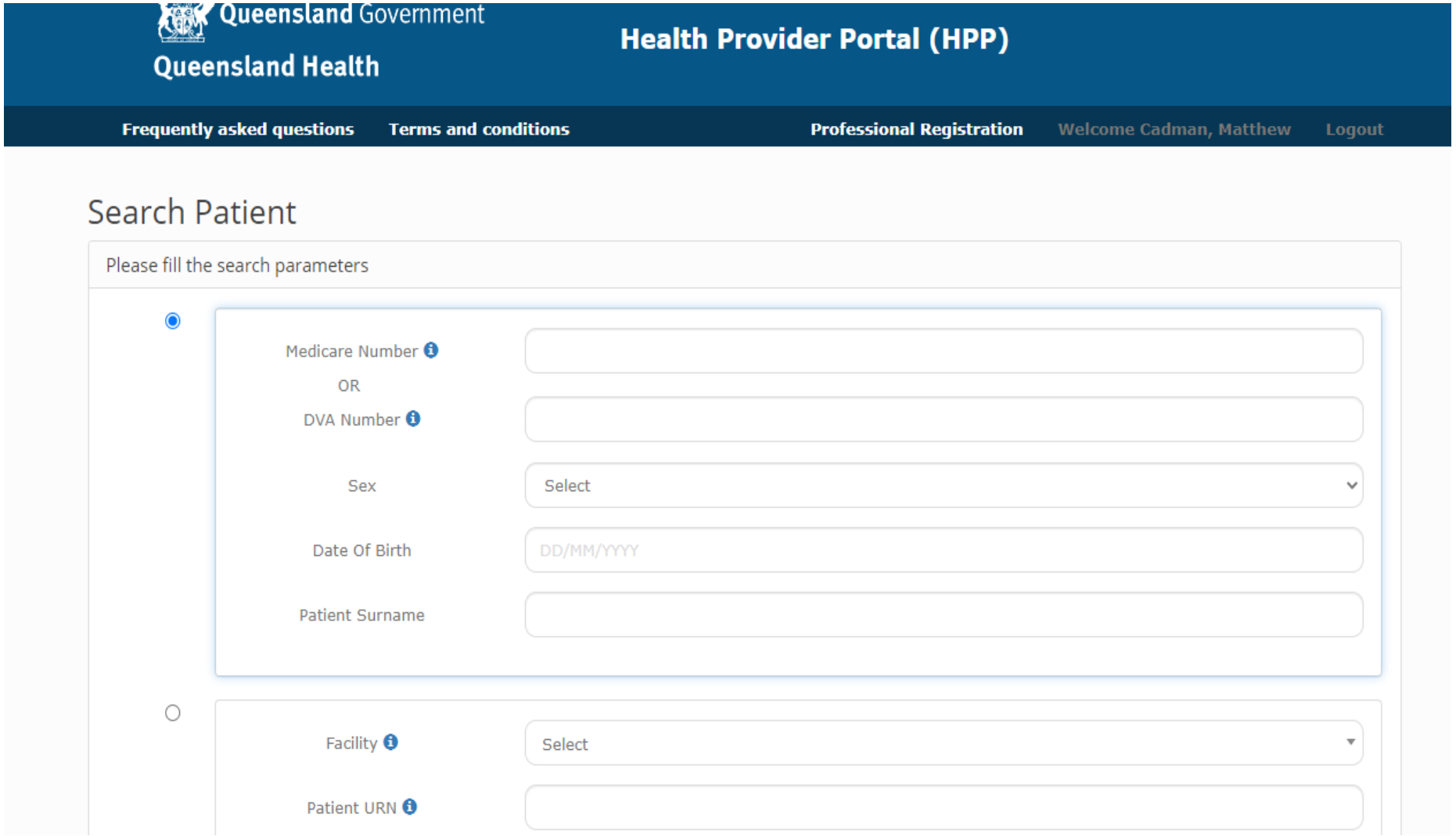
Health Provider Portal



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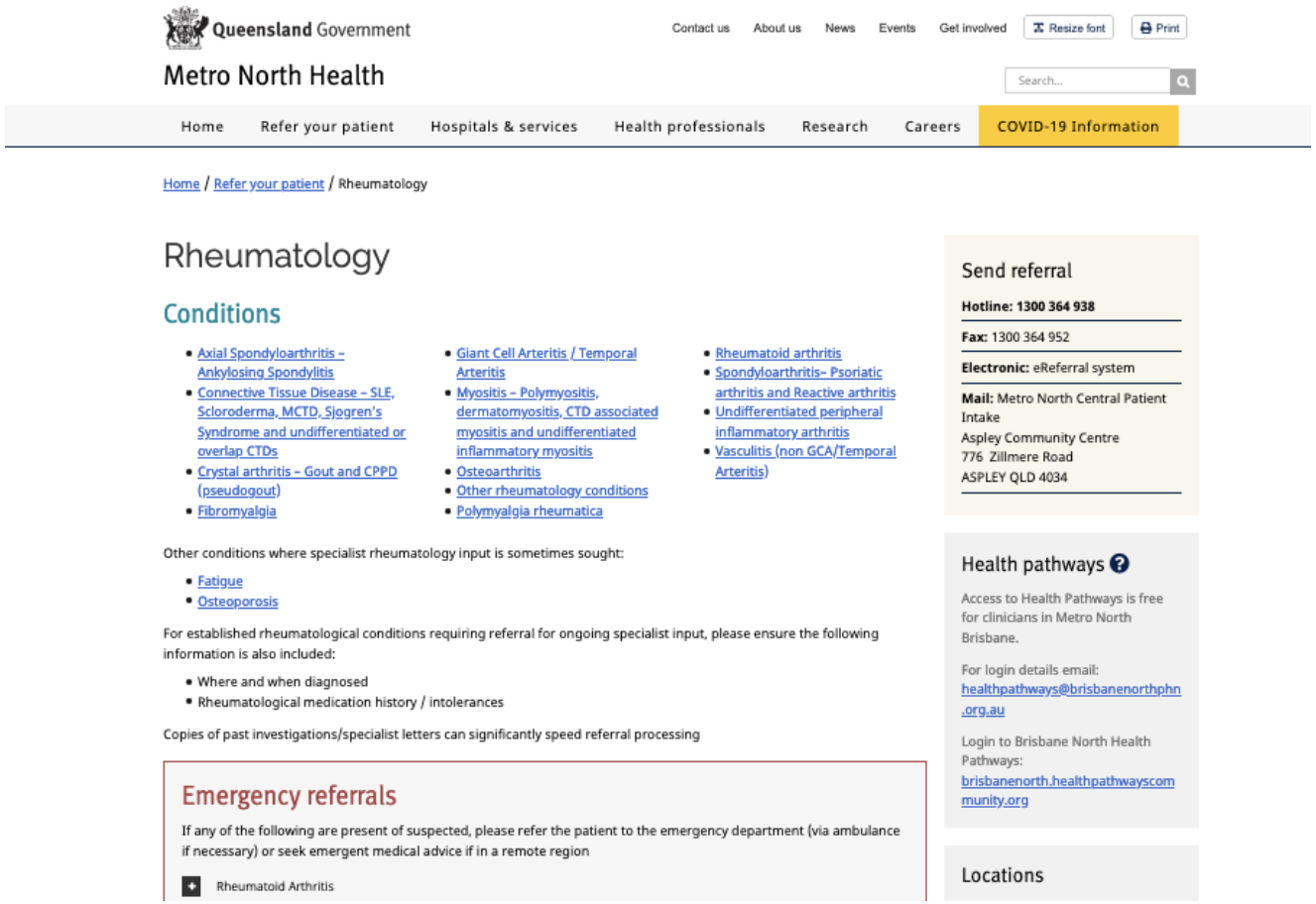
Rheumatology Shared Care Factsheets



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Rheumatology

Conditions

- Axial Spondyloarthritis – Ankylosing Spondylitis
- Connective Tissue Disease – SLE, Scloroderma, MCTD, Sjogren's Syndrome and undifferentiated or overlap CTDs
- Crystal arthritis – Gout and CPPD (pseudogout)
- Fibromyalgia
- Giant Cell Arteritis / Temporal Arteritis
- Myositis – Polymyositis, dermatomyositis, CTD associated myositis and undifferentiated inflammatory myositis
- Osteoarthritis
- Other rheumatology conditions
- Polymyalgia rheumatica
- Rheumatoid arthritis
- Spondyloarthritis– Psoriatic arthritis and Reactive arthritis
- Undifferentiated peripheral inflammatory arthritis
- Vasculitis (non GCA/Temporal Arteritis)

Other conditions where specialist rheumatology input is sometimes sought:

- Fatigue
- Osteoporosis

For established rheumatological conditions requiring referral for ongoing specialist input, please ensure the following information is also included:

- Where and when diagnosed
- Rheumatological medication history / intolerances

Copies of past investigations/specialist letters can significantly speed referral processing

Emergency referrals

If any of the following are present of suspected, please refer the patient to the emergency department (via ambulance if necessary) or seek emergent medical advice if in a remote region

- Rheumatoid Arthritis

Send referral

Hotline: 1300 364 938

Fax: 1300 364 952

Electronic: eReferral system

Mail: Metro North Central Patient Intake
Aspley Community Centre
776 Zillmere Road
ASPLEY QLD 4034

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Login to Brisbane North Health Pathways: brisbanenorth.healthpathwayscommunity.org

Locations

Resources

- Guideline for the Management of Knee and Hip Osteoarthritis Second Edition (PDF)
- Specialists list
- Osteoarthritis of the Knee Clinical Care Standard
- General referral criteria
- eReferral template

Methotrexate

- Shared Care Fact Sheet – Low Dose Methotrexate. (PDF)
- Notes for prescribers of low dose once weekly methotrexate (PDF)
- Handling Low Dose Methotrexate (PDF)
- Self injection of low dose MTX (PDF)

Other medications

- Shared Care Fact Sheet – Biologic and Targeted Synthetic DMARDs. (PDF)
- Shared Care Fact Sheet - Leflunomide (PDF)
- Shared Care Fact Sheet – Sulfasalazine (PDF)
- Shared Care Fact Sheet - Hydroxychloroquine (PDF)
- ARA Position Statement Medical Cannabis (PDF)
- Prescribing Medications for Rheumatic Diseases in Pregnancy (PDF)

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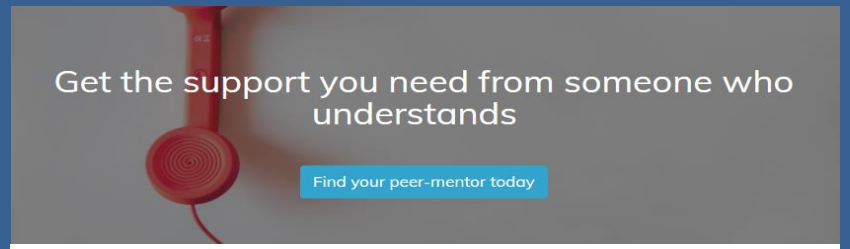
Arthritis QUEENSLAND



Sometimes you just need to speak with someone who has been in your shoes and understands what you're going through.

Arthritis Assist connects you with a Peer-Mentor who lives with arthritis and understands what you're going through. They are there to listen and can provide the support that's best for you.

A 12-week, online group exercise program for Queenslanders living with arthritis who are looking for ways to participate in physical activity.

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Free Information Services

Get in touch with us to access up-to-date information and resources.

Infoline

Call the free Arthritis Infoline to speak to trained volunteers who can answer your questions about living with arthritis.

Info Packs

Access a range of helpful booklets and information sheets by download or post.

Weekly E-news

Sign up for our E-news to get weekly articles, videos, tips and information straight to your inbox to help you navigate life with arthritis.

Online

Visit our website or connect with us on social media to access the latest arthritis information and to register for our support services.

www.arthritis.org.au

Online Support Groups

Our Online Support Groups are closed, moderated Facebook groups where you can connect with people who know exactly what you're going through.

Swell Gals

Where women with arthritis share their stories and support each other through the daily challenges of living with arthritis.

Men's Support Group

Where men with arthritis share experiences, give advice and share a joke or two along the way.

Parents' Support

For parents and carers of children diagnosed with arthritis to connect, seek support and know they're not alone.

Thank You!

For more information about these resources:

Contact us – mngplo@health.qld.gov.au

Please remember to please complete the online evaluation form

This helps us to deliver better education events for you

Future events:

- Mental Health Discussion Series – QuEDS, 26th Aug
- Gastroenterology and Hepatology Workshop, 28th Aug
- Gynaecology Workshop, 4th Sep
- Maternity Workshop, 30th Oct
- **RHEUMATOLOGY EDUCATION DAY ~~2021~~ 2022 tba**

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Rheumatoid Arthritis Essentials

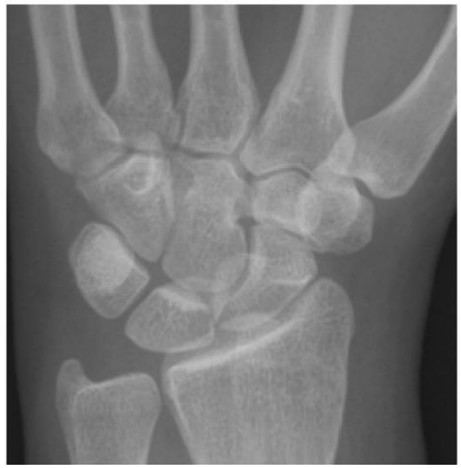
Dr Claire Barrett
Rheumatologist
Redcliffe Hospital, MNHHS
Redcliffe and Northside Rheumatology
Longreach

Review and refresh current best practice for identifying rheumatoid arthritis (RA)

- Diagnosis
  - History
  - Examination
  - Investigations

26 yr female 10 months joint pain

- Hx
  - Bilateral wrists then R 2nd MCPJ, bilateral feet, then ankle
  - Worse in morning
    - > 1 hr. to improve
  - Better with exercise
  - PMHx 2015 knee pain
    "rheumatoid test –ve"
  - FHx – uncle RA diagnosed 19 yrs untreated until age 45
- Ex tender swelling
  - R 2nd MCPJ
  - Bilateral 5th MTPJ
  - Bilateral wrists/knees
- Ix
  - CRP 3
  - ESR 17
  - RF 17
  - CCP 59
  - Imaging x-ray non erosive



RA

- Chronic autoimmune condition
- First documented 300-200 BC writings from India
- Characteristics
  - joint swelling +/- pain
  - loss of mobility
- Cause unknown
  - Women more frequently than men
  - Genetics
  - Environmental

Who really has RA?

- 450,000 Australians living with RA in 2017
  - Census data
    - “Do you have RA?”
- Prevalence 0.46% in Australasia
  - RF + joint pain does not = RA
- Onset between 35 and 60 years
  - Majority of disease burden in Australia is in > 65 years

“RA” cytokines

- Promote influx of immune effector cells into joint synovium
- Activates osteoclasts, chondrocytes and fibroblasts
- Positive feedback loop
  - reinforces inflammatory process
  - joint pain/erosion → deformity and disability
- Chronic inflammation ↑risk myocardial infarction, stroke, death
  - absolute increase in CVE 5.7/1000 person-years (95% CI 4.9–6.4) RA v those without

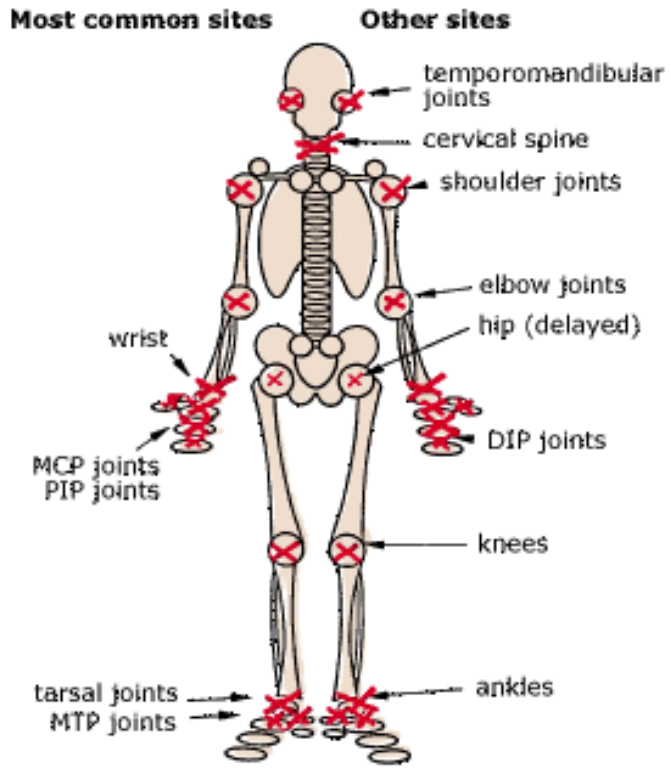
RA

History

- Joint swelling +/- pain
- Early morning joint stiffness
- Better during the day/worse after rest
- Sudden/gradually/episodic

Examination

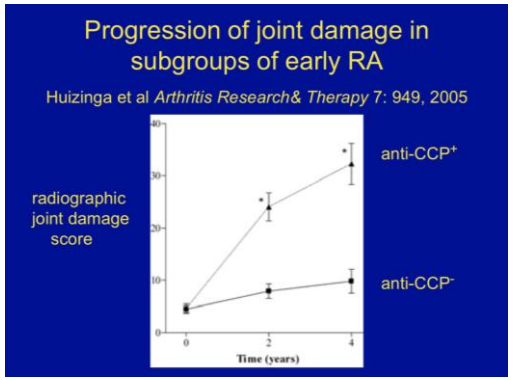
- Swollen +/- tender joints
- Small
  - Hands
  - FEET
- Large
- Other
  - Nodules
  - Lungs



RA- investigations – autoantibodies

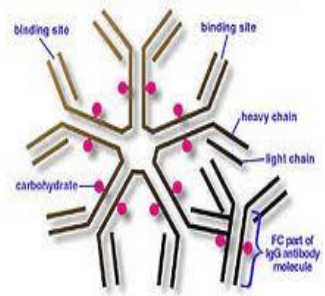
Anti-cyclic citrullinated peptides- (CCP/ACPA)

- >90% specificity for RA
  - highly predictive of development of RA
- reasonable sensitivity (50-65%)
  - severity not activity
- repeat testing **not** recommended



Rheumatoid factor

- Antibody v Fc portion of IgG
- RA 60-70%
- Sjogren's Syndrome 85-95%
- False positives
  - ✓Healthy 5%
  - ✓> 65 yrs. 20%
  - ✓5-25% Hep C
- Low level poor predictor
- Associated with extra-articular manifestations e.g. nodules, lungs



2010 ACR/EULAR RA Classification Criteria

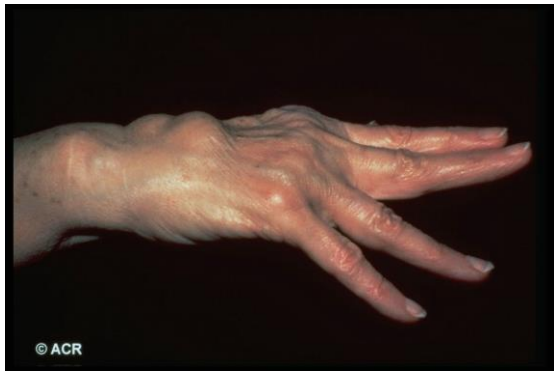
Swollen/Tender Joints (0-5)	
0	1 large joint
1	2-10 large joints
2	1-3 small joints
3	4-10 small joints
5	> 10 joints (≥ small joint)

Symptom Duration (0-1)	
0	< 6 wk
1	≥ 6 wk

Acute-Phase Reactants (0-1)	
0	Normal CRP and normal ESR
1	Abnormal CRP or abnormal ESR

Serology (0-3)	
0	Negative RF and ACPA
2	Low-positive RF or ACPA
3	High-positive RF or ACPA

Patients with a score of ≥ 6 have "definite" RA



ACPA = anti-citrullinated protein antibody; ACR/EULAR = American College of Rheumatology/European League Against Rheumatism; CRP = C-reactive protein; ESR = erythrocyte sedimentation rate; RA = rheumatoid arthritis; RF = rheumatoid factor.

Aletaha D, et al. *Arthritis Rheum*. 2010;62:2569-2581.

Differential Diagnosis of Inflammatory Arthritis (IA)

- **RA**
- Seronegative arthritis
  - **Psoriatic Arthritis**
  - Undifferentiated IA
  - Reactive arthritis
  - PMR
- CTD
  - SLE, scleroderma
- Viral arthritis
  - Ross River, Hep B/C, HIV, CMV/EBV, Parvovirus
- **Crystal arthritis**
  - **Gout** & pseudogout
- Osteoarthritis
  - Nodal hand
- Uncommon
  - Unusual infection TB,Gonococcal
  - Sarcoid
  - Leukaemia
  - Vasculitis

Inflammatory arthralgia v arthritis

Arthralgia -pain

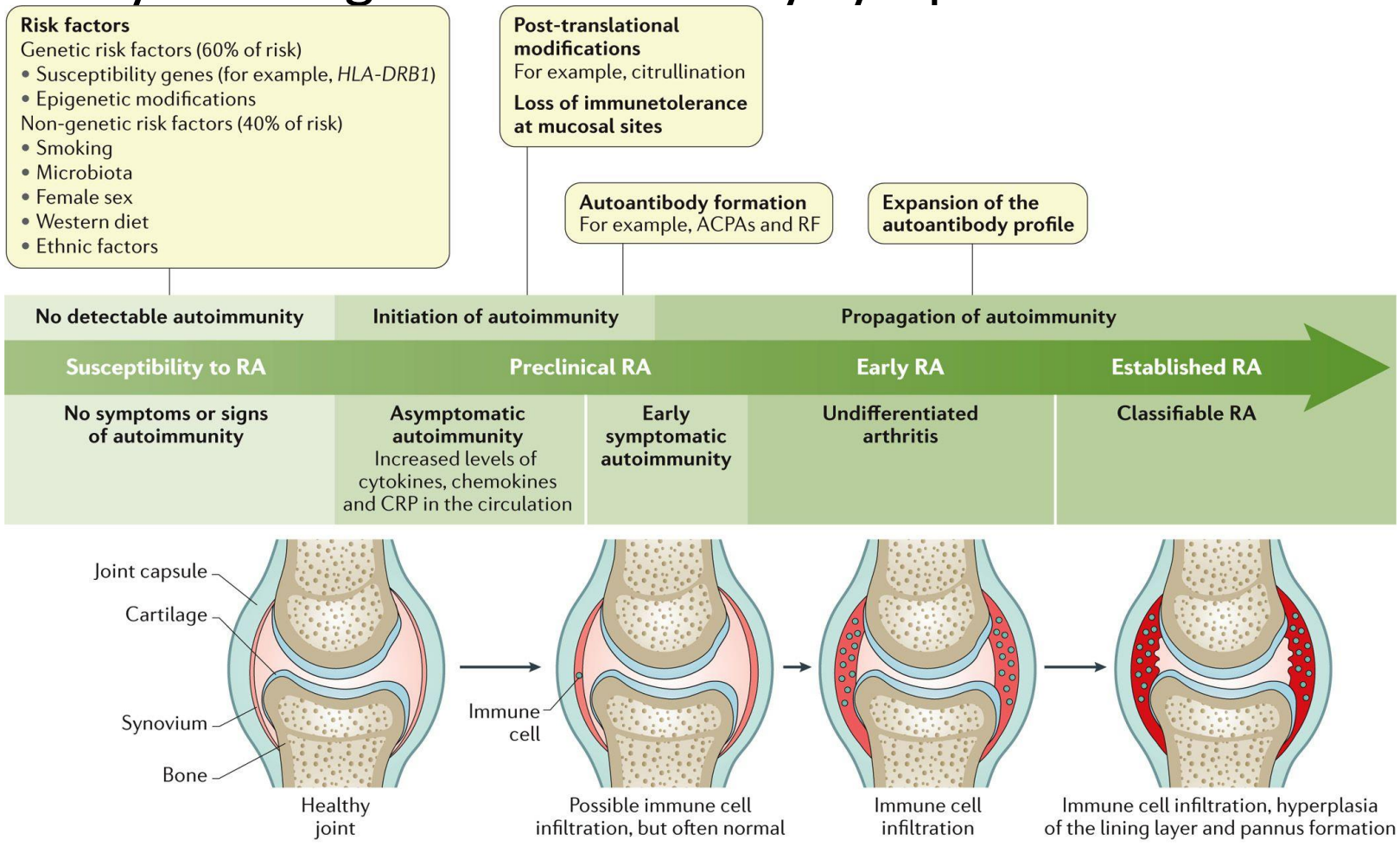
- Injury
- Disease - arthritis
- Infection
- “Growing pains”

Arthritis – swelling

- Swollen
  - clinical/imaging
- Painful
- Inflammatory v non-inflammatory
  - Stiff in the morning/after rest
- Difficult to move

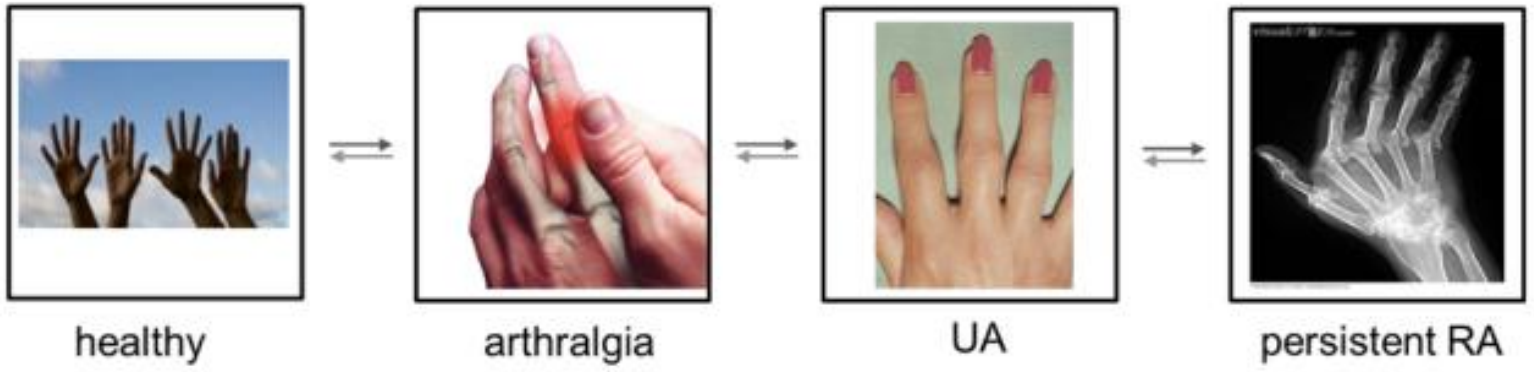
Will arthralgia eventually be RA?

- Inflammatory arthralgia -inflammatory symptoms without arthritis



EULAR definition of arthralgia at risk of RA

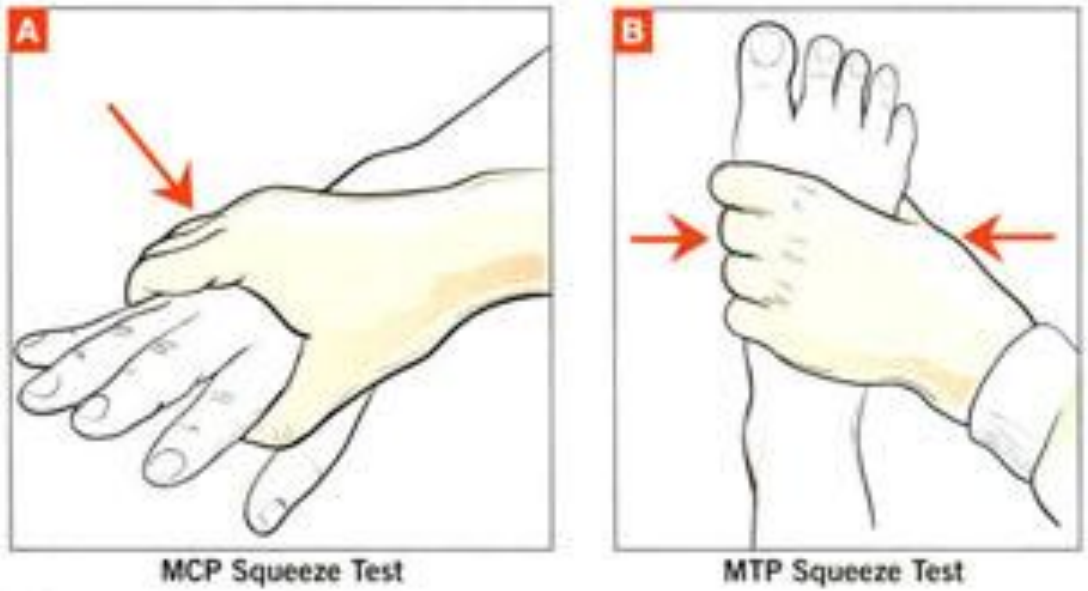
- For patients with arthralgia without arthritis without any other explanation for arthralgia
- Hx
  - Recent (< 1 yr) joint symptoms
  - MCPJ
  - EMS > 60 mins
  - Worse in morning
  - 1st degree relative with RA
- Ex
  - Difficulty making a fist
  - + MCP joint squeeze test



MCP and MTP joint squeeze tests

Figure 2

The MCP and MTP Squeeze Tests



MCP, metacarpophalangeal joint; MTP, metatarsophalangeal joint.

Tenderness or pain in response to squeezing across the second to the fifth metacarpal (A) or across the metatarsals (B) suggests synovitis. Available at and adapted from www.gp-training.net/rheum/exam.[1]

MNHHS – refer your patient

Rheumatoid arthritis

Red flags

Consider immediate referral to/liaison with specialist for

- New onset inflammatory polyarthritis (swollen, tender joints with early morning stiffness > 30 minutes) even if RhF/CCP/ESR/CRP normal
- Concerns for septic arthritis
- Complications of disease or therapy requiring emergent review – systemically unwell

Does your patient wish to be referred?

Minimum referral criteria

Does your patient meet the minimum referral criteria?

Category 1 Appointment within 30 days is desirable	• New onset, suspected or recently diagnosed rheumatoid arthritis • Active established rheumatoid arthritis requiring escalation of management
Category 2 Appointment within 90 days is desirable	• Known rheumatoid arthritis on established conventional or biologic DMARDs
Category 3 Appointment within 365 days is desirable	• No defined category 3 criteria

Specialist rheumatology input may be sought for

Send referral

Hotline: 1300 364 938

Fax: 1300 364 952

Electronic: eReferral system

Mail: Metro North Central Patient Intake
Aspley Community Centre
776 Zillmere Road
ASPLEY QLD 4034

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Locations

Caboolture Hospital

Redcliffe Hospital

MNHHS – RA referral

Referral requirements

A referral may be rejected without the following information.

− Essential referral information

History and examination

- Inflammatory arthritis symptoms, evolution and rate of deterioration
- Number/location of swollen tender joints
- Duration of early morning stiffness (greater or less than 30 minutes)
- If on a biologic DMARD and for PBS review, please stat timeframe

Investigations

- FBC
- E/LFT
- ESR/CRP
- Rheumatoid Factor/anti CCP antibody
- ANA

Additional referral information (useful for processing the referral)

- Extra-articular and systemic features, if any including weight loss
- Imaging e.g. SR, MRI/US results of affected joints
- Details of previous treatment/management offered and assessment of efficacy including relevant PBS documentation
- Pain assessment e.g. waking up at night, analgesic consumption, aggravating and relieving factors
- Interference with activities of daily living and working ability
- Other screening previously performed including CSR, HepB, HepC, HIV, QuantiFERON Gold (QFG)

Out of catchment

Metro North Health is responsible for providing public health services to the people who reside within its boundaries. Special consideration is made for patients requiring tertiary care or services that are not provided by their local Hospital and Health Service. If your patient lives outside the Metro North Health area and you wish to refer them to one of our services, inclusion of information regarding their particular medical and social factors will assist with the triaging of your referral.

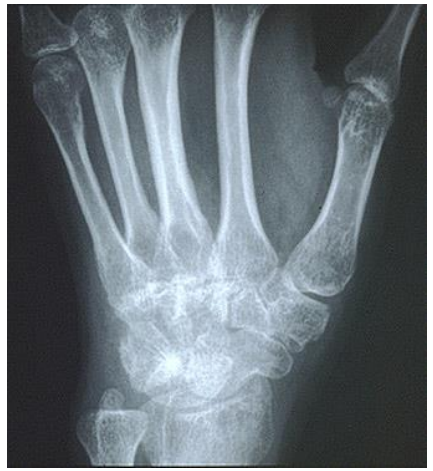
+ Clinical Modifiers (where relevant)

+ Reason for Referral (essential)

+ Clinical Information (essential)

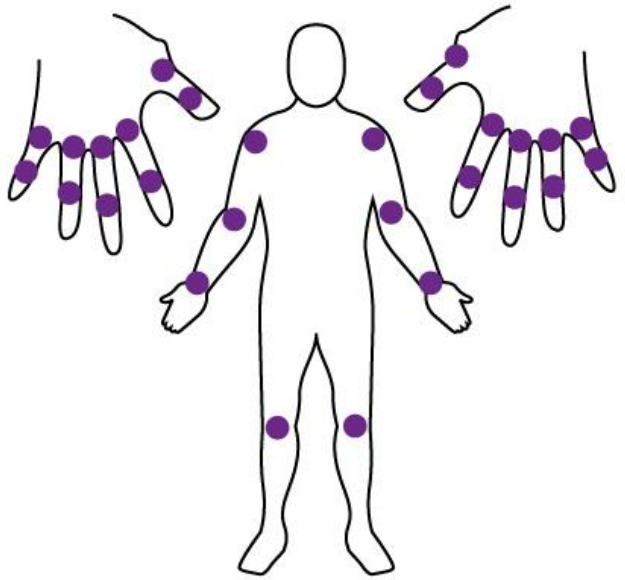
+ Patient's Demographic Details (essential)

Treating RA - 2021 to target



- Aim for remission or low disease activity
  - leads to better outcomes
  - Disease-modifying antirheumatic drugs (DMARDs) prevent
    - joint erosions
    - reduce pain
    - reduce cardiovascular morbidity and mortality
- Disease activity quantified by validated tools
  - disease activity score based on 28-joint count **(DAS-28)**
  - clinical disease activity index (CDAI)
  - simplified disease activity index (SDAI)

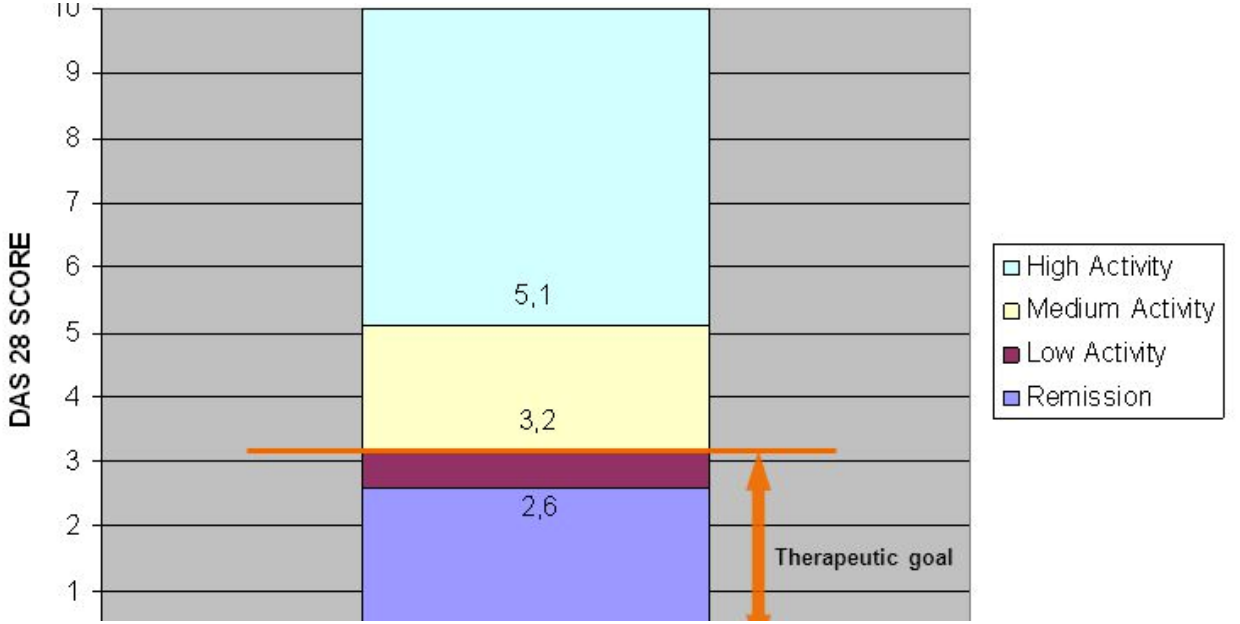
DAS-28



- Score calculated from
  - Joint examination
    - swollen JC
    - tender JC
  - Inflammatory markers
    - C-reactive protein or erythrocyte sedimentation rate
  - Global health assessment (GHA) - patient-reported pain and function

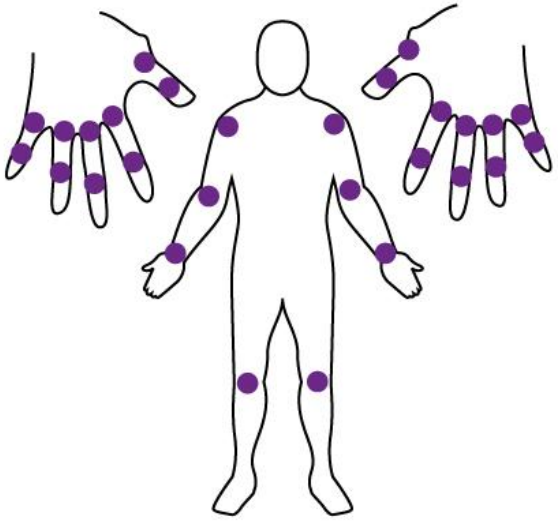
Treat-to-target approach recommended by ACR and EULAR guidelines

- Optimal scores for defining low disease activity and remission continue to be refined
  - Remission < 2.6
  - Low 2.6- 3.2
  - Moderate 3.2-5.1
  - High > 5.1



Disease Activity Score (DAS28) in Australia

- Remission: 41.6%
- Low Disease Activity (LDA): 18.6%
- Moderate Disease Activity (MDA): 31.6%
- High Disease Activity (HDA):



40% moderate or high DA

Treating to target

- Moderate to high disease activity → more intense therapy
- But
  - Patient must willing
    - > 50% not
  - Suitable option must be available
    - No contraindication
    - Funded
      - Evidence-based treatment algorithms do not completely reflect Australian regulatory restrictions

Disease-Modifying Antirheumatic Drugs (DMARDs) in a Nutshell

Dr Claire Barrett
Rheumatologist
Redcliffe Hospital, MNHHS
Redcliffe and Northside Rheumatology
Longreach

Identify how to help your patients make the best and safest use of DMARDs through shared care with their rheumatologist

- Treatment
  - Non-pharmacological
  - Pharmacological
    - Symptoms
    - Disease

Treatment
Non-pharmacological

- Patient education
- Exercise
- Diet
- Weight optimization
- Alcohol
- Smoking

Treatment Pharmacological

Symptoms

- Analgesia
- Anti inflammatory
- Glucocorticoids

Disease Modifying Antirheumatic Drugs DMARDs

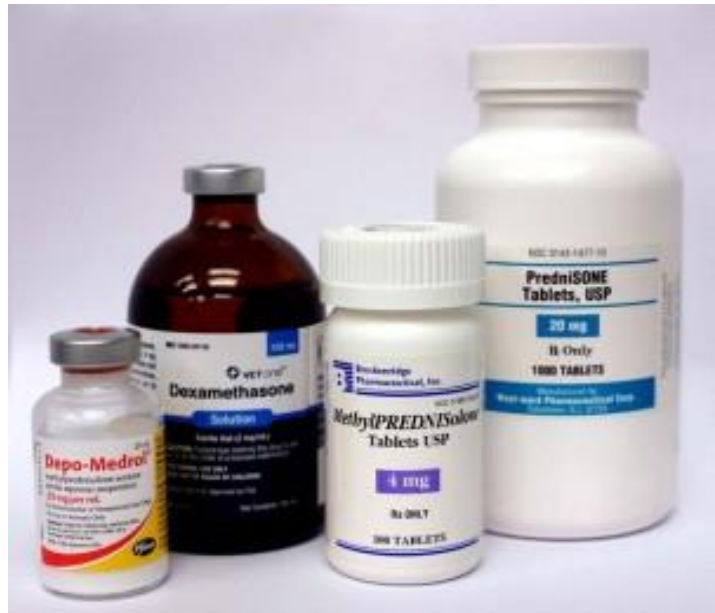
- Conventional synthetic (csDMARD)
- Targeted
  - Biological (bDMARD)
  - Targeted synthetic (tsDMARD)

Early treatment is important in RA
Remission is unlikely without intervention

- Bone erosions detectable
  - 25% of people within 3 months of onset
  - 70% by 3 years
- Delaying treatment > 3 months
  - causes more joint destruction
  - higher chance requiring persistent DMARDs to maintain remission
- Early DMARD during ‘window of opportunity’
  - more readily induce remission
  - delays progression

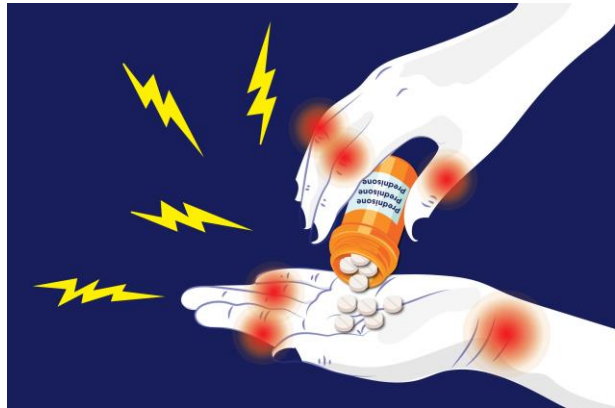
Glucocorticoids (GC) in RA recommendations

- Short-term glucocorticoids should be considered very carefully
  - initiating
  - changing csDMARDs
- Different dose regimens and routes of administration
  - Low dose 1 v 3 v 5-7.5mg/day v IA v IM
- Prevent erosions early
  - ?15mg
  - no evidence > 9 months



Glucocorticoids (GC) in RA

- Taper as rapidly as clinically feasible
  - universal long-term AE limit use
  - even at small doses
- Avoid with biological or targeted synthetic DMARDs
  - infection risks
- If cannot be withdrawn within 6 months DMARD therapy considered failure & needing optimisation



Treatment for RA –csDMARDs

- Methotrexate MTX
- Hydroxychloroquine HCQ
- Sulfasalazine SSZ
- Leflunomide LEF

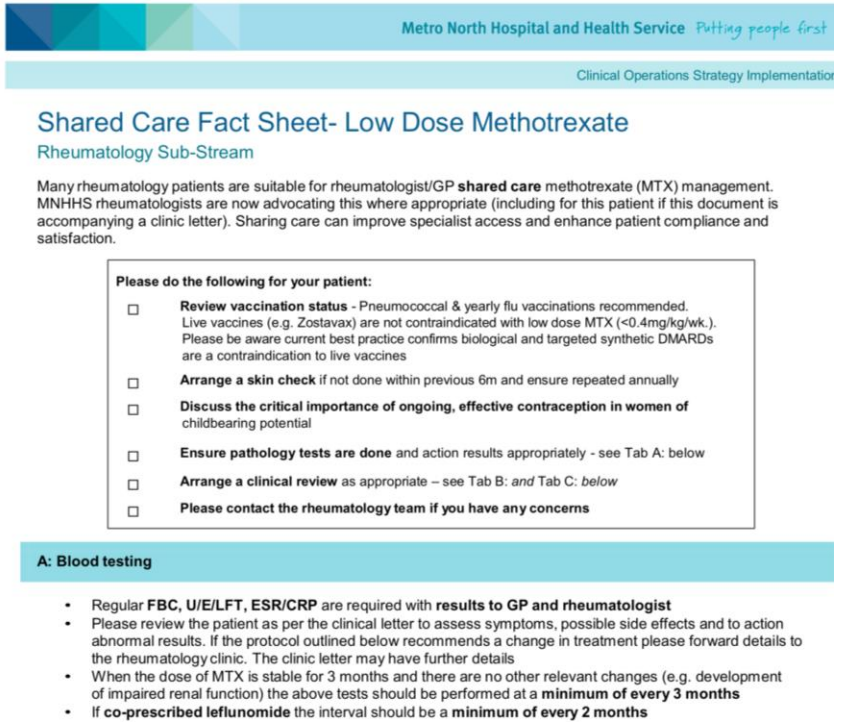
Evaluation before DMARDs

- Full blood count, serum creatinine and liver enzymes
  - Abnormalities may alter choice/dose
- Infection screen
  - hepatitis B virus, hepatitis C virus
  - +/- HIV
  - +/- TB
- Consideration
  - congestive heart failure, malignancy, lymphoproliferative disease, multiple sclerosis, chronic obstructive pulmonary disease, bronchiectasis and interstitial lung disease

Methotrexate- MTX

- Most common DMARD in world
  - Treatment guidelines

    MTX 1st line treatment +/- other cs DMARDs
- Early stage & adequate doses remission 40%
  - highest rate of continued long-term treatment
  - maintains efficacy without excessive toxicity
  - typically well-tolerated



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Clinical Operations Strategy Implementatio

Shared Care Fact Sheet- Low Dose Methotrexate

Rheumatology Sub-Stream

Many rheumatology patients are suitable for rheumatologist/GP **shared care** methotrexate (MTX) management. MNHHS rheumatologists are now advocating this where appropriate (including for this patient if this document is accompanying a clinic letter). Sharing care can improve specialist access and enhance patient compliance and satisfaction.

Please do the following for your patient:

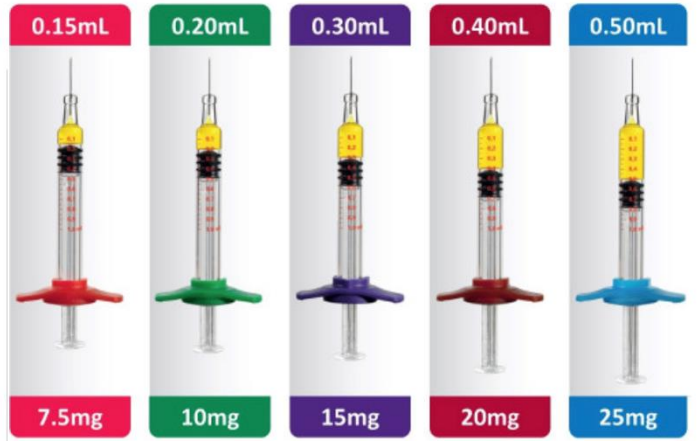
- ☐ **Review vaccination status** - Pneumococcal & yearly flu vaccinations recommended. Live vaccines (e.g. Zostavax) are not contraindicated with low dose MTX (<0.4mg/kg/wk.). Please be aware current best practice confirms biological and targeted synthetic DMARDs are a contraindication to live vaccines
- ☐ **Arrange a skin check** if not done within previous 6m and ensure repeated annually
- ☐ **Discuss the critical importance of ongoing, effective contraception in women of** childbearing potential
- ☐ **Ensure pathology tests are done** and action results appropriately - see Tab A: below
- ☐ **Arrange a clinical review** as appropriate – see Tab B: *and* Tab C: *below*
- ☐ **Please contact the rheumatology team if you have any concerns**

A: Blood testing

- Regular **FBC, U/E/LFT, ESR/CRP** are required with **results to GP and rheumatologist**
- Please review the patient as per the clinical letter to assess symptoms, possible side effects and to action abnormal results. If the protocol outlined below recommends a change in treatment please forward details to the rheumatology clinic. The clinic letter may have further details
- When the dose of MTX is stable for 3 months and there are no other relevant changes (e.g. development of impaired renal function) the above tests should be performed at a **minimum of every 3 months**
- If **co-prescribed leflunomide** the interval should be a **minimum of every 2 months**

Methotrexate- MTX

- Familiarity- used > since 1980s
- Inexpensive
  - $52.40 for 50 x 10mg ($41.30)
  - $24.18 for 15 x 10mg ($29.90)
  - $17.91 for 30 x 2.5mg ($23.63)
  - $ 39.50 for 5 x 50mg/2ml ($41.30)
  - $89.50 for prefilled syringes ($41.00)
- Convenient once a week



Possible SIDE EFFECTS

Nuisance

- GIT (10%)
- Headache (10%)
- Hair loss (3%)
- Rash
- Photosensitivity

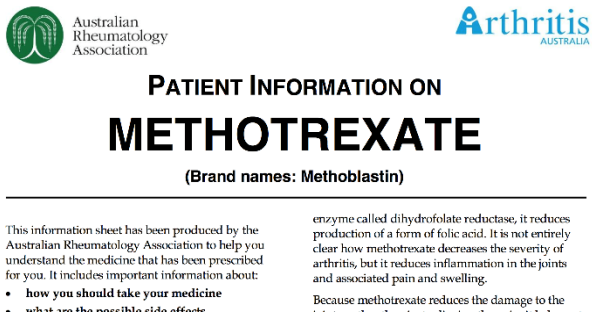
Nasty

- Liver (17% slight, 0.9% 3 xULN)
  - transient frequent not cause for modification
  - persistent abnormalities, +/- low albumin require evaluation
- Haematology
- Lung <1%

Folic Acid

- Minimum 5mg a week
  - Maximum 3 x dose MTX (Therapeutic Guidelines 2017)
- ?Not the same time as MTX
- 400 rheumatologist = 400 regimes
- Folinic acid administered in first 24 hrs after MTX dose inhibit polyglutamation

Methotrexate resources



Australian Rheumatology Association

Arthritis AUSTRALIA

PATIENT INFORMATION ON

METHOTREXATE

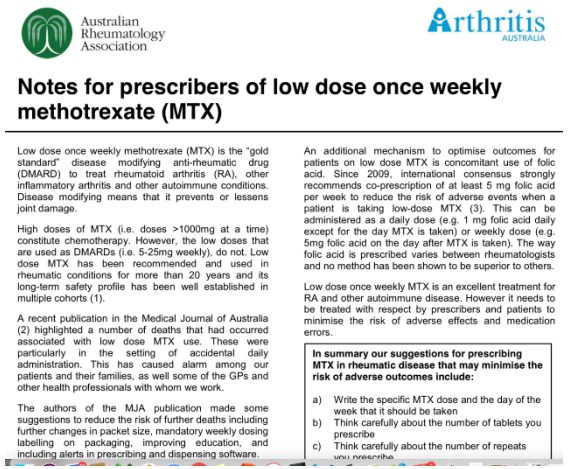
(Brand names: Methoblastin)

This information sheet has been produced by the Australian Rheumatology Association to help you understand the medicine that has been prescribed for you. It includes important information about:

- **how you should take your medicine**

enzyme called dihydrofolate reductase, it reduces production of a form of folic acid. It is not entirely clear how methotrexate decreases the severity of arthritis, but it reduces inflammation in the joints and associated pain and swelling.

Because methotrexate reduces the damage to the



Australian Rheumatology Association

Arthritis AUSTRALIA

Notes for prescribers of low dose once weekly methotrexate (MTX)

Low dose once weekly methotrexate (MTX) is the "gold standard" disease modifying anti-rheumatic drug (DMARD) to treat rheumatoid arthritis (RA), other inflammatory arthritis and other autoimmune conditions. Disease modifying means that it prevents or lessens joint damage.

High doses of MTX (i.e. doses >1000mg at a time) constitute chemotherapy. However, the low doses that are used as DMARDs (i.e. 5-25mg weekly), do not. Low dose MTX has been recommended and used in rheumatic conditions for more than 20 years and its long-term safety profile has been well established in multiple cohorts (1).

A recent publication in the Medical Journal of Australia (2) highlighted a number of deaths that had occurred associated with low dose MTX use. These were particularly in the setting of accidental daily administration. This has caused alarm among our patients and their families, as well some of the GPs and other health professionals with whom we work.

The authors of the MJA publication made some suggestions to reduce the risk of further deaths including further changes in packet size, mandatory weekly dosing labelling on packaging, improving education, and including alerts in prescribing and dispensing software.

An additional mechanism to optimise outcomes for patients on low dose MTX is concomitant use of folic acid. Since 2009, international consensus strongly recommends co-prescription of at least 5 mg folic acid per week to reduce the risk of adverse events when a patient is taking low-dose MTX (3). This can be administered as a daily dose (e.g. 1 mg folic acid daily except for the day MTX is taken) or weekly dose (e.g. 5mg folic acid on the day after MTX is taken). The way folic acid is prescribed varies between rheumatologists and no method has been shown to be superior to others.

Low dose once weekly MTX is an excellent treatment for RA and other autoimmune disease. However it needs to be treated with respect by prescribers and patients to minimise the risk of adverse effects and medication errors.

In summary our suggestions for prescribing MTX in rheumatic disease that may minimise the risk of adverse outcomes include:

a) Write the specific MTX dose and the day of the week that it should be taken
b) Think carefully about the number of tablets you prescribe
c) Think carefully about the number of repeats you prescribe

Hydroxychloroquine – HCQ

- Safe in pregnancy
- Monitoring –eyes
- Cholesterol
- Liver
- Coagulation
- Lowers risk of DM
- Good combination

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Clinical Operations Service Improvement

Shared Care Fact Sheet – Hydroxychloroquine

Rheumatology Sub-Stream

Many patients with Rheumatoid Arthritis (RA), Systemic Lupus Erythematosus (SLE) or other Connective Tissue Diseases (CTD) are suitable for rheumatologist/GP **shared care** hydroxychloroquine (HCQ) management. MNHHS rheumatologists are now advocating this where appropriate (including for this patient if this document is accompanying a clinic letter). Sharing care can improve specialist access and enhance patient compliance and satisfaction. You may find the following information helpful as you care for such patients:

Leflunomide – LEF

- Authority
- Daily
- Baseline CXR/FBC/(eGFR)LFT/HepB/C
- GIT
- Liver/haem
- Lungs
- Monitoring esp. combination

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Clinical Operations Service Improvement

Shared Care Fact Sheet - Leflunomide

Rheumatology Sub-Stream

Many patients with Rheumatoid Arthritis (RA) or Psoriatic Arthritis (PsA) are suitable for rheumatologist/GP **shared care** leflunomide (LEF) management. MNHHS rheumatologists are now advocating this where appropriate (including for this patient if this document is accompanying a clinic letter). Sharing care can improve specialist access and enhance patient compliance and satisfaction. You may find the following information helpful as you care for such patients:

Please do the following for your patient:

- ☐ **Review vaccination status** – Pneumococcal (13vPCV first then 23vPPV after > 8 weeks if vaccine-naive) & yearly flu vaccinations recommended. For live vaccines (eg MMR, Zostavax) seek advice from the treating specialist (see links below for more information)
- ☐ **Arrange a skin check** if not done within the previous 6 months and ensure repeated annually.
- ☐ Monitor BP at each visit. LEF can cause hypertension.
- ☐ **Discuss the critical importance of ongoing, effective contraception for up to 2 years post cessation in women with childbearing potential.** Consider offering a LARC. Paternal exposure may be safe, but evidence is very limited and further studies needed.
- ☐ **Ensure pathology tests are done** and action results appropriately – see Tab A: below.
- ☐ **Arrange clinical review** as appropriate and **consider software reminders for these tasks.**
- ☐ **Please contact the rheumatology team if you have concerns.**

Sulfasalazine - SSZ

- Baseline FBC/LFT
- Liver/wbc
- Safe in pregnancy/breast feec
  - add Folic Acid 5mg day
- Good in combination

Metro North Hospital and Health Service *Putting people first*

Clinical Operations Service Improvement

Shared Care Fact Sheet - Sulfasalazine

Rheumatology Sub-Stream

Many patients with Rheumatoid Arthritis (RA) or Psoriatic Arthritis (PsA) are suitable for rheumatologist/GP **shared care** sulfasalazine (SSZ) management. MNHHS rheumatologists are now advocating this where appropriate (including for this patient if this document is accompanying a clinic letter). Sharing care can improve specialist access and enhance patient compliance and satisfaction. You may find the following information helpful as you care for such patients:

Please do the following for your patient:

- ☐ **Review vaccination status** – Pneumococcal (13vPCV first then 23vPPV after > 8 weeks if vaccine-naive) and yearly flu vaccinations recommended. Live vaccines (eg MMR, Varicella Zoster) are not contraindicated by the use of SSZ. (See links below for more information.)
- ☐ **Arrange a skin check** if not done within the previous 6 months and ensure repeated annually.
- ☐ **Ensure pathology tests are done** and action results appropriately - see Tab A: below.
- ☐ **Arrange clinical review** as appropriate **and consider software reminders for these tasks.**
- ☐ **Please contact the rheumatology team (usually registrar via switch) if you have any concerns.**

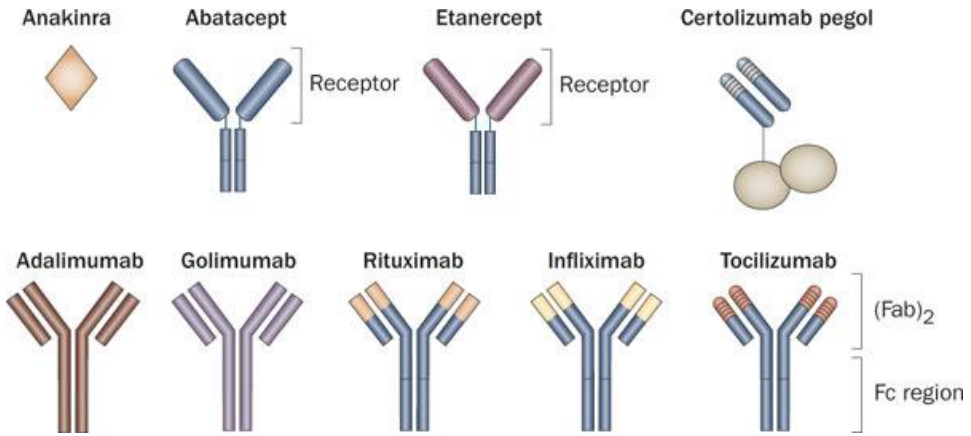
Targeted DMARDs

Biological/bDMARDS

- **cytokine blockers**
  - TNF
  - Interleukin-1 (IL-1) anakinra
  - IL-6 tocilizumab
  - IL-12/23 ustekinumab
  - IL-17 ixekizumab secukinumab
  - IlL-23 guselkumab
- **cell-targeted**
  - T cells
    abatacept
    - inhibits co-stimulatory signal required to activate T cell
  - B-cells
    rituximab
    - inhibits CD20 ag on precursor & mature B cell membrane

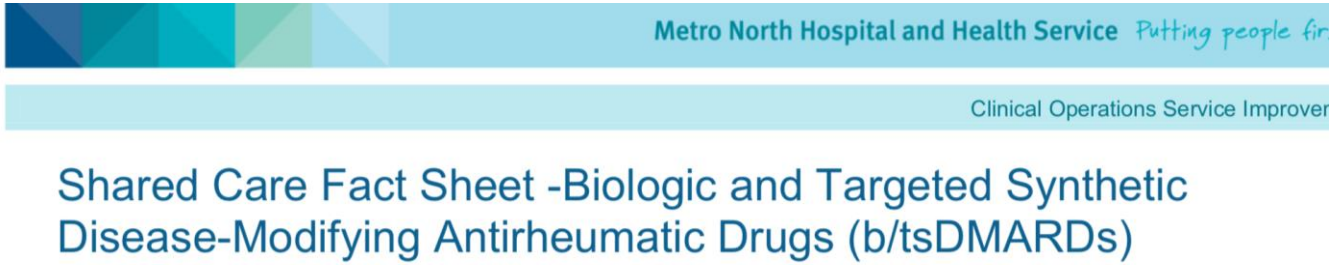
Targeted synthetic /tsDMARDs

- Janus Kinase
  - baricitinib
  - tofacitinib
  - upadacitinib

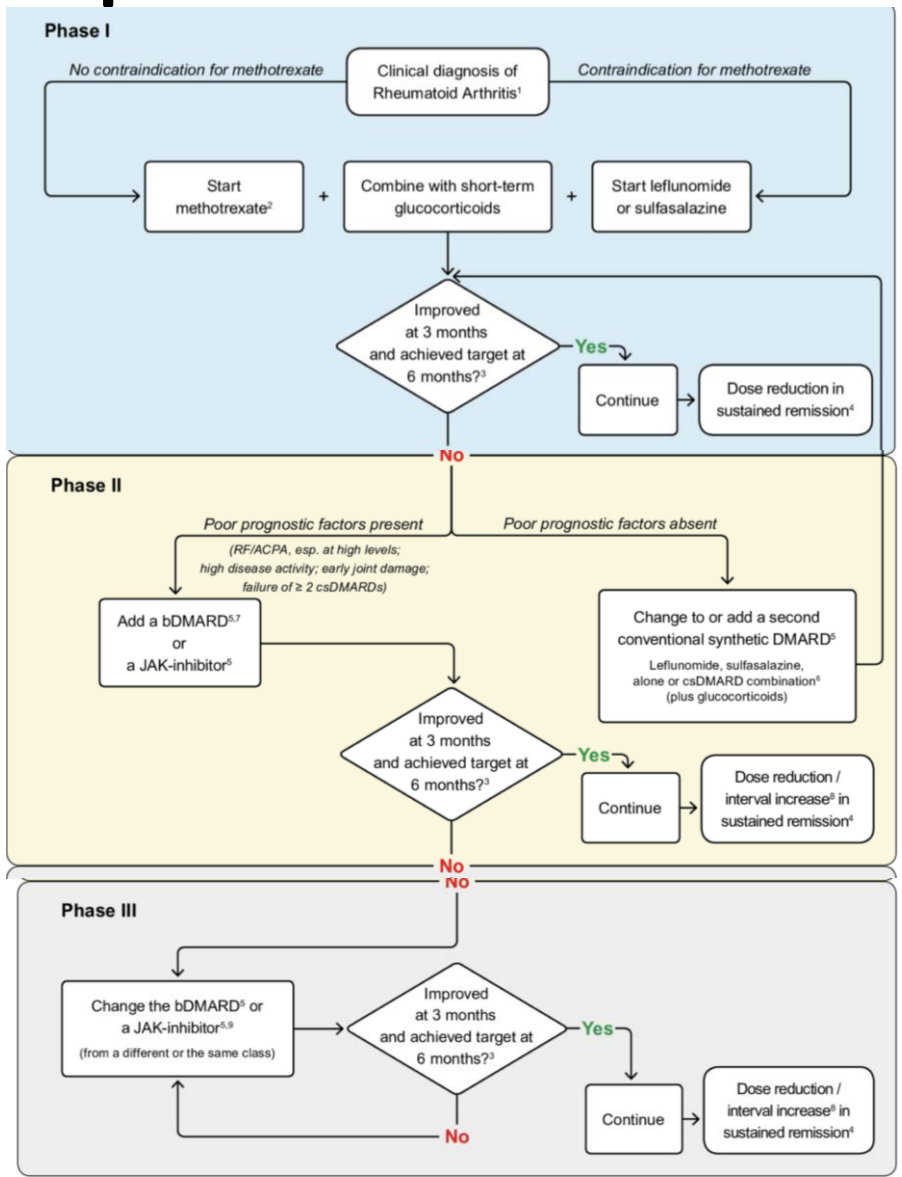


Targeted DMARDs

- They work – but not in everyone
- Most people do not have adverse effects
- Issues
  - Infections
  - Surgery
  - Pregnancy
- They are expensive
- They have a lot of paper work attached
  - Patients have to follow rules or they will miss out

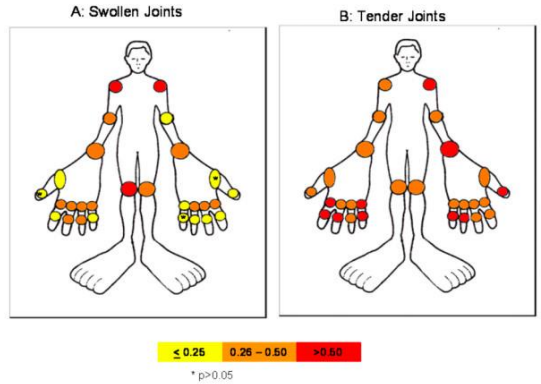


What is best practice in a nutshell?



What is best practice?

- DMARDs should be started as soon as RA diagnosed
- MTX should be part of the first treatment strategy
- In patients with contraindication/early intolerance MTX, leflunomide or sulfasalazine should be considered
- Treatment aimed at sustained remission/low disease activity
- Monitoring should every 1–3 months in active disease
  - no improvement at 3 m/target not reached 6m, therapy adjusted



Australian Rheumatology Association

Arthritis AUSTRALIA

Medications and Pregnancy
Rheumatoid Arthritis

Information for women and men with rheumatoid arthritis thinking about starting a family

Many people with Rheumatoid Arthritis (RA) may wish to have children. If this is you, please discuss this with your rheumatology team.

With careful treatment, most patients with RA can have healthy pregnancies and healthy babies.

Well-controlled RA improves the chance of healthy babies.

Effect of RA on Pregnancy

- Women with RA usually take longer to get pregnant.
- It's uncertain whether there are increased miscarriages (pregnancy loss) in women with RA

- Anti-inflammatories (NSAIDs) should not taken in the third trimester.

Corticosteroids, e.g. prednisone/prednisolone

- Risks to mothers include:
  - High blood pressure, gestational diabetes, bone thinning and infection
- Risks to babies include:
  - Prematurity (born too early), low birth weight and premature rupture of membranes
- Corticosteroids should only be used when other medications do not control the RA or cannot be used.
- Low doses (e.g. 5-7.5mg per day) can be used if the benefits outweigh the risk.

Gout &
Axial Spondyloarthritis

Philip Robinson
MBChB PhD FRACP

Associate Professor & Rheumatologist

University of Queensland
Royal Brisbane and Women's Hospital
Private Practice

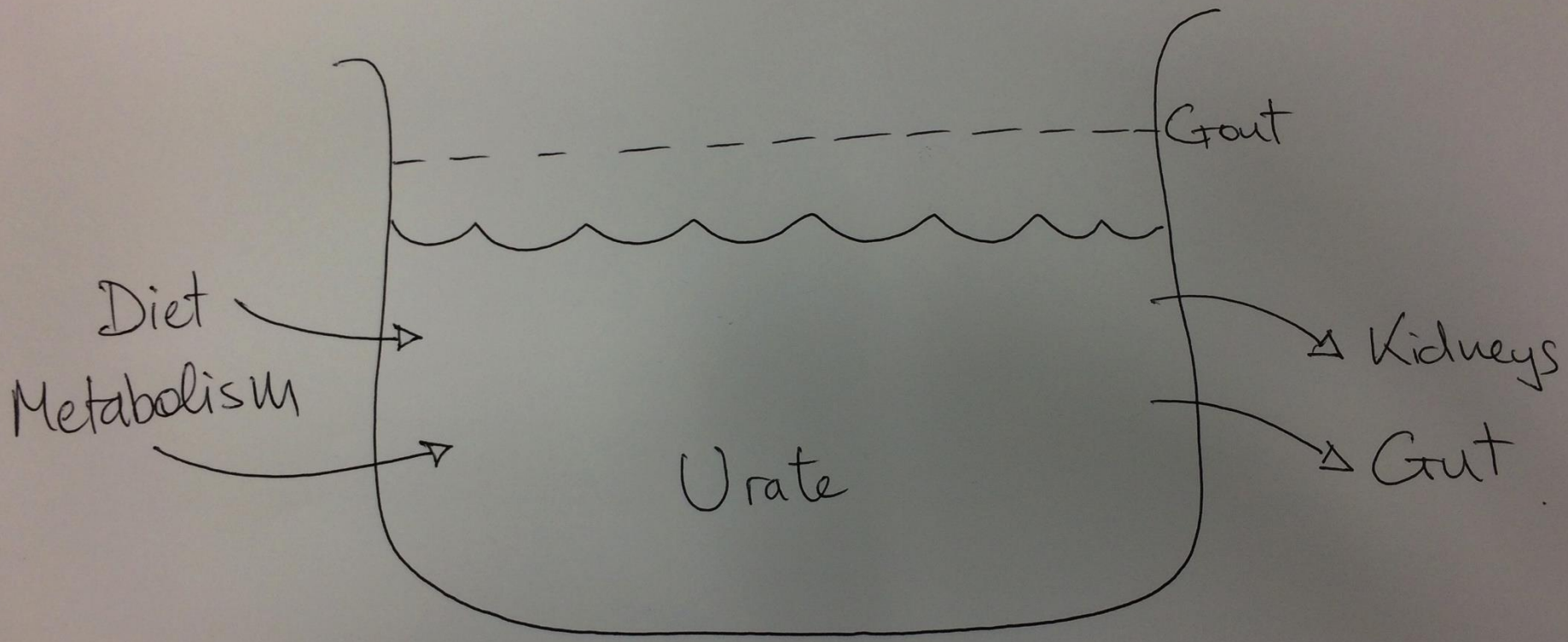
THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

Queensland Government

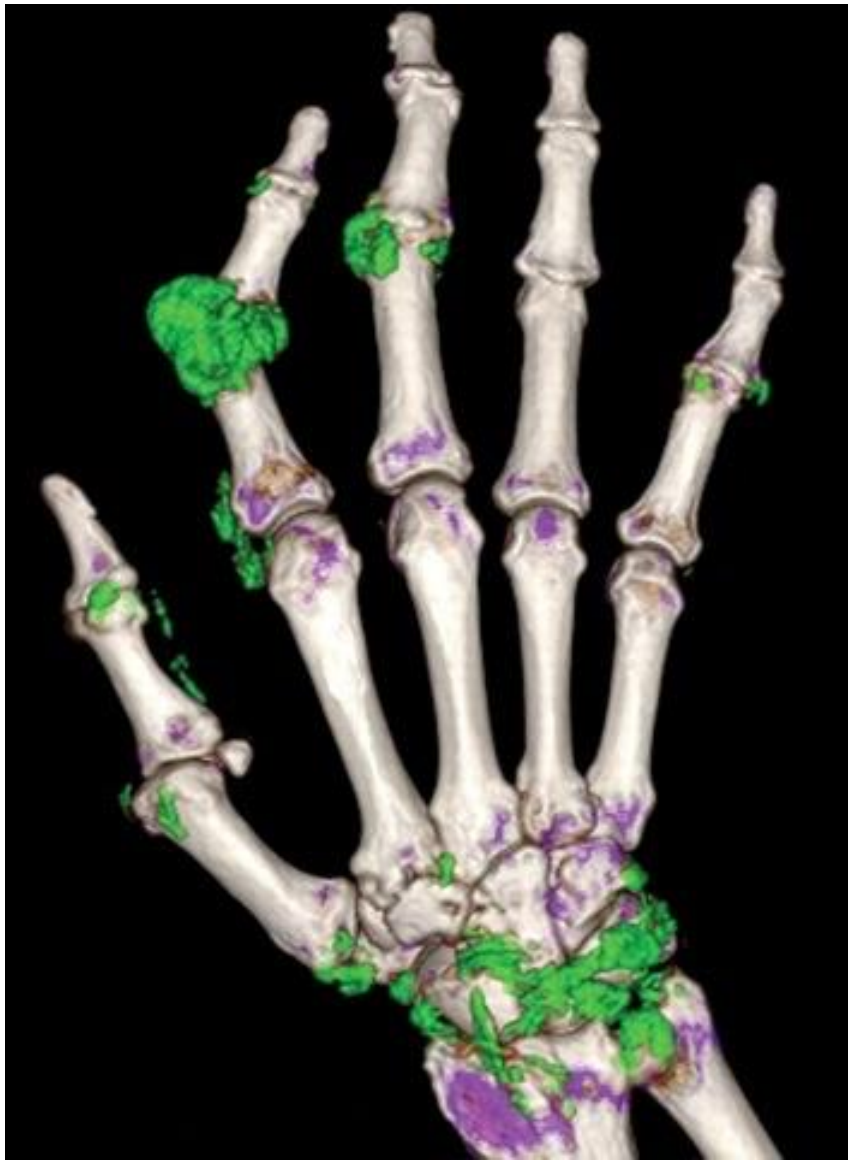
Gout

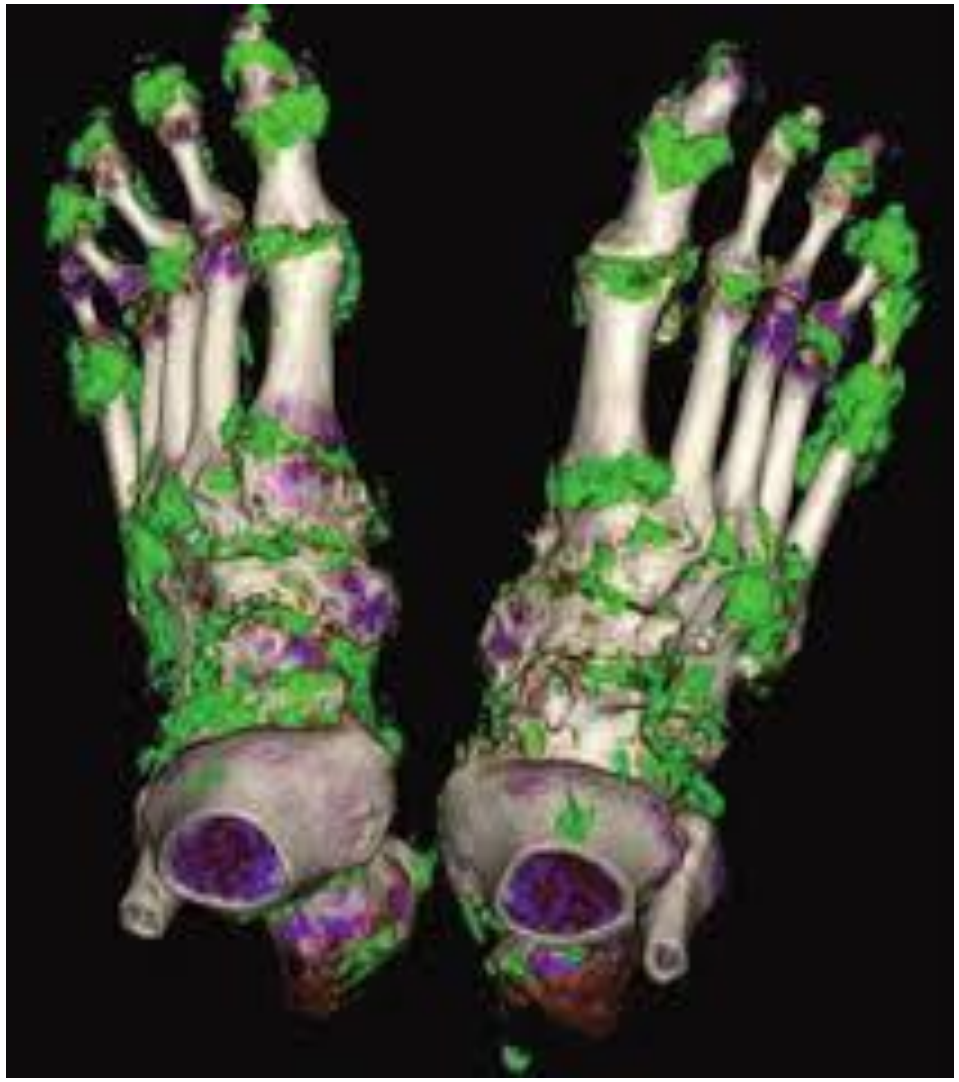
Gout

- Diagnosis
- Treating acute attacks
- **Lowering uric acid**


Gout
Diet
Metabolism
Urate
Kidneys
Gut

Urate Crystal Deposition – Dual Energy CT





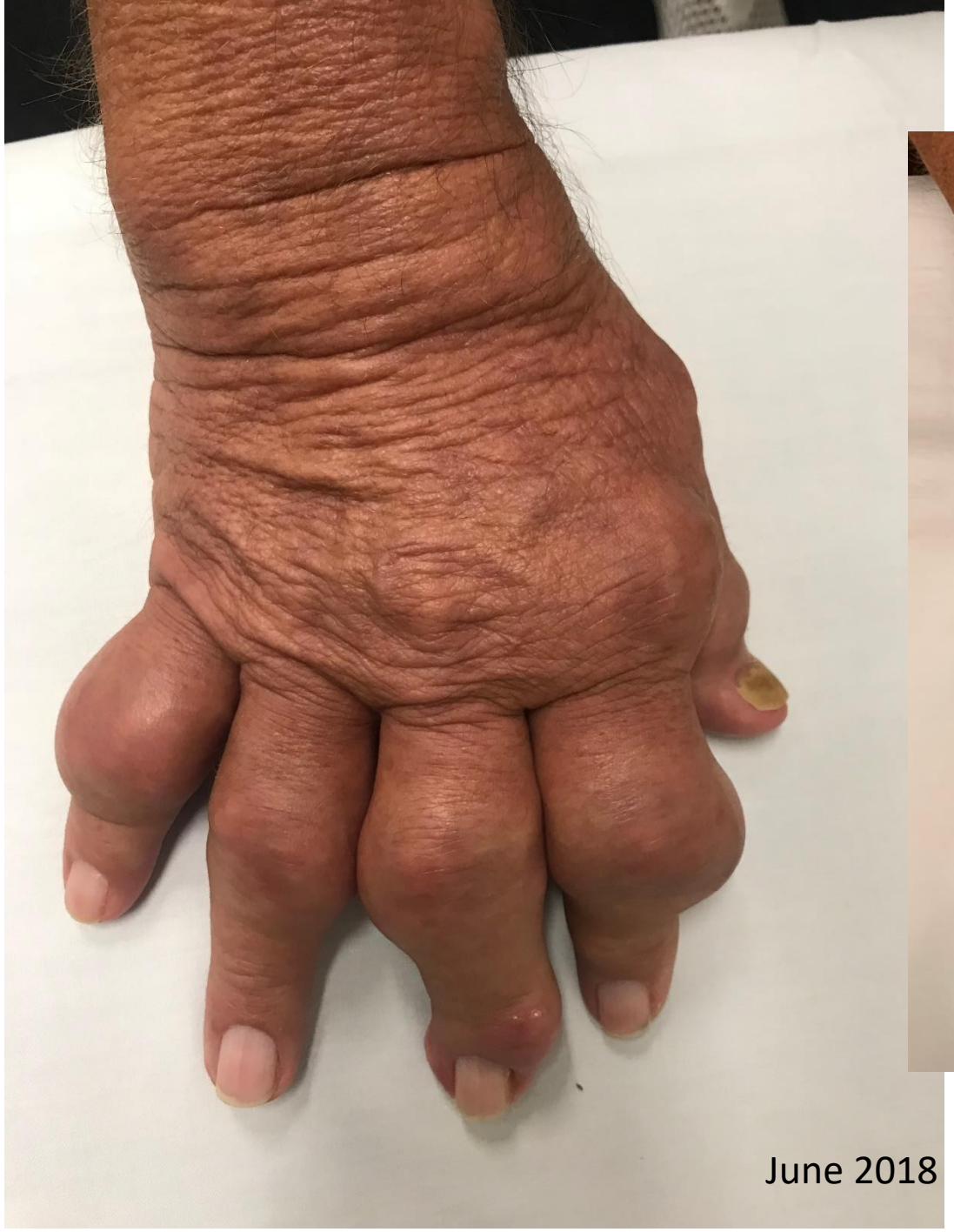
Serum urate

- Laboratory “Normal range” is irrelevant in gout
- Goal is less than **0.36mmol/L to control gout**
- Serum urate **can be normal/suppressed** in acute gout attacks or inflammatory states
- Examining old biochemistry results can be **very informative**

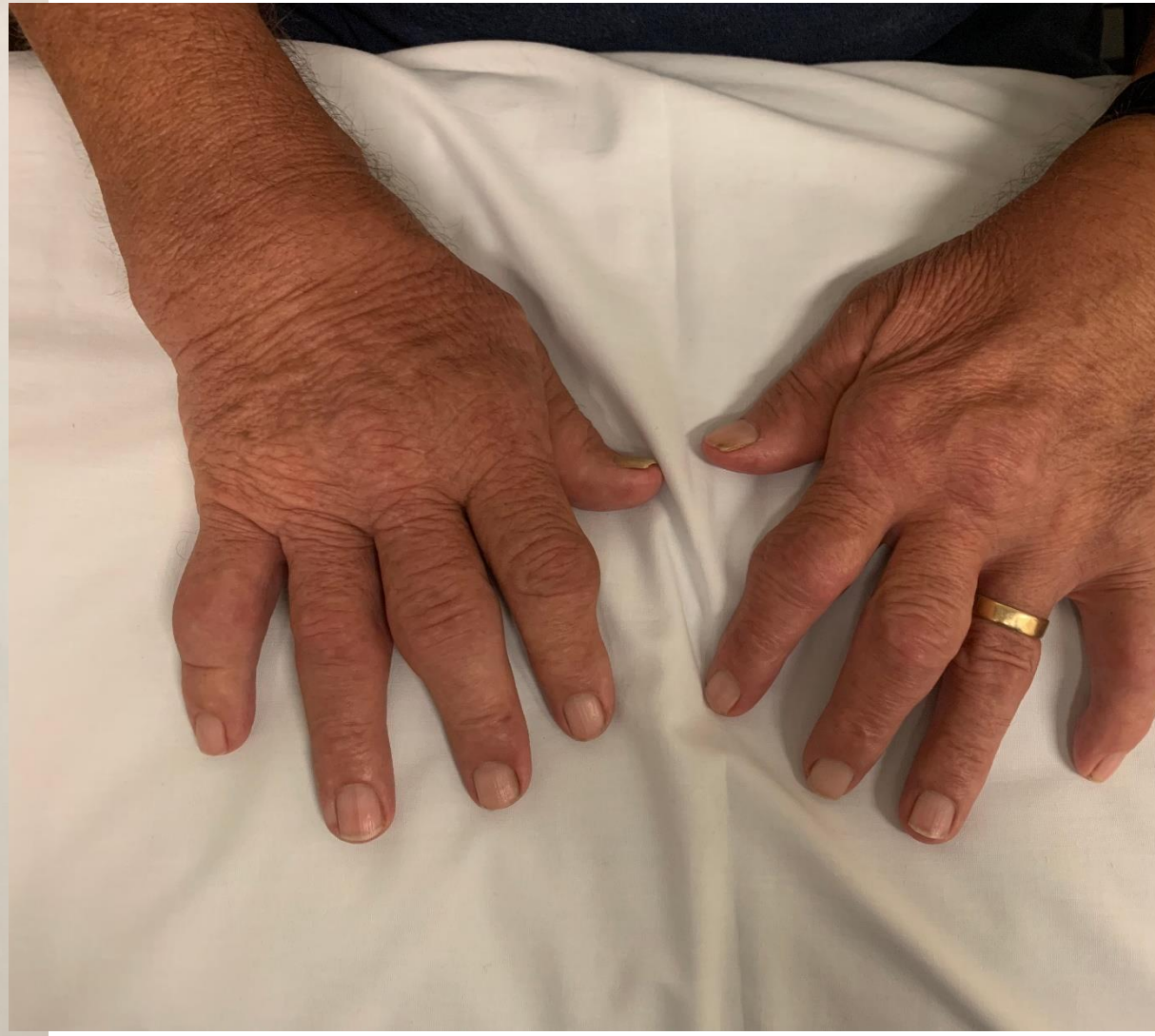
Gout: Treatment

Two Goals of Gout Treatment

- 1. Lower serum urate below target of 0.36 mmol/L
- 2. Treat acute attack/acute inflammation



June 2018



February 2019

Treatment of acute gout flares

Acute treatment 1

- **NSAID**: Full dose until symptoms resolve

- **Colchicine:** 2 tabs immediately then 1 tablet 1 hour later. After 12 hours or later commence prophylaxis dosing (1 tab od or bd).

- If patient has had acute treatment dose within last 14 days -> NSAID or corticosteroid

Khanna *et al.* Arthritis Care and Research 2012:64(10):1447-61

Acute treatment 2

- **Prednisone**
  - 0.5mg/kg/day 5-10 days duration, or
  - 2 – 5 days at full dose and taper for 7-10 days

- **Intra-articular steroid**
  - 40 - 80mg in a knee joint

Khanna *et al.* Arthritis Care and Research 2012:64(10):1447-61

Urate Lowering therapy

Urate lowering to less

than 0.36 mmol/L

Allopurinol

When do you initiate urate lowering treatment?

*

Initiate urate lowering treatment when…

- Tophi or tophus on exam or imaging
- 2 or more gout flares per year
- Chronic kidney disease stage 2 or worse (eGFR < 90ml/min)
- Past kidney stones

Khanna *et al.* Arthritis Care & Research 2012;64(10):1431-46

*

Slow up-titration every 4 weeks

- In those with eGFR < 60mL/min start at 50mg per day of allopurinol and increase by 50mg each month.

- In those with eGFR > 60mL/min start at 100mg per day of allopurinol and increase by 100mg each month.

Stamp *et al.* Ann Rheum Dis 2017;e-published

Can allopurinol (or any ULT) be commenced during an acute attack? *

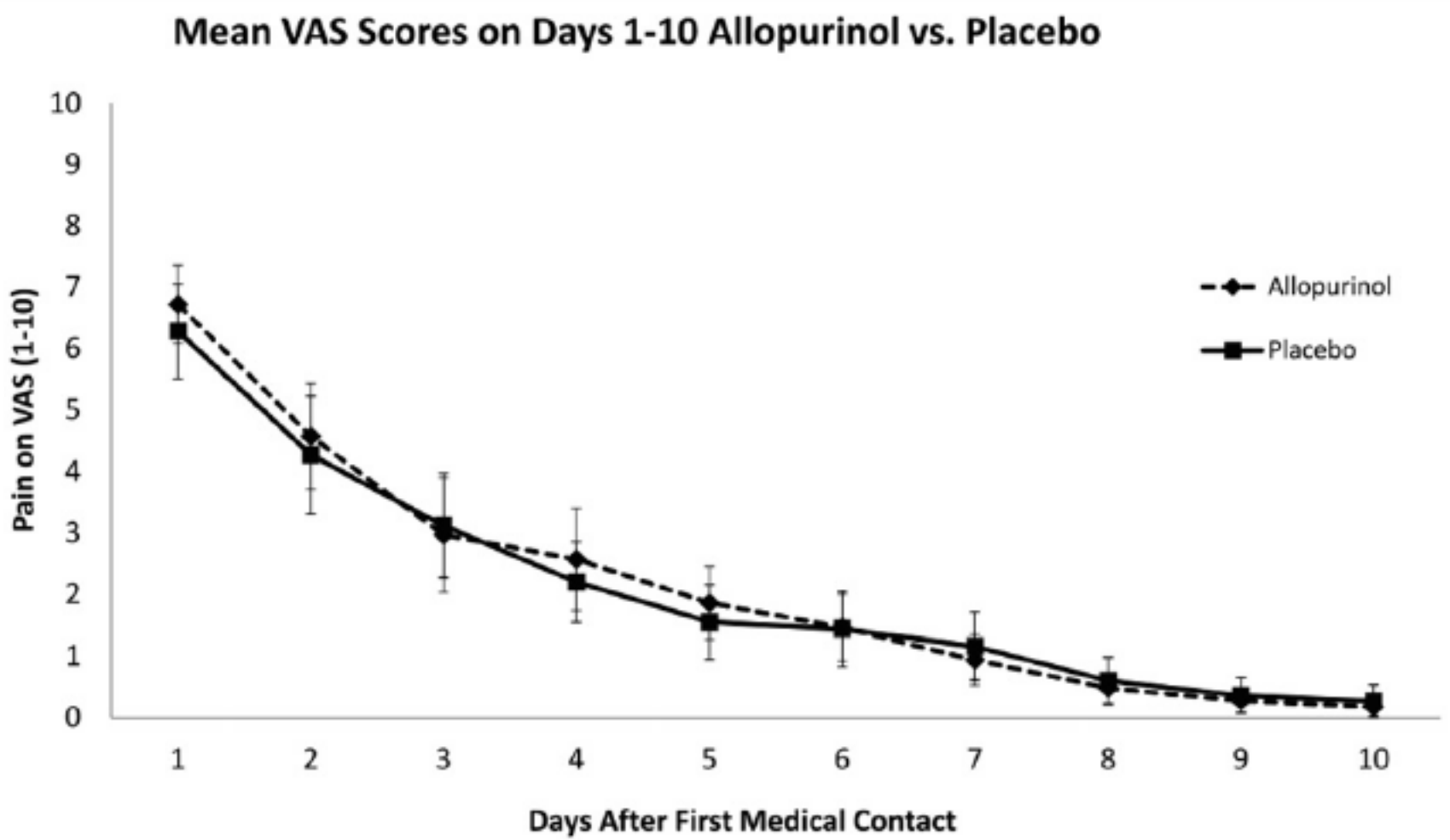
- Short answer, yes.
- Theoretical concern about exacerbating flare

- Randomised trial of starting early to waiting
- Allopurinol 300mg* or placebo
- Indomethacin prophylaxis 50mg tds

*Not recommended practice now

Taylor *et al.* Am J Med 2012;125(11):1126-1134.e7

No increase in pain



Taylor *et al.* Am J Med 2012;125(11):1126-1134.e7

Prophylaxis against acute gout flares during allopurinol treatment

Prophylaxis of gout flares

- VERY IMPORTANT

- First line:
  - Colchicine 0.5mg 1 – 2 times a day
  - NSAID, eg. naproxen 250mg bd
- Second line:
  - Prednisone <10mg per day

Khanna *et al.* Arthritis Care and Research 2012:64(10):1447-61

Duration of prophylaxis

- At least **6 months**, or
- **3 months** after achieving serum urate target (No tophi on exam)
- **6 months** after achieving serum urate target (If 1 or more tophi found on exam)

Khanna *et al.* Arthritis Care and Research 2012:64(10):1447-61

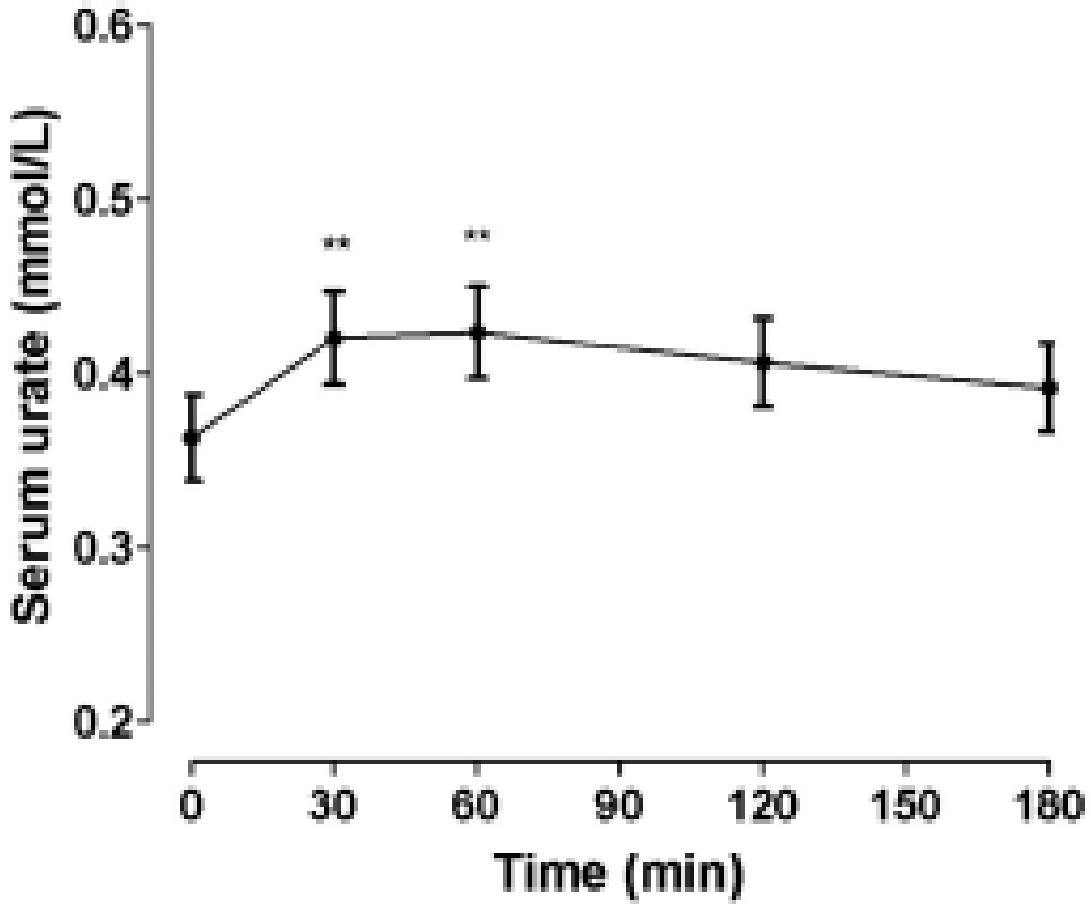
Other therapies

- Diet
  - Low purine diets are pretty unpalatable
  - Compliance is horrendous
  - But, important to limit large risk foods, such as sugar sweetened soft drinks
  - Avoid triggers (seafood, alcohol binges)

> "diet and lifestyle measures alone provide therapeutically insufficient serum urate–lowering effects and/or gout attack prophylaxis for a large fraction of individuals with gout"

Khanna *et al.* Arthritis Care & Research 2012;64(10):1431-46

Fructose induced hyperuricaemia



64 grams of fructose

Dalbeth *et al.* Ann Rheum Dis 2013;72:1868–1873

My current approach to gout

My current approach

- Make diagnosis with crystal confirmation if at all possible & check urine
- Commence allopurinol
- Uptitrate based on renal function
- Monitor Serum urate regularly
- Titrate to SU of less than 0.36 mmol/L or 0.30mmol/L
- Once target reached should check urate every 6 months

Robinson et al. J Rheumatol 2018;45(5):697-704

Failure to reach target

- If fail to achieve target, consider
  - adherence/compliance/concordance
  - genetic problems

- Add in probenecid (I do this at ~600mg allopurinol mark)

- Check urate excretion on spot urine or 24 urine (don’t want to precipitate urate renal stones)

Gout Management Guide

Rheumatology Department, Royal Brisbane & Women's Hospital

STICKER HERE

Target Serum Urate / Uric Acid: **Less than 0.36mmol/L**

Your last serum Serum Urate / Uric Acid: Date:

Urate Lowering Therapy: Allopurinol / Febuxostat / Probenecid

Dose	How Often	How Long

DO NOT STOP ALLOPURINOL DURING AN ACUTE FLARE OF GOUT

Only Stop Allopurinol If You Develop a Rash – If so talk to your GP

Treatment to reduce chance of flares when lowering urate/uric acid

Medication:

How Often:

If a gout flare occurs then need more treatment

Medication:

Important Points

- **Allopurinol does not cause renal impairment**
- **Allopurinol can be safely started during a flare**
- **Flare prophylaxis (eg. colchicine) should be started with allopurinol**
- **Increase the dose of allopurinol to reach a target serum urate of < 0.36, or the patient will not get better from their gout**
- **Flares can and do persist for months after reaching target serum urate, *be patient***

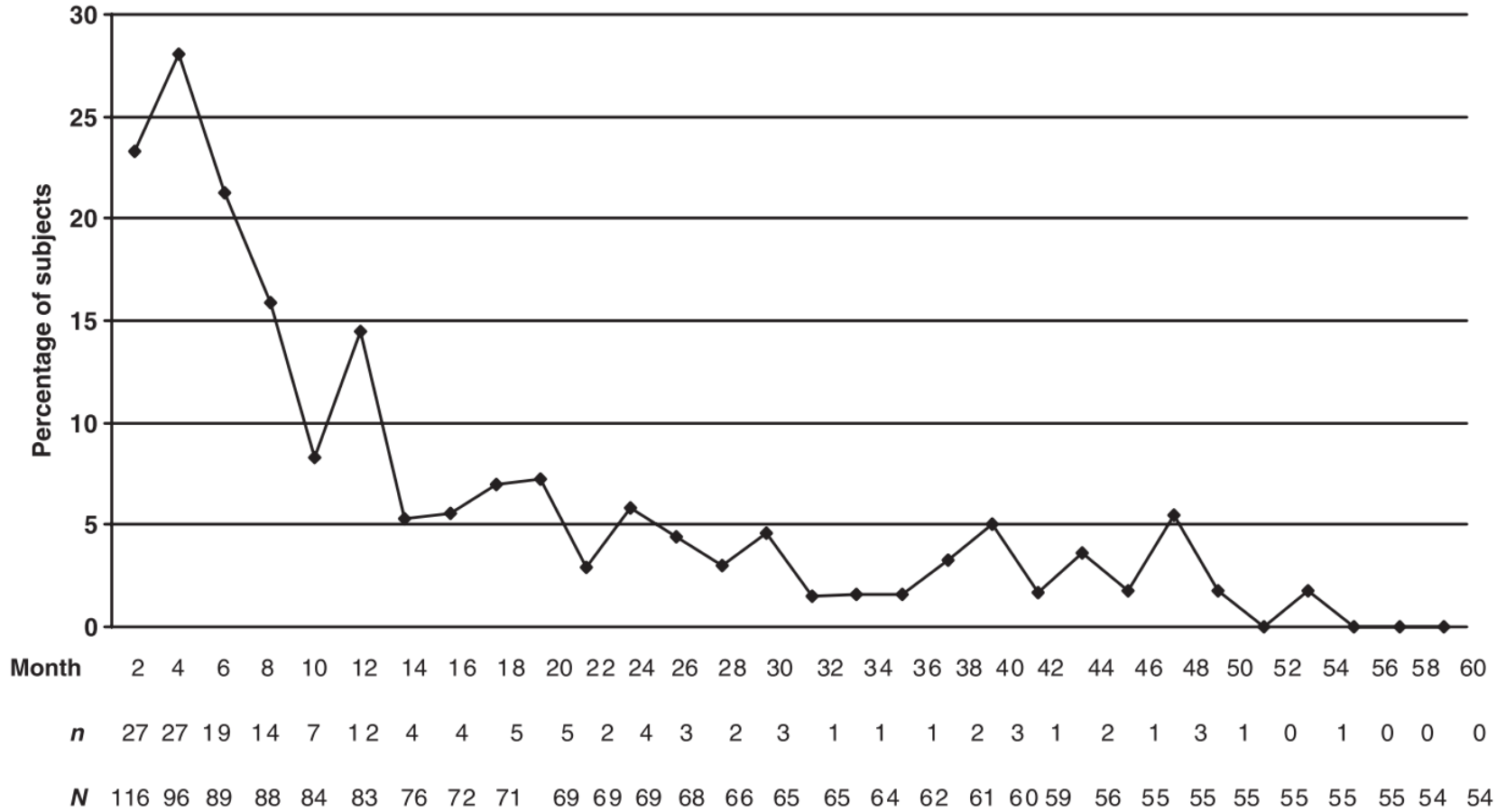


FIG. 2. Percentage of subjects that required treatment for flares while they received maintenance dose. Time is with respect to duration of treatment with stable maintenance dose. Months are the end of time intervals and data points represent the total incidence of gout flares that required treatment during each 2-month interval. '*N*' represents the total number of subjects on a final stable dose of febuxostat for the duration designated and '*n*' is the total number of subjects that reported at least one gout flare that required treatment in the given time interval.

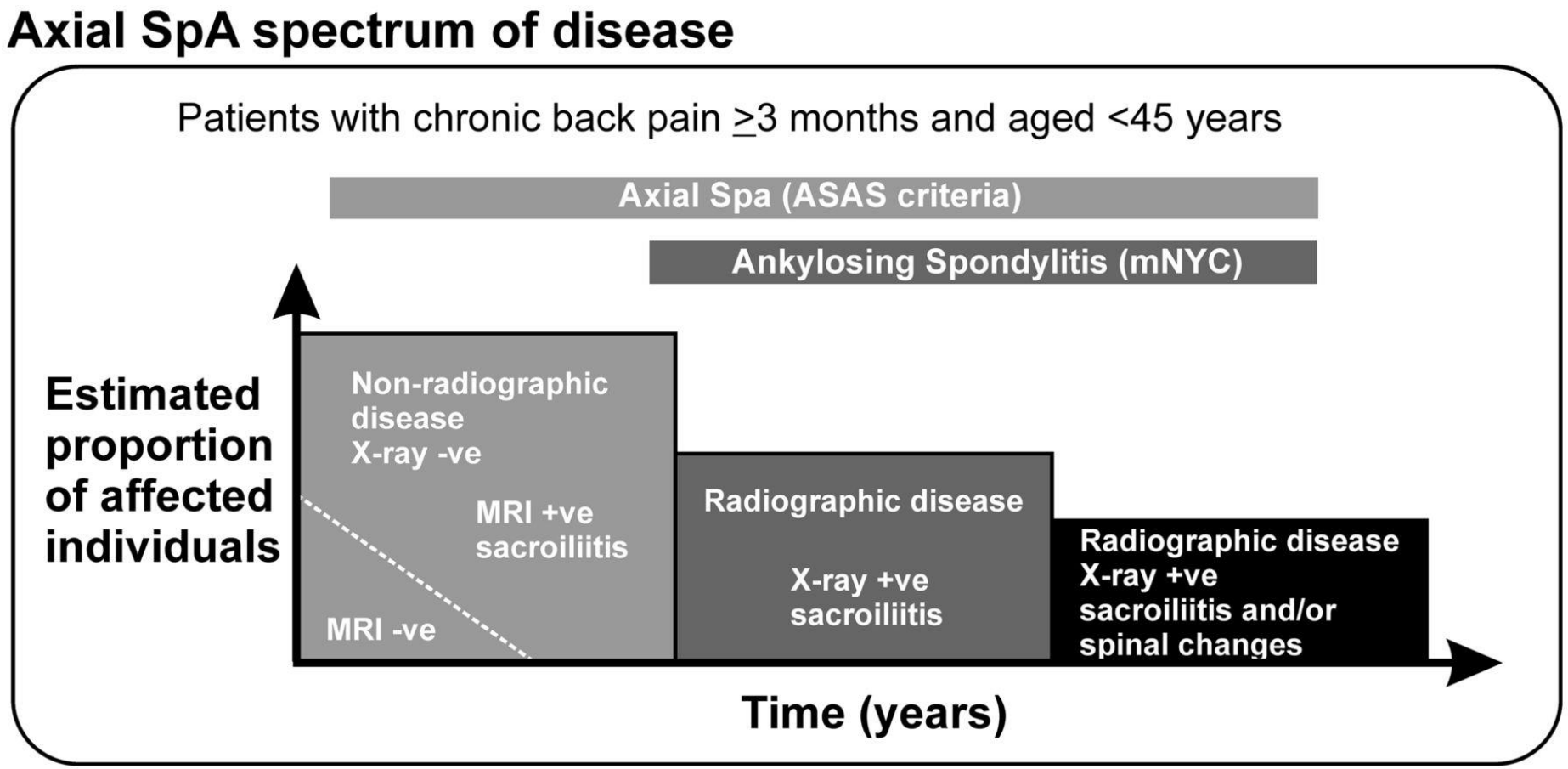
Axial Spondyloarthritis

Ankylosing spondylitis
Non-radiographic axial spondyloarthritis

What is the issue?

- Back pain is very common in the community
- Differentiating back pain caused by **Inflammatory disease** from other **causes of back pain is challenging**
- **Some simple strategies are helpful**

The spectrum of disease in axSpA.The figure depicts the spectrum of disease in patients with axSpA.



Isdale A et al. Rheumatology 2013;rheumatology.ket244

RHEUMATOLOGY

Entry criteria

- Chronic back pain and symptom duration more than 3 months

and

- Age of back pain onset < 45 years

and

- No confirmed diagnosis of AS or axial SpA

plus

Referral Strategy 1

at least one of the following:

- inflammatory back pain
- HLA-B27 positivity
- sacroiliitis detected by imaging

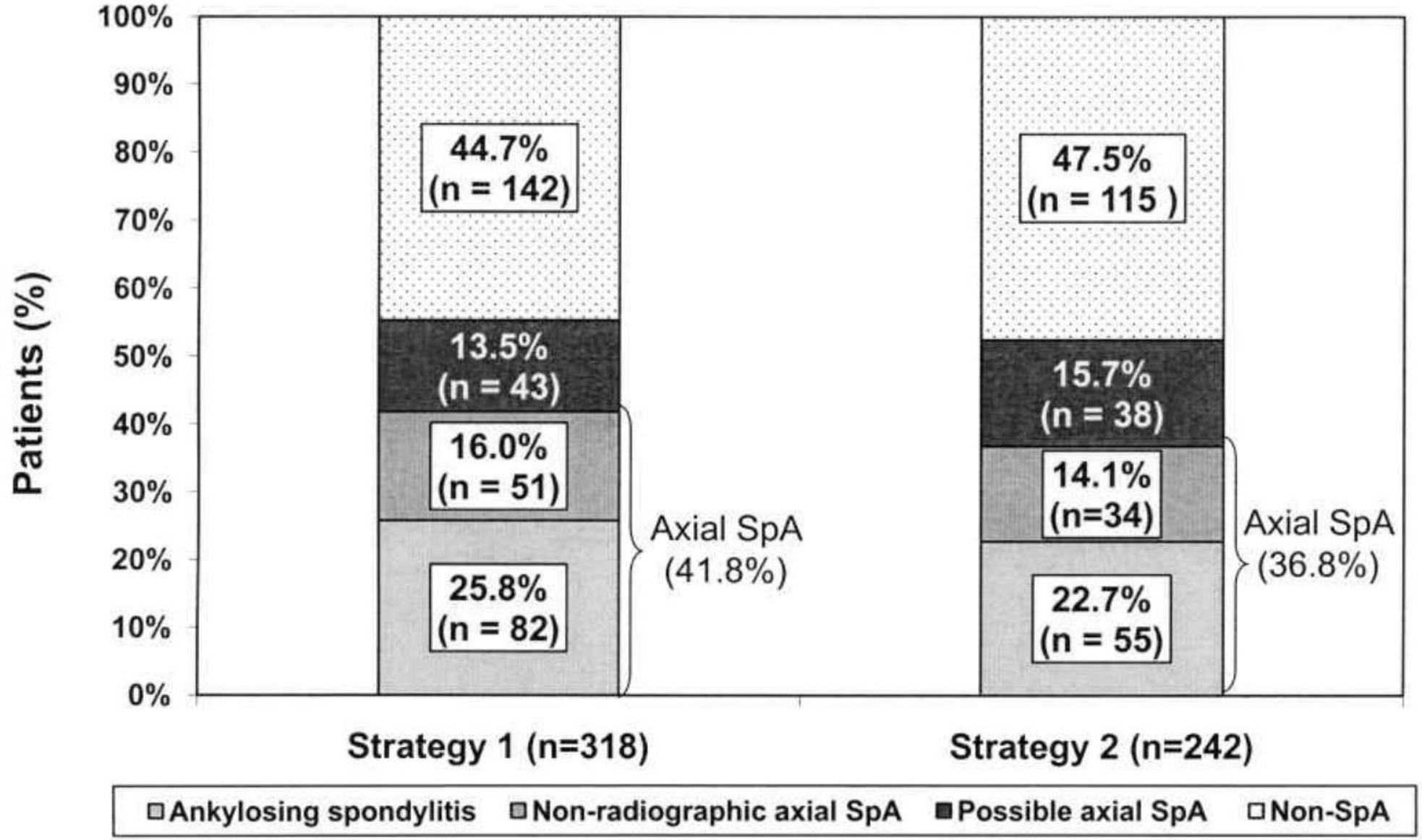
OR*

Referral Strategy 2

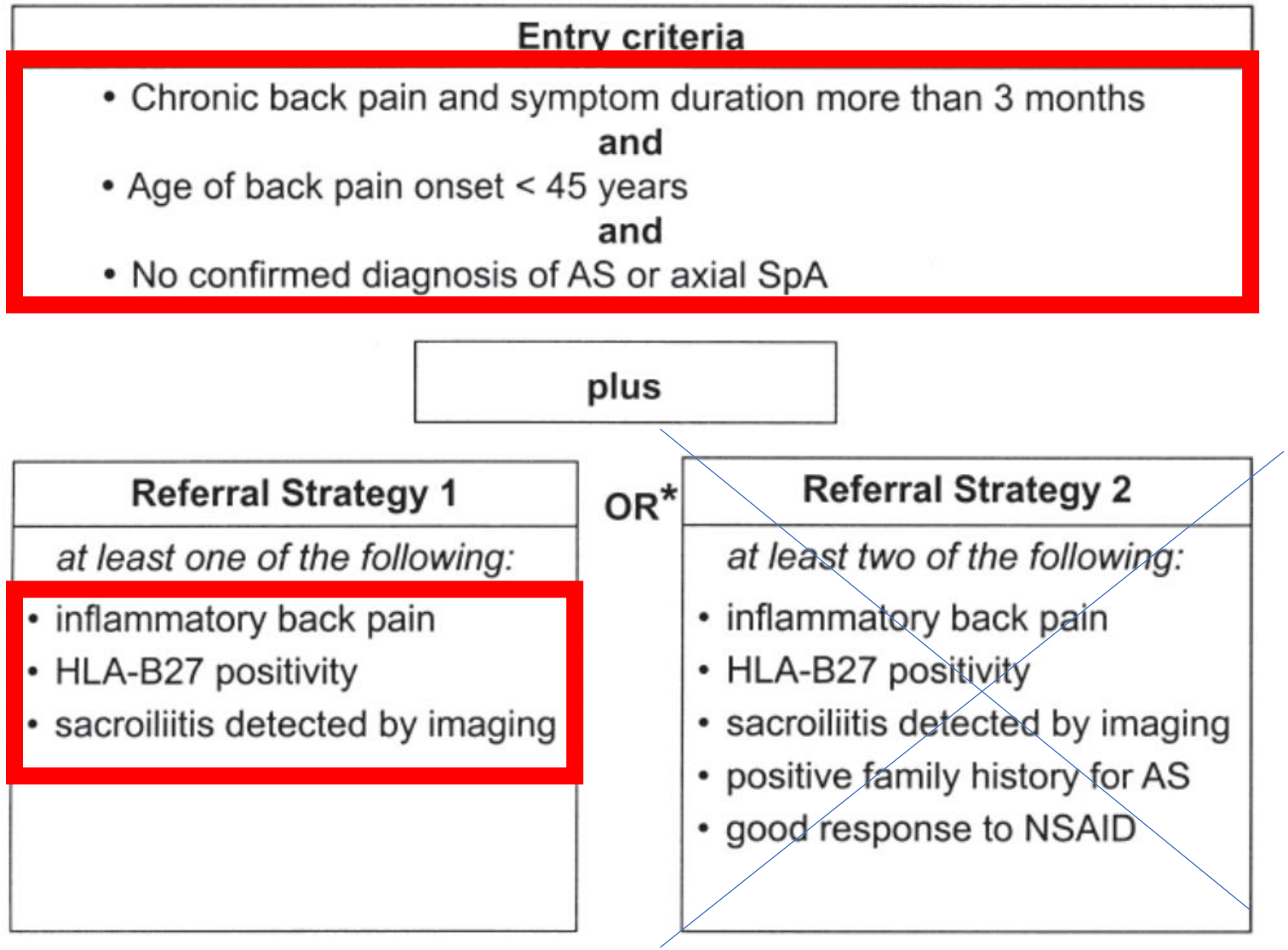
at least two of the following:

- inflammatory back pain
- HLA-B27 positivity
- sacroiliitis detected by imaging
- positive family history for AS
- good response to NSAID

J Rheumatology 2011 Nov;38(11):2452-60



J Rheumatology 2011 Nov;38(11):2452-60



J Rheumatology 2011 Nov;38(11):2452-60

Inflammatory back pain

- Pain in the back
- Better with activity
- Worse with rest
- Often worse in the morning
- Insidious onset
- Often significant improvement with NSAIDs

This type of pain is not specific to axial spondyloarthritis

Using inflammatory back pain as a diagnostic criterion

- Rheumatologist with knowledge of other features
  - Sensitivity 90%
  - Specificity 59%
  - Positive predictive value 64%
  - Negative predictive value 88%
  - Likelihood Ratio + 2.2
  - Likelihood Ratio − 0.2
- Rheumatologist without knowledge of other features
  - Sensitivity 81%
  - Specificity 44%
  - Positive predictive value 54%
  - Negative predictive value 74%
  - Likelihood Ratio + 1.4
  - Likelihood Ratio – 0.4

Poddubnyy *et al.* RMD Open 2018;4:e000825.

Using inflammatory back pain as a diagnostic criterion

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  - Sensitivity 90%
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Poddubnyy *et al.* RMD Open 2018;4:e000825.

Other things that aren't that helpful

- HLA-B27
  - Sensitive but not specific
  - ie. people with disease more likely to have it
  - But 8-9% of white Caucasian population have too

- Inflammatory markers
  - ***Very*** often normal
  - Especially early in disease course

What next?

- Refer
- or image yourself
  - MRI Scan of sacroiliac joints +/- Lumbar spine
    - T1 and STIR sequences
    - No contrast required

Questions

- If anyone has any questions, please email:
  - philip.robinson@uq.edu.au