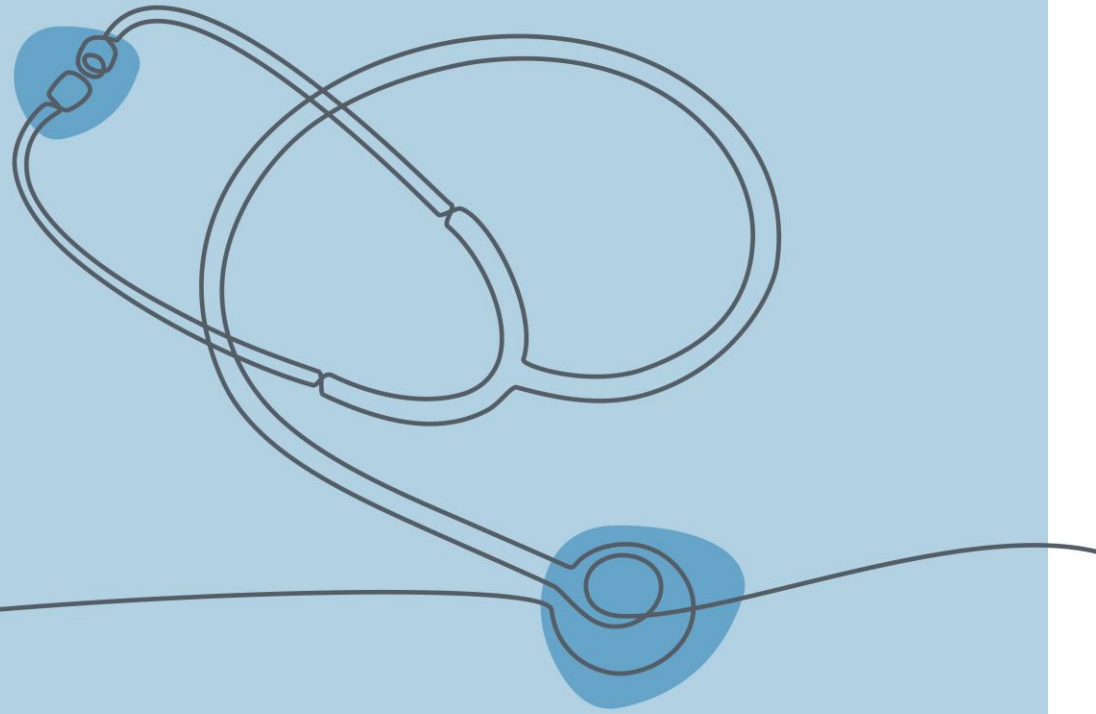
General Practice Liaison Officer Program presents

# Championing Generalism Workshop



A collaborative, multi-disciplinary and multi-specialty learning opportunity for GPs covering conditions commonly managed in primary care

## SATURDAY 31 MAY 2025 | CSDS

phn BRISBANE NORTH
An Australian Government Initiative

Queensland Government
Metro North Health

# Welcome!

## *Generalism*

**NOUN**

**a philosophy of care distinguished by a commitment to the breadth of practice within each discipline and collaboration with the larger health care team in order to respond to patient and community needs.**

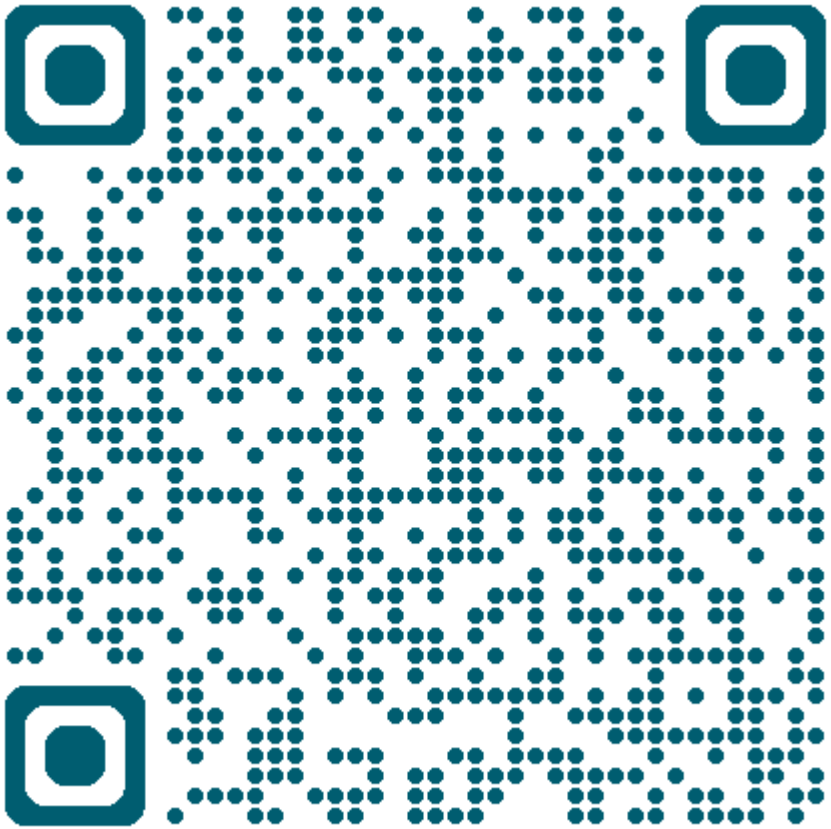
# Acknowledgement

*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.*

# The plan for today…

| | |
|---|---|
| **8.00am** | **Welcome address & getting to know you activity** |
| **8.20am** | **First session**<br>• Managing Gout: The Uric Acid Rollercoaster<br>• Breathe easy: Lung Cancer Screening for GPs<br>• How safe is your older person? |
| **10.10am** | ***Morning tea*** |
| **10.50am** | **Second session**<br>• Bone Voyage: an update on Osteoporosis<br>• We need to talk about burnout!<br>• Post Intensive Care Syndrome |
| **12.35pm** | ***Lunch*** |
| **1.05pm** | **Case studies**<br>• Trauma Service<br>• General Paediatrics<br>• Managing acute distress in primary care: practical strategies for GPs<br>• Weight management: a team effort for better health |
| **3.25pm** | **Last session**<br>• The Infectious Diseases Cocktail |
| **4.10pm** | **Table Quiz** |
| **4.25pm** | **Closing address** |

# Slides, resources and videos



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## GP and primary care education

### Presentations and further resources from past education events

- Caboolture Hospital education
- Cardiology
- Championing Generalism Workshop
- 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)

### Contact

Email: MNGPLO@health.qld.gov.au

### Refer a patient

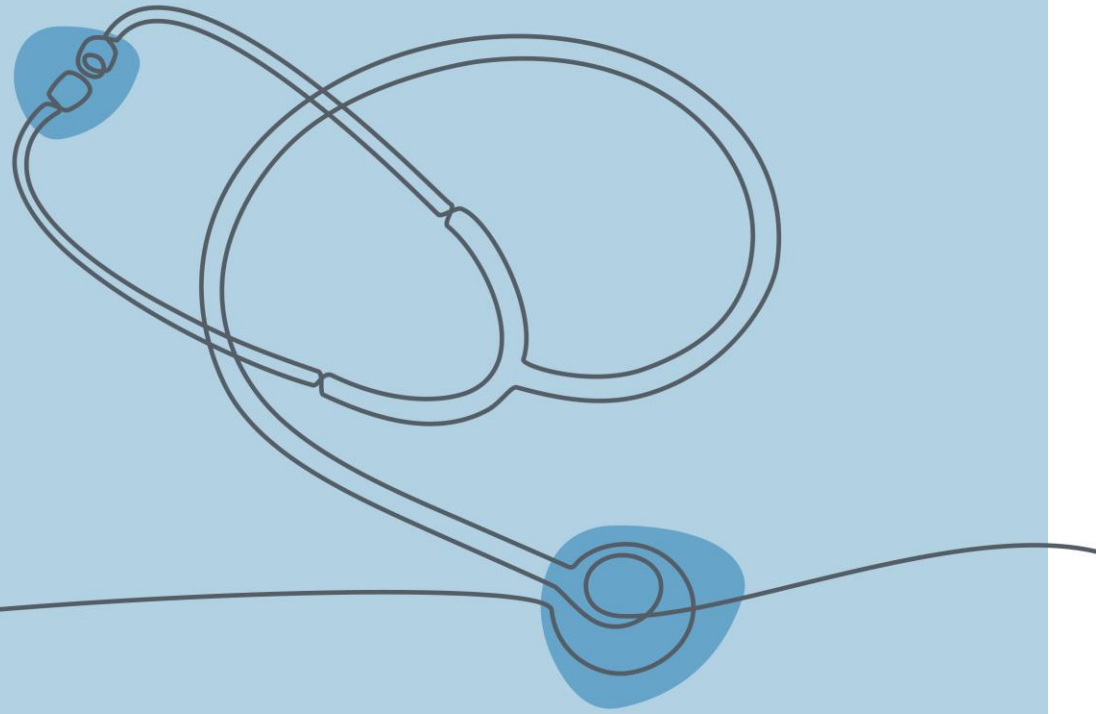
Access the referral guidelines to refer a patient.

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

General Practice Liaison Officer Program presents

# Championing Generalism Workshop

A collaborative, multi-disciplinary and multi-specialty learning opportunity for GPs covering conditions commonly managed in primary care



## Managing Gout: The Uric Acid Rollercoaster

**Dr Paul Kubler | Rheumatologist, RBWH**

phn BRISBANE NORTH
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# Managing Gout – The Uric Acid Rollercoaster

Paul Kubler – Director of Rheumatology, Royal Brisbane & Women's Hospital (May 2025)

# Learning Objectives

- Apply best practice principles in the management of gout
- Understand contemporary methods to diagnose gout
- Appreciate the significant associated comorbidities in patients with gout

# Why gout remains relevant

- 25% increase in age standardised prevalence in last 30 years
- Why? – Increasing BMI (mainly) & increasing prevalence of kidney impairment
- Australia only 2nd to USA for gout prevalence (Canada 3rd; Italy low relative prevalence)
- Increasing age is significant risk factor & males represent ~80% of affected

# Methods to diagnose gout

1. Joint aspirate
2. Dual energy CT scan
3. Ultrasound
4. Serum uric acid

# Who gets gout and why?

Multifactorial – but purine rich diet is minor

Family history important – especially in 1st nation

Kidney function crucial – under-excretion – CKD of any cause, hyper-insulinaemia & influence of sex hormones

# Gout can be treated better…

- Over 5-year period for gout patients in Aust:
  - 55% get follow-up serum urate test
  - 43% are prescribed allopurinol
  - Only 22% achieve target urate levels – 0.36 mmol/L if non-tophaceous and 0.30 mmol/L if tophaceous gout

# 6 Myths of Gout Care

AND THE REALITY

# 1

- Initiate urate-lowering therapy if:
  - Myth - at least 2 attacks in the preceding year (US gen med)
  - Reality - once 1 gout attack has been confirmed (rheum) or if urate stone or tophi confirmed - proceed

# 2

- Myth - wait at least 2 weeks after an acute attack to start urate lowering therapy (ULT)
- Reality - you CAN start allopurinol (ULT) during an acute attack
- 4 large studies have now shown this to be safe & effective
  - Taylor et al. Am J Med 2012;125(11):1126-1134.e7
  - J Clin Rheum 2015:21 120-125

# 3

- Myth – high doses of ULT (allopurinol) are associated with serious adverse effects
- Reality - start at low dose and titrate allopurinol to achieve serum urate (eg 0.36)
  - Starting low reduces adverse events – hypersensitivity reactions
  - Usually 100 mg daily starting dose & increase by 100 mg/day – monthly intervals
  - No real maximum dose (? Adherence)
  - For CKD4/5 start at 50mg alt days

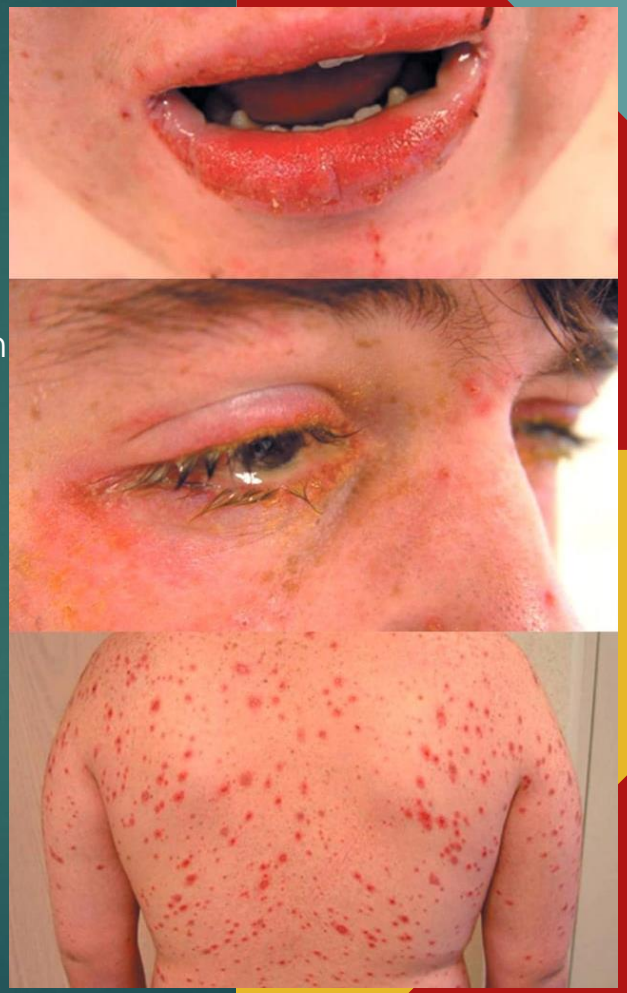
# Allopurinol hypersensitivity

Risks

- Starting with larger doses and titrating to fast
- HLA-B5801
- Chinese, Vietnamese and east Asian background
- Family history

Counselling

- Watch for rashes, mouth ulcers, flu symptoms



# 4

- Prophylaxis against flares while titrating is VERY IMPORTANT
  - Colchicine 0.5mg 1-2 tablets daily
  - NSAID eg Naproxen 250 mg bd
  - 2nd line prednisolone <7.5 mg/day
  - Typical duration 9-12 months (or 3 months after serum urate target reached)

# 5

- Myth – Gout attacks stop target serum uric acid level is reached
- Reality – takes 12-18 months for attacks to stop
- Assuming tolerated, almost NEVER STOP allopurinol (whilst alive)

# 6

- Myth – Gout is the "disease of Kings" because it is caused by eating decadent foods & drink
- Reality – Genes are far more important and a focus on diet education does not lower serum urate levels

# Who to refer

- Referral if:
  - Very poor renal function / dialysis
  - Asian / Indian with poor renal function
  - Allopurinol sensitivity
  - Very young
  - Very severe
  - Discharging tophi *(please don't operate)*

# Gout Comorbidities

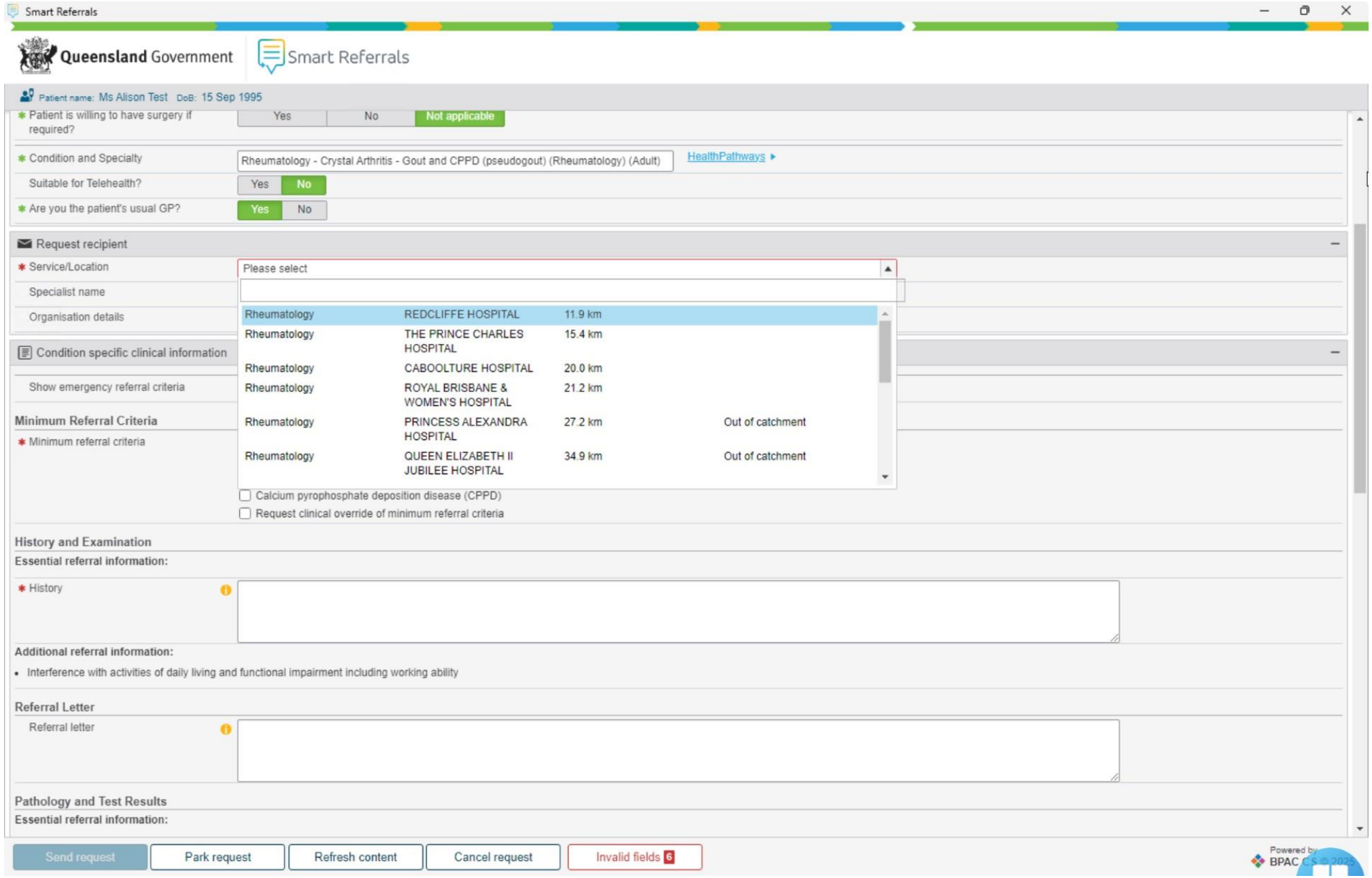
Anti-diabetic meds – especially SGLT2 inhibitors (but also metformin & DPP4 inhibitors) proven to reduce serum urate & improve gout outcomes

Stabilise (preserve) renal impairment

Address CVS risk factors

# Key Take Away Messages

- Gout meds require understanding & commitment from patient that it's a long term "slow & steady" approach with incremental benefit of months- years
- Focus on ways to keep patient engaged (optimise adherence)
- Address the comorbidities that threaten prognosis


Smart Referrals
Queensland Government
Smart Referrals
Patient name: Ms Alison Test DoB: 15 Sep 1995
Patient is willing to have surgery if required?
Yes
No
Not applicable
Condition and Specialty
Rheumatology - Crystal Arthritis - Gout and CPPD (pseudogout) (Rheumatology) (Adult)
HealthPathways
Suitable for Telehealth?
Yes
No
Are you the patient's usual GP?
Yes
No
Request recipient
Service/Location
Please select
Specialist name
Organisation details
Rheumatology REDCLIFFE HOSPITAL 11.9 km
Rheumatology THE PRINCE CHARLES HOSPITAL 15.4 km
Rheumatology CABOOLTURE HOSPITAL 20.0 km
Rheumatology ROYAL BRISBANE & WOMEN'S HOSPITAL 21.2 km
Rheumatology PRINCESS ALEXANDRA HOSPITAL 27.2 km Out of catchment
Rheumatology QUEEN ELIZABETH II JUBILEE HOSPITAL 34.9 km Out of catchment
Condition specific clinical information
Show emergency referral criteria
Minimum Referral Criteria
Minimum referral criteria
Calcium pyrophosphate deposition disease (CPPD)
Request clinical override of minimum referral criteria
History and Examination
Essential referral information:
History
Additional referral information:
Interference with activities of daily living and functional impairment including working ability
Referral Letter
Referral letter
Pathology and Test Results
Essential referral information:
Send request
Park request
Refresh content
Cancel request
Invalid fields 6
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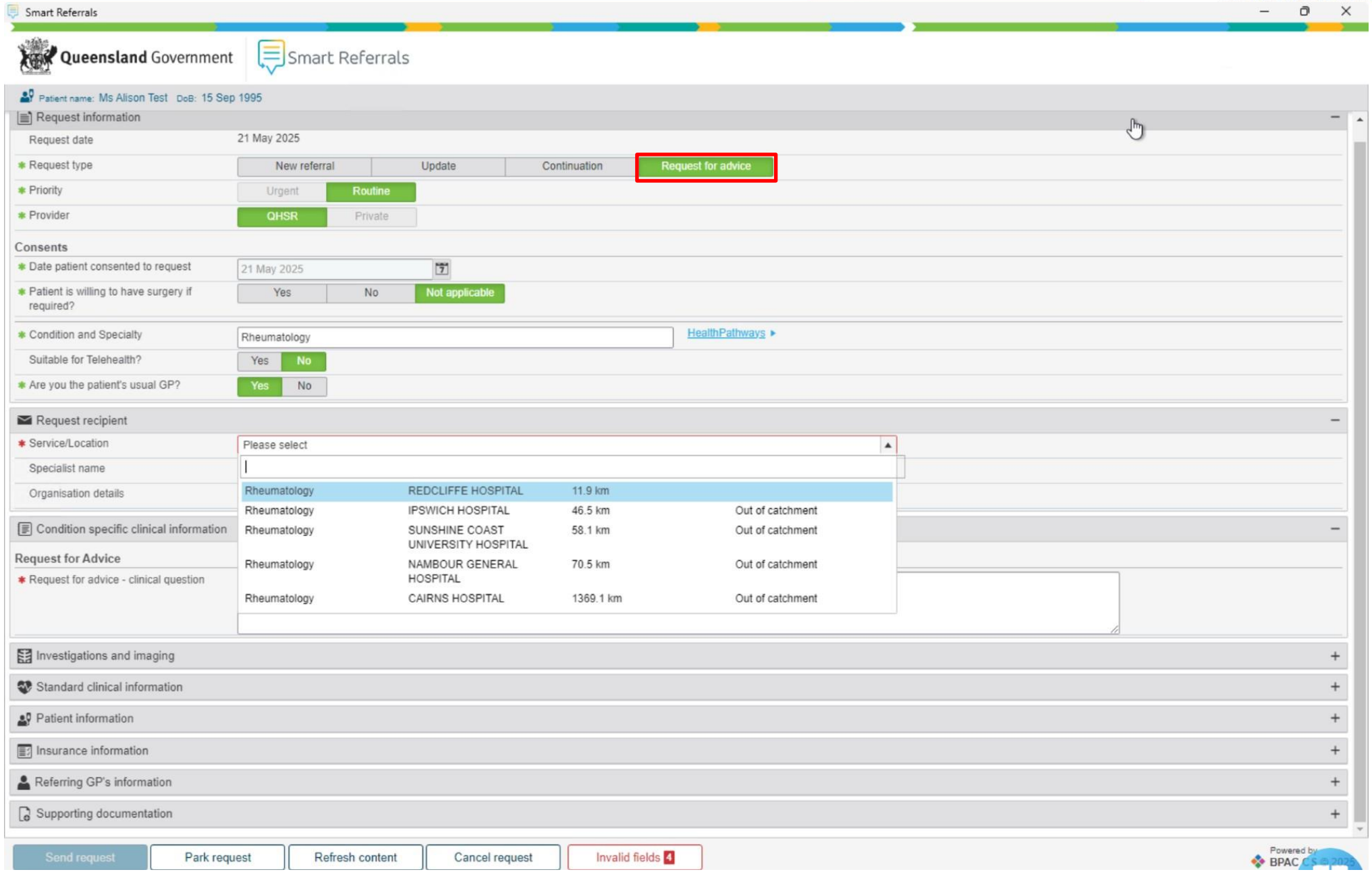
Smart Referrals
Queensland Government
Smart Referrals
Patient name: Ms Alison Test DoB: 15 Sep 1995
Request information
Request date
21 May 2025
Request type
New referral
Update
Continuation
Request for advice
Priority
Urgent
Routine
Provider
QHSR
Private
Consents
Date patient consented to request
21 May 2025
Patient is willing to have surgery if required?
Yes
No
Not applicable
Condition and Specialty
Rheumatology
HealthPathways
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Please select
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Rheumatology REDCLIFFE HOSPITAL 11.9 km
Rheumatology IPSWICH HOSPITAL 46.5 km Out of catchment
Rheumatology SUNSHINE COAST UNIVERSITY HOSPITAL 58.1 km Out of catchment
Rheumatology NAMBOUR GENERAL HOSPITAL 70.5 km Out of catchment
Rheumatology CAIRNS HOSPITAL 1369.1 km Out of catchment
Condition specific clinical information
Request for Advice
Request for advice - clinical question
Investigations and imaging
Standard clinical information
Patient information
Insurance information
Referring GP's information
Supporting documentation
Send request
Park request
Refresh content
Cancel request
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# Rheumatology

## Conditions

- Axial Spondyloarthritis – Ankylosing Spondylitis
- Connective Tissue Disease – SLE, Scleroderma, 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
- Peripheral Spondyloarthritis - Psoriatic arthritis and Reactive arthritis
- Polymyalgia rheumatica
- Rheumatoid arthritis
- Undifferentiated peripheral inflammatory arthritis
- Vasculitis (non GCA/Temporal Arteritis)

There are other conditions where rheumatology input is sometime 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 department 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
- Peripheral Spondyloarthritis - Psoriatic arthritis and Reactive arthritis
- Axial Spondyloarthritis – Ankylosing Spondylitis
- Crystal Arthritis – Gout and CPPD (pseudogout)
  - Concerns for septic arthritis
  - Severe drug reaction to Allopurinol
- Polymyalgia Rheumatica
- Connective Tissue Disease - SLE, Scleroderma, MCTD, Sjogren's Syndrome and undifferentiated or overlap CTDs
- Myositis - polymyositis, dermatomyositis, CTD associated myositis and undifferentiated inflammatory myositis
- Vasculitis
- Giant Cell Arteritis/Temporal Arteritis

Patients will be allocated to the various facilities based on their postcode, the availability of particular services at those facilities and to improve equity of access across the district.

For **urgent referrals** please contact the Rheumatology team via the switchboard at your preferred above location

### Send referral

**Hotline: 1300 364 938**

**Electronic:**
GP Smart Referrals (preferred)
eReferral system templates
**Medical Objects ID:** MQ40290004P
**HealthLink EDI:** qldmnhhs

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

### 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

### Locations

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

### Resources

Guideline for the Management of Knee and Hip Osteoarthritis Second Edition
Specialists list
Osteoarthritis of the Knee Clinical Care Standard
General referral criteria

### Methotrexate

Shared Care Fact Sheet – Low Dose Methotrexate (PDF)
Notes for prescribers of low dose

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# Crystal arthritis – Gout and CPPD (pseudogout)

Does your patient wish to be referred?

## Minimum referral criteria

Does your patient meet the minimum referral criteria?

| | |
|---|---|
| **Category 1**<br>Appointment within 30 days is desirable | • No defined category 1 criteria |
| **Category 2**<br>Appointment within 90 days is desirable | • Polyarticular gout<br>  ◦ Maximum tolerated allopurinol dose<br>  ◦ Allopurinol intolerance<br>• Recurrent gout despite treatment, with any of the following:<br>• Chronic tophaceous gout<br>• CPPD |
| **Category 3**<br>Appointment within 365 days is desirable | No defined category 3 criteria |

## If your patient does not meet the minimum referral criteria

Consider other treatment pathways or an alternative diagnosis.

If you still need to refer your patient:

- Please explain why (e.g. warning signs or symptoms, clinical modifiers, uncertain about diagnosis, etc.)
- Please note that your referral may not be accepted or may be redirected to another service

## Routine referrals

**Consider routine referral for**

- Polyarticular gout
- Diagnosis uncertain
- Unacceptable symptoms despite adequate management in primary care

For example:

- Gout
- Pseudogout

Other Rheumatology conditions

Specialist rheumatology input may be sought for

### Send referral

**Hotline: 1300 364 938**

**Electronic:**
GP Smart Referrals (preferred)
eReferral system templates
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### Locations

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Redcliffe Hospital
Royal Brisbane and Women's Hospital
The Prince Charles Hospital

# Gout and Pseudogout

This page is about gout and calcium pyrophosphate disease (CPPD) conditions, including pseudogout.

Red flags

- Septic arthritis

## Background

About gout and pseudogout

## Assessment

1. Take a history for:
   - symptoms
   - potential triggers
   - risk factors.
2. Examine the patient:
   - Measure blood pressure, heart rate, and temperature.
   - Check for signs of gout or calcium pyrophosphate disease (CPPD).
3. Consider differential diagnoses:
   - Septic arthritis – suspect if either:
     - rapid onset of a red, warm, swollen, exquisitely painful joint with reduced passive and active range of movement, especially if tachycardia, hypotension, fever or other constitutional symptoms present.
     - patient being treated for gout or calcium pyrophosphate disease (CPPD) (e.g., pseudogout) and worsening or not improving within 48 hours of treatment.
   - Other diagnoses
4. Arrange investigations.

## Management

### Management of acute attacks

1. If suspected septic arthritis, request acute orthopaedic assessment.
2. Prescribe medications – NSAIDs, colchicine, corticosteroids are all considered first line in the treatment of gout and can also be considered in acute CPPD:
3. If patient with gout taking allopurinol, advise them to continue taking it during the acute attack.
4. Educate the patient about gout or CPPD and non-pharmacological measures.
5. Review the patient in 48 hours or earlier if deteriorating – if:
   - poor response, check compliance and reconsider diagnosis. Seek rheumatology advice or request non-acute rheumatology assessment.
   - patient improving, continue treatment and discuss long-term preventive management as below.

### Prevention

1. Advise lifestyle interventions.

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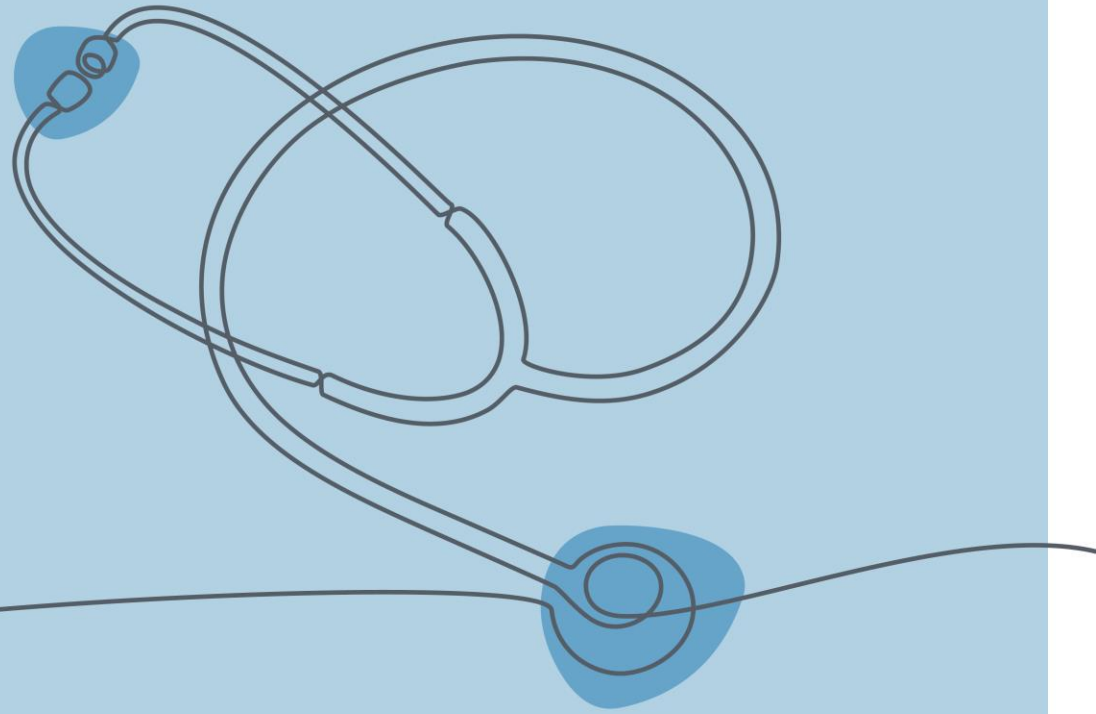
# Championing Generalism Workshop

A collaborative, multi-disciplinary and multi-specialty learning opportunity for GPs covering conditions commonly managed in primary care



## Breathe easy: Lung Cancer Screening for GPs

**Dr Kwun Fong | Thoracic Physician, TPCH / Researcher UQ**
**Dr James Martin | GP / GP Liaison Officer**
**Dr Gerry Olive | Thoracic Physician, TPCH / Researcher UQ**

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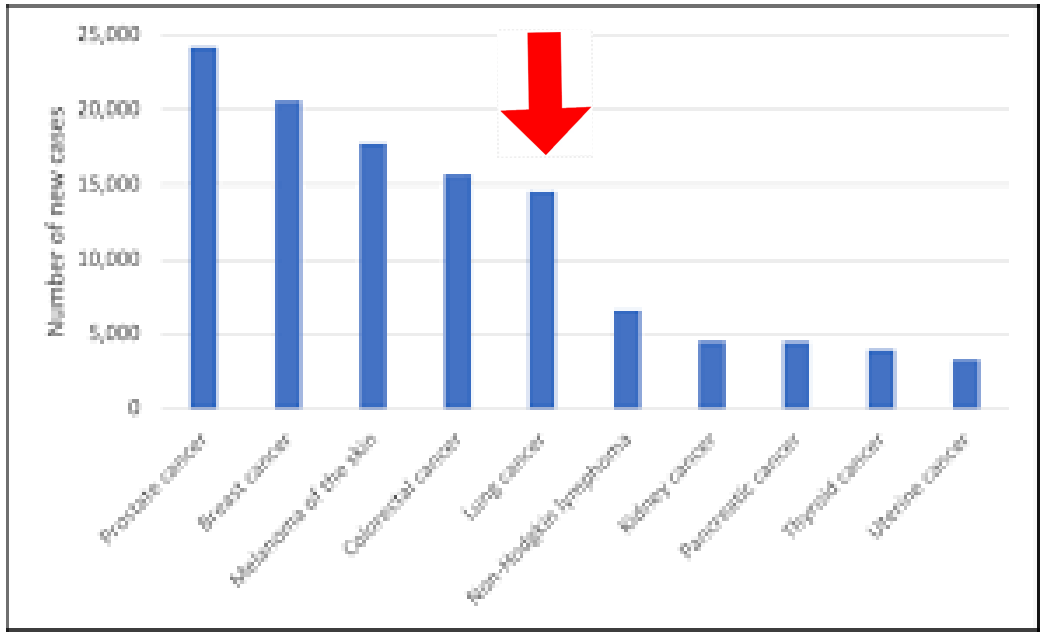
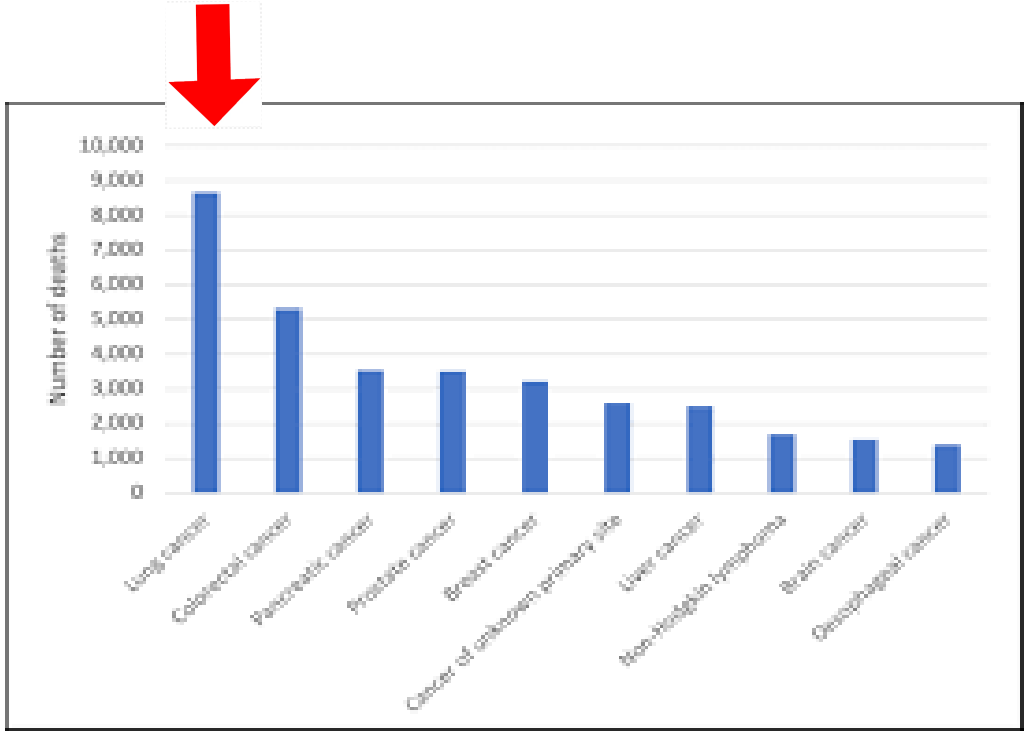
# Overview

- Survey
- Lung Cancer in Aus
- Program Overview
- Nodule Management
- Incidental Findings
- GP Impact
- Referrals
- Resources

# Lung Cancer in Australia

- 5th commonest cancer
- ***Leading* cause of cancer death**
- Despite 5y survival improvement of 10 to 26% (1990–2020)



## Colorectal cancer (C18–C20)

Select cancer: Colorectal cancer (C18–C20)

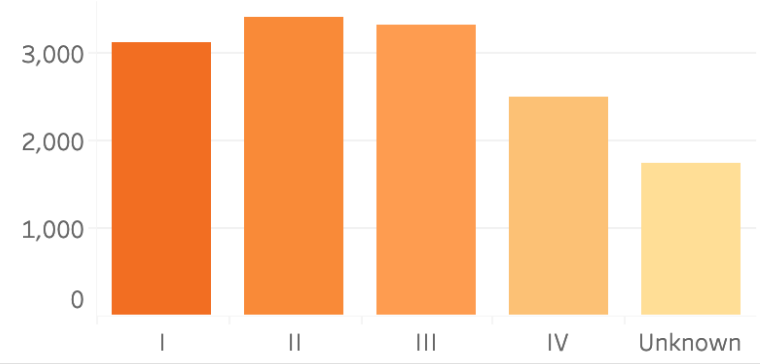
Select sex: Persons

### Incidence

Colorectal cancer (C18–C20), 2011

**Number of cases, by stage at diagnosis**

Colorectal cancer, Persons

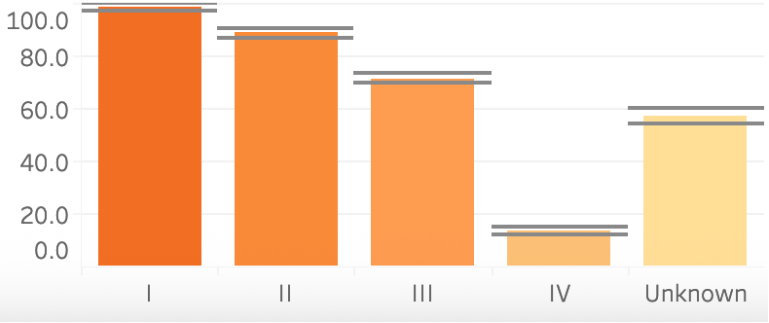



### Survival

Colorectal cancer (C18–C20), 2011–2016

**5-year relative-survival, by stage at diagnosis**

Colorectal cancer, Persons




## Lung cancer (C33–C34)

Select cancer: Lung cancer (C33–C34)

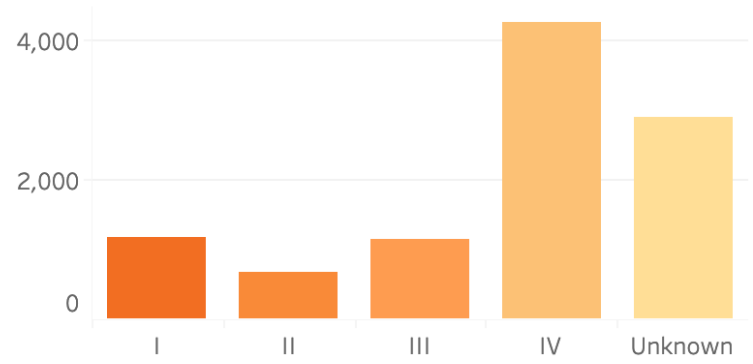
Select sex: Persons

### Incidence

Lung cancer (C33–C34), 2011

**Number of cases, by stage at diagnosis**

Lung cancer, Persons

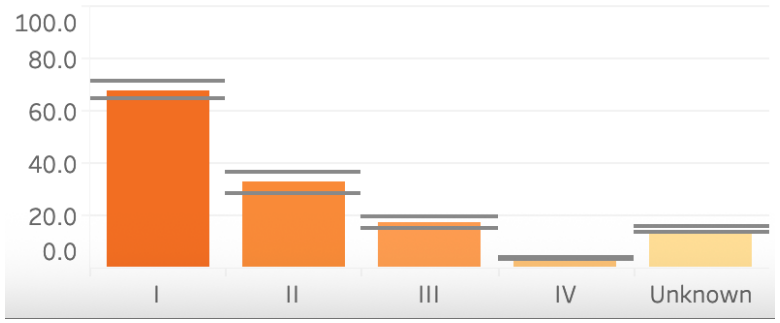



### Survival

Lung cancer (C33–C34), 2011–2016

**5-year relative-survival, by stage at diagnosis**

Lung cancer, Persons




- Internal cancer
- Asymptomatic early
- Symptom normalisation
- Stigma
- Education (“death sentence”)
- Health inequity
- **No screening!**

# Opening the Floodgates?

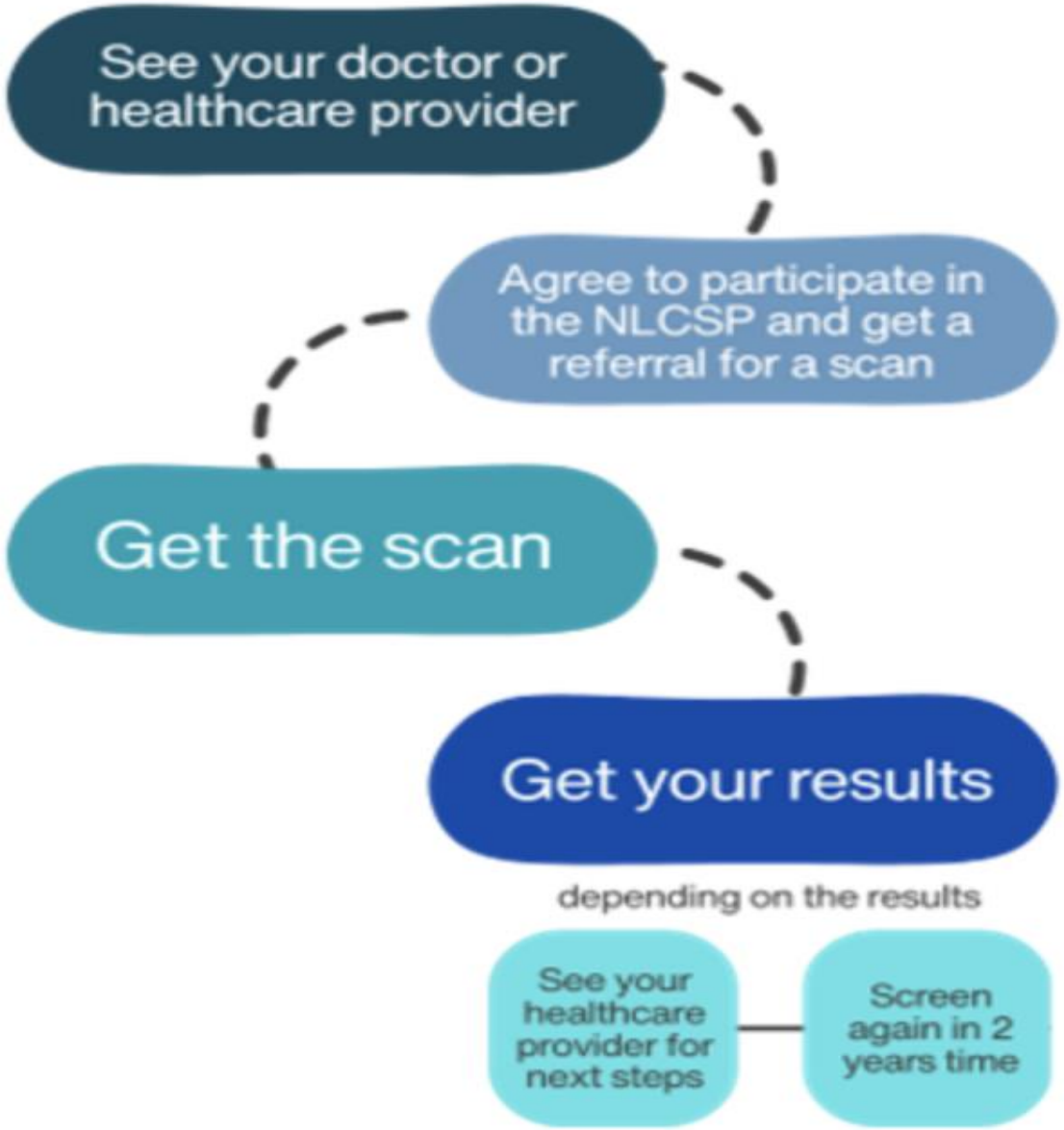
V

# National Lung Cancer Screening Program

The new NLCSP is a screening program using low-dose computed tomography scans to look for lung cancer in high-risk people without any symptoms. It aims to find lung cancer early and reduce deaths from lung cancer. Screening services will begin for eligible people from July 2025.

## Overview Program

- Commencement July 2025
  - **50-70**yo
  - **30 pack year** smoking history
  - Current or quit in last 10 years
- 2 yearly (biennial) scanning cycle
- Management algorithm based on **PanCan nodule tool** (baseline) and **LungRADS** (after baseline)
- Clearly defined recommendations for **nodule(s)** and **additional findings**




NATIONAL LUNG CANCER SCREENING PROGRAM

# SCREENING AND ASSESSMENT PATHWAY

Australian Government | NATIONAL LUNG CANCER SCREENING PROGRAM

## Promotion & awareness

All health professionals

## Screening eligibility

- Aged 50-70 years old
- AND
- No signs or symptoms suggestive of lung cancer
- AND
- Currently smoking or quit in past 10 years
- AND
- ≥30 pack-year cigarette smoking history

**May be eligible for screening**

**Not eligible for screening**

## Program entry

### Participant recruitment

Healthcare providers and support workers

- **Organised** by primary care provider
- OR
- **Opportunistic** in an unrelated consultation
- OR
- **Facilitated** by any healthcare worker
- OR
- **Self-identification** by potential participant

### Enrolment & shared decision-making

Requesting practitioner

**Eligibility and enrolment form**

- **Eligibility** for screening confirmed
- **Suitability** for low dose CT scan assessed
- **Informed choice** to participate recorded

**Low-dose CT scan request**

## Screening

### Low-dose CT scan

Radiographer

- Low-dose CT scan performed
- Scan images retained as per usual practice

## Scan assessment & reporting

### Scan assessment

Radiologist

- Scan read using **NLCSP Nodule Management Protocol**

**Structured report**

- Structured report sent to requesting practitioner
- Structured report sent to NCSR

## Results & management

*Based on NLCSP Nodule Management Protocol*

| | |
|---|---|
| Very low risk | Return for screening in 24 months |
| Low risk | Return for screening in 12 months |
| Low to moderate risk | Return for screening in 6 months |
| Moderate risk | Return for screening in 3 months |
| High risk | Refer to respiratory physician or other relevant specialist linked to lung cancer multidisciplinary team (MDT) |
| Very high risk | |
| Actionable additional findings | As appropriate to the specific finding |

## Results & reminders

Requesting practitioner

- NCSR sends requesting practitioner correspondence of the results

**Very low risk findings**

- NCSR notifies participant of result
- NCSR reminds participant to screen at required interval

**Findings with further action needed**

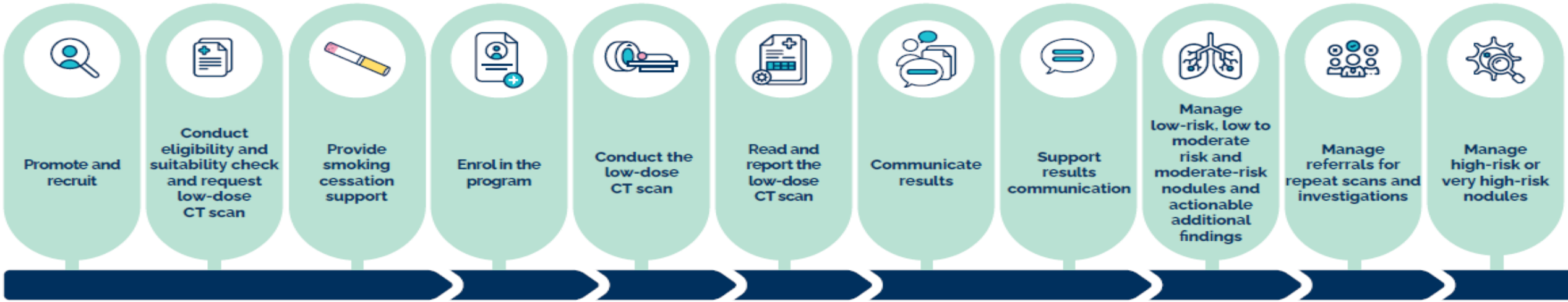
- NCSR notifies participant to contact requesting practitioner
- Requesting practitioner provides results to participant and manages according to NMP

**Offer smoking cessation support according to best practice guidelines (ASK, ADVISE, HELP)**

NCSR - National Cancer Screening Register, NMP- Nodule Management Protocol.

health.gov.au/nlcsp

# HEALTH WORKFORCE ROLES AND RESPONSIBILITIES




Australian Government

NATIONAL LUNG CANCER SCREENING PROGRAM

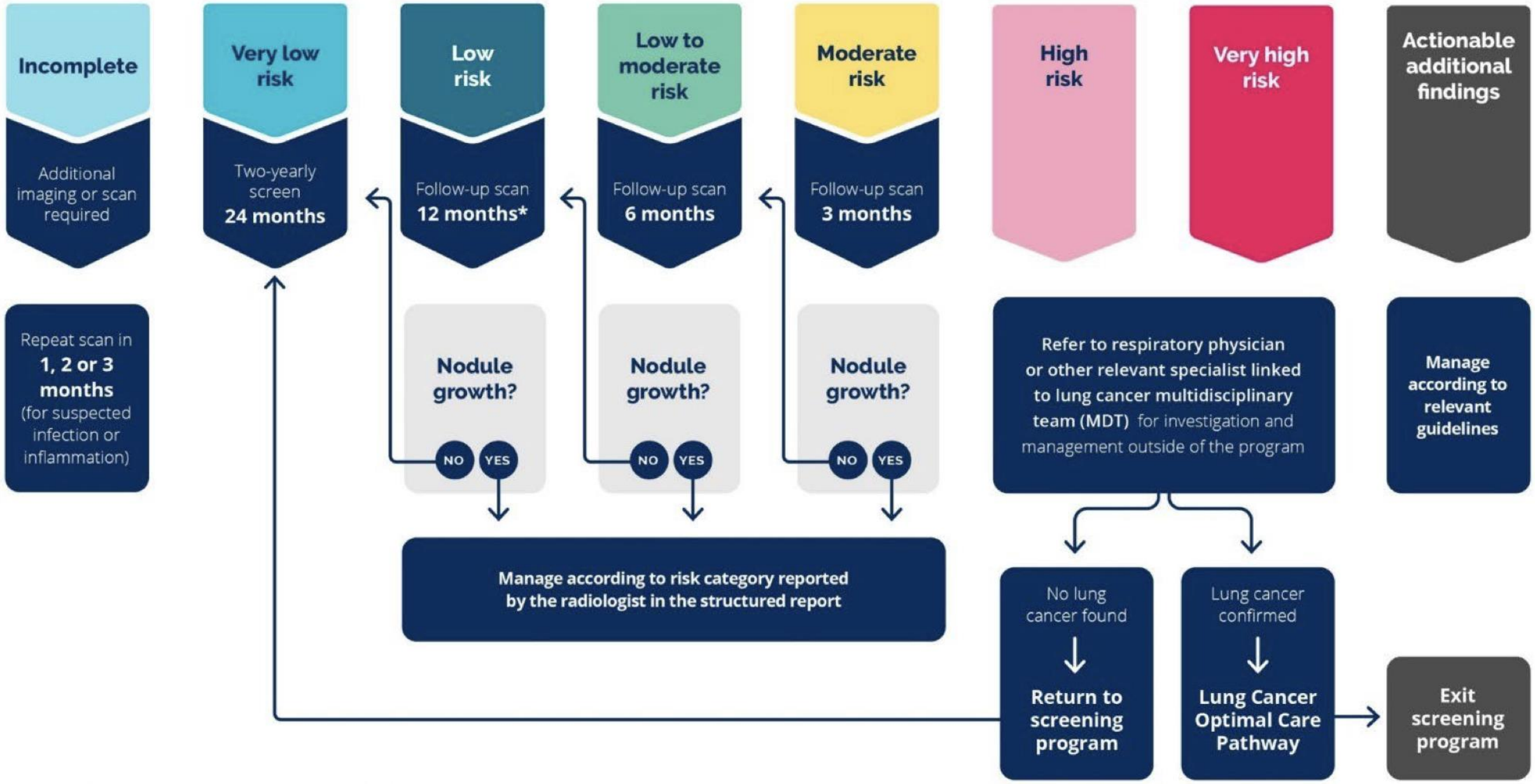
**Requesting practitioners:**
Healthcare providers authorised to request a low-dose CT scan, including general practitioners, nurse practitioners and other medical practitioners

**Healthcare providers *without authorisation to request a low-dose CT scan:**
*Registered nurse, registered nurses, practice nurses and enrolled nurses, Aboriginal and Torres Strait Islander health workers and practitioners, allied health professionals

**Health support workers:**
Aboriginal liaison officers, health support workers and smoking cessation specialists

**Administrative staff (based in primary care):**
Practice managers and administrative staff

www.health.gov.au/nlcsp




*Low risk participants require two 12 month scans before extending to 24 months.

# REQUESTING PRACTITIONER FLOW CHART FOR ELIGIBILITY AND CT SCAN REFERRAL

The National Lung Cancer Screening Program (NLCSP) is a targeted screening program available for eligible people aged between 50 and 70 who smoke tobacco cigarettes or have quit smoking within the last 10 years.

Screening regularly with low-dose computed tomography (CT) scans is the best way to detect lung cancer early.

Consider the cultural perspective of each patient you see before talking about lung cancer screening.

Consider involving Aboriginal and Torres Strait Islander Health Practitioners and Aboriginal and Torres Strait Islander Health Workers where possible when speaking with a patient who identifies as an Aboriginal and/or Torres Strait Islander person. Consider accessing interpreter services for culturally and linguistically diverse people.

Australian Government

NATIONAL LUNG CANCER SCREENING PROGRAM

## 1 Get your practice ready

**A Complete the checklist to get your practice ready**
Get Your Practice Ready for the National Lung Cancer Screening Program

**B Complete the lung cancer screening eLearning**
Education modules

**C Check practice records and send invitations**

## 2 Eligibility assessment appointment

**A Confirm eligibility***

- Aged 50 to 70 years, **and**
- Have no symptoms or signs that suggest lung cancer** (for example, unexplained persistent cough, coughing up blood, shortness of breath for no reason), **and**
- Smoke tobacco cigarettes or have a history of cigarette smoking (having quit within 10 years), **and**
- Have a history of tobacco cigarette smoking of at least 30 pack-years (for example, a pack a day for 30 years, or 2 packs a day for 15 years).

**B Assess low-dose CT scan suitability**

Screening may not be suitable for your patient. Plan with your patient when they can re-check their suitability and encourage future participation.

**Examples of a participant not being suitable include:**

- They have had a full chest CT scan within the last 12 months or have one planned for clinical reasons in the next 3 months.
- They have had a symptomatic lung infection (for example, COVID-19, pneumonia, acute bronchitis) within the previous 12 weeks.
- They are unable to lie flat for a minimum of 5 minutes and hold their hands above their head for a low-dose CT scan.
- Their weight exceeds the restrictions of the scanner (greater than 200 kg).

**C Participate in shared decision-making to decide together if screening is right for them**

Provide shared decision-making for lung cancer screening pamphlet to patients.

Shared decision-making materials

**D Provide the participant with the NLCSP privacy information notice*****

**E Complete the Eligibility and Enrolment Form to enrol a participant in the program**

Healthcare providers need to complete the form and enrol a participant in the National Lung Cancer Screening Register (NCSR) either through the NCSR interface integrated with clinical software or through the NCSR Healthcare Provider Portal.

NLCSP Low-dose CT Scan Request Form

Healthcare Provider Portal

All participants need a request for screening. Complete a low-dose CT scan request form including information that the scan is for the program and if the participant has a first-degree family history of lung cancer.

**F Provide smoking cessation advice and support**

People do not have to quit smoking to participate in the program. Encourage and support the participant to quit smoking; if appropriate, follow the Ask, Advise, Help model.

Quit Centre: Clinical tools and guidelines on smoking cessation (quitcentre.org.au)

Refer to the Program Guidelines for a comprehensive explanation of the steps of the National Lung Cancer Screening Program.

## 3 The low-dose CT scan

**A Schedule appointment**

The participant will need to book an appointment at a radiology clinic or at a mobile screening service provided in some rural and remote areas; tell the clinic that they are lung cancer screening participant.

**B During the scan**

The scan process will take 5 to 10 minutes

It is not painful and no injections are needed

**C After the scan**

The radiologist reads and reports the scan using the NLCSP nodule management protocol

**D** The low-dose CT scan report is sent to the NCSR.

**E** Results, including recommended actions, are provided to the requesting practitioner by the NCSR and via usual means.

Scan results will be classified into the following categories:

| Category | Category descriptor |
|---|---|
| 0 | Incomplete |
| 1 | Very low risk |
| 2 | Low risk |
| 3 | Low to moderate risk |
| 4 | Moderate risk |
| 5/6 | High-risk / very high-risk |
| A | Actionable additional findings |

Participants should be advised that if they develop symptoms between planned screenings, they should see their healthcare provider.

## 4 Refer or recall for investigation

**A** If a lung nodule or finding not related to lung cancer is found, the participant may need investigation, which could include additional low-dose CT scans, referrals or tests. These will be reported in the radiology report, with guidance regarding next steps provided.

**B If nodules are identified**

Investigations of identified nodules may include additional interval low-dose CT scans (at 3, 6 or 12 months) or referral to a respiratory physician linked to a lung cancer multidisciplinary team (MDT).

See NLCSP nodule management protocol

**C If actionable additional findings are identified**

Imaging of the chest may identify actionable additional findings not related to lung cancer.

If actionable additional findings are detected, discuss these with the participant and manage them as per the Royal Australian and New Zealand College of Radiology Actionable Additional Findings Guidelines for the National Lung Cancer Screening Program. This may include referral to other specialists with relevant expertise who are linked with a lung cancer MDT.

See actionable additional findings guidelines

## 5 Requesting practitioner follow-up and rescreening

**A** For each scan, participants will need to book an appointment with you for a new low-dose CT scan request.*

**B** Those with no significant findings will be reminded about screening every two years if they have opted in for communication from the NCSR.***

**C** For participants who have opted out of the NCSR, you will need to remind them and follow up about all screening.

**D** Those with findings will be reminded about interval scans at 3, 6 or 12 months. Those without findings will be reminded every two years.

### Additional notes

* Once an individual is participating in the program, their smoking history eligibility criteria does not need to be re-assessed.

** Any of the following unexplained, persistent symptoms and signs (lasting more than 3 weeks, or earlier in patients with known risk factors or with more than one symptom or sign).

See the Cancer Australia guide to Investigating symptoms of lung cancer

- **Coughing up blood**
- **New unexplained cough or changed cough**
- **Chest and/or shoulder pain**
- **Shortness of breath for no reason**
- **Hoarseness**
- **Unexplained weight loss or loss of appetite**
- **Persistent or recurrent chest infection**
- **Fatigue**
- **Deep vein thrombosis (DVT)**
- **Abnormal chest signs**
- **Finger clubbing**

***Individuals can choose to opt out of the NCSR and still have a free low-dose CT scan; however, they will not be considered a participant in the program or receive communication from the NCSR. If a screening participant opts out of participating in the NCSR, it is the responsibility of the requesting practitioner to notify them of repeat or follow-up scans.

A. If a lung nodule or finding not related to lung cancer is found, the participant may need investigation, which could include additional low-dose CT scans, referrals or tests. These will be reported in the radiology report, with guidance regarding next steps provided.

B. If nodules are identified

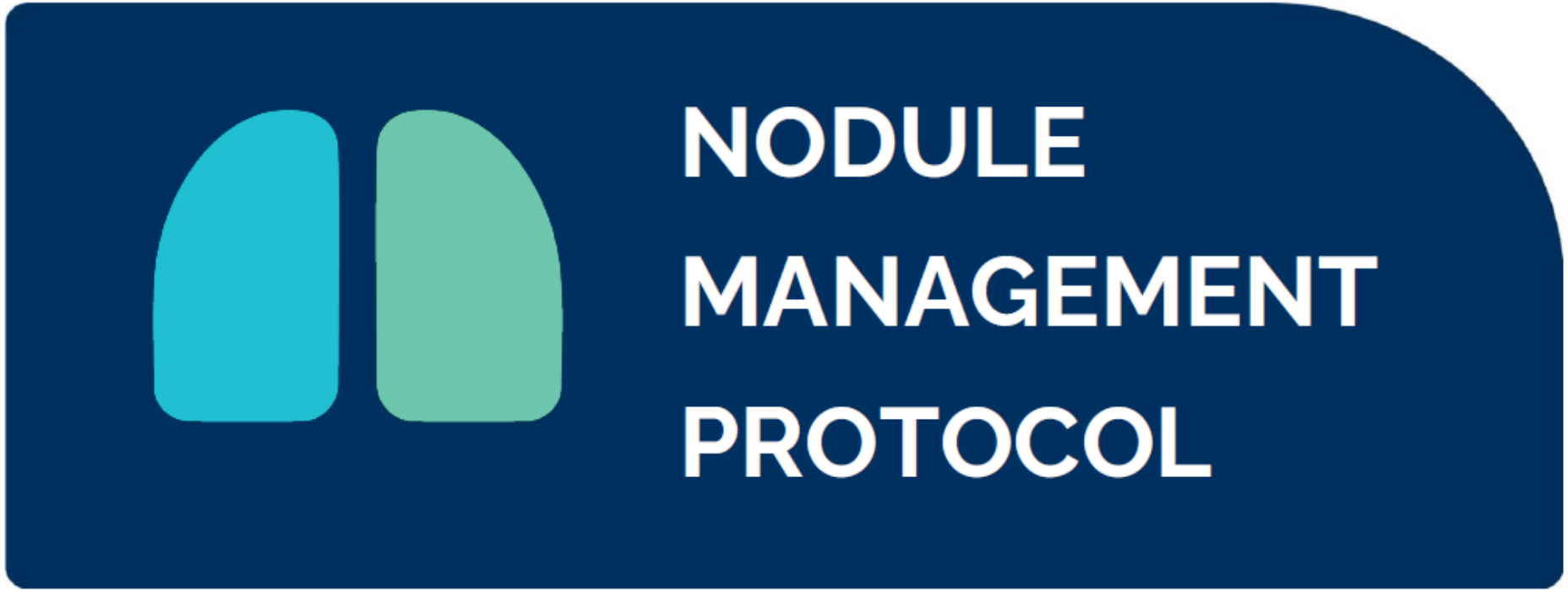
- Investigations of identified nodules may include additional interval low-dose CT scans (at 3, 6 or 12 months) or referral to a respiratory physician linked to a lung cancer multidisciplinary team (MDT). See **NLCSP nodule management protocol**

C. If actionable additional findings are identified

- Imaging of the chest may identify actionable additional findings not related to lung cancer.
- If actionable additional findings are detected, discuss these with the participant and manage them as per the Royal Australian and New Zealand College of Radiology Actionable Additional Findings Guidelines for the National Lung Cancer Screening Program. This may include referral to other specialists with relevant expertise who are linked with a lung cancer MDT. See **actionable additional findings guidelines**

# Nodule Mx

Australian Government | NATIONAL LUNG CANCER SCREENING PROGRAM



## Baseline

Australian ILST Data (QLD)

83.9%

8.4%

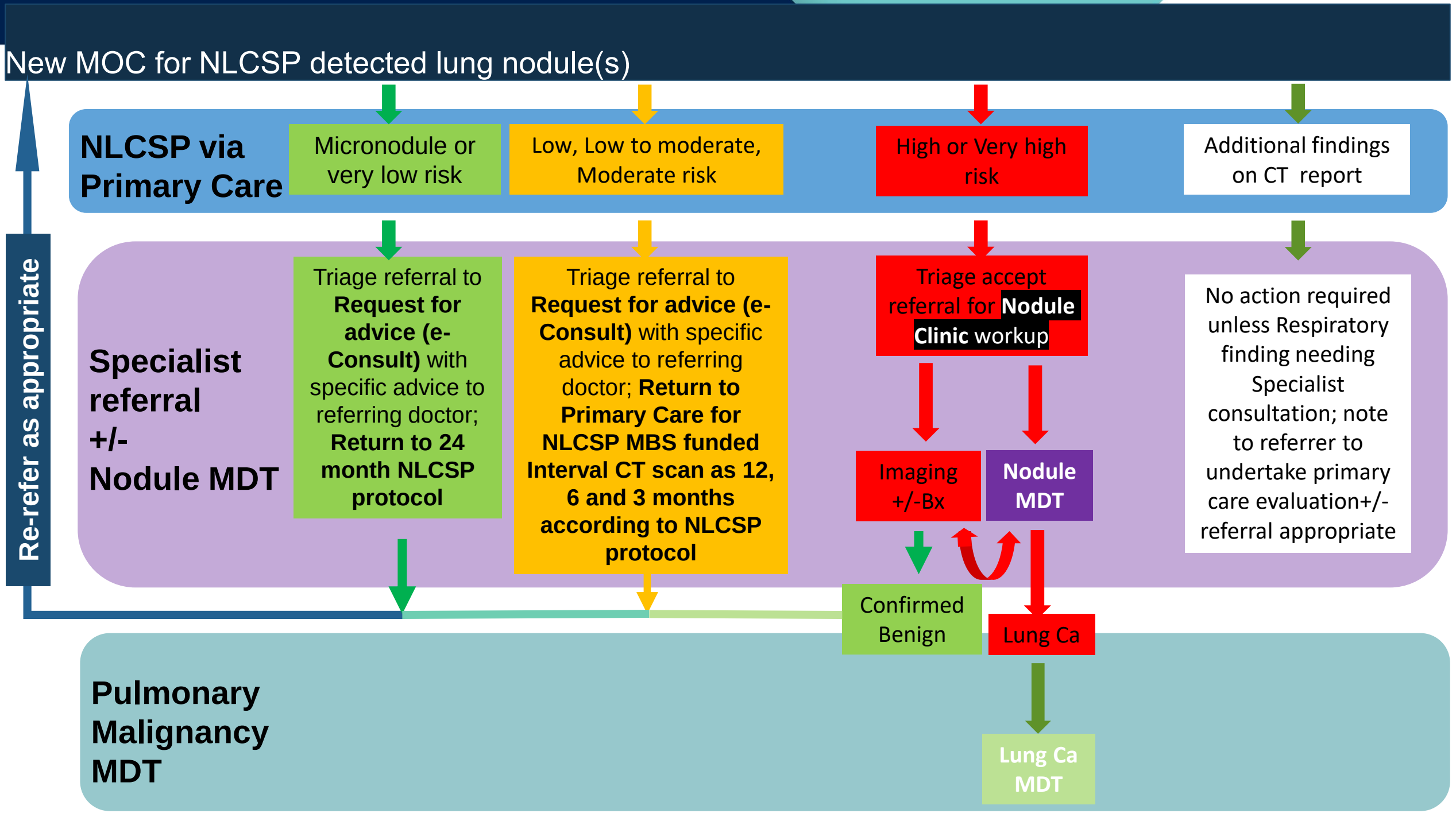
2.9%

3.0%

1.3%

0.5%

| Category descriptor | Findings | Management | Category |
|---|---|---|---|
| Incomplete | Findings suggestive of an inflammatory or infectious process | 1-, 2-, or 3-month LDCT | 0 |
| Very low risk | No lung nodules | 24-month LDCT | 1 |
| | Baseline nodule with PanCan risk <1.5%<br>excluding airway nodules and atypical pulmonary cysts | | |
| | Nodule with benign features:<br>• Complete, central, popcorn, or concentric ring calcifications<br>• Fat-containing | | |
| | Juxtapleural nodule:<br>• 524 $mm^3$(<10 mm) AND<br>• Solid; smooth margins; and oval, lentiform, or triangular shape | | |
| Low risk | Baseline nodule with PanCan risk 1.5% to < 6%<br>excluding airway nodules and atypical pulmonary cysts | 12-month LDCT | 2 |
| | Airway nodule, subsegmental | | |
| Low to moderate risk | Baseline nodule with PanCan risk 6% to < 10%<br>excluding airway nodules and atypical pulmonary cysts | 6-month LDCT | 3 |
| Moderate risk | Baseline nodule with PanCan risk 10% to < 30%<br>excluding airway nodules and atypical pulmonary cysts | 3-month LDCT | 4 |
| | Airway nodule, segmental or more proximal | | |
| | Atypical pulmonary cyst:<br>• Thick-walled cyst OR<br>• Multilocular cyst | | |
| High risk | Baseline nodule with PanCan risk ≥ 30%<br>excluding airway nodules and atypical pulmonary cysts | Refer to Respiratory Physician linked to a lung cancer multidisciplinary team | 5 |
| Very high risk | Further features or imaging findings that increase suspicion for lung cancer | Refer to Respiratory Physician linked to a lung cancer multidisciplinary team | 6 |
| Actionable additional findings | Clinically significant or potentially clinically significant findings unrelated to lung cancer will be described with appropriate recommendations | As appropriate to the specific finding | A |


New MOC for NLCSP detected lung nodule(s)
NLCSP via Primary Care
Micronodule or very low risk
Low, Low to moderate, Moderate risk
High or Very high risk
Additional findings on CT report
Specialist referral +/- Nodule MDT
Triage referral to Request for advice (e-Consult) with specific advice to referring doctor; Return to 24 month NLCSP protocol
Triage referral to Request for advice (e-Consult) with specific advice to referring doctor; Return to Primary Care for NLCSP MBS funded Interval CT scan as 12, 6 and 3 months according to NLCSP protocol
Triage accept referral for Nodule Clinic workup
No action required unless Respiratory finding needing Specialist consultation; note to referrer to undertake primary care evaluation+/- referral appropriate
Imaging +/-Bx
Nodule MDT
Confirmed Benign
Lung Ca
Lung Ca MDT
Pulmonary Malignancy MDT
Re-refer as appropriate

# Specialist nodule MDT care

## 1. GP referral

Clinical Prioritisation Criteria*

Imaging

## 2. Resp Specialist - clinic or TH

History

Lung function

Assess fitness

Review Imaging

Risk calculation

Pt preferences

## 3. +/- Nodule MDT

Surveillance

Biopsy

Curative Treatment

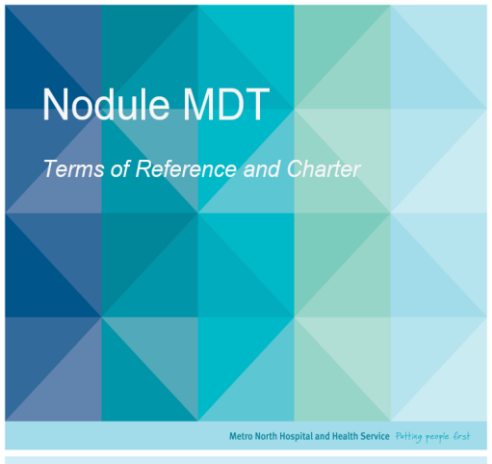
- Surgery
- SABR

## 4. Decision making with person

(dis)Agree

Proceed

Follow-up



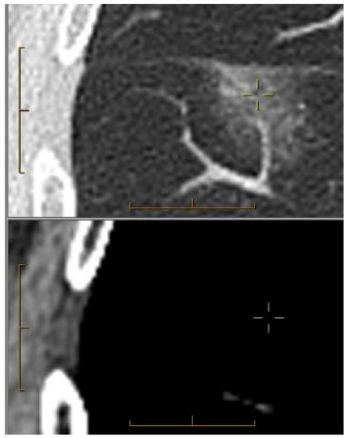
# Nodule Assessment

- Patient factors
  - Preference
  - Fitness
  - Performance status
  - Comorbidity

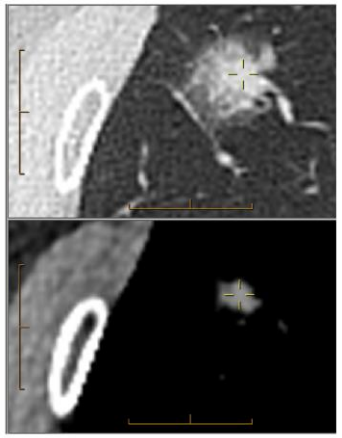
- Nodule factors
  - Character
  - Size
  - Location / accessibility
  - Associations
  - Change over time

What is it?
Where is it?
What are we going to do about it?

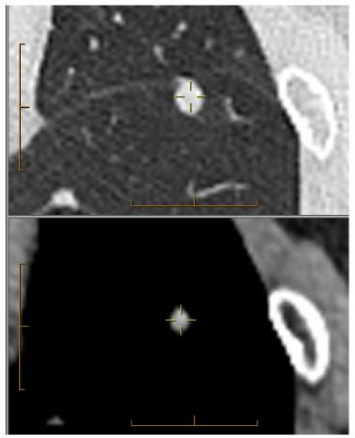
## Character



15mm ground glass nodule

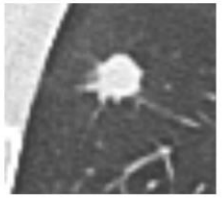


15mm subsolid nodule with 7mm solid component

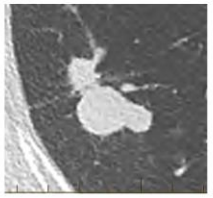


6mm solid nodule

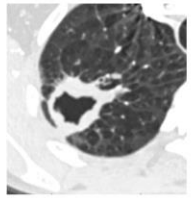
## Features



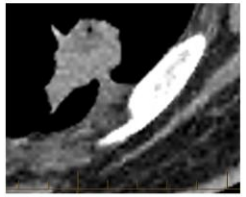
Spiculation



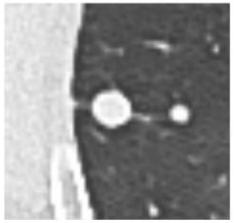
Lobulation



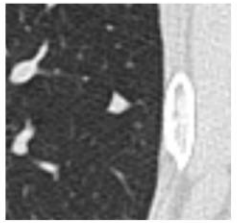
Cavitation



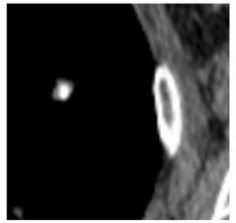
Heterogeneity/necrosis



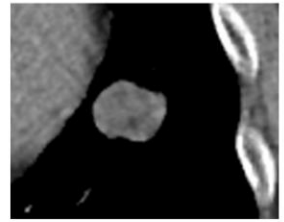
Smooth



Triangular



Calcification

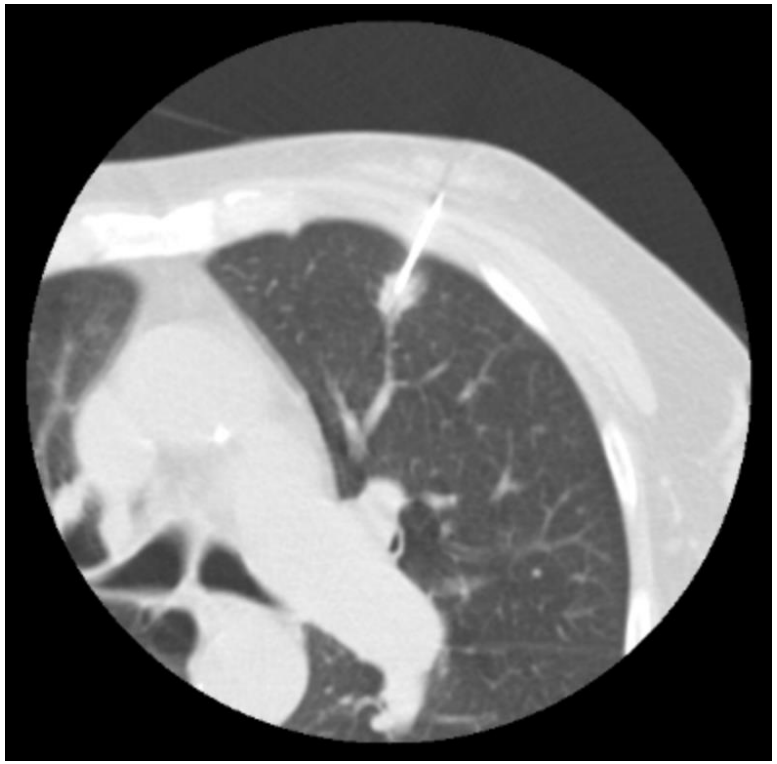


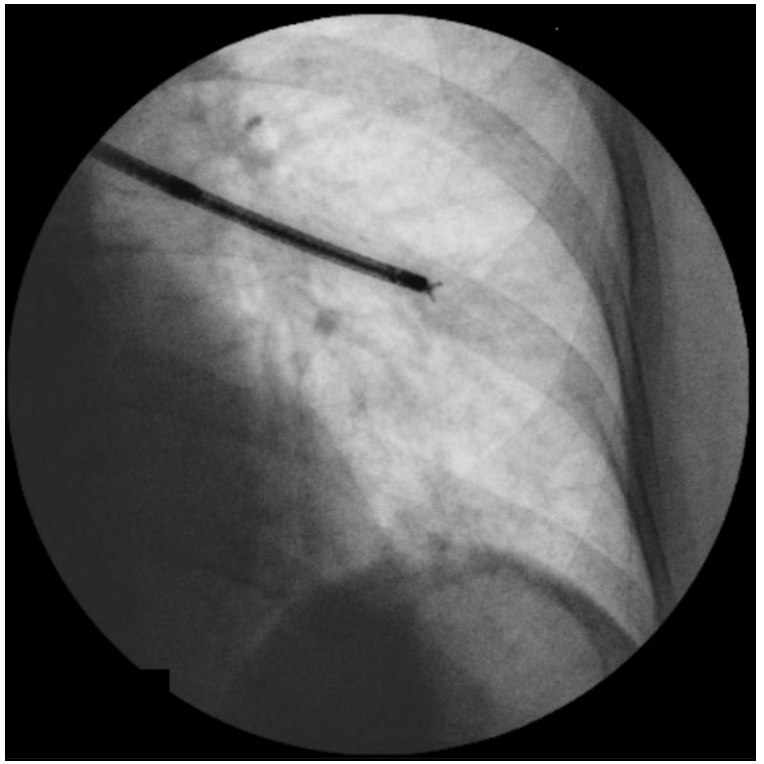
Fat containing

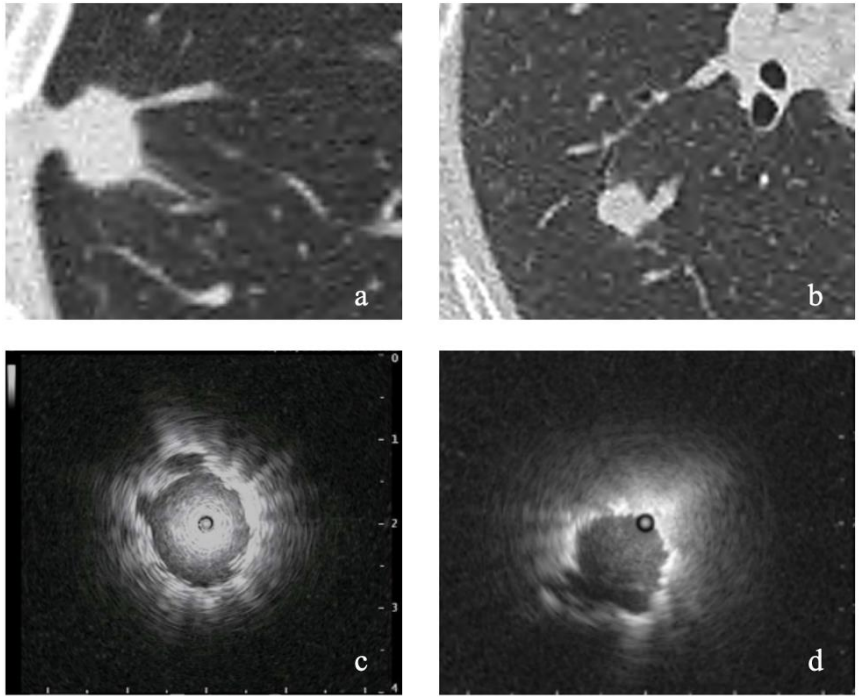
# Air Bronchus Sign

## Biopsy?

- CT guided vs Bronchoscopic
- Risks / expected yield /
- Is it required?







# Pulmonary nodules | Clinical Prioritisation Criteria

## Minimum referral criteria

Does your patient meet the minimum referral criteria?

| | |
|---|---|
| **Category 1**<br>Appointment within 30 days is desirable | • Solid nodule >8 mm in diameter |
| **Category 2**<br>Appointment within 90 days is desirable | • Solid nodule 6-8 mm (solitary or largest of multiple nodules)<br>• Subsolid nodule >10 mm<br>• Subsolid (ground glass) lesion with interval growth or development of solid component on serial imaging<br>• Part solid nodule of diameter ≥6 mm or where solid component is ≥5 mm (solitary or largest of multiple)<br>• Multiple subsolid (ground glass) or part solid nodules <6 mm<br>• Multiple nodules of any size in patient with personal history of malignancy |
| **Category 3**<br>Appointment within 365 days is desirable | • Subsolid (ground glass) nodule 6-10 mm<br>• Solid nodule <6mm in high-risk patient (solitary or largest of multiple) |

## If your patient does not meet the minimum referral criteria

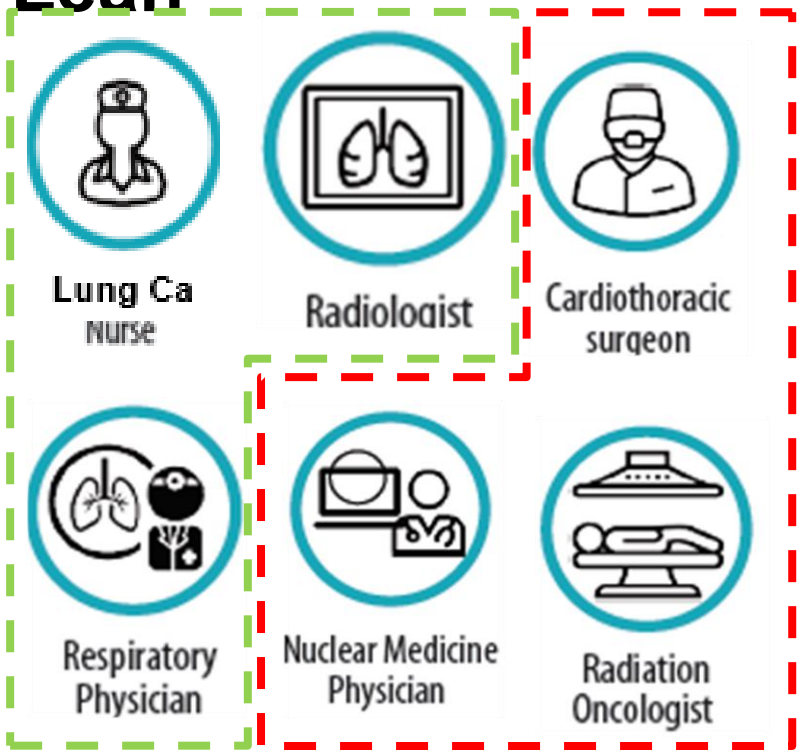
Consider other treatment pathways or an alternative diagnosis.

If you still need to refer your patient:

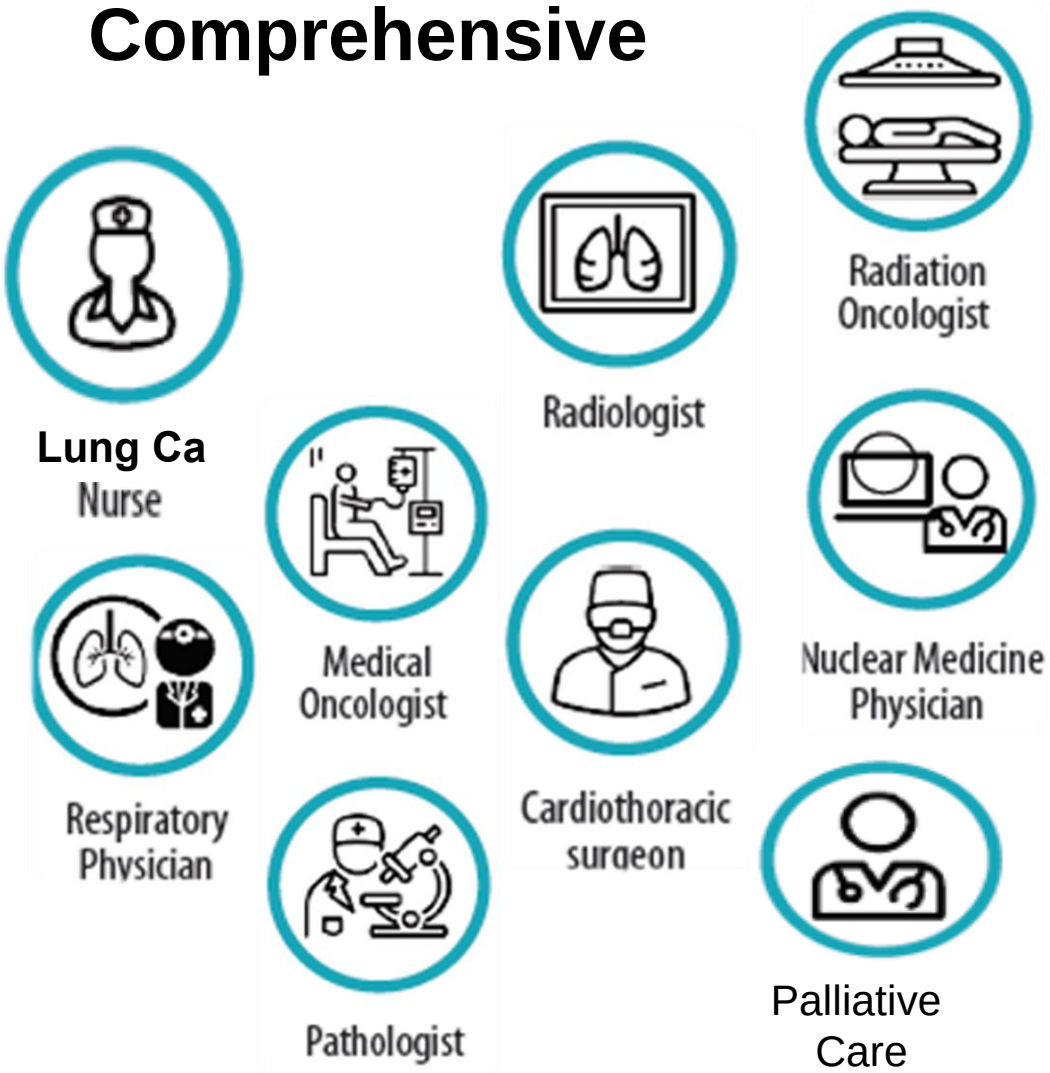
- Please explain why (e.g. warning signs or symptoms, clinical modifiers, uncertain about diagnosis, etc.)
- Please note that your referral may not be accepted or may be redirected to another service

# What is a nodule MDT? Not a lung cancer MDT

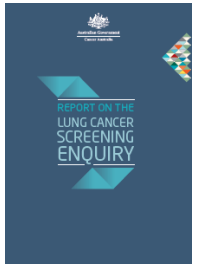
## Lean




## Comprehensive




Excellent icons gratefully adapted from



# Incidental Mx

https://www.ranzcr.com/college/document-library/nlcsp-additional-findings-guidelines

The Royal Australian and New Zealand College of Radiologists

ANZSTR Australian and New Zealand Society of Thoracic Radiology

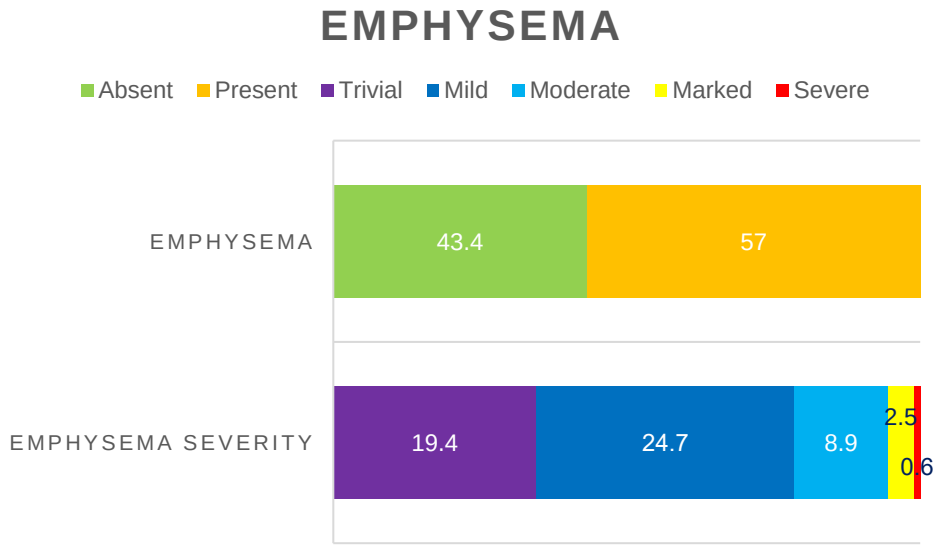
**NATIONAL LUNG CANCER SCREENING PROGRAM**

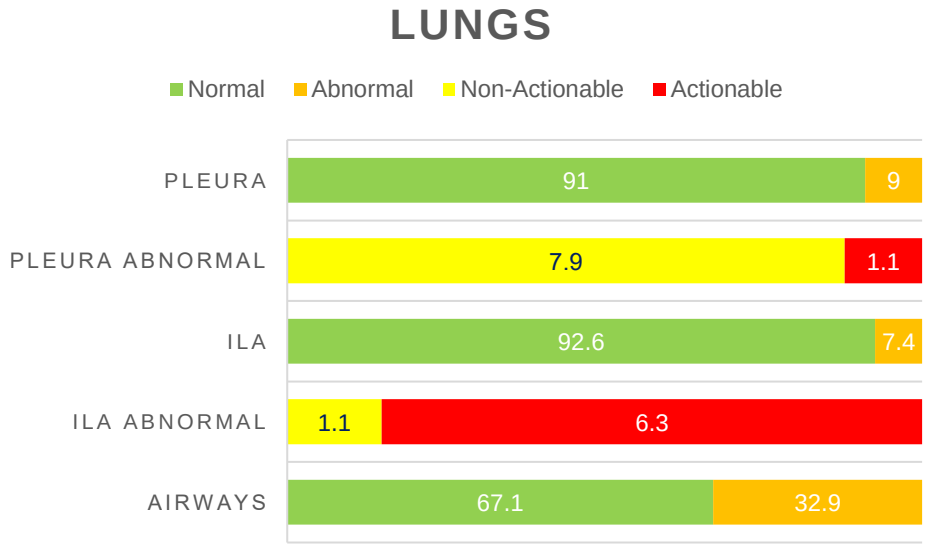
Additional Findings Guidelines

| Finding | Reporting recommendation | Management recommendation for reported findings | Reference/source |
|---|---|---|---|
| Lungs | | | |
| Emphysema | *Mild (< 25% of lung volume), moderate (25-50%) or severe (> 50%)* – report<br><br>*Panlobular* - report | Clinical review. Refer to Lung Foundation Australia COPD-X Handbook. | American College of Radiology Lung Cancer Screening CT Incidental Findings Quick Reference Guide. (1)<br><br>ERS/ESTS/ESTRO/ESR/ESTI/EFOMP statement on management of incidental findings from low dose CT screening for lung cancer.(2)<br><br>Expert opinion (ANZSTR, RACGP, and TSANZ). |

# Additional Findings - Lungs

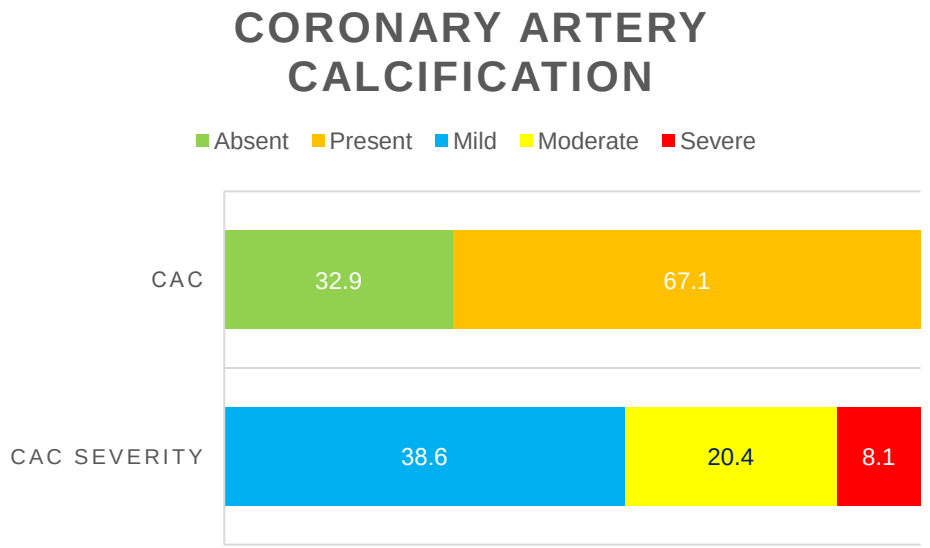
| Finding | Reporting recommendation | Management recommendation for reported findings | Reference/source |
|---|---|---|---|
| Lungs | | | |
| Emphysema | *Mild (< 25% of lung volume), moderate (25-50%) or severe (> 50%)* – report<br><br>*Panlobular* - report | Clinical review. Refer to Lung Foundation Australia COPD-X Handbook.<br>  | American College of Radiology Lung Cancer Screening CT Incidental Findings Quick Reference Guide. (1)<br><br>ERS/ESTS/ESTRO/ESR/ESTI/EFOMP statement on management of incidental findings from low dose CT screening for lung cancer.(2)<br><br>Expert opinion (ANZSTR, RACGP, and TSANZ). |
| Interstitial lung abnormality | *Interstitial lung abnormality with high-risk features (honeycombing, reticulation, traction bronchiectasis or progression)* – report<br><br>*Interstitial lung abnormality, stable or without high-risk features* – report | *Interstitial lung abnormality with high-risk features*: Clinical review (symptoms, family history, crackles). Perform high resolution CT chest (including prone acquisition). Refer to respiratory physician.<br><br>*Interstitial lung abnormality without high-risk features*: Clinical review (symptoms, family history, crackles). Imaging findings will be assessed at next screening CT. | ERS/ESTS/ESTRO/ESR/ESTI/EFOMP statement on management of incidental findings from low dose CT screening for lung cancer.(2)<br><br>Interstitial lung abnormalities detected incidentally on CT: a Position Paper from the Fleischner Society (3).<br><br>Expert opinion (ANZSTR and TSANZ). |
| Bronchiectasis | *Mild (dilated bronchi, but internal bronchial luminal diameter < 2 times that of adjacent artery)* – do not report<br><br>*Moderate or severe* – report | Clinical review for symptoms. Consider sputum microbiology and airway clearance recommendations. If symptomatic, consider referral to respiratory physician. | ERS/ESTS/ESTRO/ESR/ESTI/EFOMP statement on management of incidental findings from low dose CT screening for lung cancer.(2)<br><br>Expert opinion (ANZSTR and TSANZ). |



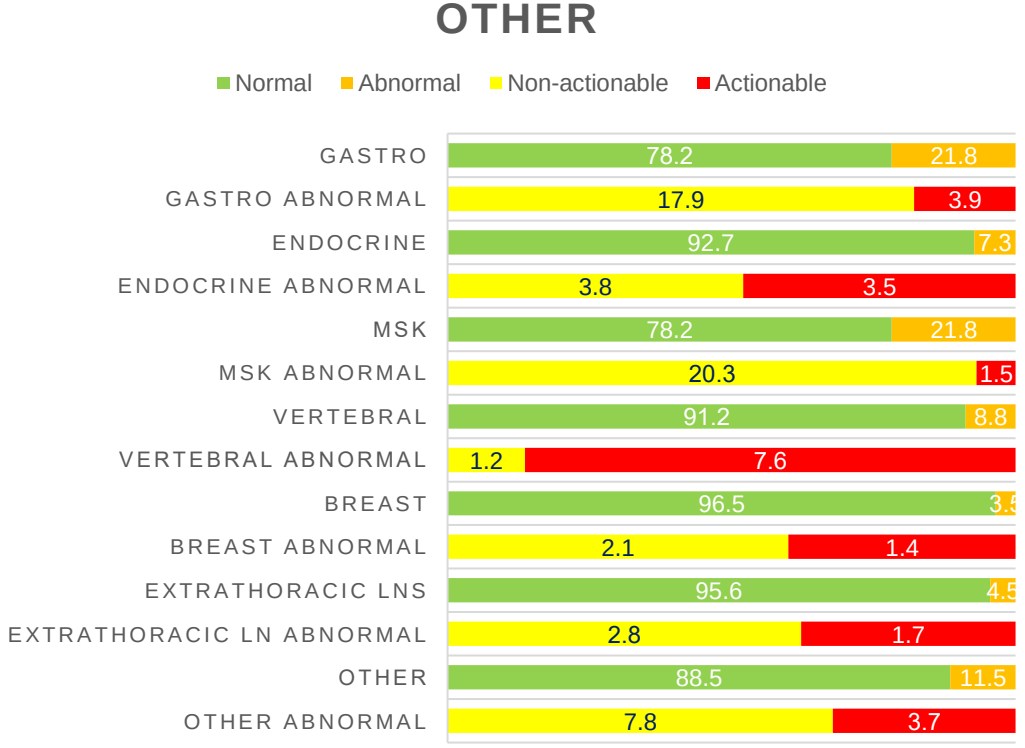
# Additional Findings – Coronary Artery Calcification

| Cardiovascular | | | |
|---|---|---|---|
| Coronary artery calcified plaque | *Mild*, *moderate* or *severe* – report | *Mild:* Clinical review. Consider lifestyle modification and pharmacological therapy.<br><br>*Moderate* or *severe*: Clinical review. Recommend lifestyle modification and pharmacological therapy.<br><br>  | American College of Radiology Lung Cancer Screening CT Incidental Findings Quick Reference Guide. (1)<br><br>ERS/ESTS/ESTRO/ESR/ESTI/EFOMP statement on management of incidental findings from low dose CT screening for lung cancer.(2)<br><br>Coronary Artery Calcium Data and Reporting System (CAS-DRS): A Primer.(4)<br><br>Measurement and Application of Incidentally Detected Coronary Calcium: JACC Review Topic of the Week. (5) |



# Additional Findings – Other

| | | | |
|---|---|---|---|
| **Thyroid** | | | |
| Thyroid nodule | *≥ 15 mm or suspicious feature (punctate calcification, invasion, or local lymphadenopathy)* – report<br><br>*Otherwise* – do not report | Clinical review. Refer for thyroid ultrasound. | American College of Radiology Lung Cancer Screening CT Incidental Findings Quick Reference Guide. (1)<br><br>ERS/ESTS/ESTRO/ESR/ESTI/EFOMP statement on management of incidental findings from low dose CT screening for lung cancer. (2) |
| **Bone** | | | |
| Reduced bone density | *< 100 HU at L1 (or other lower thoracic or lumbar vertebral body if L1 fractured)* – report<br><br>*Otherwise* – do not report | Clinical review. Refer for DEXA scan. | American College of Radiology Lung Cancer Screening CT Incidental Findings Quick Reference Guide. (1) |
| Vertebral compression fracture | *≥ 20% height loss* – report<br><br>*Otherwise* – do not report | Clinical review. Refer for DEXA scan. | American College of Radiology Lung Cancer Screening CT Incidental Findings Quick Reference Guide. (1) |
| **Breast** | | | |
| Breast lesion | *Suspicious breast lesion (asymmetric density, mass, skin thickening, nipple retraction)* – report<br><br>*Coarse calcification or simple cyst* – do not report | Clinical review. Refer for mammography and breast ultrasound. | American College of Radiology Lung Cancer Screening CT Incidental Findings Quick Reference Guide. (1)<br><br>ERS/ESTS/ESTRO/ESR/ESTI/EFOMP statement on management of incidental findings from low dose CT screening for lung cancer. (2) |



## Smoking Cessation

- Estimation that 75% of eligible participants will be current smokers
  −Multiple opportunities to support quit attempts!
- NLST: former smokers in the control arm abstinent for 7 years had a 20% lung cancer mortality reduction: comparable with the benefit reported with LDCT screening!
- Combination of smoking cessation PLUS CT screening, nearly double the benefit (38%)
- Only ¼ of people who currently smoked in NLST were prescribed pharmacologic tobacco treatment

Tanner NT, et al. The Association between Smoking Abstinence and Mortality in the National Lung Screening Trial. *Am J Respir Crit Care Med*. 2016;193(5):534-541.

Thomas NA, et al. Factors Associated With Smoking Cessation Attempts in Lung Cancer Screening: A Secondary Analysis of the National Lung Screening Trial. *Chest*. 2023;163(2):433-443.

# Impact – GP Preparation

- National awareness campaign starts July
- Individual patients WILL NOT be *invited* to NLCSP…
- … but WILL be *recalled*


**4 Point Plan:**

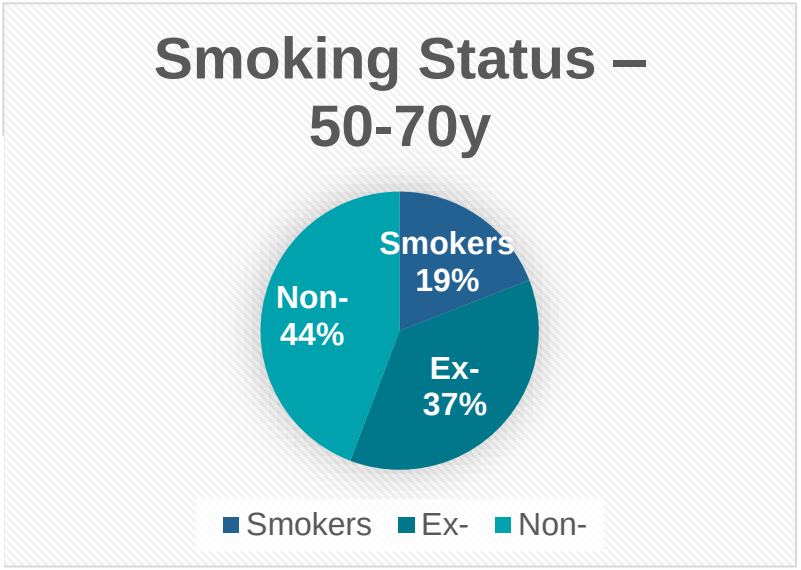
1. Inform yourself ✅
2. Inform colleagues
3. Integrate PMS with NCSR*
   - Best Practice, Medical Director, Communicare
4. Identify eligible patients *

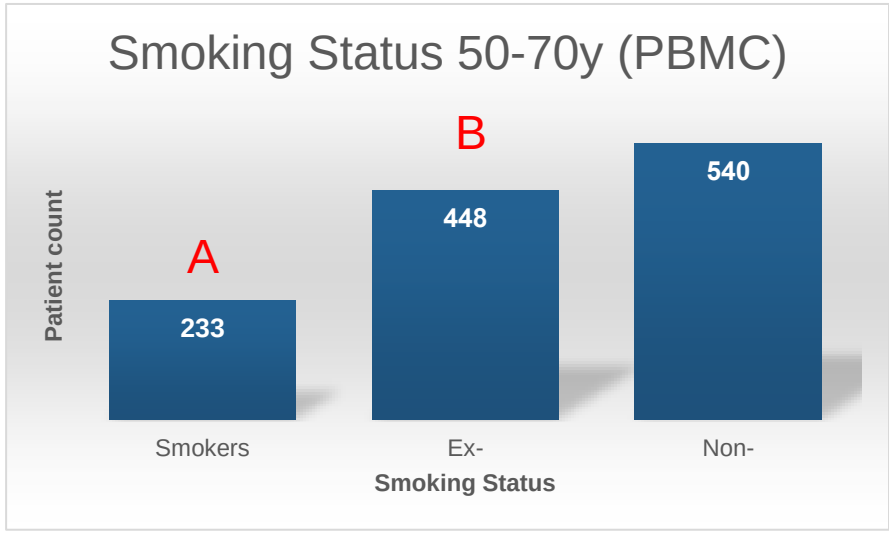
** Do not ask me how to do the above* ➡️

NATIONAL CANCER SCREENING REGISTER

- NCSR Website
- Practice manager/IT support
- BNPHN Primary Care team

# Impact: Practice – 4.5K patients, 3FTE GPs




681 NLCSP “consultations” (A+B)
4+ Thoracic referrals (1.8% of A +)
116+ Incidental CT findings (50% of A)
+ how many among ex-smokers?

# Practice Support

GP LINK
Your local source of GP news

- Comms – GP Link/Practice Link
- CQI focus on NLCSP due Oct 2025 + outreach support
- Tonic Media campaign to align with this
- Co-developing NLCSP PHN support package/resources
- Working with PHNs nationally for coordinated approach

- Primary Sense report **will** be available by 1st July
  - will assist identification of potential participants
  - PMS limitations will limit accuracy of this

PRIMARY SENSE

MedicalDirector

?



?

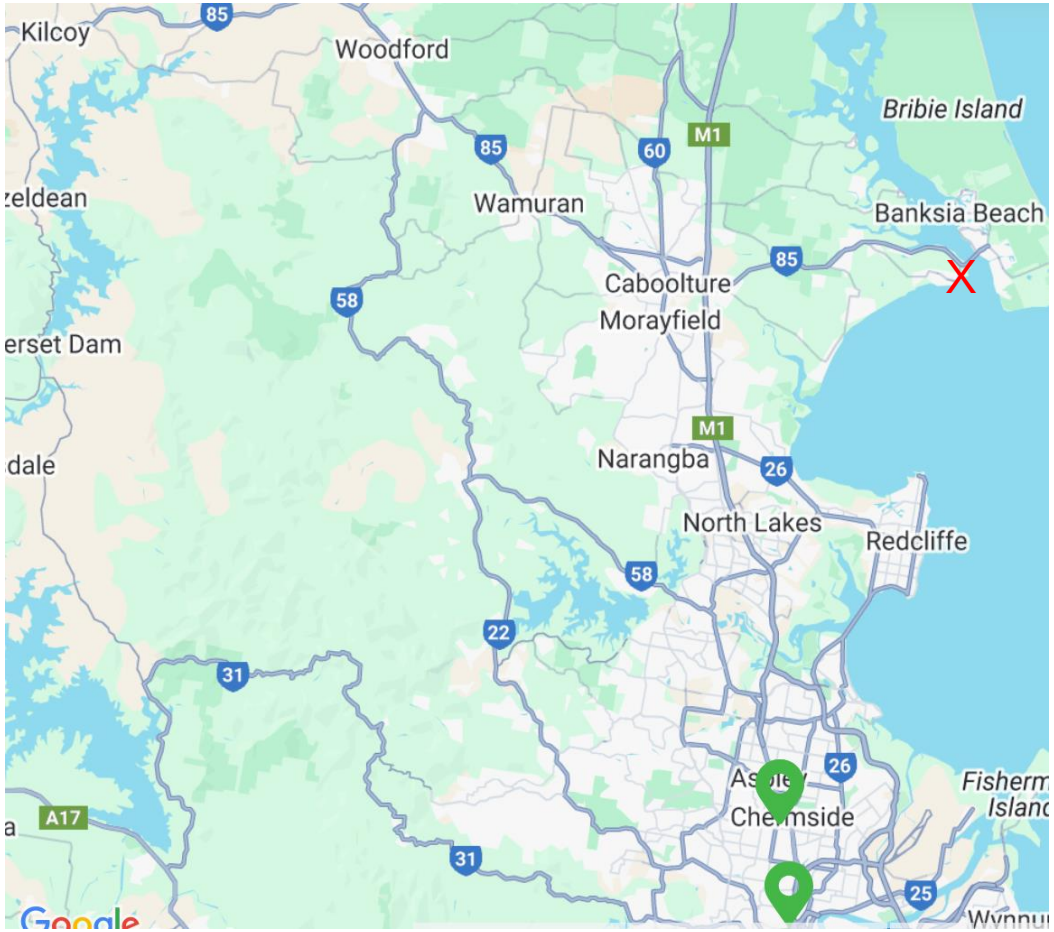
# Referrals – Low Dose CT scan

- Major radiology providers getting organized
  - Walk-ins
  - AI
- Look out for a list of participating facilities:
  - *GP Link* article
  - Health Pathways
- Refer in usual way
  - "NLCSP participant"
- Include:
  - FH lung cancer in 1st degree relatives
  - Provider of any prior chest imaging
- Same provider for future Program scans if possible

# Referrals – “Lung Cancer MDT”

Lung Foundation
NLCSP page map search:
“Location of lung cancer MDTs”

- Is this accurate?
- Private referrals?
- Remote MDT triage?

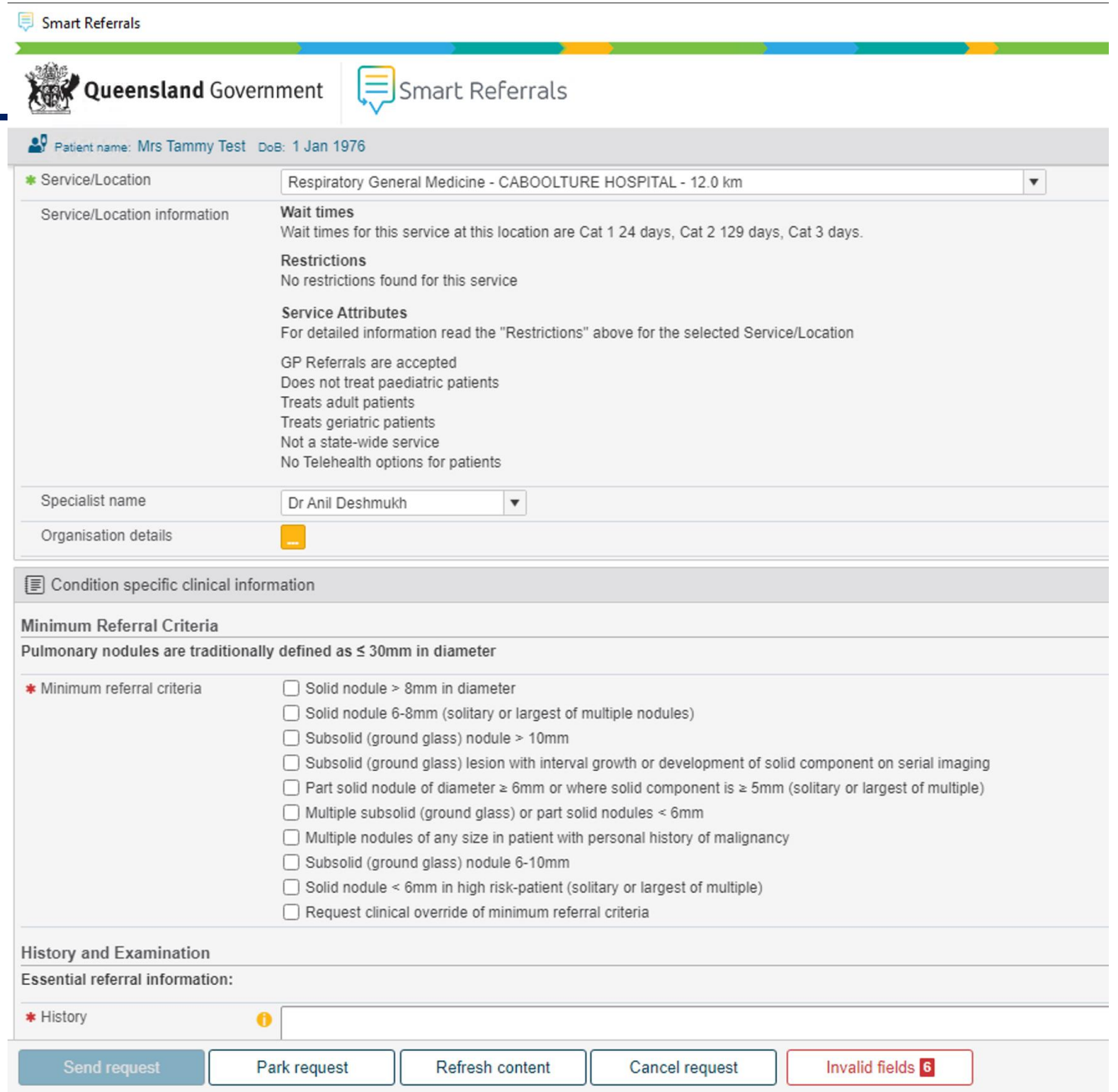


# GP Smart Referrals

Particular benefits

- Latest referral criteria
- Live wait times
- UTD referral destination advice
- Potential 2-way correspondence

Alignment:
Lung nodule CPC - NLCSP criteria

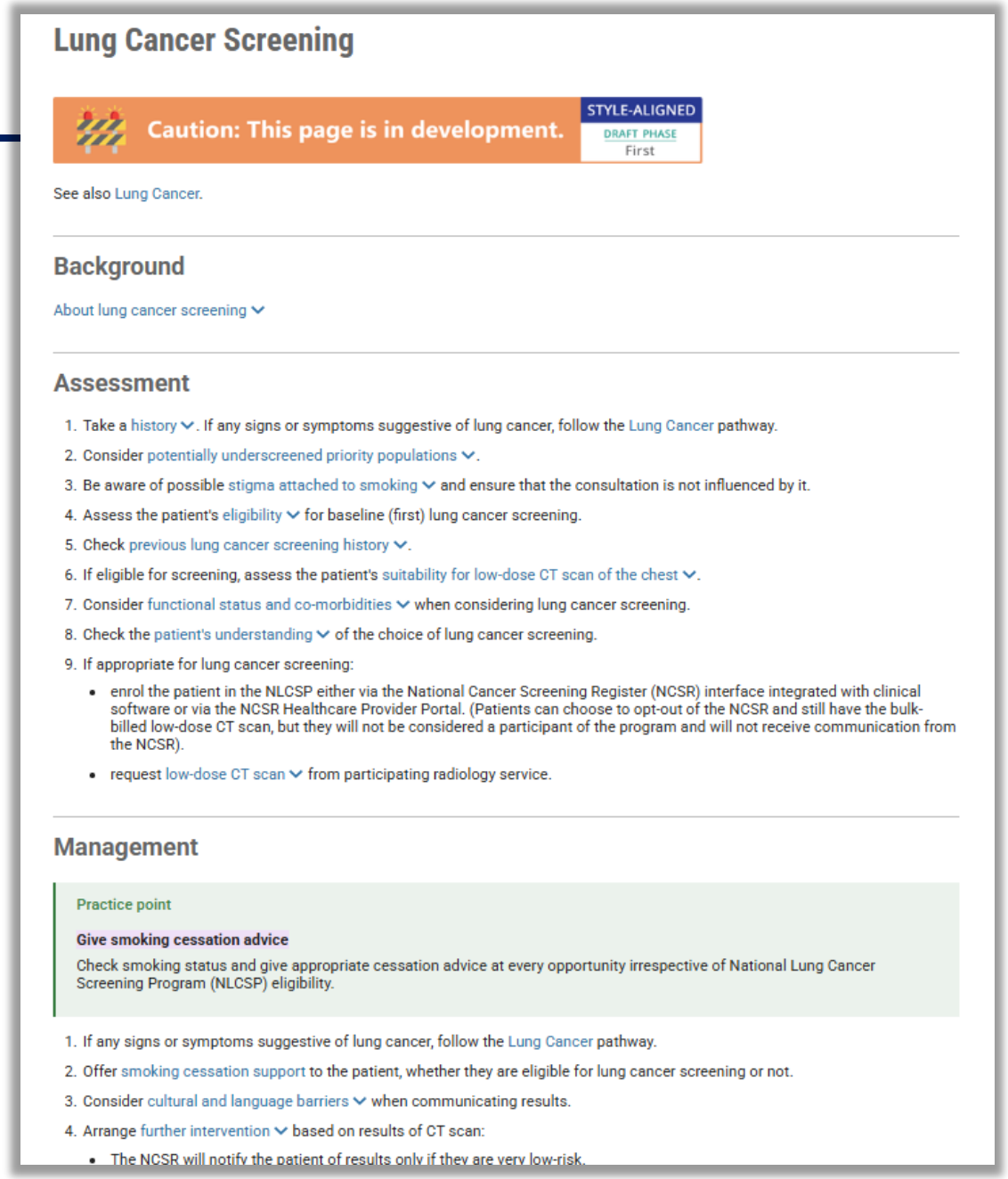



# Health Pathways

- New Lung Cancer Screening pathway currently in draft - available by 1st July for the launch of the Program

- Access Brisbane North HealthPathways website with this login (case sensitive):

  - Username: Brisbane
  - Password: North



## Lung Cancer Screening

Caution: This page is in development. STYLE-ALIGNED DRAFT PHASE First

See also Lung Cancer.

### Background

About lung cancer screening

### Assessment

1. Take a history. If any signs or symptoms suggestive of lung cancer, follow the Lung Cancer pathway.
2. Consider potentially underscreened priority populations.
3. Be aware of possible stigma attached to smoking and ensure that the consultation is not influenced by it.
4. Assess the patient's eligibility for baseline (first) lung cancer screening.
5. Check previous lung cancer screening history.
6. If eligible for screening, assess the patient's suitability for low-dose CT scan of the chest.
7. Consider functional status and co-morbidities when considering lung cancer screening.
8. Check the patient's understanding of the choice of lung cancer screening.
9. If appropriate for lung cancer screening:
   - enrol the patient in the NLCSP either via the National Cancer Screening Register (NCSR) interface integrated with clinical software or via the NCSR Healthcare Provider Portal. (Patients can choose to opt-out of the NCSR and still have the bulk-billed low-dose CT scan, but they will not be considered a participant of the program and will not receive communication from the NCSR).
   - request low-dose CT scan from participating radiology service.

### Management

Practice point

**Give smoking cessation advice**

Check smoking status and give appropriate cessation advice at every opportunity irrespective of National Lung Cancer Screening Program (NLCSP) eligibility.

1. If any signs or symptoms suggestive of lung cancer, follow the Lung Cancer pathway.
2. Offer smoking cessation support to the patient, whether they are eligible for lung cancer screening or not.
3. Consider cultural and language barriers when communicating results.
4. Arrange further intervention based on results of CT scan:
   - The NCSR will notify the patient of results only if they are very low-risk.

# Resources - Education

Health Workforce Education:
Online modules

Lung Foundation Australia

RACGP CPD Approved Activity

| Educational Activities | Measuring Outcomes | Reviewing Performance |
|---|---|---|
| 2.5 hours | 00 hours | 1 hours |

ACRRM CPD ACCREDITED ACTIVITY 2023-2025

# Resources - Additional

NATIONAL LUNG CANCER SCREENING PROGRAM

NATIONAL CANCER SCREENING REGISTER

Clinical Software Integration

- Guidance
- Benefits
- Walkthrough video

Resources for the Health Sector:

- Discussion guides
- Decision aids
- Patient pathways etc

# Summary

Lung Cancer Screening:

- Proven health advantages
- Most effective combined with smoking cessation assistance
- Be prepared!


# Active recruiting Lung Cancer Screening Trials – Brisbane



## Australian Lung Screen Trial

**Lung cancer is the #1 cause of cancer deaths in Australia. We're researching how early lung cancer screening could help change that.**

Are you:

- Current or former smoker, aged 50–80 years
- People who have never smoked, aged 55–74 years, and
- Aboriginal and Torres Strait Islander people aged 50–80 years.

Participants should be generally well, and willing to have a chest CT scan as part of the trial.

**Scan the QR code to find out more:**

metronorth.health.qld.gov.au/tpch/australianlungscreentrial

The University Of Queensland AUSTRALIA

Metro North Health

Queensland Government


**Lung cancer screening and quitting smoking could save your life.**

**We need your help with our research.**

1. Do you want to check your lung health?
2. Are you looking to quit smoking?

If you live in Queensland and are 50 – 80 years old, you may be eligible for our study.

**INTERESTED?**

**Call Quitline on 13 7848** (13 QUIT) or visit Request a Quitline call | Quit HQ (initiatives.qld.gov.au) to arrange a call-back

Find out more about the Max Up research study, scan the QR Code for Max Up clinical trial | The Prince Charles Hospital (health.qld.gov.au)

The Max Up trial is supported by the Medical Research Future Fund. The University of Queensland, Queensland Health, Cancer Council Australia, and Lung Foundation Australia.

The University Of Queensland AUSTRALIA

Quitline 137848

Lung Foundation Australia

Cancer Council

Metro North Health

Queensland Government

# References


- https://www.canceraustralia.gov.au/research-data/data-and-statistics/cancer-australia-statistics

- https://www.aihw.gov.au/reports/cancer/cancer-data-in-australia/contents/cancer-incidence-and-survival-by-stage-data-visual

# Respiratory and Thoracic Medicine

## Conditions

- Asthma
- Bronchiectasis / chronic suppurative lung disease (CSLD)
- Chronic cough
- Chronic obstructive pulmonary disease
- Cystic fibrosis
- Haemoptysis of unknown cause
- Interstitial lung disease (ILD)
- Lung cancer
- Mediastinal lymphadenopathy
- Non-tuberculosis mycobacterial infections
- Pleural disorders
- Pulmonary hypertension
- Pulmonary nodules
- Recurrent respiratory infections without known lung disease
- Sarcoidosis
- Shortness of breath / dyspnoea without a known cause
- Sleep disordered breathing (suspected or confirmed)
- Sleep disorders excluding sleep disordered breathing
- Tuberculosis

Thoracic medicine services are provided at four locations within the Metro North area by the Department of Thoracic medicine. These hospitals are Royal Brisbane and Women's Hospital, The Prince Charles Hospital, Caboolture Hospital and Redcliffe Hospital. Patients will be allocated to the various facilities based on their postcode, the availability of particular services at those facilities and to improve equity of access across the district.

### Pulmonary Rehabilitation Services

For information on direct referral to pulmonary rehabilitation and referral guidelines (PDF)

### Paediatric services

Referrals for children and young people should follow the Children's Health Queensland referral guidelines.

### Urban Indigenous Respiratory Outpatient Clinic (UROC)

The Urban Indigenous Respiratory Outreach Clinic (UROC) project delivers specialist respiratory services to Indigenous and Torres Strait Islander adults in two IUIH Indigenous Community Centres within Metro North (Margate and Morayfield). Please refer to the UROC Program information (PDF) for clinic details and referral pathways.

## Emergency department referrals

Phone on call Respiratory Registrar via:

- Royal Brisbane & Women's Hospital switch - (07) 3646 8111
- The Prince Charles Hospital switch - (07) 3139 4000
- Redcliffe Hospital switch – (07) 3883 7777
- Caboolture Hospital switch – (07) 5433 8888

and send patient to the Department of Emergency Medicine (DEM) at their nearest hospital.

## Send referral

**Hotline: 1300 364 938**

**Electronic:**
GP Smart Referrals (preferred)
eReferral system templates
**Medical Objects ID:** MQ40290004P
**HealthLink EDI:** qldmnhhs

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

## 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

## Locations

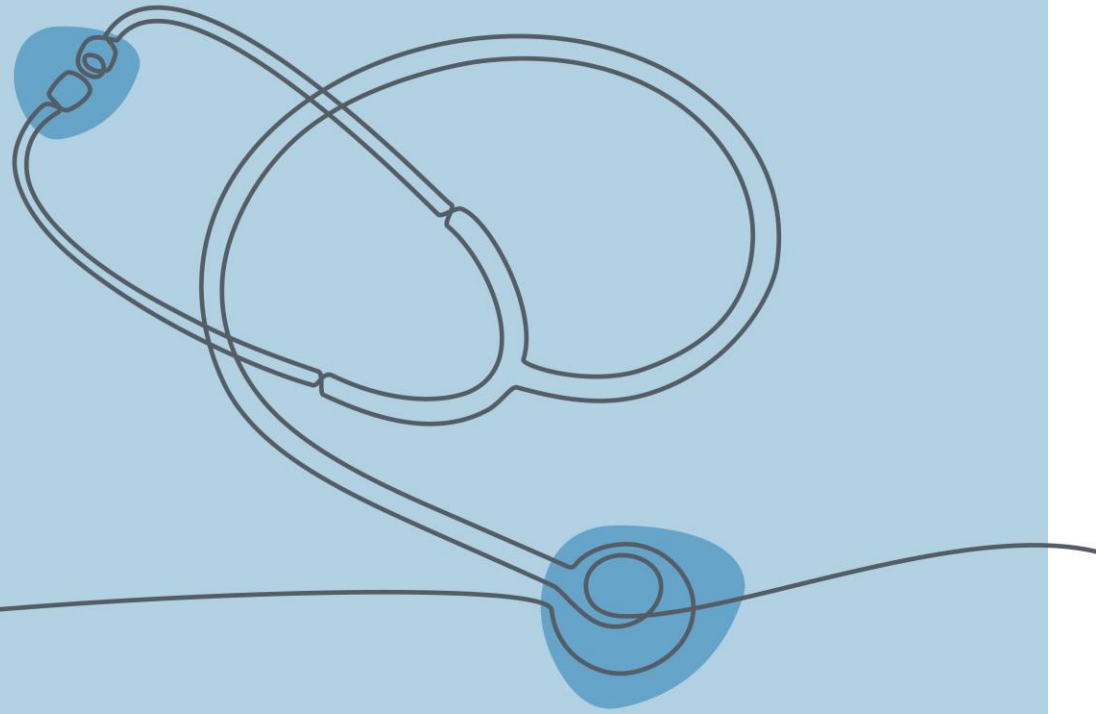
Caboolture Hospital
Redcliffe Hospital
Royal Brisbane and Women's Hospital
The Prince Charles Hospital

## Resources

General Practice Liaison Officer Program presents

# Championing Generalism Workshop

A collaborative, multi-disciplinary and multi-specialty learning opportunity for GPs covering conditions commonly managed in primary care



## How safe is your older person?

**Dr Joshua Flavell | Old Age Psychiatrist & Lecturer, UQ**

phn BRISBANE NORTH
An Australian Government Initiative

Queensland Government
Metro North Health

# How Safe is Your Older Person?

Dementia and safety

Dr Joshua Flavell
UQ / The Mind Cove
josh@themindcove.com.au

# Overview

# Overview

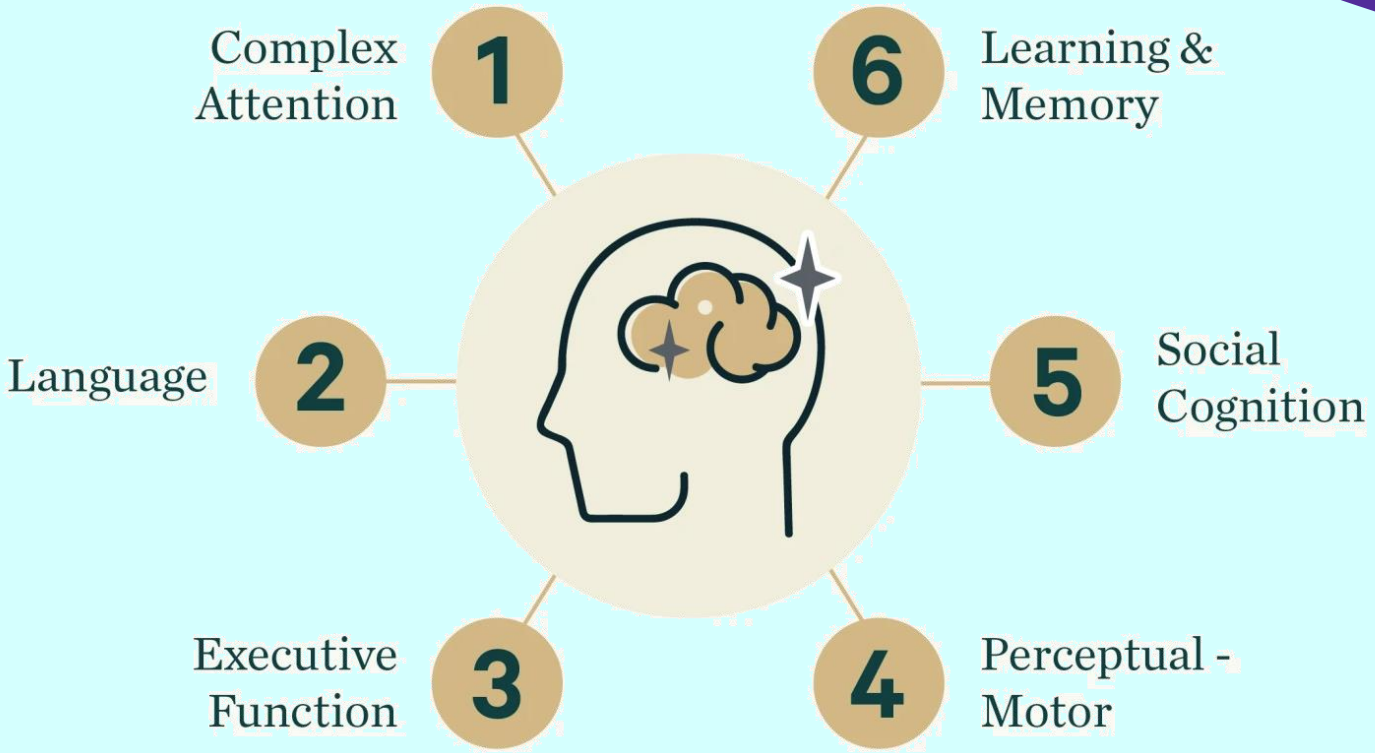
- Recognise dementia subtypes and capacity issues
- What to screen and investigate for cognitive concerns
- Manage medico-legal and safety issues

# Dementia

# Dementia

Clinical

Dementia = ≥2 cognitive domains impaired



# Dementia

Clinical

- Cognition
- Behaviour and psychiatric
- Motor and neurological
- Function

# Dementia

Clinical

- Cognition ➡️ Alzheimer's dementia
- Behaviour and psychiatric ➡️ Frontotemporal
- Motor and neurological ➡️ Lewy body dementia
- Function

# Dementia

Aetiology

- Degenerative dementias
- Non-degenerative dementias

# Dementia

Aetiology

Degenerative dementias:

- Alzheimer's disease
- Frontotemporal dementia
- Lewy body dementia / Parkinson’s disease dementia

# Dementia

Aetiology

Non-degenerative dementias:

- Vascular
- Infections (HIV, Syphilis, etc.)
- Trauma (CTE, TBI, etc.)
- Metabolic (B12 deficiency, thyroid, etc.)
- Pseudo-dementia (depression, schizophrenia, etc.)

# History of Dementia

# History of dementia

18th Century: Philippe Pinel ➡️ “démence”

19th Century:

- Emil Kraepelin ➡️ “dementia praecox”
- Arnold Pick (1892) ➡️ FTD
- Alois Alzheimer (1906) ➡️ Auguste Deter

  (1911) ➡️ Pick bodies

# History of dementia

20th Century:

- DSM (1952) ➡️ Dementia
- NINCDS-ADRDA Criteria (1984) ➡️ Alzheimer's
- Lund and Manchester Groups Criteria (1994) ➡️ FTD
- Consortium criteria (1996) ➡️ DLB

# History of dementia

Alzheimer's

**Aβ+NFT**

1906

FTD

**Tau**

1911

DLB/PDD

**Lewy bodies**

1912

FTD/LATE

**TDP**

2001

FTD

**FTLD-other**

2005-present

FTD

**FUS**

2009

# History of dementia

Histopah Dx

1. Brain biopsy/autopsy
2. Genetics (e.g. MAPT, C9orf72, PSEN1)
3. Disease specific biomarkers:

   Amyloid-PET, CSF Aβ/Tau

# Dementia screening

# Dementia screening (<15min)

- Symptoms: Cognitive issues, behaviour change >50yo, motor (falls, tremors, etc.)
- Bed side tests: MMSE or MoCA
- Functional history: bADLs and iADLs
- Collateral history essential

# Dementia screening (<15min)

Investigations:

- FBC, Chem20, B12, folate, TFTs +/- infection screen
- Delerium screen (e.g., Urine MCS, etc.)
- CT brain +/- MRI

# Dementia screening (<15min)

When to refer to a specialist:

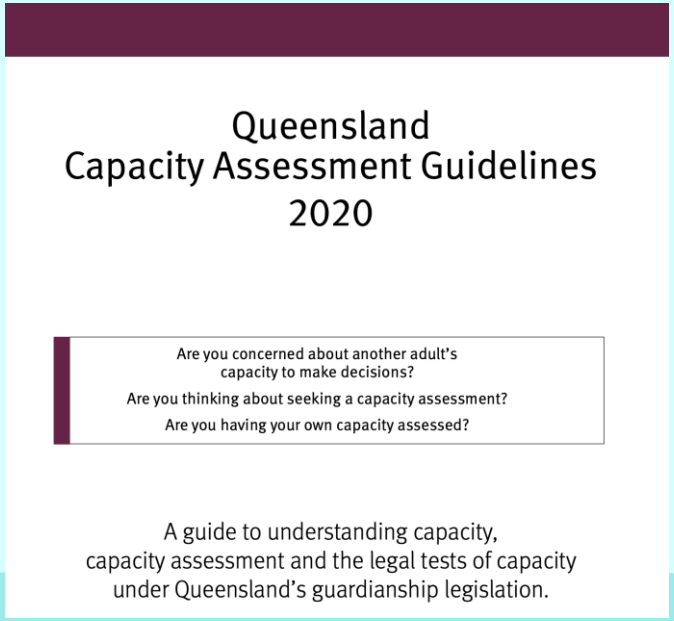
- Diagnostic uncertainty
- Young (<65yo)
- Psychiatric comorbidity / mod-severe BPSD
- Safety/risk concerns

# Dementia & capacity

# Dementia & Capacity

Financial, medical, personal decisions

- Capacity assessment (QLD):



# Dementia & Capacity

**Principle 1**
Always presume an adult has capacity

**Principle 2**
Capacity is decision-specific and time-specific

**Principle 3**
Provide the adult with the support and information they need to make and communicate decisions

**Principle 4**
Assess the adult's decision-making ability rather than the decision they make

**Principle 5**
Respect the adult's dignity and privacy

1. Understanding the nature and effect of decisions about the matter
2. Freely and voluntarily making decisions about the matter
3. Communicating the decision in some way.

# Dementia & Capacity

Patient X:

1. Cognitively intact
2. MRI normal
3. Functional decline
4. Impulsive, hyperorality, obsessive behaviours

# Dementia & Capacity

Patient X:

1. Cognitively intact
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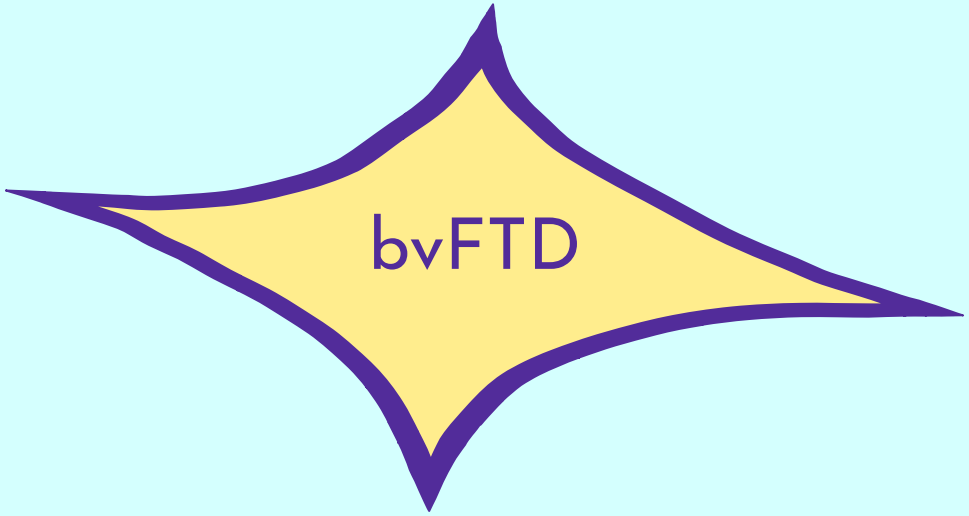


# Dementia safety

# Dementia safety considerations

Driving:

- Decline in attention, visuospatial, judgment
- Can refer to OT driving assessments
- **Consider reporting obligations**

# Dementia safety considerations

Falls & home safety:

- Vision, gait, medications (polypharmacy)
- Engage allied health (OT, etc.)
- Engage services: Dementia Australia, Alzheimer's association, MyAgeCare

# Dementia safety considerations

Medication Management:

- Blister packs
- Dose administration aids

# Questions?

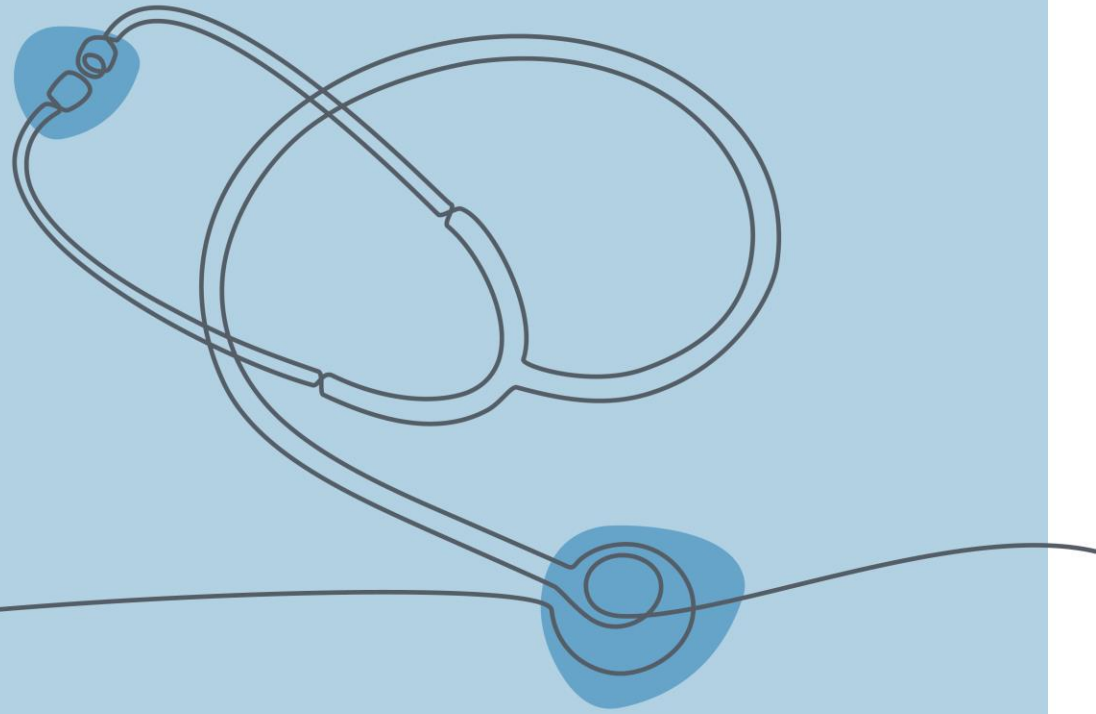
The Queensland Brain Institute / Private practice

josh@themindcove.com.au

General Practice Liaison Officer Program presents

# Championing Generalism Workshop

A collaborative, multi-disciplinary and multi-specialty learning opportunity for GPs covering conditions commonly managed in primary care



## How safe is your older person?

**Dr Kylie Norris | GPLO**

phn BRISBANE NORTH
An Australian Government Initiative

Queensland Government
Metro North Health

# Metro North Clinical Advice Line

## Connecting GPs directly to Metro North specialties.

**This service is for GPs ONLY and is not a patient advice phone line.**

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

1. Phone line
2. Written request for advice.

The range of adult specialities currently available to support patient care in the community includes:
*(This list will expand over time so keep coming back for the latest advice services available)*

## 1. Phone advice

| Specialty | Catchment* | Exclusion Criteria |
|---|---|---|
| Healthy Ageing Assessment Rehabilitation Team (HAART) | Kallangur Satellite Hospital | Patients may be ineligible if:<br>• Currently accessing equivalent services in public or private sector<br>• Reside outside of catchment area<br>• Medically unstable requiring inpatient assessment or currently an inpatient<br>• Only require therapy for maintenance of chronic condition<br>• Residential aged care facility residents |
| Rapid Access to Community Care | Metro North | • Excludes Patients under 16years<br>• Excludes Acute mental health, alcohol or drugs related.<br>• Excludes Residential Aged Care Facility Residents (Call RADAR - 1300 072 327) |

**Clinical Advice Line**
1800 569 099
Open Monday to Friday
8.30am – 4.00pm

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

### Want to learn more?

For more information, please call the advice line or email MNH_SpecialtyAdviceLine@health.qld.gov.au.

The team can also undertake engagement sessions with interested GPs (Virtual or Face to Face).

# Geriatric & Rehabilitation Services

## Emergency department referrals

All urgent cases must be discussed with the on call Registrar to obtain appropriate prioritisation and treatment. Contact through:

- Redcliffe Hospital (07) 3883 7777
- Royal Brisbane and Women's Hospital (07) 3646 8111
- The Prince Charles Hospital (07) 3139 4000

Please note: Surgical, Treatment and Rehabilitation Service (STARS) does not have an Emergency Department.

Urgent cases accepted via phone must be accompanied with a written referral and a copy faxed immediately to the Central Patient Intake Unit: 1300 364 952.

Geriatric & Rehabilitation Services are provided at three locations in Metro North: Redcliffe Hospital, Surgical Treatment and Rehabilitation Service (STARS) and The Prince Charles Hospital. (The Geriatric and Rehabilitation services that were located at RBWH have moved to STARS, a facility on the Herston campus.)

Geriatric & Rehabilitation Services includes:

- Clinical Geriatric Research
- Cognitive assessment/memory clinic
- Dementia diagnosis and management
- Falls Assessment
- Geriatric Assessment/ Medicine
- Neurodegenerative Disorders
- Rehabilitation Assessment
- Spasticity Assessment

### Aboriginal and Torres Strait Islander Healthy Ageing Clinic (HAC)

The Aboriginal and Torres Strait Islander Healthy Ageing Clinic (HAC) provides specialist geriatrician services in a culturally safe environment for Aboriginal and Torres Strait Islander

people over 50 years of age with chronic or complex conditions relating to ageing, frailty, disability, and cognitive problems. Please refer to HAC information for clinic details (PDF). GPs can refer via GP Smart Referrals searching *Geriatric Medicine* in the Condition and Specialty box or send a referral to Metro North Central Patient Intake.

## Referral requirements

**A referral may be rejected without the following information.**

Essential referral information

- Name and contact details of patient carer
- Current living arrangements
- Home access issues
- Community services currently in place
- Any recent discharge summaries from private or community facilities
- Medications (current)

### Send referral

**Hotline: 1300 364 938**

**Electronic:**
GP Smart Referrals (preferred)
eReferral system templates
**Medical Objects ID:** MQ40290004P
**HealthLink EDI:** qldmnhhs

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

### 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

### Locations

Redcliffe Hospital
Surgical Treatment and Rehabilitation Service
The Prince Charles Hospital

### Resources

Clinical Frailty Scale (PDF)
Specialists list
General referral criteria

Health professionals

# Virtual Ward



If you are a Queensland Health employee, please refer to the Metro North Virtual Ward Intranet Page (internal link) (QH network only) available on QHEPS to access the internal referral form.

The Metro North Virtual Ward (VW) is an additional telehealth service that complements the current Virtual Emergency Department, Covid Virtual Ward, and Hospital-in-the-home services available within the Metro North Health region. Given the success of the virtual care model, the Metro North VW can now admit and manage patients with conditions other than COVID.

The VW can assist GP's by providing an inpatient equivalent admission for eligible patients.

On admission patients will be provided with team-based care via regular phone calls and/or video consults. The ward is based at the Royal Brisbane and Women's Hospital, from 0700 to 1930, 7 days a week, with overnight access to medical support. The patients will have access to medical, nursing, pharmacy, and social work support.

## What can Virtual Ward provide?

Monitoring determined by patient's primary illness and co-morbidities.

Where required, patients will be provided with the following monitoring equipment free of charge and delivered to their home:

- Oxygen saturation probe
- Blood pressure monitor
- Thermometer
- Scales
- Facilitation of relevant investigations i.e.- Blood tests, medical imaging including MRI, ECG, Echo
- Facilitation of Specialist opinion
- Pharmacy review
- Referral to Allied Health

## Which patients are eligible for admission to the VW?

Patients who require a brief period of monitoring and treatment which would otherwise require them to stay in hospital.

Patients at risk of deterioration, which if detected early, can be managed at home with the aim that hospital admission be avoided.

Patients where daily review in between planned GP review would be helpful.

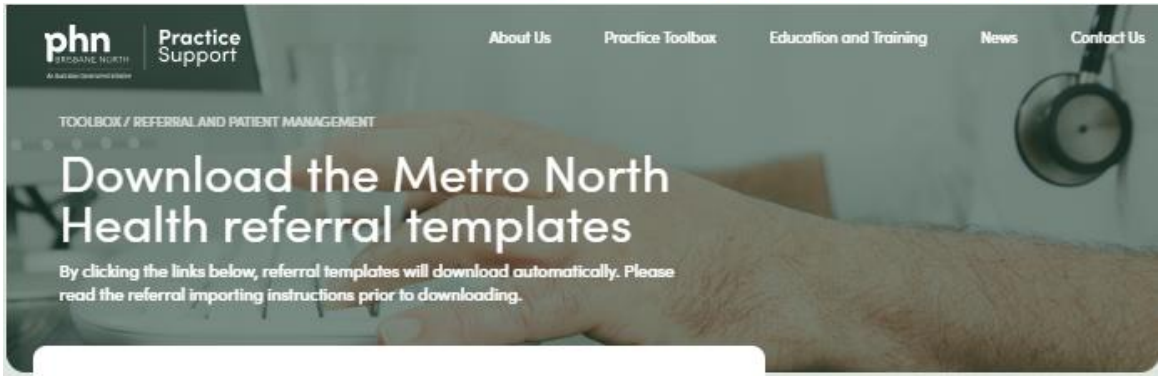
Examples of conditions that may be suitable for admission include:

- COVID
- community acquired pneumonia, infective exacerbations of asthma and other chronic obstructive airway conditions
- infections including cellulitis, osteomyelitis, UTI
- severe hypertension without neurological red flags for short term monitoring, medication adjustment
- hyperglycaemia without ketoacidosis for short term monitoring, medication adjustment.
- electrolyte abnormalities requiring monitoring
- supratherapeutic INR for short term monitoring
- serendipitous lumps to expedite investigation and Specialist review.

## How to refer your patients to VW?

Phone **(07) 3074 2109** in hours (0800-1700hrs) or phone RBWH switchboard out of hours on **(07) 3646 8111** and ask to speak to the Virtual Ward Consultant.

If your patient is accepted by the Virtual Ward Consultant please complete an electronic referral using Virtual Ward specific, Best Practice or Medical Director, referral templates which can be accessed from the Brisbane North PHN website.




**Important note:** The referral templates provided are not to be used by Medical Officers employed within Metro North HHS for referring patients to hospital outpatient services. Medical Officers may refer Category 1 patient by completing the *Inter-Facility Speciality Outpatient Referral Form* (to refer patients to another Metro North facility for a new condition) or *Internal Referral Form* (within the same facility). Medical Officers are to redirect patients to their General Practitioner for consideration of referral for non-urgent health conditions.

PDF
Metro North Health referral importing instructions

### Medical Director templates (RTF version 6.4)

Community and oral health
General paediatrics
Maternity shared care
Palliative care
Caboolture Hospital
Redcliffe Hospital
The Prince Charles Hospital
Royal Brisbane and Women's Hospital
Virtual Ward

### Best Practice templates (RTF version 6.4)

Community and oral health
General paediatrics
Maternity shared care
Palliative care
Caboolture Hospital
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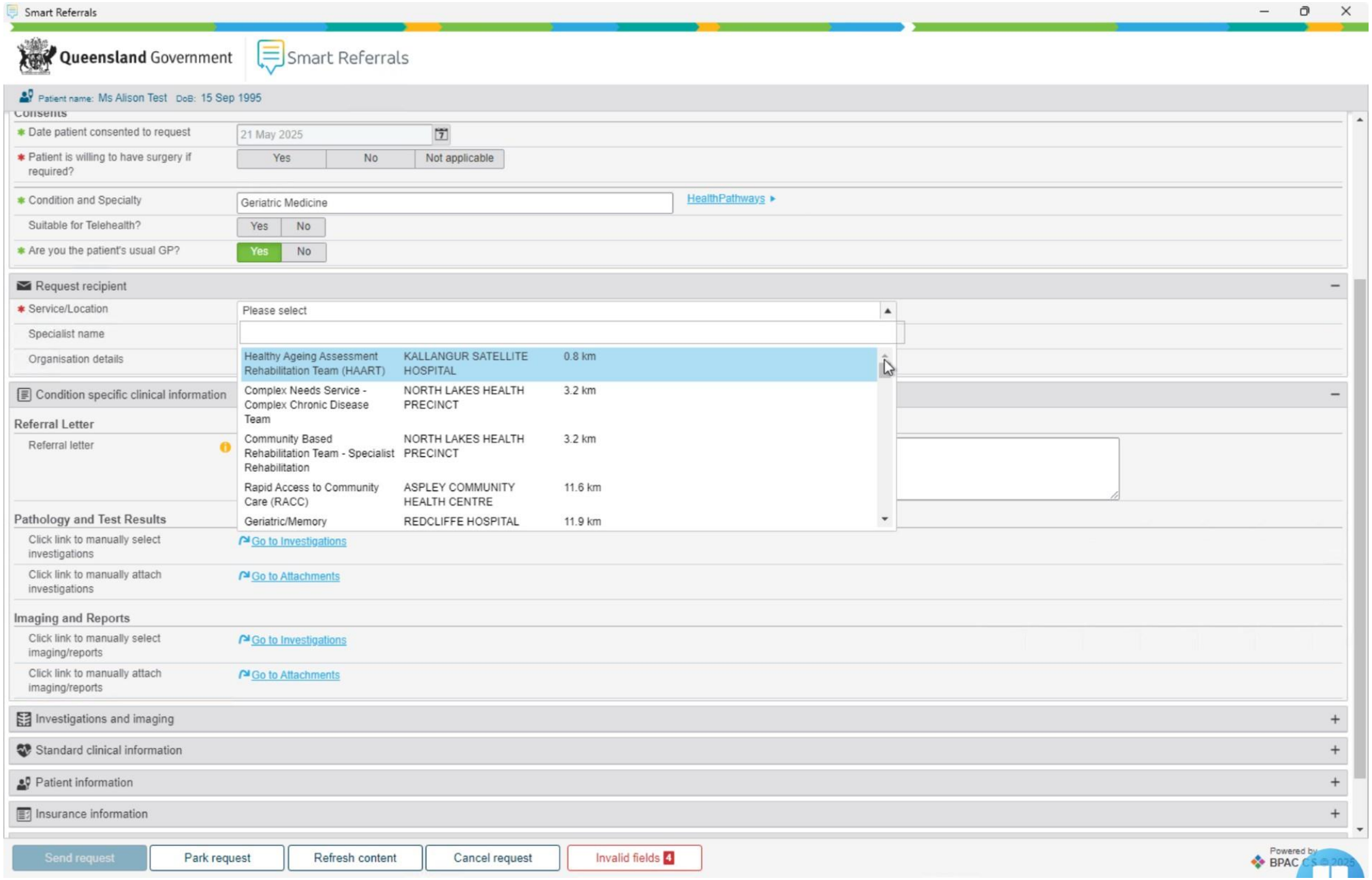
The Prince Charles Hospital
Royal Brisbane and Women's Hospital
Virtual Ward


Smart Referrals
Queensland Government
Smart Referrals
Patient name: Ms Alison Test DoB: 15 Sep 1995
Consents
Date patient consented to request
21 May 2025
Patient is willing to have surgery if required?
Yes
No
Not applicable
Condition and Specialty
Geriatric Medicine
HealthPathways
Suitable for Telehealth?
Yes
No
Are you the patient's usual GP?
Yes
No
Request recipient
Service/Location
Please select
Specialist name
Organisation details
Healthy Ageing Assessment Rehabilitation Team (HAART) KALLANGUR SATELLITE HOSPITAL 0.8 km
Complex Needs Service - Complex Chronic Disease Team NORTH LAKES HEALTH PRECINCT 3.2 km
Community Based Rehabilitation Team - Specialist Rehabilitation NORTH LAKES HEALTH PRECINCT 3.2 km
Rapid Access to Community Care (RACC) ASPLEY COMMUNITY HEALTH CENTRE 11.6 km
Geriatric/Memory REDCLIFFE HOSPITAL 11.9 km
Condition specific clinical information
Referral Letter
Referral letter
Pathology and Test Results
Click link to manually select investigations
Go to Investigations
Click link to manually attach investigations
Go to Attachments
Imaging and Reports
Click link to manually select imaging/reports
Go to Investigations
Click link to manually attach imaging/reports
Go to Attachments
Investigations and imaging
Standard clinical information
Patient information
Insurance information
Send request
Park request
Refresh content
Cancel request
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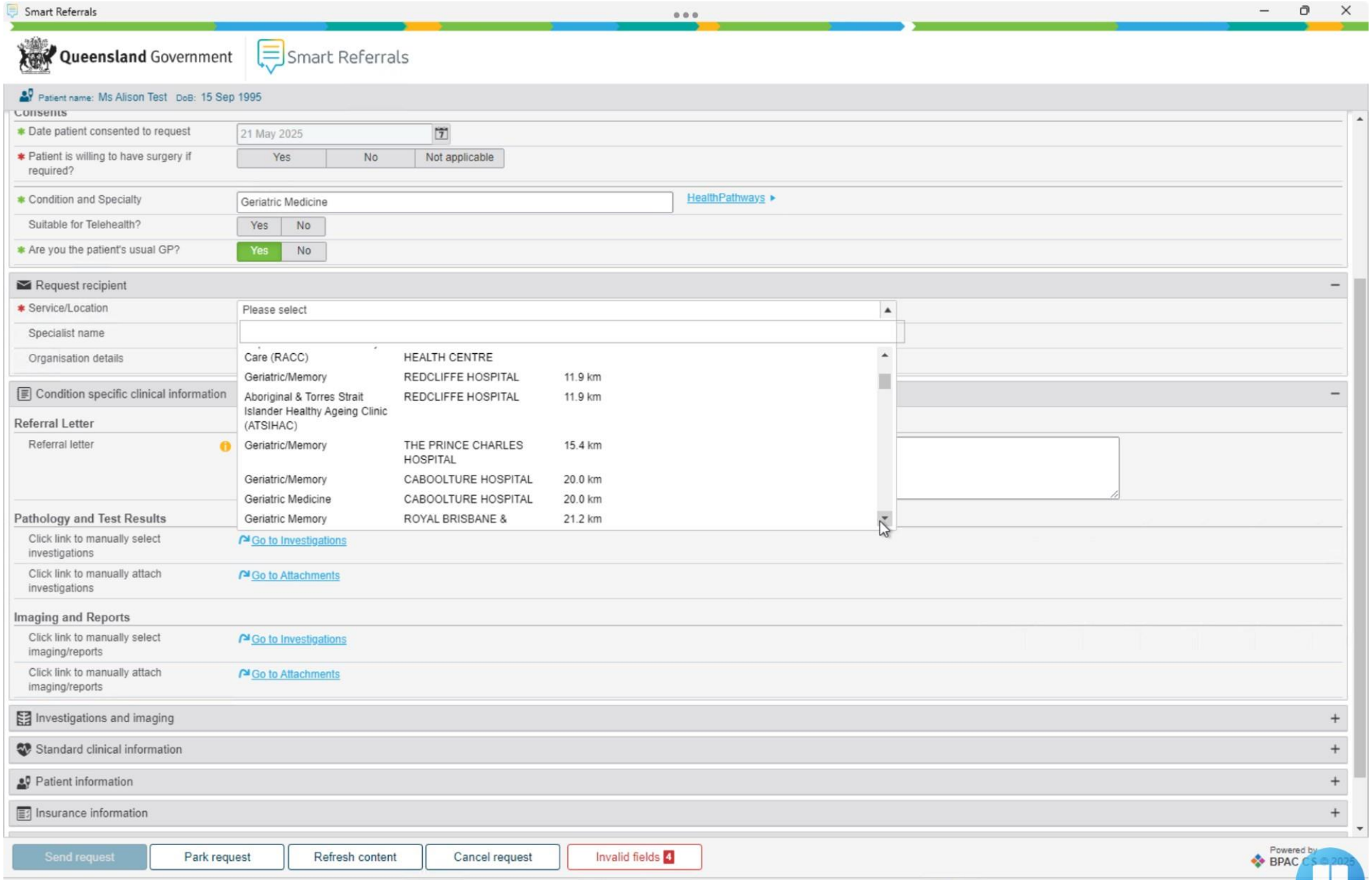
Smart Referrals
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No
Request recipient
Service/Location
Please select
Specialist name
Organisation details
Care (RACC) HEALTH CENTRE
Geriatric/Memory REDCLIFFE HOSPITAL 11.9 km
Aboriginal & Torres Strait Islander Healthy Ageing Clinic (ATSIHAC) REDCLIFFE HOSPITAL 11.9 km
Geriatric/Memory THE PRINCE CHARLES HOSPITAL 15.4 km
Geriatric/Memory CABOOLTURE HOSPITAL 20.0 km
Geriatric Medicine CABOOLTURE HOSPITAL 20.0 km
Geriatric Memory ROYAL BRISBANE & 21.2 km
Condition specific clinical information
Referral Letter
Referral letter
Pathology and Test Results
Click link to manually select investigations
Go to Investigations
Click link to manually attach investigations
Go to Attachments
Imaging and Reports
Click link to manually select imaging/reports
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Go to Attachments
Investigations and imaging
Standard clinical information
Patient information
Insurance information
Send request
Park request
Refresh content
Cancel request
Invalid fields 4
Powered by BPAC

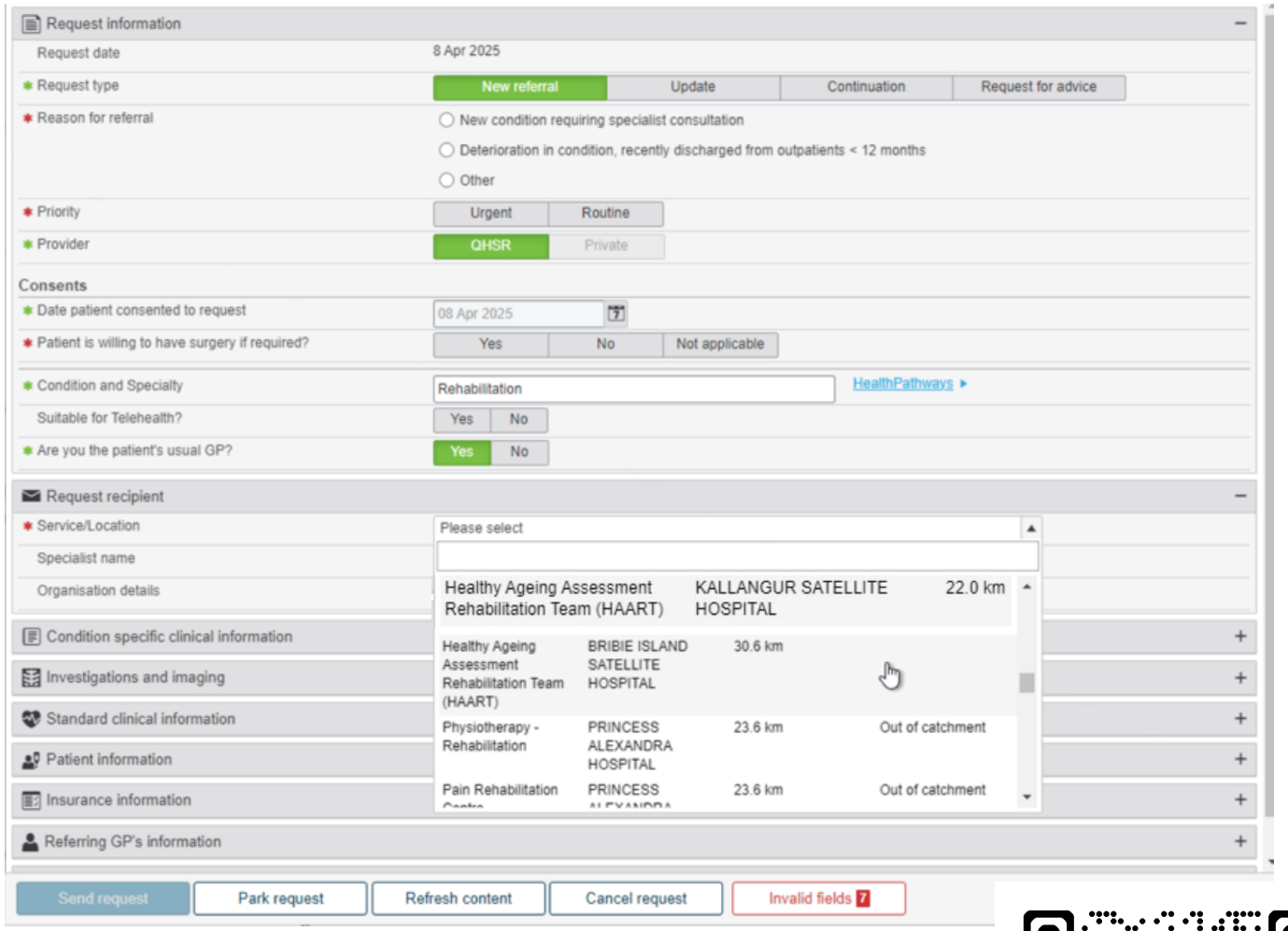
# Supporting people 65 years and over live their best lives!

The **Healthy Ageing Assessment and Rehabilitation Team (HAART)** provides comprehensive assessment, care planning, reconditioning and rehabilitation after a recent health event, functional health decline, injury or chronic condition.

**Kallangur Satellite Hospital**
9 Stoker Way,
Kallangur

**Call 3285 0000**

Metro North Health | Queensland Government



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Community and Oral Health
Metro North Health

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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.

## Our services

RACC undertakes a clinical phone assessment with the client within 1 business day to initiate the assessment and intervention pathway and communicates the outcome to the client's GP.

RACC provides a single, rapid, comprehensive, in-home assessment and immediate intervention including on-referral to the most appropriate community-based care services within 3 business days of receipt of the referral.

Referral pathways include community support services including Metro North Community Health services, PHN Team Care Coordination, Non-Government Organisations and My Aged Care.

The assessment and referral outcomes are communicated to the GP.

## Service Scope

Referrals accepted from GPs, Queensland Ambulance Service including Falls Co- Responders, OPEN, PHN Team care co-ordination and Virtual ED referral.

Community dwelling adult patients at risk of avoidable hospital presentation requiring rapid comprehensive assessment to optimise community support services.

Reside in Metro North

## Outside Service Scope

- Patients who reside in Residential Aged Care Facilities
- Patients whose primary issue is acute mental health concerns.
- Patients whose primary issue is alcohol or drug related.
- Current inpatient admission
- Linked with other Community and Oral Health home visiting services.
- Under 18 years of age

## 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

or 13 HEALTH (13 43 25 84)

## Refer a patient

**To refer a patient:**
Phone referral 1300 220 922 Monday to Friday 0900-1700

GP: phone or submit electronic referral via GP Smart Referrals

VED: phone or submit electronic referral via Refer

QAS: phone referral if need to book home visit appointment whilst on scene and then submit eARF as per QAS process.

**Referral enquiries:**

Phone referral line 1300 220 992 to discuss referral and scope of service.

# OLDER PERSONS EMERGENCY NETWORK

OPEN


**OPEN** is an emergency department substitution service offering emergency care for older people in their own home. We provide care to the community including residential aged care facilities.

**OPEN** aims to provide an alternative pathway for older persons to access acute care in the community. We have a multidisciplinary team consisting of senior medical officers, nurse practitioners, specialist nurses and pharmacists.

## Why refer a patient to OPEN?

**OPEN** is suitable for vulnerable older persons who have emergent care needs and would benefit from acute care in their home rather than transfer to a hospital emergency department.

## Who can be referred to OPEN?

- Residential aged care facility residents based in the Metro North catchment.
- Older adults in their community homes in the Caboolture and Redcliffe catchment (>65 years of age or >50 years for Aboriginal and Torres Strait Islander peoples).

## Service hours

**OPEN** is open for referrals 8am-8pm, seven days a week.

**For more information or to refer a patient, scan the QR code**

## Why was OPEN developed?

In Australia, patients aged 65 and over accounted for approximately 22% of all emergency department presentations. The older population continue to experience the highest growth in emergency department presentations. There is greater risk of hospital-based harm in older persons due to a high level of vulnerability to complications such as falls, delirium, pressure injuries and secondary infection. The **OPEN** model aims to reduce these risks by providing emergency healthcare in the home.

Metro North Health | Queensland Government

# Older Persons Emergency Network (OPEN)

**OPEN is open for referrals 8am-8pm, 7 days a week.**

OPEN is an emergency department substitution service offering emergency care for older people in their own home. The service provides care to the community including residential aged care facilities.

OPEN aims to provide an alternative pathway for older persons to access acute care in the community. The multidisciplinary team consists of senior medical officers, nurse practitioners, specialist nurses and pharmacists.

## Refer a patient

OPEN is suitable for vulnerable older persons who have emergent care needs and would benefit from acute care in their home rather than transfer to a hospital emergency department.

### Healthcare Providers ONLY

Who can make a referral to OPEN?

- Queensland Ambulance Service (QAS)
- Virtual Emergency Department (VED)
- General Practitioners (GPs)
- Residential Aged Care District Assessment and Referral Service (RADAR)
- Community based services in Caboolture and Redcliffe catchment areas

What can be referred to OPEN?

- Acute injuries and illnesses

Who can be referred to OPEN?

- Residential aged care facility residents based in the Metro North catchment
- Older adults in their community homes in the Caboolture and Redcliffe catchment (>65 years of age or >50 years for Aboriginal and Torres Strait Islander peoples).

#### Opening Hours

**Referrals 8am – 8pm, 7 days a week.**

To make a referral phone: 1300 072 327 (select 1 for OPEN) to speak with a Senior Medical Officer or Nurse Practitioner.

### Patients

**If you have the following symptoms, call 000**

- Chest pain
- Breathing problems or turning blue
- Comatose or unconscious
- Sudden inability to move or speak, or sudden facial drooping
- The effects of a severe accident

For all other acute symptoms contact the Virtual Emergency Department 8am – 10pm

Virtual Emergency Department (ED) - Metro North Health

## Why was OPEN developed?

In Australia, patients aged 65 and over accounted for approximately 22% of all emergency department presentations. The older population continues to experience the highest growth in emergency department presentations. There is greater risk of hospital-based harm in older persons due to a high level of vulnerability to complications such as falls, delirium, pressure injuries and secondary infection. The OPEN model aims to reduce these risks by providing emergency healthcare in the home.

# Complex Chronic Disease Team (CCDT)

The Complex Chronic Disease Team (CCDT) provides a range of services for adults with chronic and complex health conditions. The aim is to provide coordinated and integrated care that improves and supports individual clients to optimise and manage their health and wellbeing within their community.

The service provides access to a multidisciplinary team (medical, nursing and allied health) who will undertake a comprehensive assessment, develop an individualised client care plan and deliver interventions that meet the diverse needs of clients referred.

- Information sheet (PDF)

## Our services

### Complex Needs Service

The complex needs service focusses on clients whose care needs require greater than usual levels of health care management due to a range of interacting physical, psychological and social factors.

### Cardiac Rehabilitation

The cardiac rehabilitation service provides an integrated education and exercise program for clients following a recent (within 6 months) cardiac event including NSTEMI or STEMI, PCI, Coronary Artery Bypass Grafting, Cardiac Valve Surgery or clients who have medically stable Heart Failure.

### Pulmonary Rehabilitation

The pulmonary rehabilitation service provides an integrated education and exercise program for clients with a pulmonary diagnosis who are medically stable and would benefit from group-based exercise sessions.

## How to access this service

To access this service, your GP or medical practitioner will need to send a referral letter to the hospital.

If there is a waiting list, you will receive a confirmation letter and be advised on what to do next. If there is no waiting list, you will receive an appointment booking letter or we will contact you to arrange a suitable time for your appointment.

## Refer a patient

**To refer a patient:**
Complex Chronic Disease

**GP and Specialist Hotline:**
1300 658 252

## Contact us

**Complex Needs Service**
**Location:** 9 Endeavour Boulevard, North Lakes
**Phone:** (07) 3049 1292
**Open:** Monday-Friday, 8.00am-4.30pm

**Cardiac Rehabilitation**
**Location:** 9 Endeavour Boulevard, North Lakes
**Phone:** (07) 3049 1291
**Open:** Monday-Friday, 8.00am-4.30pm

**Pulmonary Rehabilitation**
**Location:** 9 Endeavour Boulevard, North Lakes
**Phone:** (07) 3049 1291
**Open:** Monday-Friday, 8.00am-4.30pm

## Locations

North Lakes Health Precinct

Nundah Community Health Centre

Chermside Community Health Centre

Caboolture Square Building

## Need help outside hours?

For non-urgent medical issues call 13 HEALTH (13 43 25 84) or visit your GP.

In an emergency call 000.

## Our performance

CCDT performance dashboard (PDF)

## When will my client be seen?

All referred clients are prioritised according to their needs. Following referral, a letter will be sent to the client and GP advising of their initial appointment.

## Is there a cost?

There is no cost for services provided by the team.

# Community Based Rehabilitation Team (CBRT)

We provide rehabilitation services that aim to improve people's wellbeing, functional capacity, independence and quality of life following a significant health event or injury.

## Our services

Our services and programs, including home visits (if required), run for 4, 8 and 12 weeks and include:

- physiotherapy
- occupational therapy
- speech pathology
- social work
- leisure therapy.

We provide rehabilitation for people who are recovering from or have been diagnosed with:

- stroke
- acquired brain injury
- early stage or acute exacerbation of neurodegenerative conditions
- an orthopaedic condition
- amputation requiring functional rehabilitation (improving functional capacity).

## How to access this service

To access this service, your GP or medical practitioner will need to send a referral letter.

If there is a waiting list, you will receive a confirmation letter and be advised on what to do next. If there is no waiting list, you will receive an appointment booking letter or we will contact you to arrange a suitable time for your appointment.

## Refer a patient

**To refer a patient:**
Community based rehabilitation team

**GP and Specialist Hotline:**
1300 364 938

## Locations

North Lakes Health Precinct

King Street Community Health Centre

Redcliffe Community Health Centre

Chermside Community Health Centre

## Need help outside hours?

For non-urgent medical issues call 13 HEALTH (13 43 25 84) or visit your GP.

In an emergency call 000.

## Refer a patient

To refer a patient to this service, view the Community based rehabilitation team referral process.

GP and Specialist Referral Hotline: 1300 658 252

## Our performance

CBRT performance dashboard (PDF)

Aboriginal and Torres Strait Islander

# Healthy Ageing Clinic (HAC)

**The Aboriginal and Torres Strait Islander Healthy Ageing Clinic (HAC) provides specialist geriatrician services on Brisbane Northside for Aboriginal and Torres Strait Islander people over 50 years of age.**

The clinics are delivered at Moreton Aboriginal and Torres Strait Islander Community Health Service (MATSICHS) in collaboration with Metro North Health.

HAC provides specialised care in a culturally safe environment for Aboriginal and Torres Strait Islander older persons with chronic or complex conditions relating to ageing, frailty, disability, and cognitive problems.

## This includes:

- Cognitive and functional assessment
- Restorative care assessment
- Comprehensive geriatric assessment
- Dementia diagnosis and management
- Falls risk assessment and management
- Polypharmacy

## Who can access the service

- Patients 50 years of age and older who identify as Aboriginal and/or Torres Strait Islander.
- Immediate family members (even if the immediate family member does not identify as Aboriginal and/or Torres Strait Islander) defined as spouse, partner, sibling, parent or child of someone of Aboriginal and/or Torres Strait Islander background.

## How to access this service

Access to HAC can be by a referral from your GP through to a Metro North Hospital and Health Geriatric Service.

HAC clinics available every Tuesday from 9am – 4.30pm.

For further information contact Caboolture Satellite Hospital on (07) 3049 9755.

## Clinic locations

Moreton Aboriginal and Torres Strait Islander Community Health Service (MATSICHS).

MATSICHS Caboolture
5 James Street, Caboolture
Phone: (07) 5428 5855.

MATSICHS Strathpine
496-498 Gympie Rd, Strathpine
Phone: (07) 3897 0500.

IUIH institute for urban indigenous health

Moreton ATSICHS

Metro North Health

Queensland Government

This initiative is supported by the Aboriginal and Torres Strait Islander Leadership Team, Metro North Health

# Healthcare coordination
for people with long term medical conditions.

**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

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.

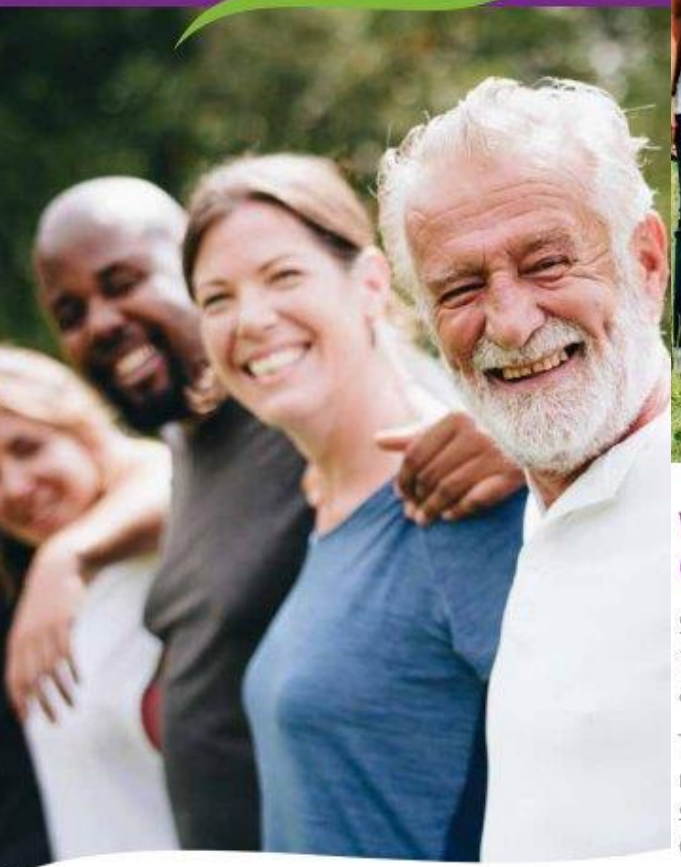
The service is delivered by clinical nurses and allied health that can offer health education and coordination of health and community services. Our team will:

- 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.

# SOCIAL HEALTH CONNECT

## AT FOOTPRINTS COMMUNITY

*Helping you to manage your social health and improve connection!*



footprints community

## WHAT IS SOCIAL HEALTH CONNECT?

Social Health Connect supports people aged 18+ in the Kilcoy and Caboolture regions who are experiencing social isolation and loneliness.

The program will help you address barriers that may impact on your ability to improve your social health, community participation and connection.

Barriers include:

- Finances
- Housing
- Transport
- Physical health barriers
- Mental health barriers
- Limited social supports and networks
- Language barriers.

Interpreter

You can ask for an interpreter.
It is FREE.

## SOCIAL HEALTH CONNECT TEAM

The Footprints Social Health Connect team is:

- Highly skilled
- Professional
- Warm.

The Footprints Social Health Connect team:

- Supports people in the local Kilcoy and Caboolture regions with practical guidance for an engaging and meaningful life
- Supports people to develop person centred goals plans
- Supports people to build independence and resilience to improve and manage their health and wellbeing
- Links people to local groups, activities or social opportunities that align with their individual interests
- Links people to services that can support them to address barriers to social participation e.g. financial supports, carer supports, My Aged Care and transport supports
- Provides an easily accessible referral pathway and strongly encourage referrals from General Practitioners and Health Professionals.

Supported by phn BRISBANE NORTH
An Australian Government Initiative

# Older Adults' Health

In This Section





## Cognitive Impairment and Dementia

This pathway is about gradual or sub-acute onset of cognitive impairment. See also:

- Behavioural and Psychological Symptoms of Dementia (BPSD)
- Delirium

### Background

About cognitive impairment and dementia

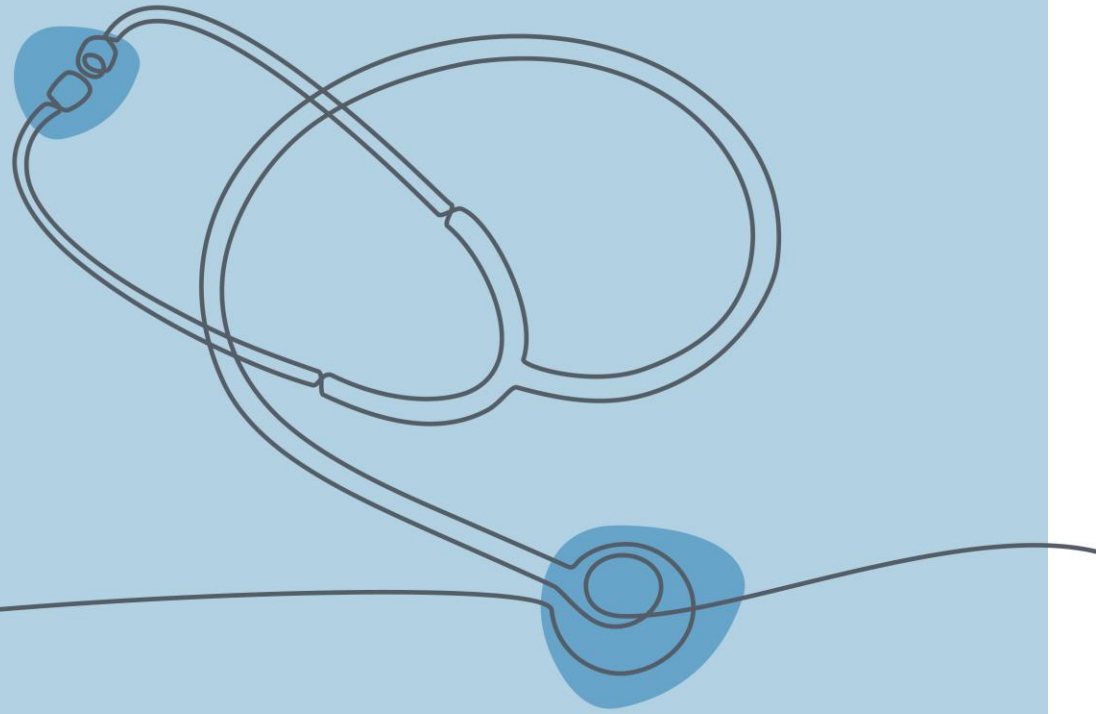
### Assessment

1. Screen patients at moderate risk for cognitive impairment and dementia, or who have experienced a change in their cognition. Population screening is not recommended. [1]
2. Take a collateral history from both the patient and an informant who has been documenting the onset, progression, fluctuations, and time frame of symptoms. Consider providing a Short IQCODE for family to complete.
3. Take a careful history covering the Five Domains of Dementia [3]:
   1. Cognitive decline is usually the first symptom to appear. This may be more noticeable to family members or carers, so collateral history is vital.
   2. Functional decline that is a result of cognitive decline.
   3. Psychiatric symptoms
   4. Behaviour changes which represent a change from how the person would previously behave.
   5. Physical changes – more likely to be seen in later stages.
4. Ask about:
   - reversible or modifiable conditions.
   - factors that increase risk of harm.
5. Ask about current concerns e.g., carer stress.
6. Review medications that may impair cognition, including over-the-counter medications.
7. Examine the patient – include:
   - cardiovascular examination
   - 5-minute neurological examination
   - hearing and vision assessment
   - mental status examination, including:
     - cognitive assessment,
     - mood examination.
8. Arrange investigations.
9. Consider differentiating features of delirium, dementia, and depression.

General Practice Liaison Officer Program presents

# Championing Generalism Workshop

A collaborative, multi-disciplinary and multi-specialty learning opportunity for GPs covering conditions commonly managed in primary care



## Bone Voyage: an update on Osteoporosis

**Dr Syndia Lazarus | Staff Specialist, Diabetes & Endocrinology, RBWH**

phn BRISBANE NORTH
An Australian Government Initiative

Queensland Government
Metro North Health

# Bone voyage: An update on osteoporosis

Dr Syndia Lazarus

MBBS (Hons I) FRACP PhD

Department of Endocrinology, RBWH and TPCH

# Osteoporosis - Diagnosis

- Progressive, systemic disease characterized by reduced bone density, quality and increased fracture risk
- Criteria:
  - **Postmenopausal women or Men >50yo with minimal trauma fracture or BMD T-score <-2.5**
- BMD is not required for diagnosis, however, still expect T-score in osteopaenic range (-1.0 to -2.5)

# Key questions

- Who to screen
- Who to treat
- With what and how long
- When to refer

# Osteoporosis – Patient screening

- >70 yo
- History of minimal trauma fracture
- Postmenopausal woman or >50 yo man with risk factors
  - FRAX calculator can help decide if a BMD is required
  - Other risk factors include frequent falls, malabsorption, inflammatory arthritis, premature menopause, male hypogonadism, chronic liver disease, CKD, hyperthyroidism, hyperparathyroidism

FRAX® Fracture Risk Assessment Tool

Home | Calculation Tool | Paper Charts | FAQ | References | CE Mark | English

# Calculation Tool

Please answer the questions below to calculate the ten year probability of fracture with BMD.

Country: US (Caucasian) Name/ID: About the risk factors

## Questionnaire:

1. Age (between 40 and 90 years) or Date of Birth
   Age: Date of Birth: Y: M: D:
2. Sex ○ Male ○ Female
3. Weight (kg)
4. Height (cm)
5. Previous Fracture ◉ No ○ Yes
6. Parent Fractured Hip ◉ No ○ Yes
7. Current Smoking ◉ No ○ Yes
8. Glucocorticoids ◉ No ○ Yes
9. Rheumatoid arthritis ◉ No ○ Yes
10. Secondary osteoporosis ◉ No ○ Yes
11. Alcohol 3 or more units/day ◉ No ○ Yes
12. Femoral neck BMD ($g/cm^2$)

Select BMD

Clear Calculate

### Weight Conversion

Pounds → kg

Convert

### Height Conversion

Inches → cm

Convert

**13635490**
Individuals with fracture risk assessed since 1st June 2011

FRAX® Fracture Risk Assessment Tool

Home | Calculation Tool | Paper Charts | FAQ | References | CE Mark | English

# Calculation Tool

Please answer the questions below to calculate the ten year probability of fracture with BMD.

Country: Australia  Name/ID:  About the risk factors

## Questionnaire:

1. Age (between 40 and 90 years) or Date of Birth
   Age:  Date of Birth: Y: M: D:
2. Sex  ○ Male ○ Female
3. Weight (kg)
4. Height (cm)
5. Previous Fracture  ◉ No ○ Yes
6. Parent Fractured Hip  ◉ No ○ Yes
7. Current Smoking  ◉ No ○ Yes
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10. Secondary osteoporosis  ◉ No ○ Yes
11. Alcohol 3 or more units/day  ◉ No ○ Yes
12. Femoral neck BMD ($g/cm^2$)

Select BMD

Clear | Calculate

**Refer for BMD if ≥ 10%**

### Weight Conversion

Pounds → kg

Convert

### Height Conversion

Inches → cm

Convert

**00425252**

Individuals with fracture risk assessed since 1st June 2011

# Key questions

Who to screen

Who to treat

With what and how long

When to refer

# When to consider anti-osteoporosis drugs

| | |
|---|---|
| Fragility fracture | • Excludes fingers and toes, stress fractures |
| Osteoporosis on BMD | • PBS-funded antiresorptive therapy only for >70yo |
| High calculated fracture risk | • >20% risk of major osteoporotic fracture within 10 yrs<br>• >3% risk of hip fracture within 10 years<br>• Non-PBS |

# Key questions

Who to screen

Who to treat

With what and how long

When to refer

# Anti-osteoporosis therapies

## Lifestyle modifications

- Weight-bearing exercise – high impact, bone loading, exercise physiologist
- Dietary calcium and protein – supplement if required
- Vitamin D
- Healthy Bones Australia website

## Antiresorptive drugs

- MHT, raloxifene
- Oral bisphosphonates (risedronate, alendronate)
- IV bisphosphonate (zoledronate)
- Denosumab

## Osteoanabolic drugs

- Teriparatide, abaloparatide
- Romosozumab

# Anti-osteoporosis therapies

## Lifestyle modifications

- Weight-bearing exercise – high impact, bone loading, exercise physiologist
- Dietary calcium and protein – supplement if required
- Vitamin D
- Healthy Bones Australia website

## Antiresorptive drugs

- MHT, raloxifene
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- Teriparatide, abaloparatide
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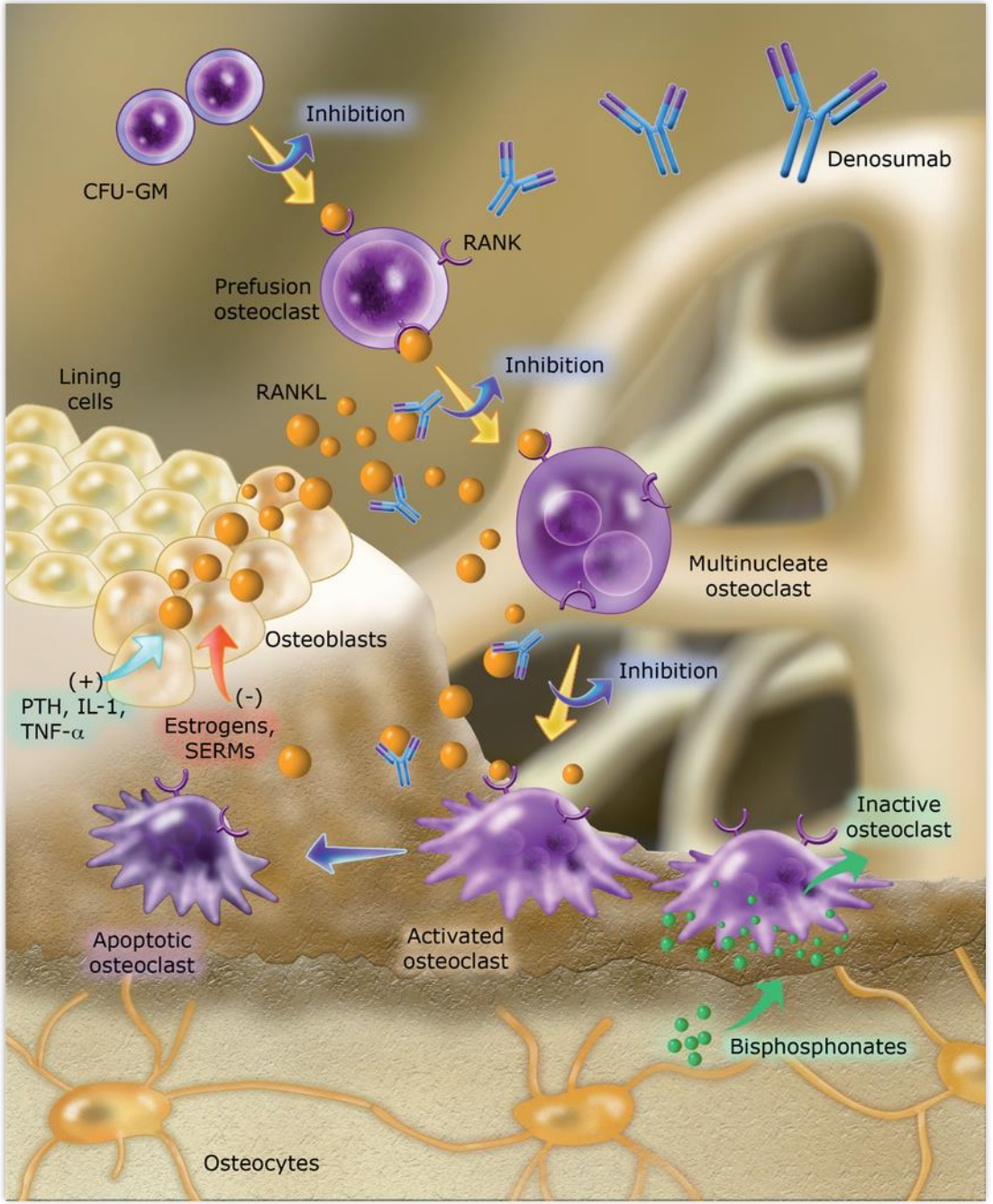
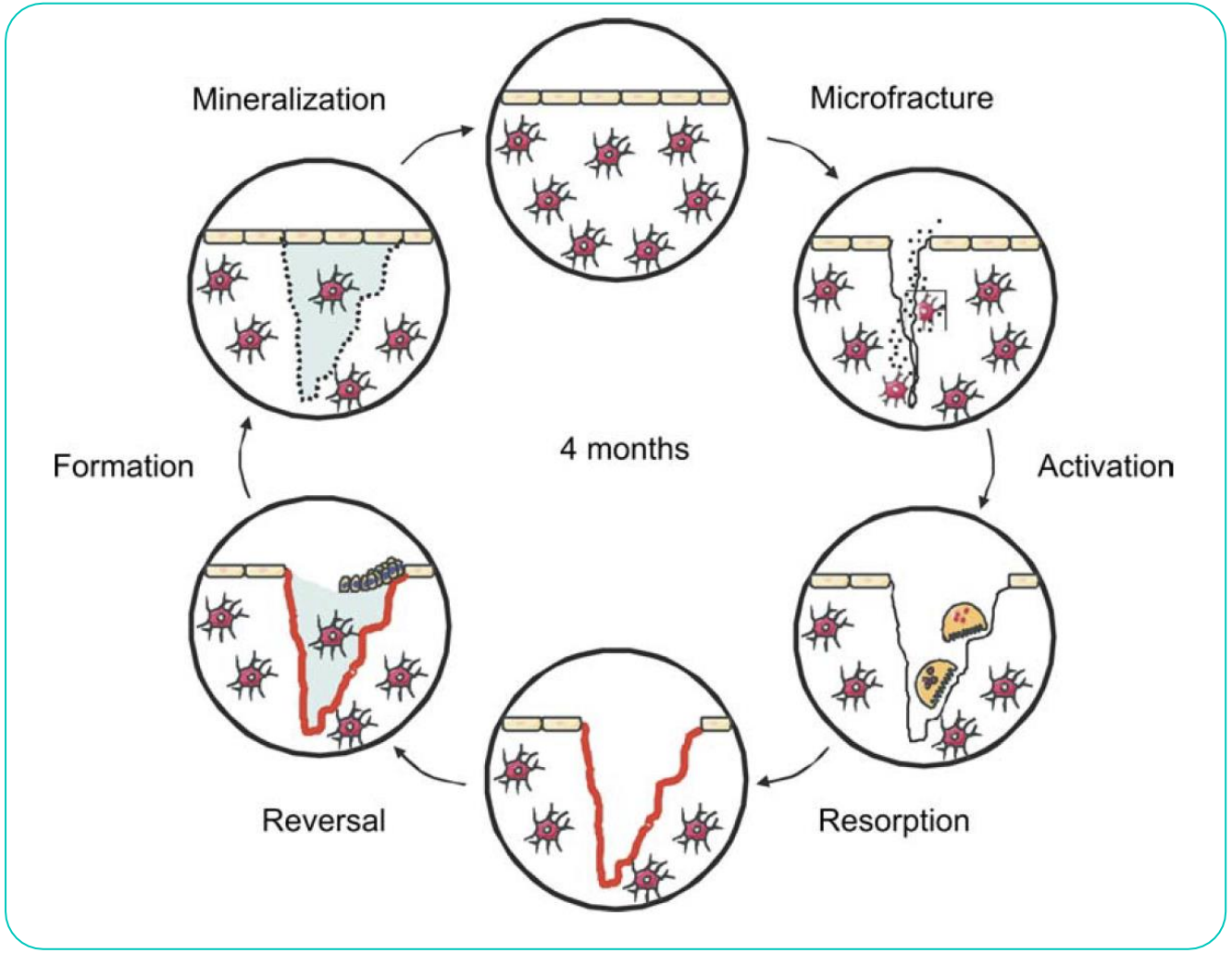
# Antiresorptive drugs




Langdahl et al. 2011 Therapeutic advances in musculoskeletal disease 10.1177/1759720X10392105




# Remodelling of bone matrix

# Osteopetrosis: Lessons from monogenic disease

- Rare genetic condition characterized by dense but brittle bones
- Due to defects in osteoclast function -> impaired removal and replacement of damaged bone
- Very high BMD but prone to stress fractures, particularly from teens onwards
- Prolonged antiresorptive therapy mimics osteopetrosis

# How long to treat (controversial!)

- Antiresorptive therapy was previously limited to elderly patients
- In younger patient with no fractures, consider intermittent therapy (e.g. drug holiday after 5-10 years)
  - East Asian ethnicity may be higher risk of atypical femur fracture (AFF)
- Continue treatment if fragility fracture within 2 years
- Refer if on antiresorptive for >10 years with uncertainty over treatment duration and no specialist review specifying long term treatment plan

# Antiresorptive drugs

## Bisphosphonates

- Pros
  - Can be safely ceased or delayed (no rebound)
  - Infrequent dosing (every 1-2 years) for ZA
- Cons
  - GI side effects for po forms
  - Acute phase reaction
  - Infusion service required for ZA

## Denosumab

- Pros
  - Convenient and infrequent administration
- Cons
  - **More difficult to safely cease or delay dosing due to rebound increase in bone turnover**

JOURNAL ARTICLE

# Severe Rebound-Associated Vertebral Fractures After Denosumab Discontinuation: 9 Clinical Cases Report

FREE

Olivier Lamy , Elena Gonzalez-Rodriguez , Delphine Stoll , Didier Hans , Bérengère Aubry-Rozier  Author Notes

*The Journal of Clinical Endocrinology & Metabolism*, Volume 102, Issue 2, 1 February 2017, Pages 354–358, https://doi.org/10.1210/jc.2016-3170

**Published:** 12 October 2016  **Article history** ▾

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Case Reports > Osteoporos Int. 2018 Mar;29(3):769-772. doi: 10.1007/s00198-017-4334-3. Epub 2017 Dec 11.

# Rebound-associated vertebral fractures after discontinuation of denosumab for the treatment of maxillitis

R Niimi [1], T Kono [2], A Nishihara [2], M Hasegawa [3], T Kono [2], A Sudo [3]

Affiliations + expand

PMID: 29230512  DOI: 10.1007/s00198-017-4334-3

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Breast Cancer Research and Treatment (2020) 179:153–159
https://doi.org/10.1007/s10549-019-05458-8

CLINICAL TRIAL

# Sixty spontaneous vertebral fractures after denosumab discontinuation in 15 women with early-stage breast cancer under aromatase inhibitors

Elena Gonzalez-Rodriguez[1,2] · Bérengère Aubry-Rozier[1] · Delphine Stoll[1] · Khalil Zaman[3] · Olivier Lamy[1,4]

Received: 18 June 2019 / Accepted: 24 September 2019 / Published online: 9 October 2019


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Case Reports > Joint Bone Spine. 2020 Mar;87(2):171-173. doi: 10.1016/j.jbspin.2019.07.010. Epub 2019 Jul 29.

# Rebound-associated vertebral fractures after stopping denosumab: Report of four cases

Jolan Dupont [1], Michaël R Laurent [2], Lenore Dedeyne [3], Frank P Luyten [4], Evelien Gielen [5], Marian Dejaeger [5]

Affiliations + expand

PMID: 31369866  DOI: 10.1016/j.jbspin.2019.07.010

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JBMR

Short Report | Free Access

# Clinical Features of 24 Patients With Rebound-Associated Vertebral Fractures After Denosumab Discontinuation: Systematic Review and Additional Cases

Athanasios D Anastasilakis, Stergios A Polyzos, Polyzois Makras, Berengere Aubry-Rozier, Stella Kaouri, Olivier Lamy

First published: 27 February 2017 | https://doi.org/10.1002/jbmr.3110 | Citations: 298

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Review > Semin Arthritis Rheum. 2019 Oct;49(2):197-203. doi: 10.1016/j.semarthrit.2019.02.007. Epub 2019 Feb 15.

# Spontaneous vertebral fractures after denosumab discontinuation: A case collection and review of the literature

Helena Florez [1], Julio Ramírez [2], Ana Monegal [2], Núria Guañabens [2], Pilar Peris [2]

Affiliations + expand

PI

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JBMR Plus. 2020 Aug 21;4(10):e10396. doi: 10.1002/jbm4.10396

# Failure of Oral Risedronate Therapy to Prevent Spontaneous Vertebral Fracture in a Patient Ceasing Denosumab: A Cautionar Case

Dahlia F Davidoff [1,2,✉], Christian M Girgis [1,2,3]

Author information · Article notes · Copyright and License information

PMCID: PMC7574702 PMID: 33103026

doi: 10.2174/1871530321666210708142127.

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# Multiple Rebound-Associated Vertebral Fractures after Denosumab Discontinuation: Is Prompt Antiresorptive Therapy Always Recommended,Even When the Risk of Fracture Seems Low? A Case Report

Giangiacomo Osella [1], Soraya Puglisi [1], Anna Alì [1], Giuseppe Reimondo [1], Massimo Terzolo [1]

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Osteoporos Int (2016) 27:1923–1925
DOI 10.1007/s00198-015-3380-y

CASE REPORT

# Severe spontaneous vertebral fractures after denosumab discontinuation: three case reports

B. Aubry-Rozier[1] · E. Gonzalez-Rodriguez[1] · D. Stoll[1] · O. Lamy[1]

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ELSEVIER

Bone

Volume 108, March 2018, Page 43

Correspondence

# Rebound vertebral fracture in the dental chair during a tooth extraction whilst on a treatment holiday from denosumab to avoid ONJ!

Alexandra Leaney ✉, Shoshana Sztal-Mazer ✉

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CLINICAL ENDOCRINOLOGY

LETTER TO THE EDITOR | Full Access

# Rebound vertebral and non-vertebral fractures during denosumab interruption in a postmenopausal woman

Sunita M. C. De Sousa ✉, David Jesudason

First published: Case Reports > Reumatol Clin (Engl Ed). 2020 Nov-Dec;16(6):480-484. doi: 10.1016/j.reuma.2018.11.002. Epub 2019 Mar 4.

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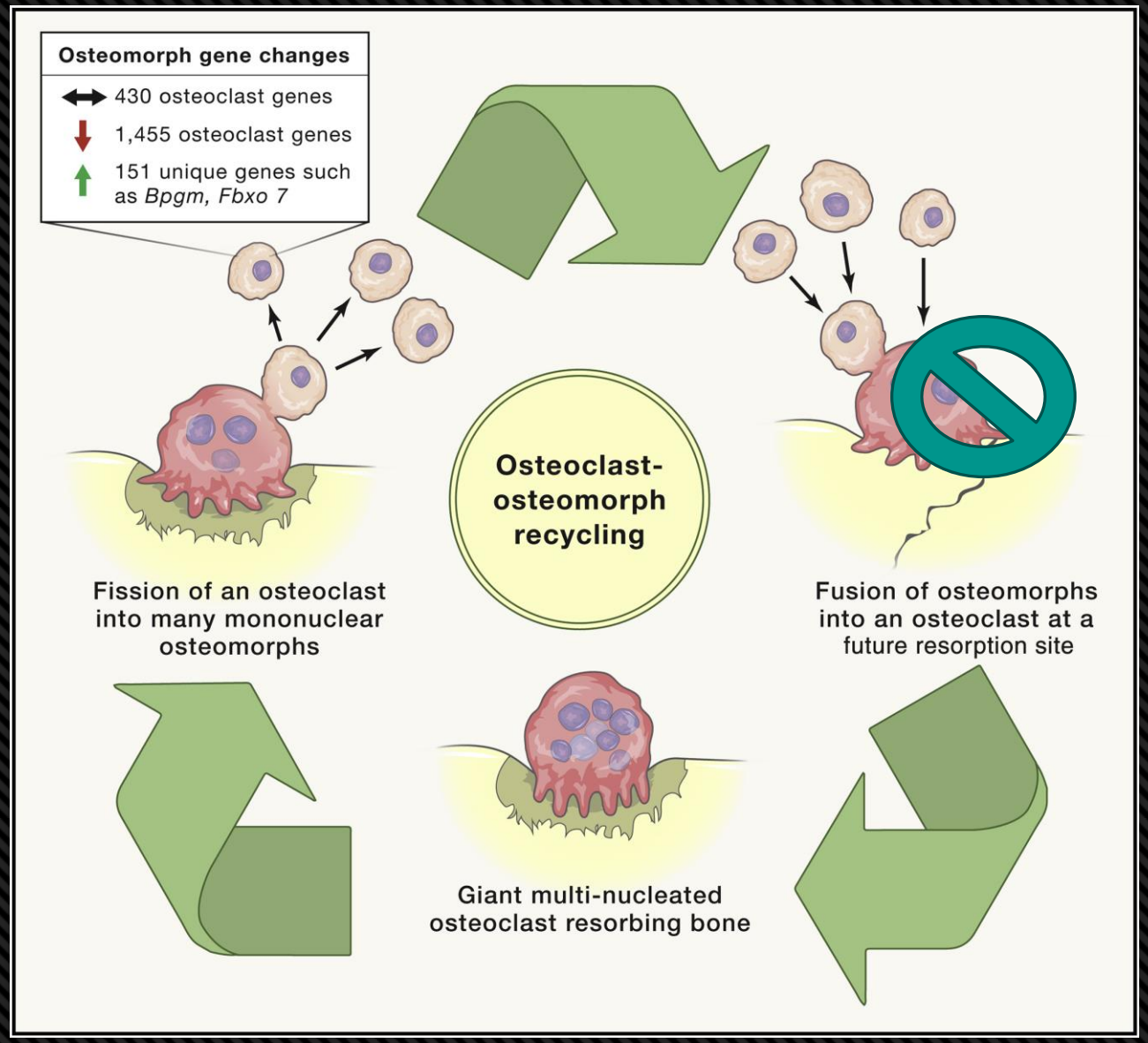
# Multiple vertebral fractures following discontinuation of denosumab treatment: Ten clinical cases report

[Article in English, Spanish]

Elisa Fernández Fernández [1], Diego Benavent Núñez [2], Gema Bonilla Hernán [2], Irene Monjo Henry [2], Sara García Carazo [2], Miguel Bernad Pineda [2], Alejandro Balsa Criado [2], Pilar Aguado Acín [2]

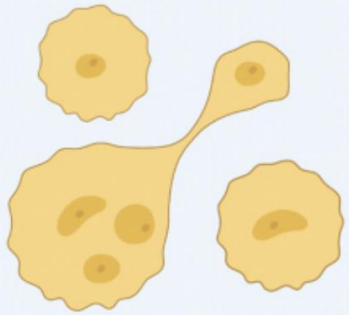
Affiliations + expand

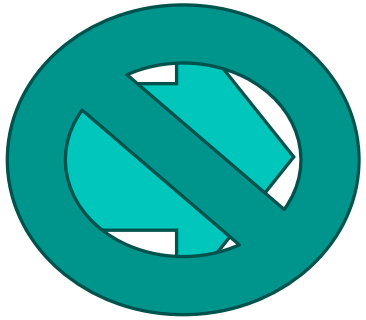
PMID: 30846260 DOI: 10.1016/j.reuma.2018.11.002



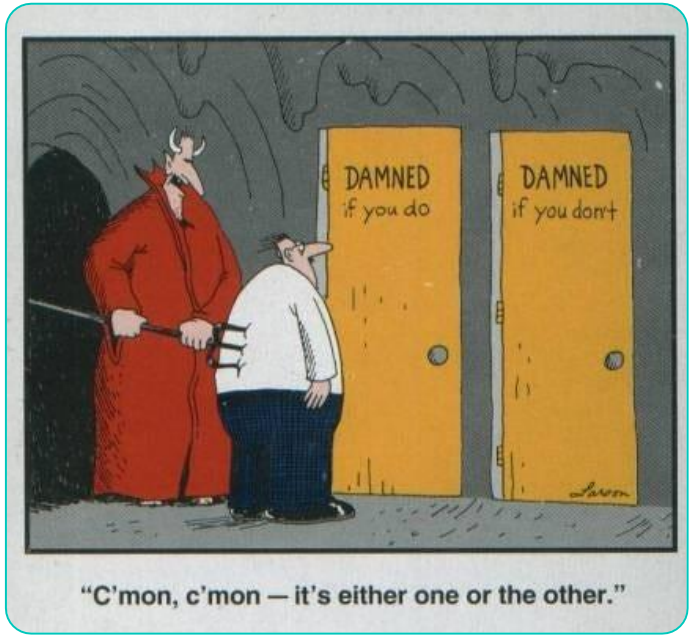

Iqbal et al 2021 Cell 10.1016/j.cell.2021.02.023

Osteomorphs





Osteoclasts




- Once on denosumab,
  - Prolonged treatment -> increasing risk of low bone turnover complications e.g. atypical femoral fractures
  - Ceasing treatment -> ~10% risk of rebound vertebral fractures
- Therefore, think carefully before starting a patient on denosumab!

# The Denosumab Dilemma

Best patient for denosumab: A patient who can safely receive continuous denosumab without interruption for their remaining lifespan

# Scenarios to consider before starting a patient on denosumab

- Development of confirmed or possible side effects
  - Early (e.g. nausea, alopecia, hypocalcaemia)
  - Late (e.g. ONJ, AFF)
- Withheld for procedure
  - Orthopaedic surgery
  - Dental procedure
- Missed dose
  - Changed GP practice
  - In and out of hospital
  - On holidays
  - Interstate/overseas family emergency
- Future candidate for osteoanabolic therapy
  - Rebound bone loss during withdrawal from denosumab not counteracted by osteoanabolic agent

# Can denosumab be ceased safely?

- Depends on how many doses they received
  - After 1-2 doses of denosumab
    - Give po alendronate 70 mg weekly starting from 5.5 months after last denosumab dose and continuing for 1-2 years
  - After >2 doses of denosumab
    - Will most likely require monitoring of bone turnover markers (CTx), po alendronate initially then convert to iv zoledronate. Refer to specialist bone service
  - After >10 doses of denosumab
    - Likely to require more intensive CTx monitoring (6-12-weekly), combination of po alendronate followed by multiple doses of iv zoledronate (e.g. 4 infusions/year) for at least 2 years. Refer to specialist bone service

# Example scenario: A patient on long term antiresorptive therapy needs a dental extraction

## Patient on denosumab

Time extraction to be done at ~4 months after last injection

At 6 months, if there is inadequate healing, check CTx

If CTx >200, start po risedronate/alendronate

After 3 wks, if CTx not adequately controlled, may need iv zoledronate or denosumab to suppress rebound increase in bone turnover (which may hinder healing) with or without additional teriparatide to promote healing

## Patient on po bisphosphonate

Can withhold for 6 weeks prior to dental work

Restart once adequate healing. Teriparatide is an option if inadequate healing.

## Patient on iv zoledronate

Time extraction towards 12 months or more after last infusion if possible

Proceed with next dose as appropriate. Teriparatide is an option if inadequate healing.

# Example scenario: A patient has a fracture on long term antiresorptive therapy and qualifies for intensification of therapy with osteoanabolic

**Patient on denosumab**

- If patient has received <4 doses of denosumab, could change to romosozumab but not able to change directly to teriparatide due to risk of rapid bone loss (would need transition to bisphosphonate first)
- If patient has received ≥4 doses, will need to change to oral followed by iv bisphosphonate first and monitor CTx with 6-12-weekly blood tests. Once rebound bone loss has stabilized, add in osteoanabolic

**Patient on bisphosphonate**

- Change to osteoanabolic agent


# Zoledronate

- Similar efficacy to denosumab
  - 50-70% reduction in vertebral fracture risk, ~40% reduction in hip fracture risk
- 5mg iv every 12-24 months
- Main barriers to use in GP
  - Route of administration
  - Acute side effects

# How to administer

- Comes in premixed 100 ml vial (insert giving set directly into vial), given over 15 min
- IV access
- 25ml N/saline flush before and after
- Observations before and after

- Easier than an iron infusion!

# Checklist

Vitamin D replete

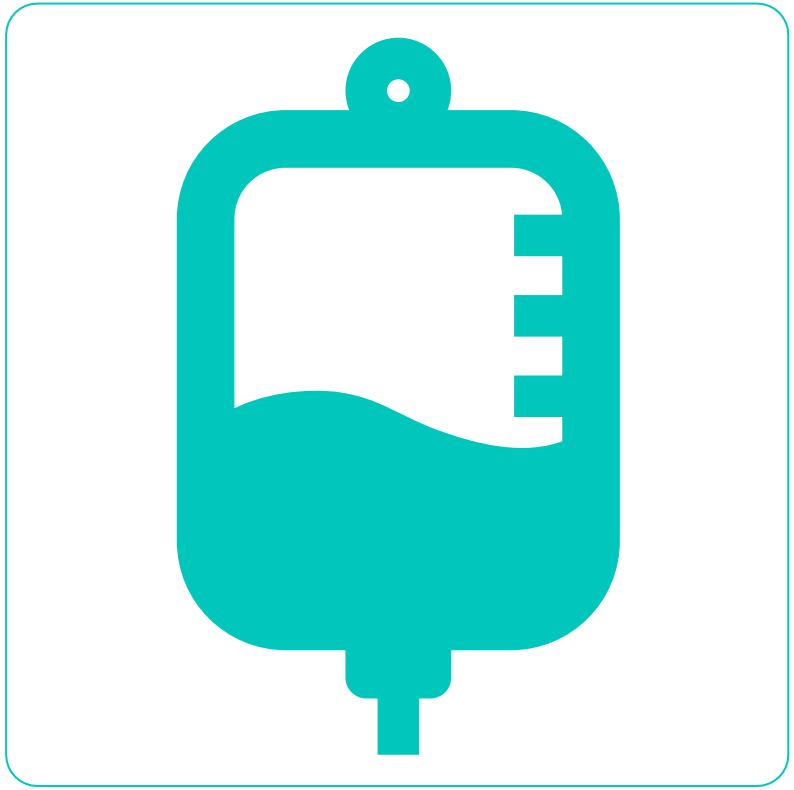
Proceed if >50 nmol/L, keep 70-100 nmol/L as a rough target in mind

eGFR >30

Can still be used in a specialist setting at lower eGFR

# Acute phase reaction

- Due to uptake of zoledronate into monocytes -> release of pro-inflammatory cytokines
- Less likely with subsequent infusions
- Symptoms:
  - Fever (most common) ~20%
  - Arthralgias/myalgias
  - Fatigue
  - Abdo pain, vomiting, diarrhoea
  - Ocular inflammation
  - Nasopharyngitis
- Onset begins a few hours after infusion, usually lasts 1-3 days



# Acute phase reaction

- **Counselling and expectation management is vital!**

- Regular paracetamol +/- NSAIDs from 1hr prior to infusion and for 48 hrs after
- Offer po dexamethasone 4mg for 3 days (D0-D2) if high likelihood of APR or patient anxious regarding APR
- If APR occurs, associated greater improvement in fracture risk. If pt has had previous bisphosphonate exposure, much lower likelihood of APR.
- Subsequent infusions are much less likely to cause APR
- Consider 3-6 months of po bisphosphonates first if worried

# Key questions

- Who to screen
- Who to treat
- With what and how long
- When to refer

# When to refer

- Not typical primary osteoporosis, e.g.
  - Younger than expected
  - More fractures than expected
- Fractured on therapy
- Difficulty finding an appropriate agent
- On >10 years of antiresorptive therapy and no specialist-led plan for long term treatment
- Denosumab withdrawal after >2 doses denosumab

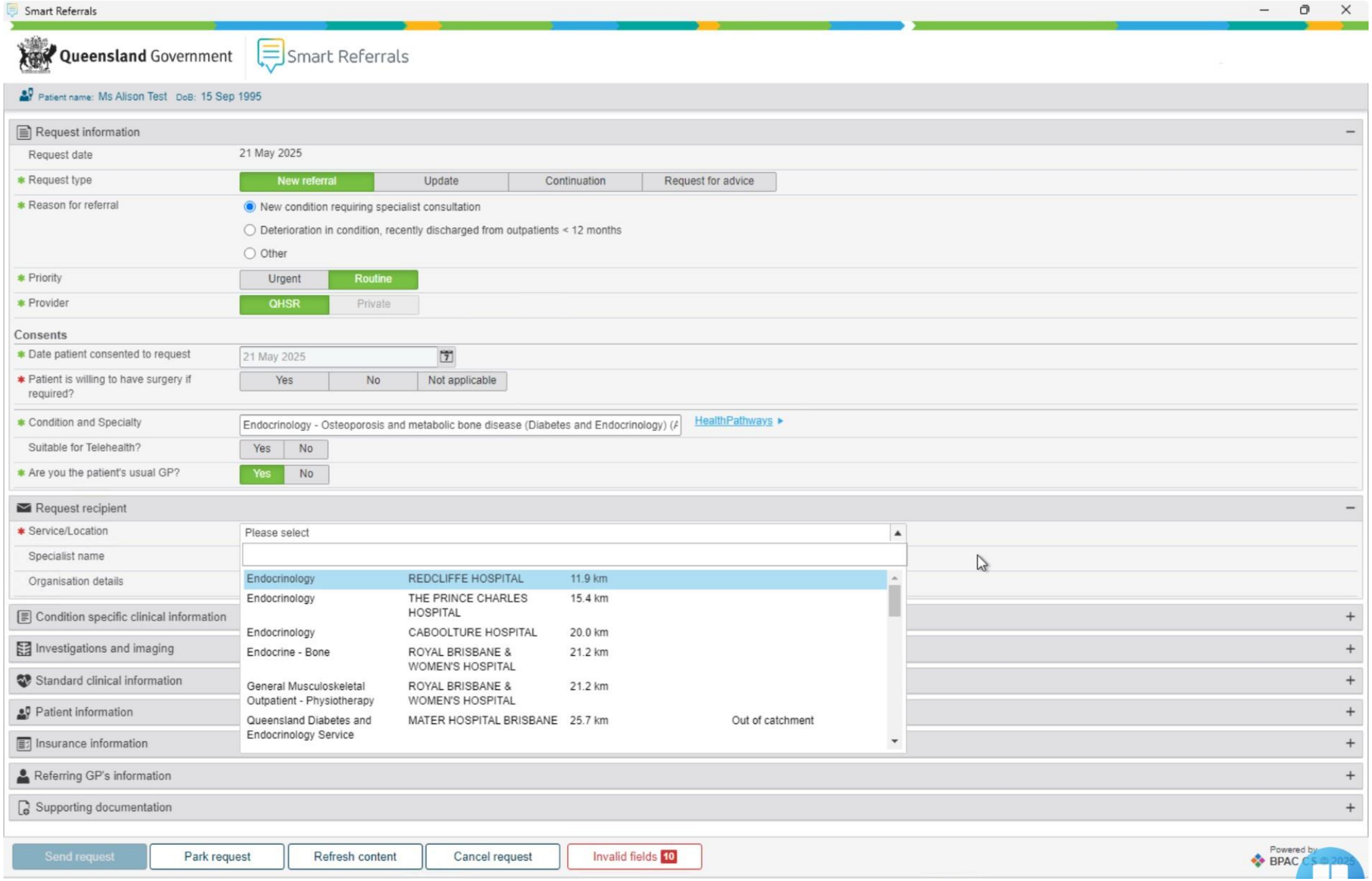
# Take home messages

Antiresorptive therapy should not be “set and forget”

Carefully consider before starting anyone on denosumab

Denosumab cessation can be complex and must always be covered by bisphosphonate therapy +/- specialist supervision

Zoledronate is a great option that can be easily given in General Practice


Smart Referrals
Queensland Government
Smart Referrals
Patient name: Ms Alison Test DoB: 15 Sep 1995
Request information
Request date
21 May 2025
Request type
New referral
Update
Continuation
Request for advice
Reason for referral
New condition requiring specialist consultation
Deterioration in condition, recently discharged from outpatients < 12 months
Other
Priority
Urgent
Routine
Provider
QHSR
Private
Consents
Date patient consented to request
21 May 2025
Patient is willing to have surgery if required?
Yes
No
Not applicable
Condition and Specialty
Endocrinology - Osteoporosis and metabolic bone disease (Diabetes and Endocrinology) (A
HealthPathways
Suitable for Telehealth?
Yes
No
Are you the patient's usual GP?
Yes
No
Request recipient
Service/Location
Please select
Specialist name
Organisation details
Endocrinology REDCLIFFE HOSPITAL 11.9 km
Endocrinology THE PRINCE CHARLES HOSPITAL 15.4 km
Endocrinology CABOOLTURE HOSPITAL 20.0 km
Endocrine - Bone ROYAL BRISBANE & WOMEN'S HOSPITAL 21.2 km
General Musculoskeletal Outpatient - Physiotherapy ROYAL BRISBANE & WOMEN'S HOSPITAL 21.2 km
Queensland Diabetes and Endocrinology Service MATER HOSPITAL BRISBANE 25.7 km Out of catchment
Condition specific clinical information
Investigations and imaging
Standard clinical information
Patient information
Insurance information
Referring GP's information
Supporting documentation
Send request
Park request
Refresh content
Cancel request
Invalid fields 10
Powered by BPAC

# Diabetes and Endocrinology

## Conditions

Please note this is not an exhaustive list of all conditions for Endocrinology and Diabetes outpatient services and does not exclude consideration for referral unless specifically stipulated in the out-of-scope section.

- Adrenal Insufficiency
- Adrenal Mass
- Assessment for metabolic surgery suitability
- Diabetes Mellitus
- Disorders of salt and water
- Endocrine Neoplasia/ Tumour Genetics
- Gender Incongruence
- Glucocorticoid excess (Cushing's syndrome)
- High Risk Foot - Diabetes and Endocrinology
- Hypercalcaemia
- Hyperprolactinaemia
- Hypertension (endocrine)
- Hyperthyroidism
- Hypocalcaemia
- Hypogonadism & infertility – male
- Hypothyroidism
- Insulinoma / hypoglycaemia unrelated to diabetes
- Lipids
- Obesity
- Oligo/amenorrhoea, hirsutism, acne, female infertility
- Osteoporosis and metabolic bone disease
- Pituitary disorders
- Thyroid enlargement / thyroid nodules

## Paediatric services

Referrals for children and young people should follow the Children's Health Queensland referral guidelines.

## Emergency department referrals

Phone on call Diabetic and Endocrinology Registrar via:

- Royal Brisbane & Women's Hospital switch - (07) 3646 8111
- The Prince Charles Hospital switch - (07) 3139 4000
- Redcliffe Hospital switch – (07) 3883 7777
- Caboolture Hospital switch – (07) 5433 8888

and send patient to the Department of Emergency Medicine (DEM) at their nearest hospital.

## Adult conditions

### Pancreatic disease

- Diabetic ketoacidosis – **A**
- Acute severe hyperglycaemia
- Acute severe hypoglycaemia – **A**
- Hyperosmolar hyperglycaemic state (HHS) – **A**
- Newly diagnosed type 1 diabetes – **B** (call registrar or consultant on call)
- Foot ulcer with infection and systemically unwell or febrile – **A**
- Invasive infection or rapidly spreading cellulitis (defined by peripheral redness around the wound >2cm) – **A**
- Acute ischaemia – **A**
- Wet gangrene – **A**
- Diabetes and severe vomiting – **A**

**Urgent cases – (refer to key below)**

**A** – client to present to emergency department immediately

**B** – client to present to diabetes specialist service within 24 hours. If no specialist service is available, present to an emergency department.

### Send referral

**Hotline: 1300 364 938**

**Electronic:**
GP Smart Referrals (preferred)
eReferral system templates
**Medical Objects ID:** MQ40290004P
**HealthLink EDI:** qldmnhhs

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

### 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

### Locations

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

### Resources

Specialists list
General referral criteria





# Osteoporosis and metabolic bone disease

## 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

- Recurrent or current fractures despite initiation of treatment for osteoporosis
- Fracture with delayed or missed denosumab therapy

**Category 2**
Appointment within 90 days is desirable

- New diagnosis severe osteoporosis with T ≤3.0 and recent fracture
- Pagets disease – symptomatic or ALP ≥2 fold ULN
- Fibrous dysplasia
- Osteomalacia
- Low trauma fracture, in individuals in whom there are contraindications/concerns regarding conventional osteoporosis management
- Atypical femoral fracture
- Long term glucocorticoids with BMD t-score <-1.5, in individuals in whom there are contraindications/concerns regarding conventional osteoporosis management
- Post-transplant osteoporotic (BMD t-score <-2.5) and/or fracturing and/or using glucocorticoids
- Osteoporosis where PBS thresholds are not met (e.g. Inflammatory bowel disease)
- Unexplained osteoporosis

**Category 3**
Appointment within 365 days is desirable

- Osteoporosis on BMD without fracture in patients <70 years
- Other (suspected) metabolic bone disease eg.Osteogenesis imperfecta
- Incidental finding or localised Paget's disease changes on bone scan with ALP <2 fold ULN

## If your patient does not meet the minimum referral criteria

Brisbane North

Search HealthPathways

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- Investigations
- Lifestyle and Preventive Care
- Medical
  - Assault or Abuse
  - Cardiology
  - Dermatology
  - Diabetes
  - Endocrinology
    - Amenorrhoea
    - Gynaecomastia
    - Hypercalcaemia
    - Long-term Corticosteroids
    - Osteoporosis
      - Zoledronic Acid Infusion
    - Primary Hyperparathyroidism (PHPT)
    - Testosterone Deficiency in Men
    - Thyroid
    - Endocrinology Requests
  - Gastroenterology
  - General Medicine
  - Genetics
  - Haematology
  - Hyperbaric Medicine
  - Immunology
  - Infectious Diseases
  - Intellectual and Developmental Disability
  - Neurology

/ Medical / Endocrinology / Osteoporosis

# Osteoporosis

**Clinical editor's note**

The Therapeutic Goods Administration published a safety update in December 2023 regarding Romosozumab. Romosozumab is now contraindicated in patients with a history of myocardial infarction or stroke. Stronger warnings regarding cardiovascular risks are advised.

## Background

About osteoporosis

## Assessment

1. Consider testing for osteoporosis in patients with minimal trauma fractures or with major clinical risk factors for osteoporotic fracture.
2. Request DEXA scanning.
   - Check criteria for a Medicare rebatable DEXA scan. Patients not eligible may be able to claim a refund from their private health insurer.
   - See interpretation of DEXA results.
3. Consider FRAX risk assessment:
   - If the patient is aged > 50 years with any risk factors, consider FRAX to further risk stratify patients.
   - If FRAX score > 10% refer for DEXA, if not already completed, and then determine further risk according to results.
4. If suspected or confirmed osteoporosis, consider additional investigations.
5. Consider secondary causes of osteoporosis and investigate accordingly.

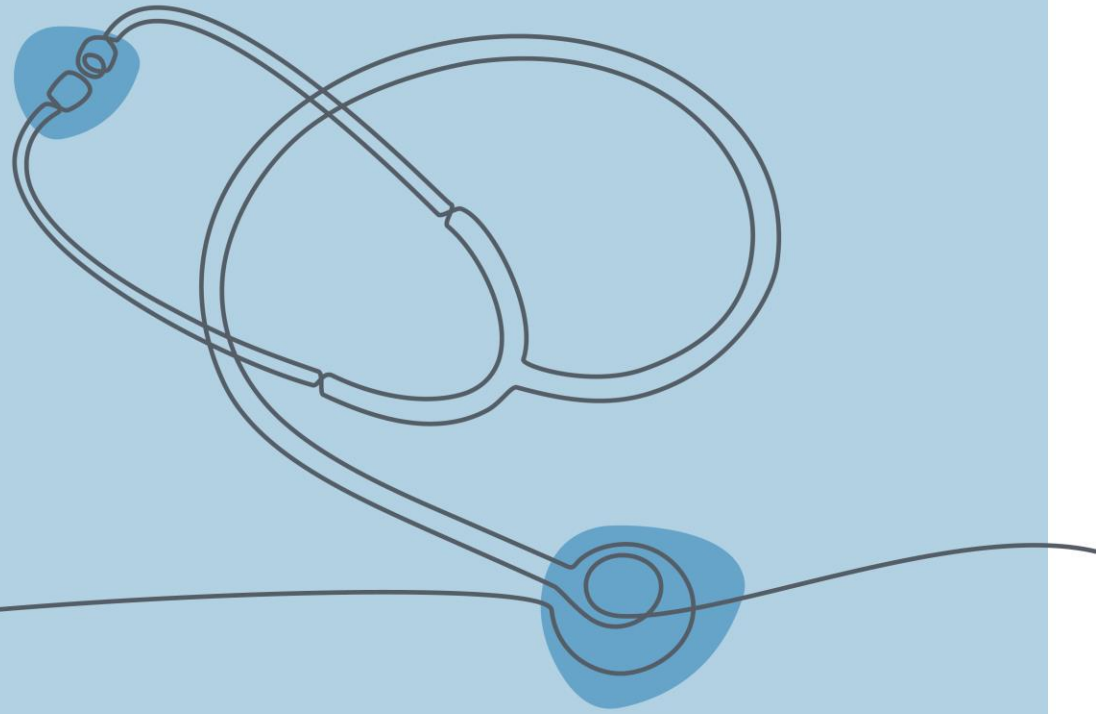
## Management

1. If premenopausal woman, or man aged < 50 years, with suspected osteoporosis, request non-acute endocrinology assessment. Diagnostic assessment in these patients is complex, multifactorial, and not based on DEXA measurement alone.
2. Consider anti-osteoporosis medication and bone health maintenance strategies if:
   - Postmenopausal woman, or man aged > 50 years, with either of:
     - Minimal trauma hip or vertebral fracture
     - Minimal trauma fracture other than hip or vertebra (toes and fingers excluded) and DEXA T-score ≤ -1.5
   - Patient with no history of minimal trauma fracture and either a:
     - major clinical risk factor for osteoporotic fracture, and high estimated 10 year risk of fracture (FRAX assessment)
     - DEXA T-score ≤ -2.5.
   - A woman commencing aromatase inhibitor therapy, unless contraindicated, who is either:
     - Aged ≥ 70 years with BMD T-score ≤ -2.0.

General Practice Liaison Officer Program presents

# Championing Generalism Workshop

A collaborative, multi-disciplinary and multi-specialty learning opportunity for GPs covering conditions commonly managed in primary care



# We Need to Talk About Burnout

**Dr James Martin | GP & GP Liaison Officer**

phn BRISBANE NORTH
An Australian Government Initiative

Queensland Government
Metro North Health

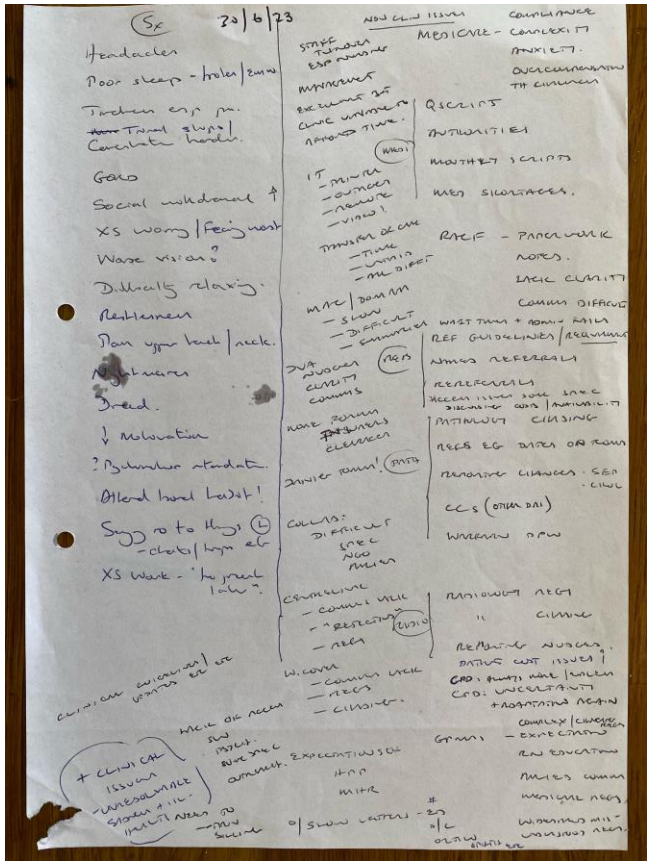
# Guarantee!

Older person safety
Gout
Lung cancer…


Satisfaction ❌
Money back ❌
Me and You ✅

# Me (1 slide)


Black Dog Institute | TEN - The Essential Network for Health Professionals



## Your results

### Burnout

# You (the rest)

- Listen
- Know
- Treat
- Manage risk...

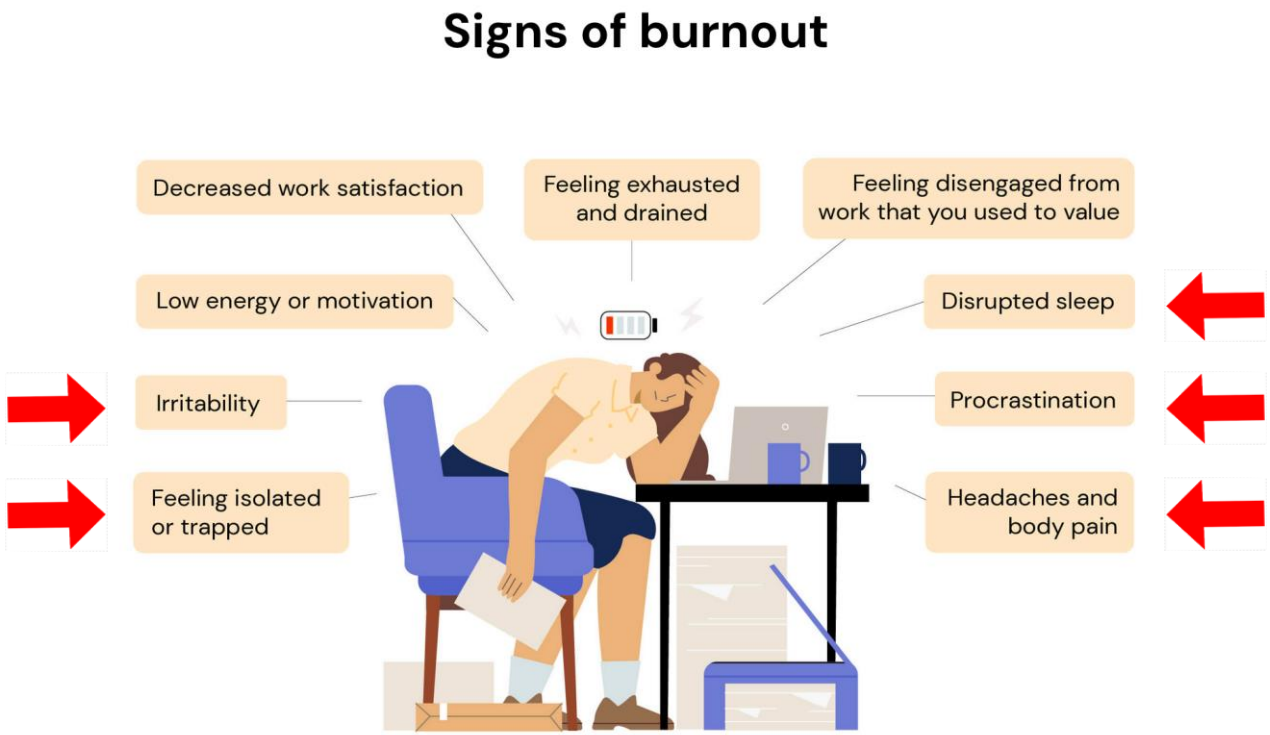



GPs reporting feelings of burnout
*RACGP, Health of the Nation*

# Burnout - Definition

1. Exhaustion
2. Disengagement
3. Reduced professional efficacy

*FROM CHRONIC WORKPLACE STRESS*




# So where does that leave us?[1]

Risk factors
- Age 40-60 (>50% of us)
- Long hours
- Poor support network
- IMG (42%)[2]

Protective factors[3]
- Autonomy
- Boundaries
- Collaboration
- CPD… ✅

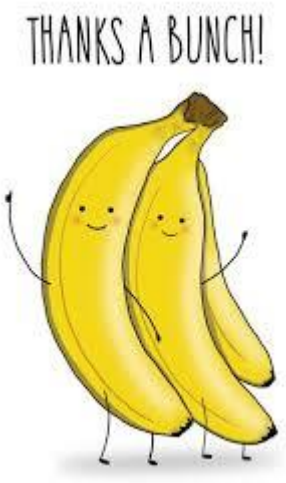
The "Evidence"…

# Let’s hear from some colleagues…

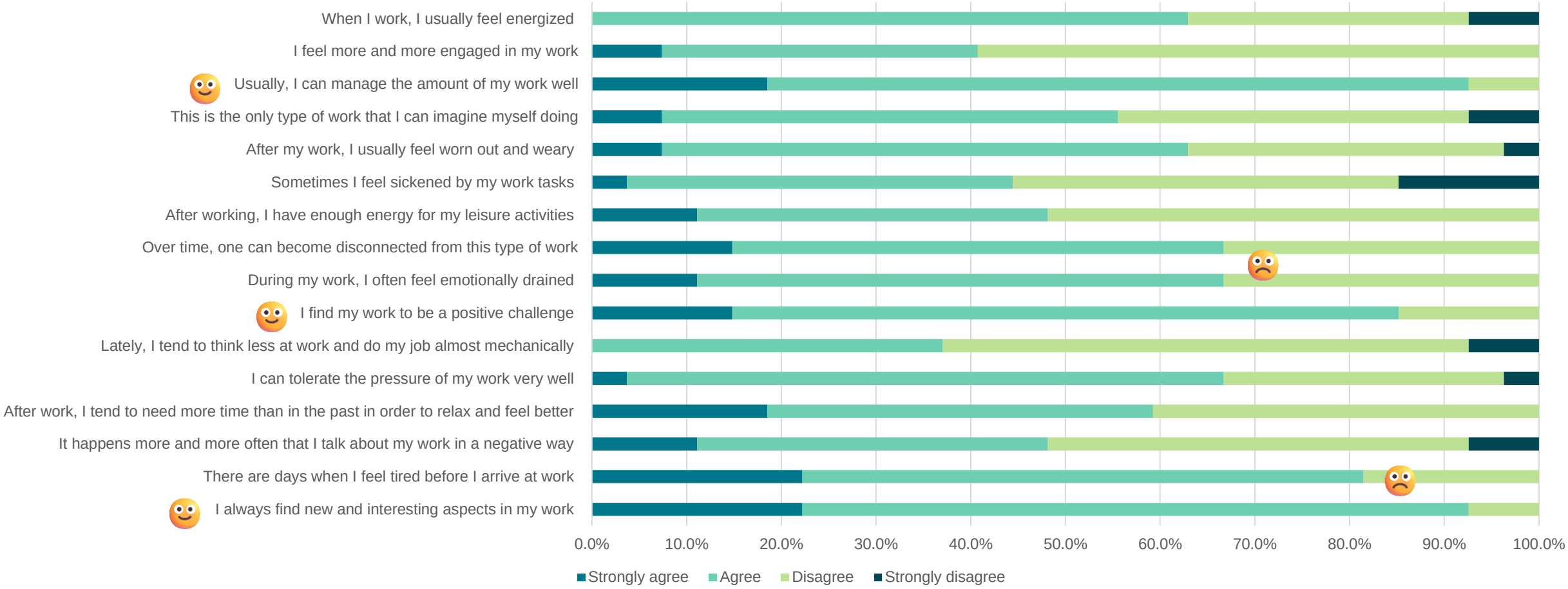
# Survey – Oldenburg Burnout Inventory (OBI)[4]

1. I always find new and interesting aspects of my work
2. It happens more and more that I talk about work in a negative way
3. After work, I tend to need more time than in the past to relax and feel better
4. I can tolerate the pressure of my work very well
5. Lately, I tend to think less at work and do my job almost mechanically
6. I find my work to be a positive challenge
7. Etc…

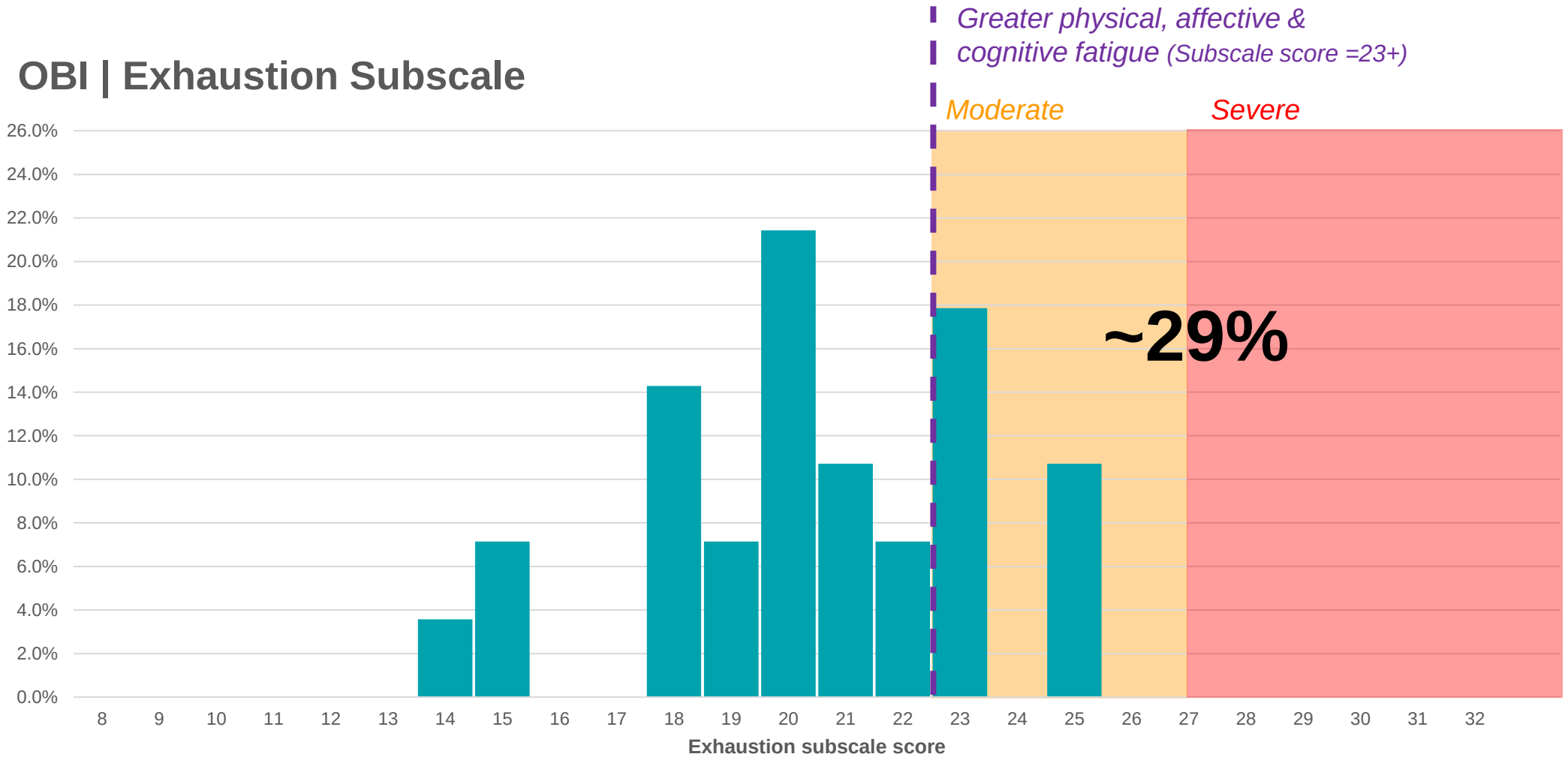
Link to calculator...



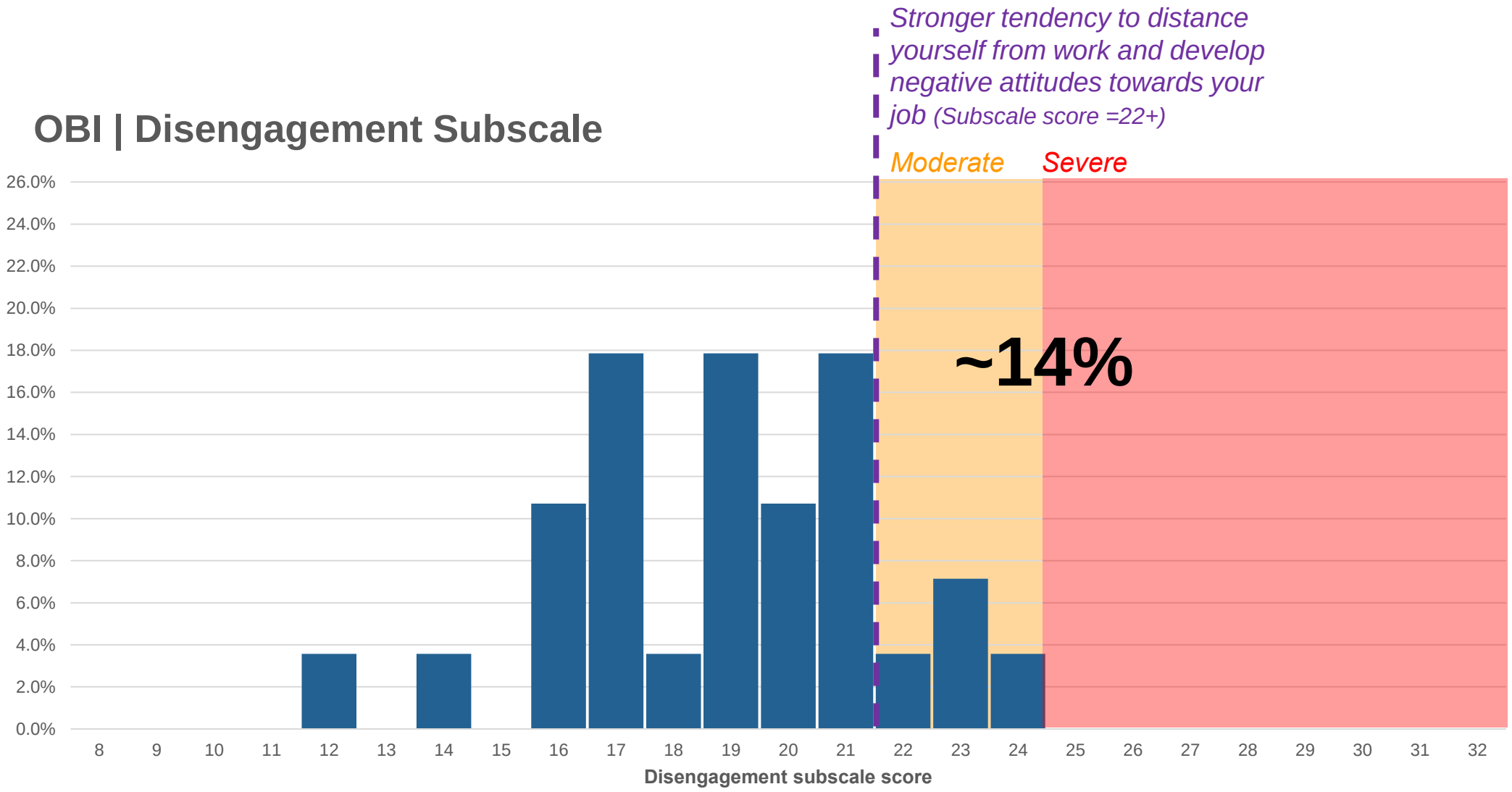
# Your OBI | Question breakdown



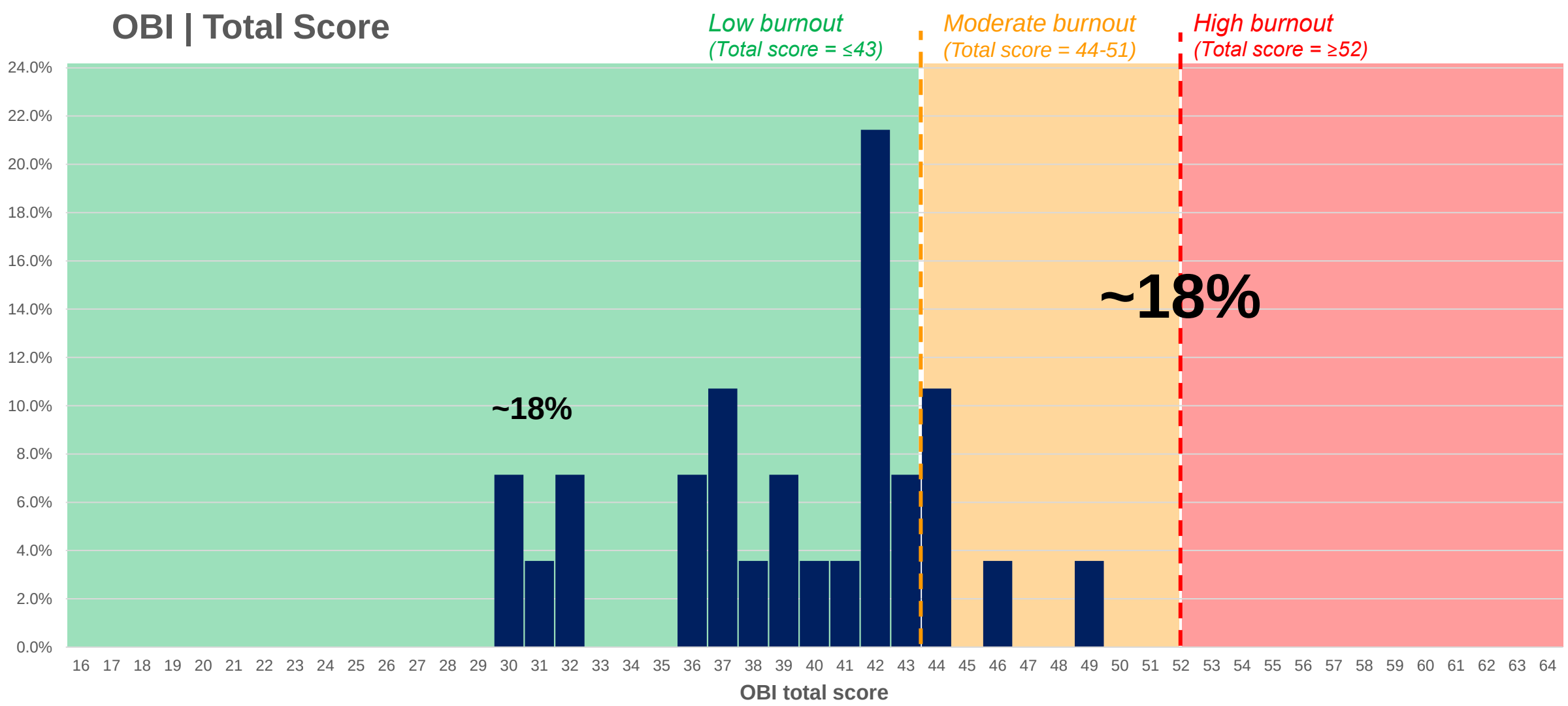
# OBI | Exhaustion Subscale



# OBI | Disengagement Subscale



“Clinically significant”



NEWSGP WEEKLY POLL

**As a GP, do you use any resources or visit a healthcare professional to support your own mental health and wellbeing?**

Yes — 38%

No — 59%

Unsure — 1%

# What can we do?

Prevention vs Cure

- Take a break
- Talk to someone
- Have a look at your life

- “THE RIGHT MINDSET”

# What do we do?

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- Allied Health
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- End of Life
- Investigations
- Lifestyle and Preventive Care
- Medical
- Mental Health
- Older Adults' Health
- Pharmacology
- Public Health
- Reproductive Health



# Clinician Health - Self-care

This pathway is about caring for your own physical and mental health as a medical practitioner. While some elements of the pathway may be useful to other health professionals, it has been written specifically for doctors.

See also Clinician Health – Caring for Colleagues.


## Background

About clinician health – self-care

## Management

1. Plan self-care in advance:
   - Have your own general practitioner. Do not be your own general practitioner.
   - Plan a yearly preventive health visit.
   - Analyse and respond to potential barriers to accessing formal health care.
2. Be aware that doctors as patients can have unsatisfactory interactions and consultations due to:
   - patient factors.

SEND FEEDBACK

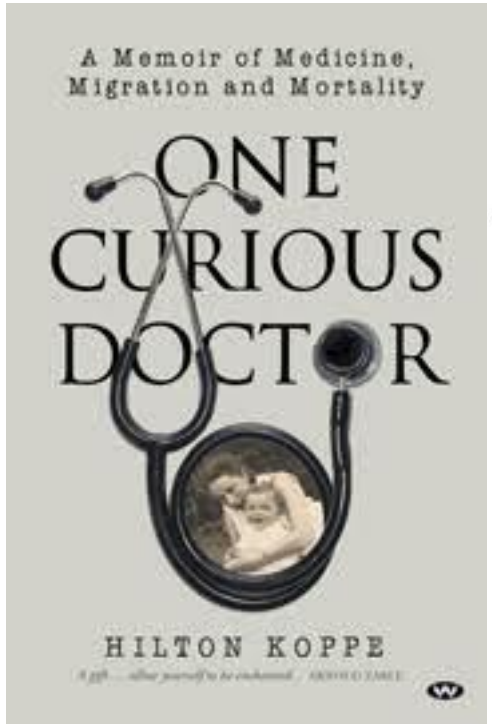
# TEN – The Essential Network for Health Professionals

Helping healthcare professionals find resources and support to navigate burnout and maintain good mental health.

# Other Resources

DOCTORS' HEALTH in QUEENSLAND

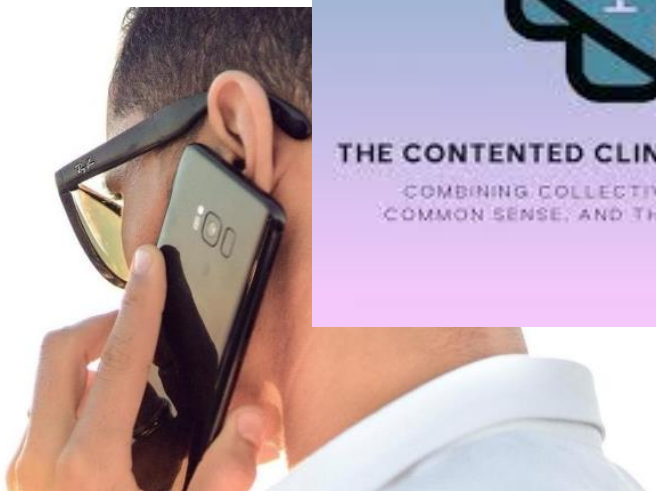
Doctor's Health in QLD
Hilton Koppe "From self-abuse to self-care"
The Contented Clinician podcast…




**24/7 HELPLINE**
07 3833 4352

DHQ provides an independent, confidential, colleague-to-colleague **support service** to assist doctors and medical students.

DOCTORS' HEALTH in QUEENSLAND



THE CONTENTED CLINICIAN PODCAST
COMBINING COLLECTIVE EXPERIENCE COMMON SENSE, AND THE BEST EVIDENCE

Family / friends
Gym/Pool
Sports
Creativity
Hobbies
Nature
Etc, etc...

CPD
Troubleshooting
Connecting with colleagues…


“Almost everything will work again if you unplug it for a few minutes, including you.”
— Anne Lamott

# Questions?

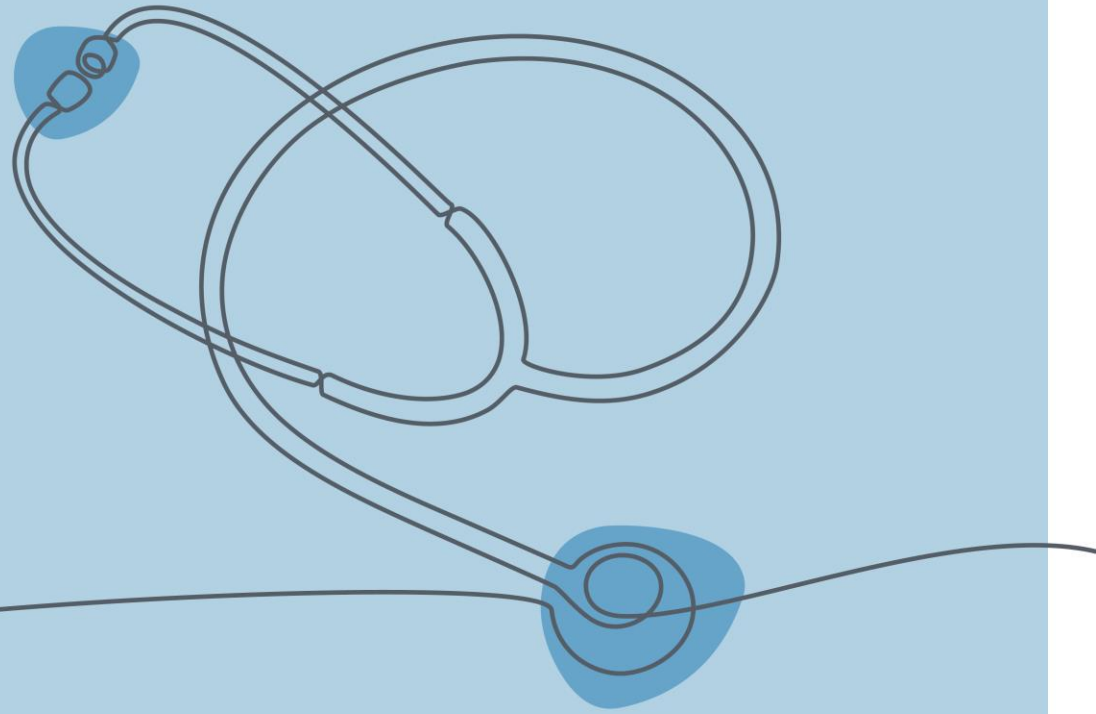
# References


1. https://www.sciencedirect.com/science/article/abs/pii/S002239562200539 8?via%3Dihub
2. https://www.aihw.gov.au/reports/workforce/health-workforce
3. file:///Users/jim/Downloads/fpsyg-13-1064889.pdf
4. https://novopsych.com/assessments/well-being/oldenburg-burnout-inventory-olbi/

General Practice Liaison Officer Program presents

# Championing Generalism Workshop

A collaborative, multi-disciplinary and multi-specialty learning opportunity for GPs covering conditions commonly managed in primary care



## Post Intensive Care Syndrome

**Dr Stuart Baker | Senior Staff Specialist, ICU, Redcliffe Hospital**
**Laura Smith | Clinical Nurse Consultant, ICU, Redcliffe Hospital**

phn BRISBANE NORTH
An Australian Government Initiative

Queensland Government
Metro North Health

# ICU Follow-Up Clinic

## Redcliffe Hospital

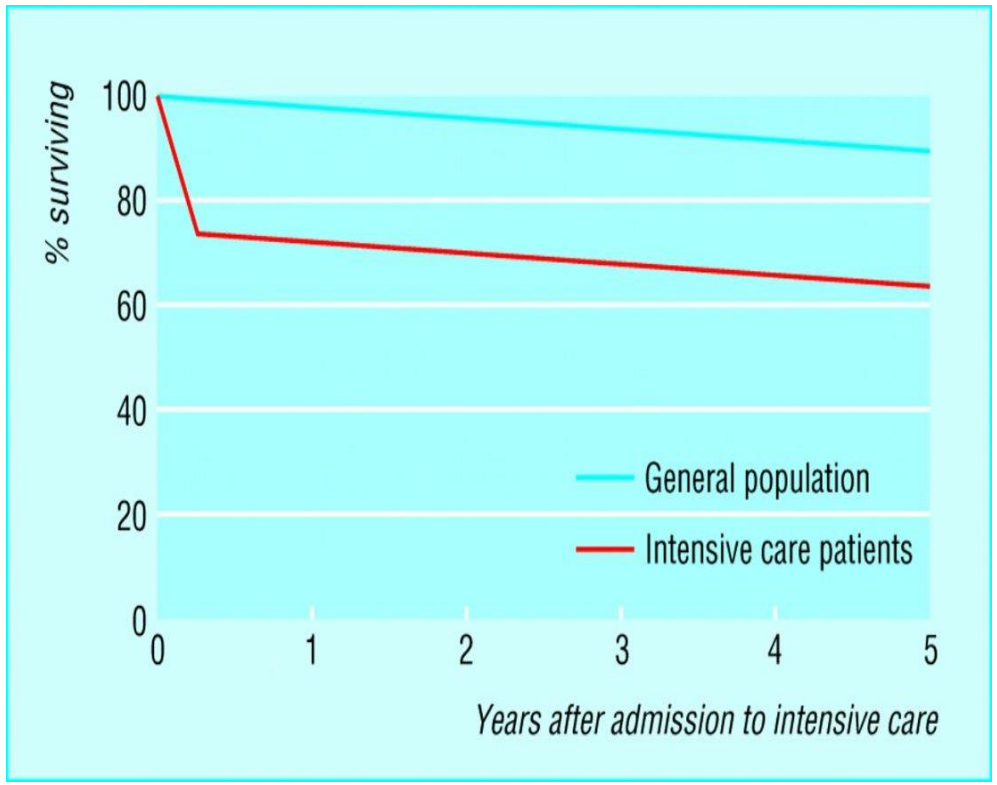
Dr Stuart Baker – Senior Staff Specialist

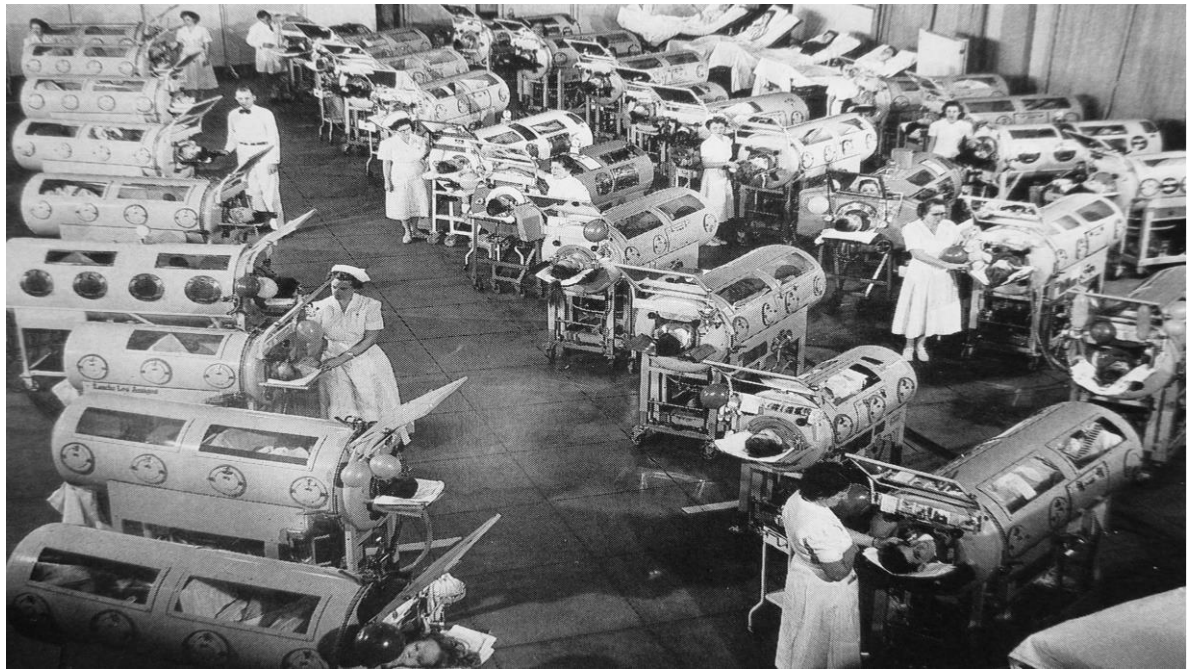
Laura Smith – Clinical Nurse Consultant

Metro North Health | Queensland Government

# Once upon a time... a (very) brief history of ICU.

- Mechanistic approach
  - Fix the problem
- Outcomes were binary
  - Survival vs non-survival
- Practitioners were happy if the patients left the ICU...



- Data from MNH
  - Approx 4500 ICU admissions per year
  - 88% of patients survive to hospital discharge (approx. 4000 per year)

- **THESE PEOPLE ARE HEADING BACK INTO OUR COMMUNITY!!**

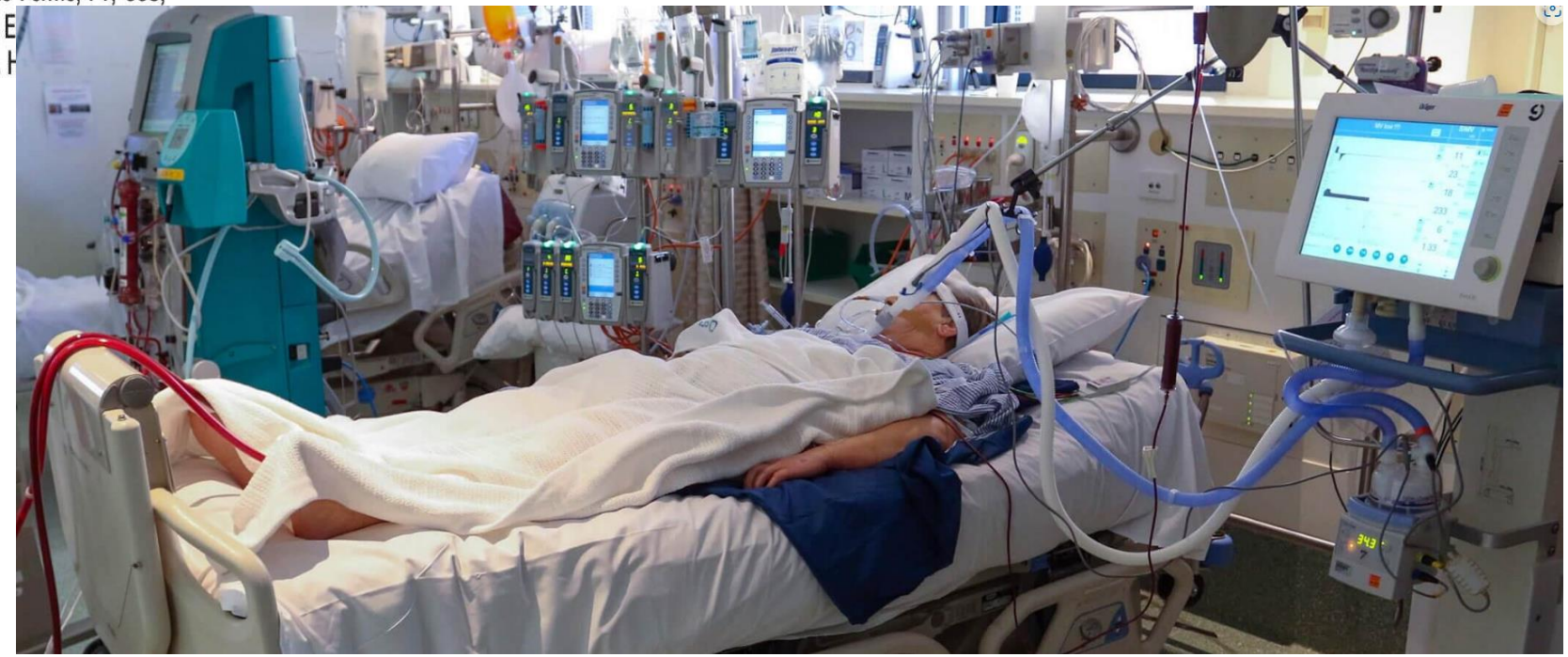
But around 2010...

# Improving long-term outcomes after discharge from intensive care unit: Report from a stakeholders' conference*

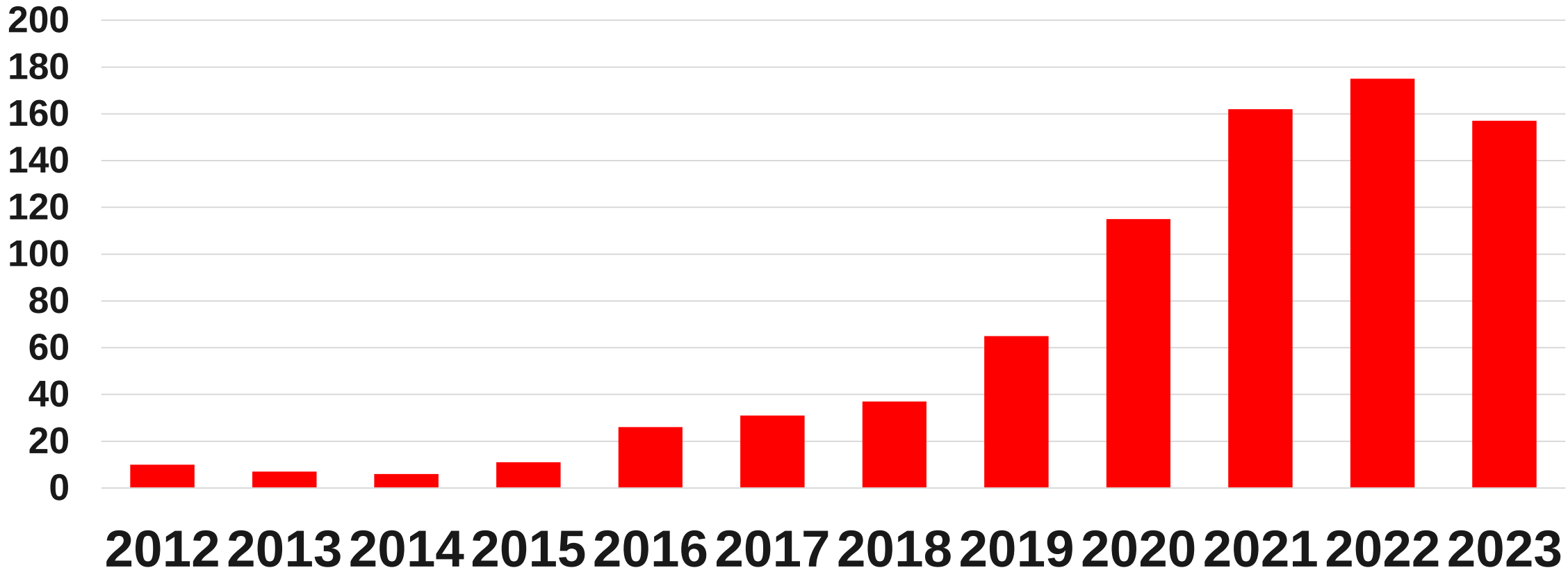
Dale M. Needham, M, PhD; Judy Davidson, DNP, RN; Henry Cohen, PharmD; Ramona O. Hopkins, PhD;
Craig Weinert, MD, MPH; Hannah Wunsch, MD, MSc; Christine Zawistowski, MD;
Anita Bemis-Dougherty, PT, DPT; Susan C. Berney, PT, PhD; O. Joseph Bienvenu, MD, PhD;
Susan L. Brady, MS; Martin B. Brodsky, PhD; Linda Denehy, PT, PhD; Doug Elliott, RN, PhD; Carl Flatley, DDS;
Andrea L. Harabin, PhD; Christina Jones, RN, PhD; Deborah Louis, RN; Wendy Meltzer, JD;
Sean R. Muldoon, MD, MPH, MS; Jeffrey B. Palmer, MD; Christiane Perme, PT, CCS;
Marla Robinson, OTR/L, MSc, BCPR; David M. Schmidt, MD, PhD; E
C. Porter Storey, MD; Marta Render, MD; John Votto, DO; Maurene A. H

= a change in metric for ICU outcomes

QUALITY of recovery



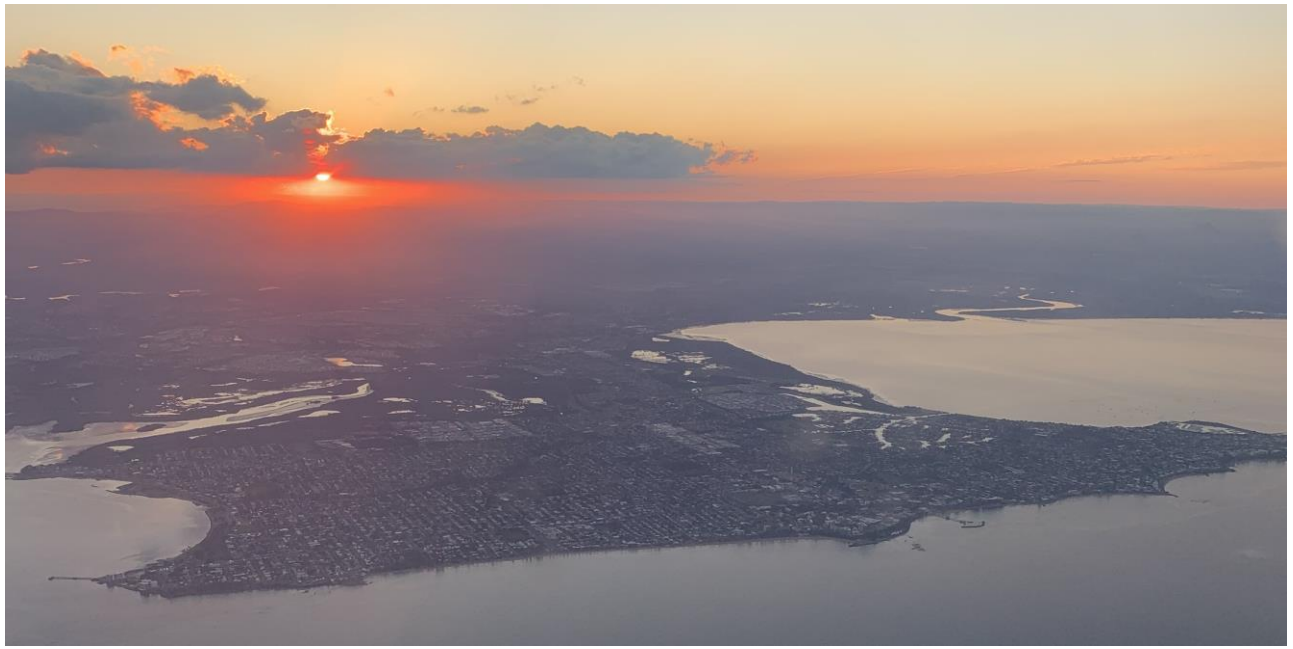
# "Post Intensive Care Syndrome" Publications



**Once upon a time in 2017…**

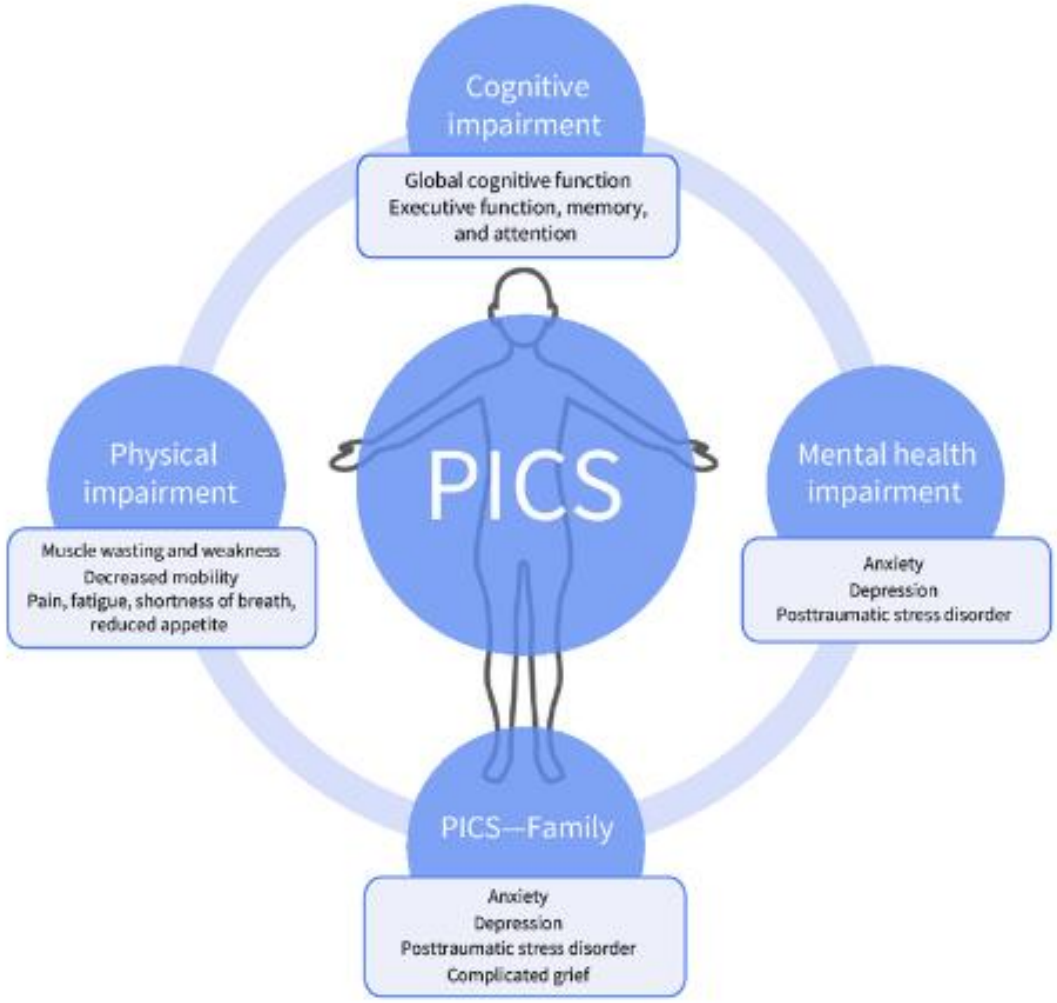
***“I want to speak with the people who understand my experiences and receive help from them to fill in the blanks”***

*(ICU patient – 2017)*



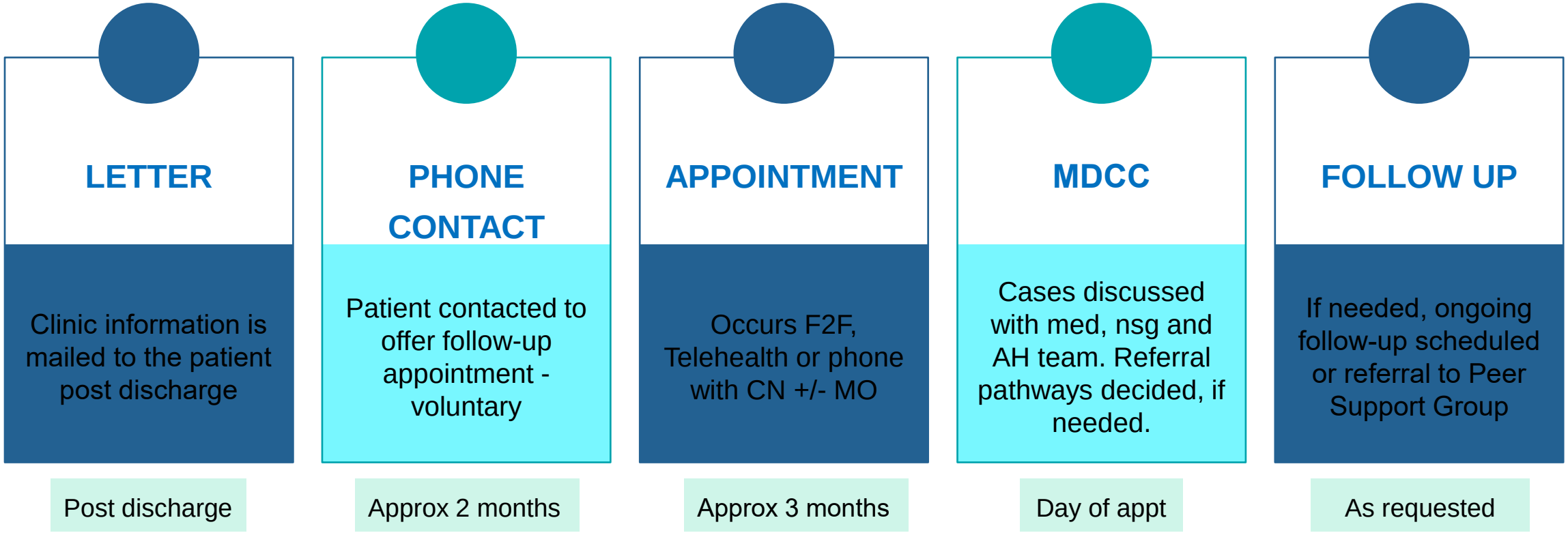
# Intensive Care Follow-Up… WHY?

- Patients frequently experience ongoing, sometimes debilitating symptoms impacting their QOL post discharge, theses can persist for months to years
  - **Cognitive**
    - Difficulties with executive function
    - Changes to memory and attention
  - **Physical**
    - Ongoing muscle wasting, weakness and fatigue
    - Changes to mobility status
    - Shortness of breath
    - Appetite and weight changes
  - **Mental health**
    - Anxiety and depression, PTSD
    - Recurrent flashbacks, hallucinations or nightmares
- **PICS-Family**
  - Family members also experience significant stress which can lead to psychological disturbance
    - Anxiety and depression, PTSD
    - Sleep deprivation
    - Anticipatory grief
    - Role changes post discharge resulting in caregiver stress




## Post Intensive Care Syndrome

# The Follow-Up Clinic Process



***How are you doing?***

***“I’m great…!”***

***How are you doing?***

***“I’m great…!”***

***What do you remember?***

***Do you worry about it?***

*How are you doing?*

*“I’m great…!”*

*What do you remember?*

*Do you worry about it?*

*Can you watch a whole movie?*

# What does a follow-up appointment involve?


- **Completion of validated assessment tools**
  - HADS –Hospital Anxiety and Depression Scale
  - PCL-5– PTSD Checklist for DSM-5 – measure of incidence of symptoms of post traumatic stress disorder
  - PROMIS-COG – assesses for patient perceived concerns in cognition
  - MST – Malnutrition Screening Tool
- **QOL Tools**
  - EQ-5D-5L – a multidimensional scale measuring mobility, self-care, usual activities, pain/discomfort and anxiety/depression
  - KATZ Index of Independence in ADL's
  - Clinical Frailty Scale
- **General discussion**
  - Resolution of reason for admission inc. Vascular access sites, airway issues
  - Speech pathology questions – difficulties with voice quality and communication, swallow
  - Family and psychosocial recovery
  - Return to work
  - What do the patients say about the care they received?
- **MDCC and referral pathways**

# What do we do with that information?

- Establish referral pathways for the patients' reported concerns, for example;
  - ENT
  - Rehab Day Therapy
  - Neuropsych assessment and mgmnt
  - Community based service link-ins
  - Social Work
  - Pulmonary rehab
  - Chronic complex disease team/Nurse Navigators
- Communicate with the patients GP regarding ongoing concerns and recommendations
- Provide essential debriefing and validation of their experience
- Provide education on cares and treatments delivered in ICU – this helps to reduce memory 'gaps' that can lead to symptoms of PTSD
- Provide the opportunity for a walk-through of the ICU if the patient requests this.
- Refer to the Peer Support Group

# We are LEADERS in Australia with ICU Follow-up

- The ONLY follow-up clinic in Australia with permanent funding, and have existed for 7 years!
- Established systems, processes and referral pathways already in place
- Currently following up patients from Redcliffe ICU, and some referred Caboolture ICU
- Engaged in research with other facilities nationally offering follow-up
- We will help fulfill requirements of Quality Statement 7 of the **Sepsis Clinical Care Standard** – Care after hospital and survivorship.

# Changes are afoot!

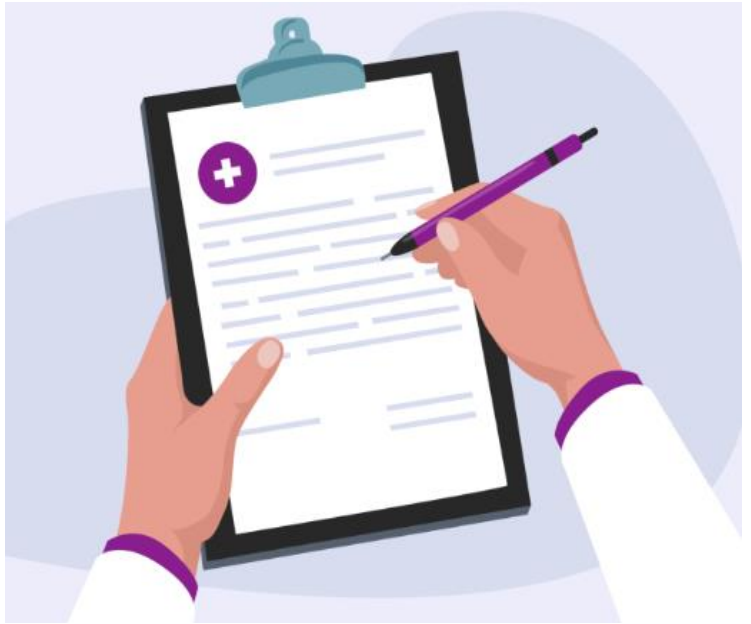
- Soon to be moving to REDCap for patient ease of access to assessment tools – send directly to patients prior to appointment

- Becoming a MNH wide service for ICU follow-up

- Minimal exclusion criteria

  - Admitted <24 hours
  - Recreational overdose

- Many more patients!



# Patients Assessed by Clinic

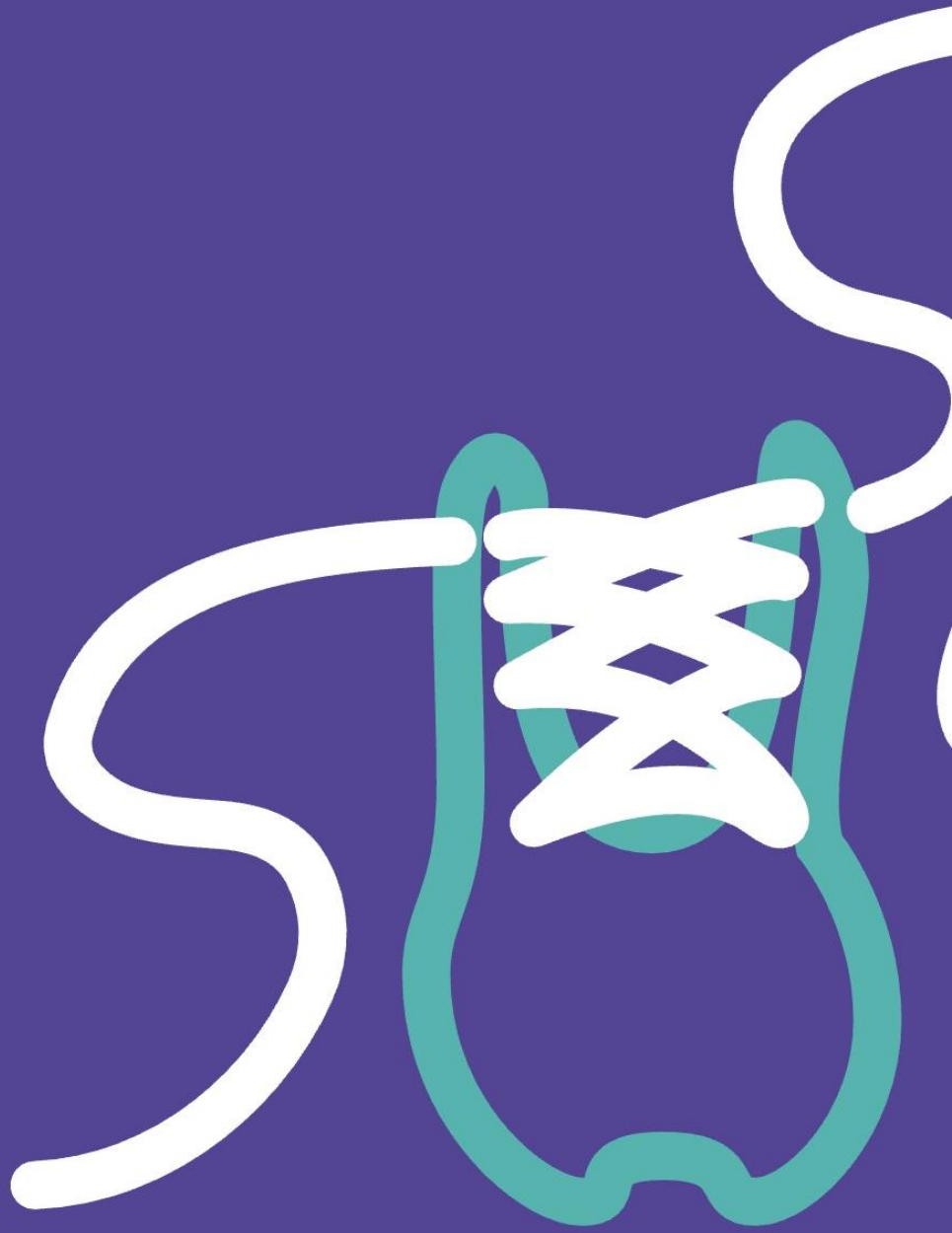
# Join the **International Walk for PICS**

Saturday, September 27, 2025

Your City

**Participants can adopt a different day in September to walk if you can't make it that Saturday.*

**JOIN US**



Queensland Government | Smart Referrals

Patient name: Ms Alison Test DoB: 15 Sep 1995

## Request information

| | |
|---|---|
| Request date | 28 May 2025 |
| * Request type | New referral \| Update \| Continuation \| Request for advice |
| * Reason for referral | (•) New condition requiring specialist consultation<br>( ) Deterioration in condition, recently discharged from outpatients < 12 months<br>( ) Other |
| * Priority | Urgent \| Routine |
| * Provider | QHSR \| Private |

### Consents

| | |
|---|---|
| * Date patient consented to request | 28 May 2025 |
| * Patient is willing to have surgery if required? | Yes \| No \| Not applicable |
| * Condition and Specialty | Post-Acute Care — HealthPathways ▸ |
| Suitable for Telehealth? | Yes \| No |
| * Are you the patient's usual GP? | Yes \| No |

## Request recipient

| | |
|---|---|
| * Service/Location | Please select |
| Specialist name | ICU Follow Up Clinic — REDCLIFFE HOSPITAL |
| Organisation details | Geriatrics — SUNSHINE COAST UNIVERSITY HOSPITAL — 58.1 km — Out of catchment |

Condition specific clinical information +

Investigations and imaging +

Standard clinical information +

Patient information +

Insurance information +

Referring GP's information

Supporting documentation

Send request | Park request | Refresh content | Cancel request | Invalid fields 4

Powered by BPAC CS

# Post ICU Follow Up Clinic

The Post Intensive Care Follow-Up Clinic is available at Redcliffe Hospital for patients who have experienced a critical illness and have been discharged from an Intensive Care Unit in Queensland.

The clinic is conducted by intensive care nurses and an Intensive Care Consultant (as required) to identify any psychological, cognitive, physical, and psychosocial issues that patients may experience as a result of their critical illness.

Patients can discuss their experience and receive education regarding the treatments that they have received. Patients are provided support to improve their quality of life and encourage positive health outcomes following critical illness.

Patients are referred to additional services as appropriate.

The Post ICU Follow-Up Clinic occurs on Thursdays at Redcliffe Hospital. Telehealth and phone consultations are available.

## Eligibility criteria

- ANY adult patient who has been admitted to ANY ICU in Queensland for greater than a 24-hour duration.
- Patients who were admitted to ICU for less than 24 hours or as a result of a recreational overdose are not eligible for this service.
- All adult patients discharged from Redcliffe ICU are automatically referred for follow up.
- GP referrals are accepted – please search "Post acute care" in the *Condition and Specialty* box on GP Smart Referrals or use the Redcliffe Hospital eReferral template.
- Referrals from internal Queensland Health clinicians or self-referrals from patients are accepted.

## Other important information for referring practitioners

- Refer to Health pathways or local guidelines
- Home – My Life After ICU – an excellent resource to assist in demystifying treatments that happen in the intensive care unit.

## Referral requirements

**A referral may be rejected without the following information.**

− Essential referral information

- Date and duration of ICU admission
- Location of ICU admission
- Reason for ICU admission
- Issues you have identified for this patient that are related to their ICU admission

### Send referral

**Hotline: 1300 364 938**

**Electronic:**
GP Smart Referrals (preferred)
eReferral system templates
**Medical Objects ID:** MQ40290004P
**HealthLink EDI:** qldmnhhs

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

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### Locations

Redcliffe Hospital

### Resources

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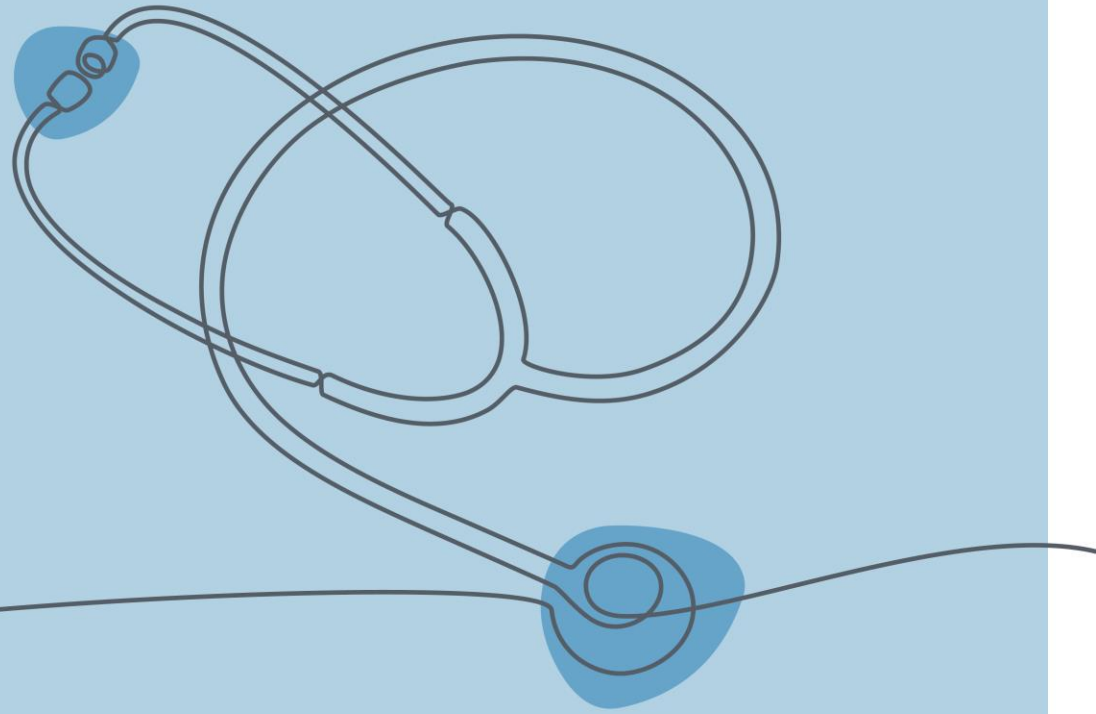


## The Infectious Diseases Cocktail

**Dr Alex Chaudhuri | Director of Infectious Diseases, TPCH**

phn BRISBANE NORTH
An Australian Government Initiative

Queensland Government
Metro North Health

# Fevers in the Returned Overseas Traveller

Championing Generalism Workshop

2025

- **Background**
- **Clinical presentations**
- **Resources**
- **Summary**

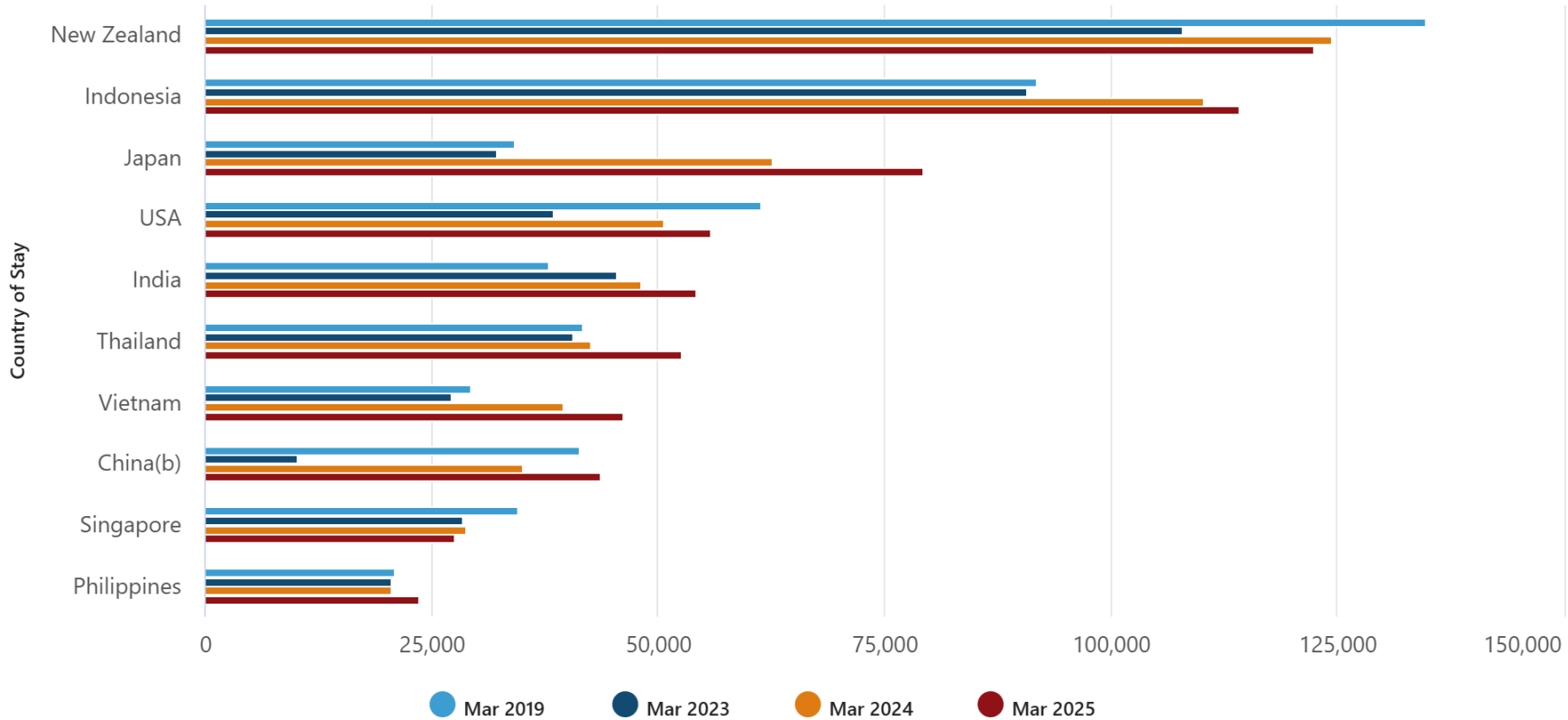
# QUIZ

- How many Australian Residents travelled overseas in 2024? 9.6 million (11.4 million trips)

# QUIZ

- How many Australian Residents travelled overseas in 2024? 9.6 million (11.4 million trips)
- Where?

## 12.2 Short-term resident returns, Australia - top 10 destination countries(a)




a. Top 10 destination countries for March 2025.
b. Excludes SARs and Taiwan.

Source: Australian Bureau of Statistics, Overseas Arrivals and Departures, Australia March 2025

# Who are returning travellers?

- Tourists:
  - package
  - up market independent
  - back packers

- Business traveller

- Travellers visiting friends or relatives (VFR)
- Aid worker/missionary

- Military

- Asylum seekers/ immigrants

# Travel history

- **Where**
- **When**
- **Why**
- **What**
- **Which**

- Where did you travel?
- When did you travel: – departure date – return date?
- Did you travel in: – urban areas – rural areas?
- What was the purpose of your travel: – tourism – visiting friends or relatives – business – other?
- What special activities did you undertake: – mountaineering – scuba diving – caving – other?
- Did you experience any specific risk exposures: – sexual risks – consume poor quality water or food – ticks or other insect bites – swim in lakes – contact with wildlife?
- What vaccinations did you receive?
- Were you taking malaria prophylaxis? If so: – which drug did you take – when did you start it – did you take it regularly as directed – are you still taking it?
- Did you become ill while away?
- Did anyone accompanying you become ill?

# Specific presentations

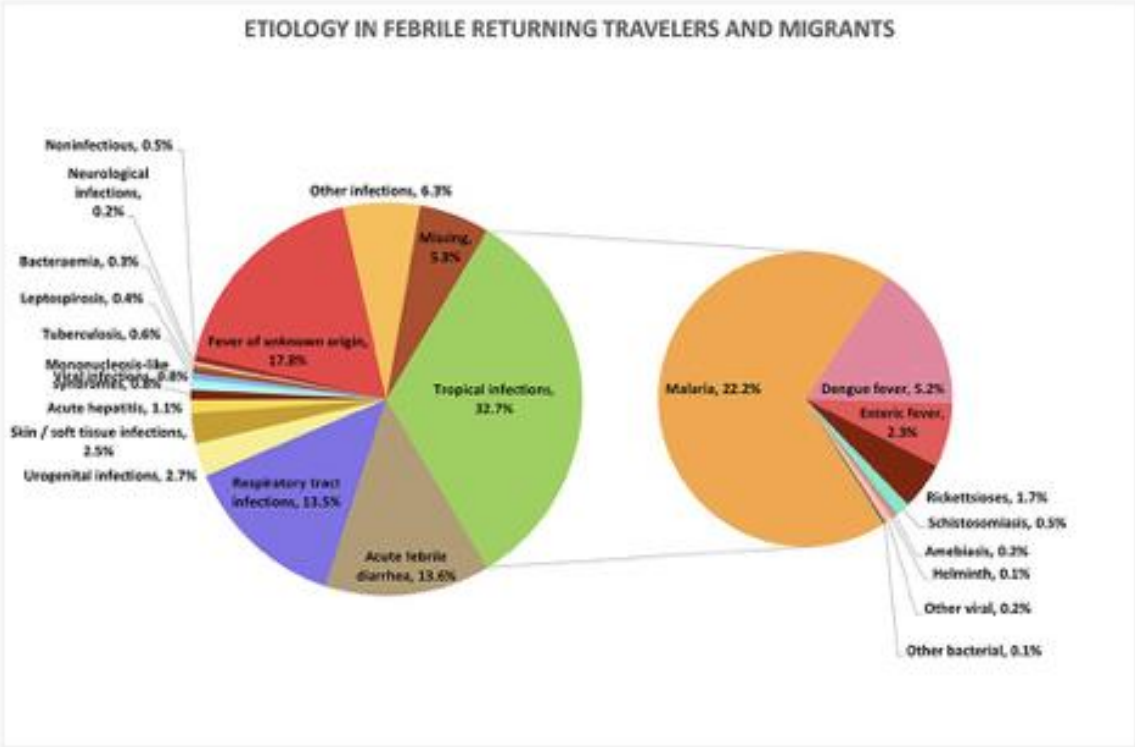
- **Fever**
- **Diarrhoea**
- **Respiratory**
- **Skin**
- **Jaundice/STI/others**

# Fever

The Big Five

- Malaria
- Dengue (or other arboviruses)
- Typhoid (or enteric fevers)
- Rickettsia
- IFI (other autochthonous viruses)

**Figure 1** Proportion of febrile returning travellers and migrants with different etiological diagnoses, with tropical ...



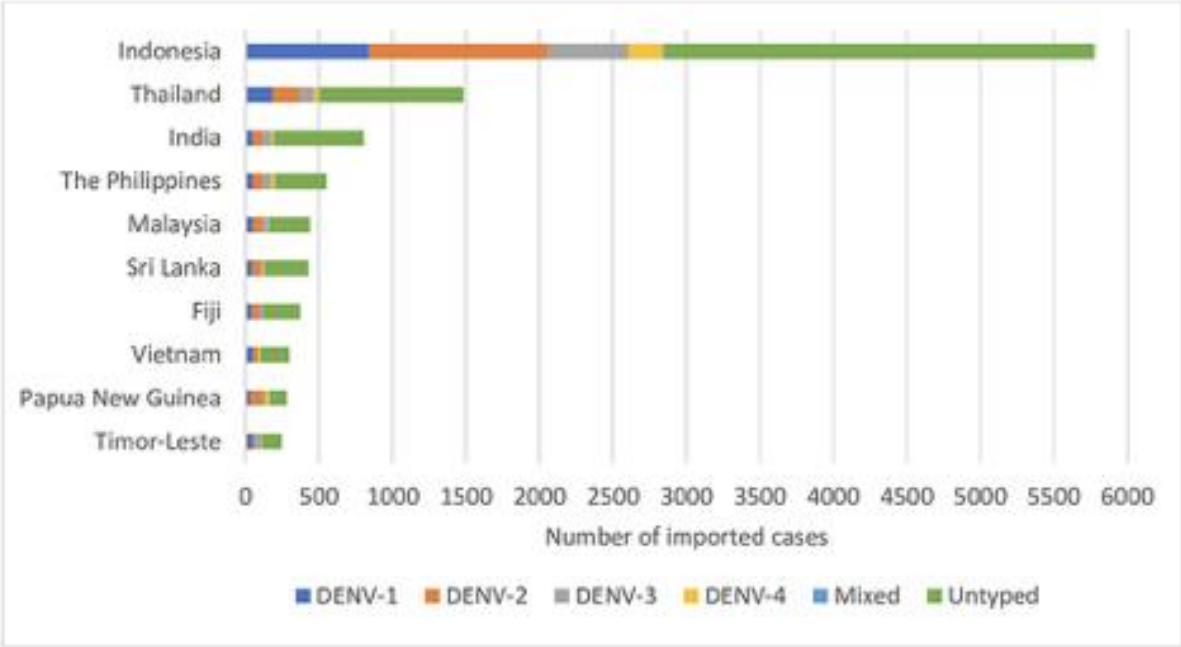

*J Travel Med*, Volume 27, Issue 8, December 2020, taaa207, https://doi.org/10.1093/jtm/taaa207

# QUIZ

- What is more likely in a returned Australian with fever?

- https://nindss.health.gov.au/pbi-dashboard/

**Figure 3** Top 10 countries of acquisition by DENV serotype for imported dengue cases, 2012–22. Abbreviations: DENV: ...

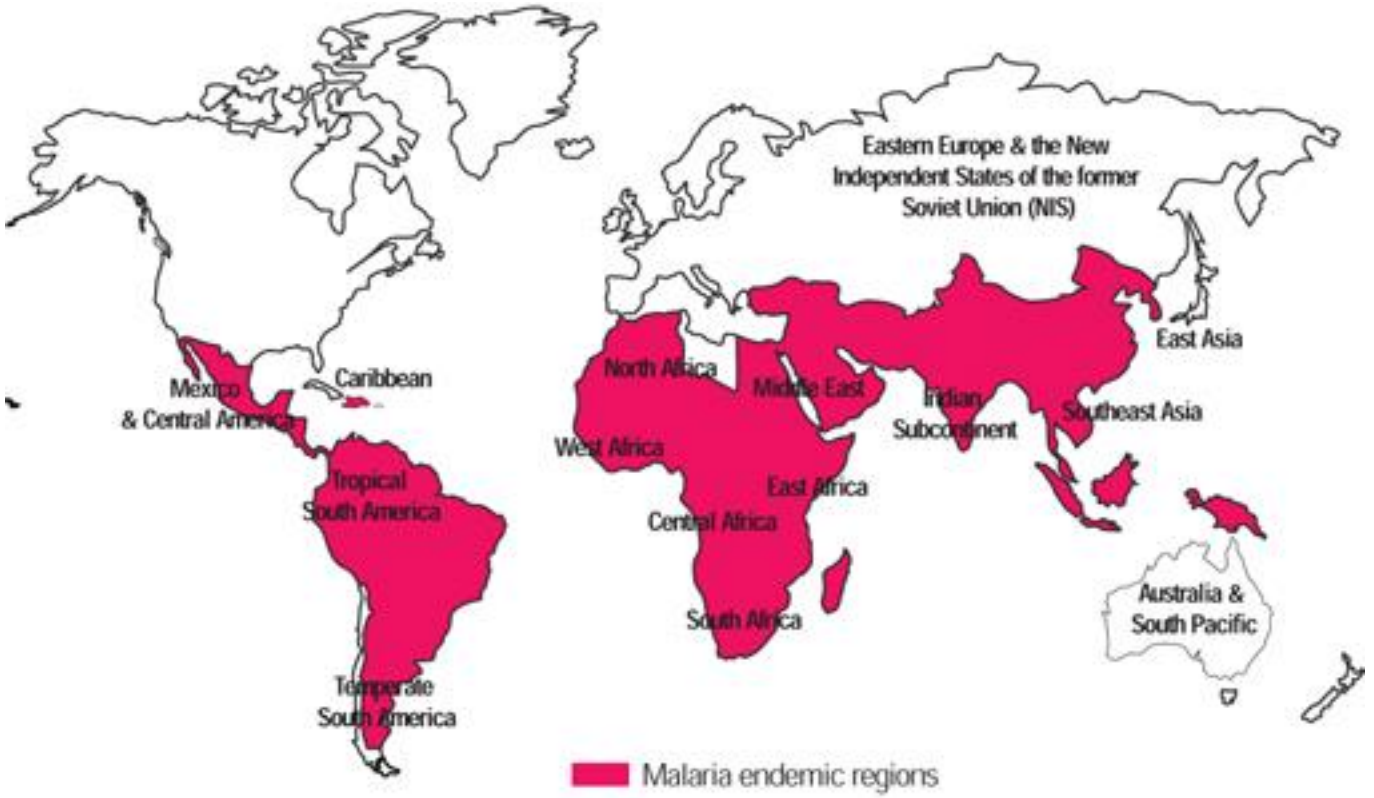



*J Travel Med*, Volume 31, Issue 2, March 2024, taae014, https://doi.org/10.1093/jtm/taae014

# Incubation for Fever

| Short (<10 days) | Intermediate (10–21 days) | Long (>21 days) |
|---|---|---|
| Malaria | Malaria | Malaria |
| Influenza | Viral haemorrhagic fevers | Hepatitis A, B, C, E |
| Arboviral infections including dengue, yellow fever | Typhoid fever | Schistosomiasis (Katayama fever) |
| Plague | Scrub typhus | Leishmaniasis |
| Enteric bacterial infections including paratyphoid fever | Q fever | Amoebic liver abscess |
| African tick bite fever | Relapsing fever (*Borrelia* spp.) | Tuberculosis |
| Spotted fever group (including Rocky Mountain spotted fever) | African trypanosomiasis | Filariasis |
| | Brucellosis | HIV |
| | Leptospirosis | |

# Malaria


Eastern Europe & the New Independent States of the former Soviet Union (NIS)
East Asia
North Africa
Middle East
Indian Subcontinent
Southeast Asia
West Africa
East Africa
Central Africa
South Africa
Australia & South Pacific
Caribbean
Mexico & Central America
Tropical South America
Temperate South America
Malaria endemic regions

# Resources

- https://www.fevertravel.ch
- https://www.cdc.gov/yellow-book/hcp/travel-associated-infections-diseases
- https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/diseases-infection/surveillance/reports/notifiable/annual
- https://nindss.health.gov.au/pbi-dashboard/

# References

CDC Current Outbreak List | Outbreaks | CDC

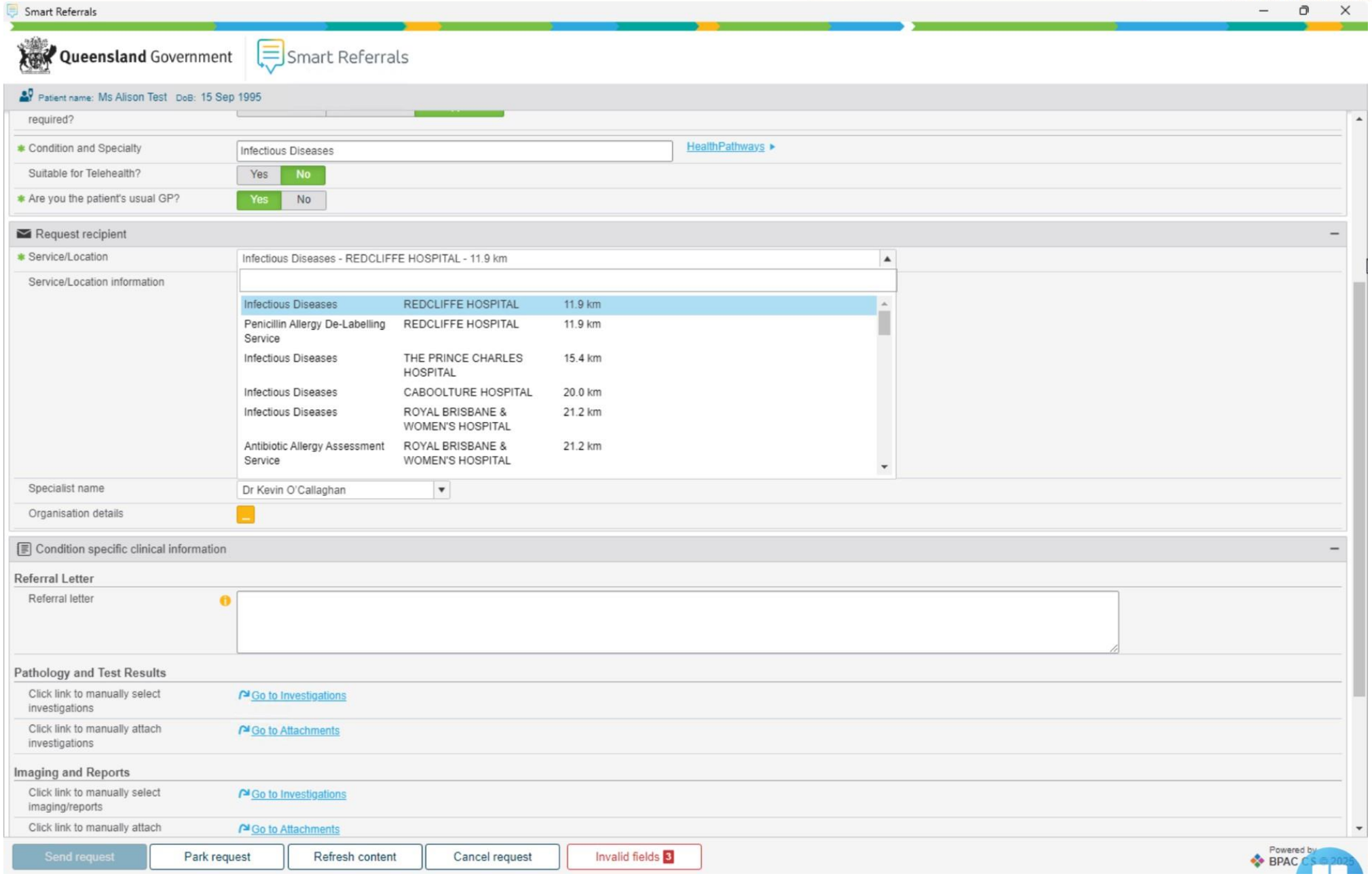
Assessment of returned travellers with fever | health.vic.gov.au

Returned traveller | Emergency Care Institute

https://www.fevertravel.ch/?home=Home

# Summary

- Always ask about travel-related activities
- Always do a malaria film if returning from an endemic area
- **Never forget autochthonous infections (HIV, IFI, Mono)**


Smart Referrals
Queensland Government
Smart Referrals
Patient name: Ms Alison Test DoB: 15 Sep 1995
required?
Condition and Specialty
Infectious Diseases
HealthPathways
Suitable for Telehealth?
Yes
No
Are you the patient's usual GP?
Yes
No
Request recipient
Service/Location
Infectious Diseases - REDCLIFFE HOSPITAL - 11.9 km
Service/Location information
Infectious Diseases REDCLIFFE HOSPITAL 11.9 km
Penicillin Allergy De-Labelling Service REDCLIFFE HOSPITAL 11.9 km
Infectious Diseases THE PRINCE CHARLES HOSPITAL 15.4 km
Infectious Diseases CABOOLTURE HOSPITAL 20.0 km
Infectious Diseases ROYAL BRISBANE & WOMEN'S HOSPITAL 21.2 km
Antibiotic Allergy Assessment Service ROYAL BRISBANE & WOMEN'S HOSPITAL 21.2 km
Specialist name
Dr Kevin O'Callaghan
Organisation details
Condition specific clinical information
Referral Letter
Referral letter
Pathology and Test Results
Click link to manually select investigations
Go to Investigations
Click link to manually attach investigations
Go to Attachments
Imaging and Reports
Click link to manually select imaging/reports
Go to Investigations
Click link to manually attach
Go to Attachments
Send request
Park request
Refresh content
Cancel request
Invalid fields 3
Powered by BPAC CS

# Infectious Diseases

## Conditions

- Bone and prosthetic infections
- Encephalitis and meningitis
- Hepatitis A
- Hepatitis B
- Hepatitis C
- HIV
- Meningococcal disease
- Mycobacterial infections
- Parasitic infections
- Pyrexia of unknown origin
- Skin infections – Chronic and recurrent
- Syphilis
- Travel related and tropical infections
- Zoonotic diseases

Infectious diseases services are provided at Redcliffe Hospital, Royal Brisbane and Women's Hospital and The Prince Charles Hospital in the Metro North Hospital and Health Service. Patients will be allocated to the various facilities based on their postcode, the availability of particular services at those facilities and equity of access across the district.

### Paediatric services

Referrals for children and young people should follow the Children's Health Queensland referral guidelines.

## Specialists list

View the full specialists list.

### Send referral

**Hotline: 1300 364 938**

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**HealthLink EDI:** qldmnhhs

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### Locations

Redcliffe Hospital
Royal Brisbane and Women's Hospital
The Prince Charles Hospital

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# Travel related and tropical infections

## Red flags

Consider urgent referral for patients with the following:

- Altered conscious level
- Breathing difficulty
- Abnormal bruising or bleeding
- Petechial rash
- Persistent vomiting
- Dehydration
- Paralysis
- Jaundice

Travel related and tropical infections include:

- Malaria
- Dengue fever
- Chickungunya
- Typhoid
- Cholera
- Schistosomiasis/bilharzia
- Ebola (very rare)
- Lyme disease

Most tropical diseases will present with an acute illness and may require urgent transfer through Emergency. However, others present with early, low grade symptoms that may provide an opportunity to investigate and initially manage within a primary care setting.

## Other important information for referring practitioners

### Medical management

An extensive review of tropical disease is outside the scope of these ID guidelines but the following may help in logical diagnosis and management based on main symptoms.

**Diarrhoea**

- Most commonly caused by E.coli as traveller's diarrhoea. Most cases resolve spontaneously. However, if:

+ Other Infectious Diseases conditions

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### Locations

Redcliffe Hospital

Brisbane North

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- End of Life
- Investigations
- Lifestyle and Preventive Care
- Medical
  - Assault or Abuse
  - Cardiology
  - Dermatology
  - Diabetes
  - Endocrinology
  - Gastroenterology
  - General Medicine
  - Genetics
  - Haematology
  - Hyperbaric Medicine
  - Immunology
  - Infectious Diseases
    - Australian Bat Lyssavirus (ABLV) Immunisation and Exposure
    - Cellulitis and Erysipelas in Adults
    - Hepatitis B
    - Hepatitis C (HCV)
    - Herpes Zoster (Shingles)
    - Infectious Mononucleosis
    - Influenza



# Infectious Diseases

## In This Section

- Australian Bat Lyssavirus (ABLV) Immunisation and Exposure
- Cellulitis and Erysipelas in Adults
- Hepatitis B
- Hepatitis C (HCV)
- Herpes Zoster (Shingles)
- Infectious Mononucleosis
- Influenza
- Meningococcal Disease
- Mpox (formerly Monkeypox)
- Mosquito-borne Diseases in Queensland
- Mumps
- Respiratory Pandemic Practice Management
- Pertussis (Whooping Cough)
- Recurrent Staphylococcal Infection
- Acute Respiratory Infections in RACHs
- Acute Rheumatic Fever
- Scabies
- Zika Virus
- Infectious Diseases Requests

## See Also

- Infection Prevention and Control
- Immunisation
- Measles
- Multi-drug Resistant Organisms (MDRO)

# Thank you!

## *Generalism*

**NOUN**

a philosophy of care distinguished by a commitment to the breadth of practice within each discipline and collaboration with the larger health care team in order to respond to patient and community needs.