

We desperately need funding to run GP led post covid clinics.

POST ACUTE COVID



POST ACUTE COVID-19

The World Health Organization defines post acute sequelae of COVID-19 as:

“a condition that occurs in individuals with a history of probable or confirmed SARS CoV-2 infection, usually 3 months from the onset of COVID-19 with symptoms and that last for at least 2 months and cannot be explained by an alternative diagnosis.”

Common symptoms include fatigue, shortness of breath and impaired cognitive function. Overall having an impact on everyday functioning

Symptoms may be new onset following recovery from acute COVID 19 or ongoing from initial diagnosis

Fluctuation and relapsing of symptoms is expected over time

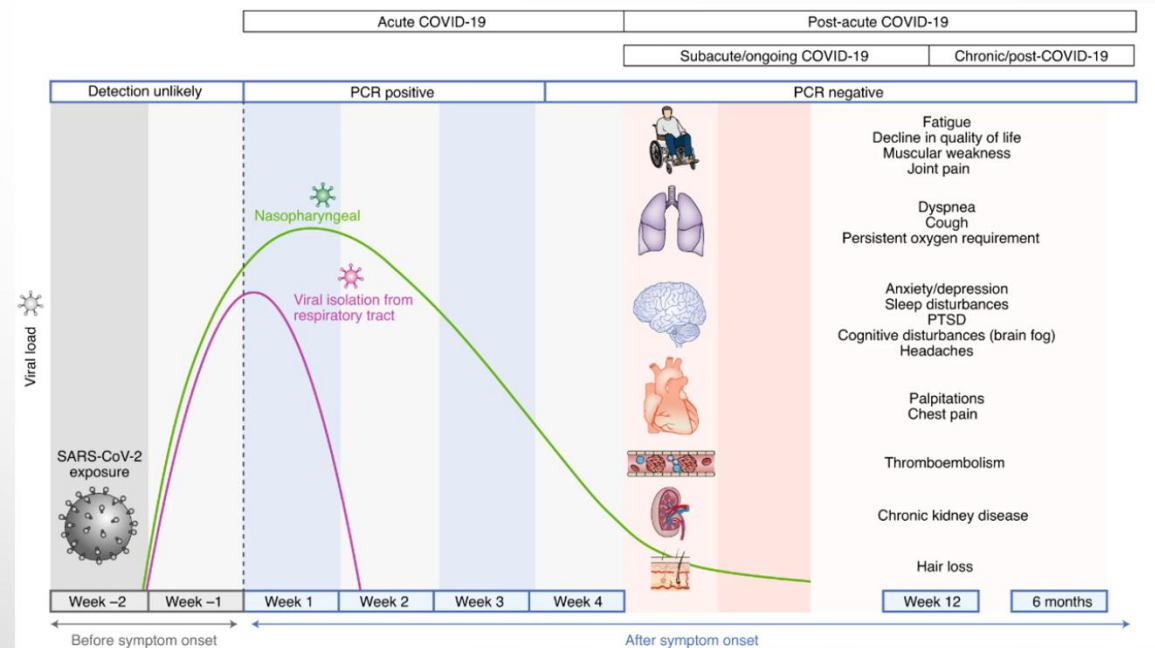
POSSIBLE SIGNS AND SYMPTOMS OF POST-ACUTE COVID19

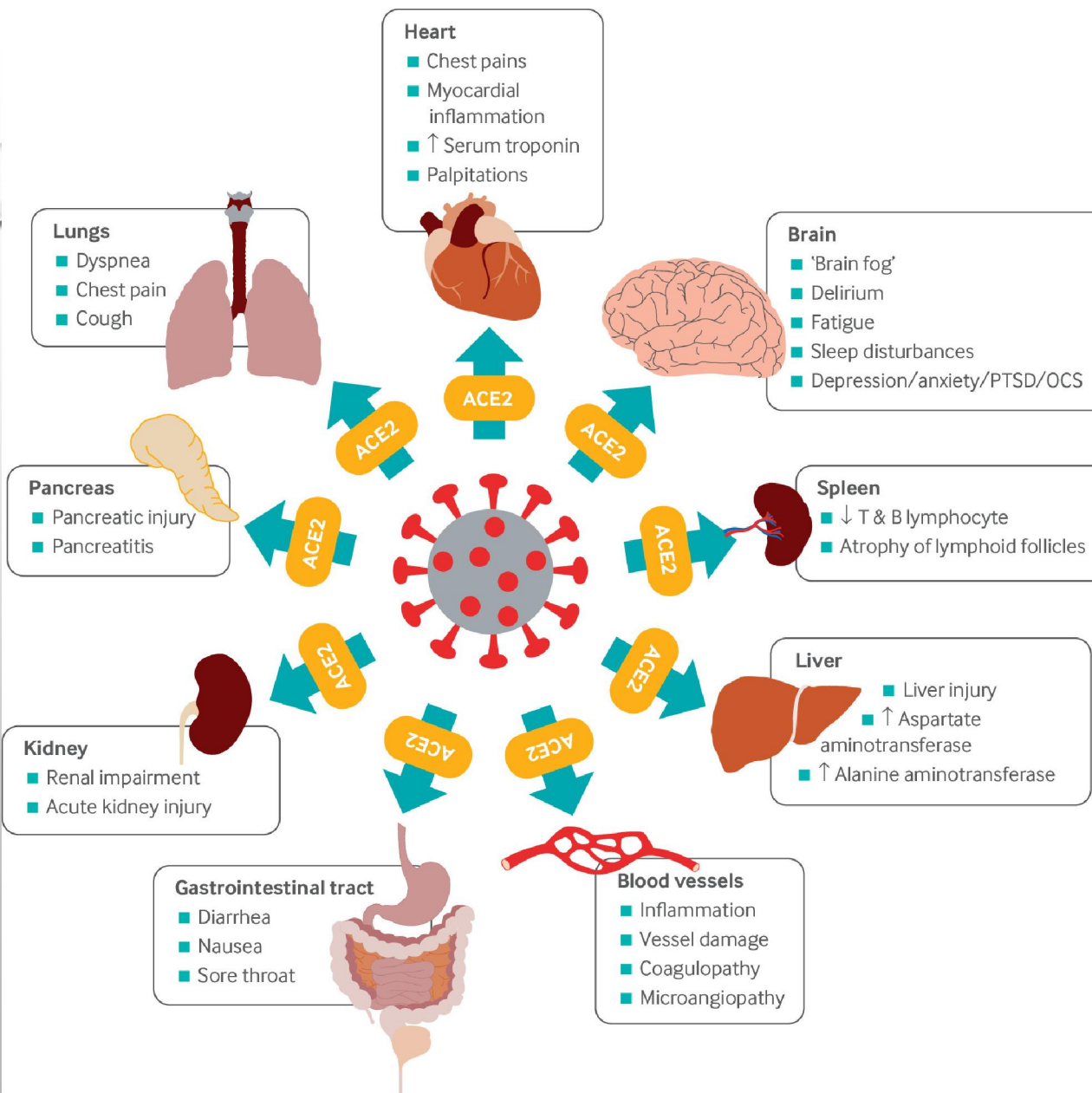
Symptoms / signs	
Pulmonary symptoms	Breathlessness Cough Chest pain
Neurological symptoms	Fatigue Headache Cognitive dysfunction Sleep disturbance Loss of smell or taste Paraesthesia Dizziness
Renal disease	Acute kidney injury during admission with evidence of persistent micro-proteinuria, elevated creatinine and/or impaired eGFR
Thromboembolism	Confirmed on CTPA, V/Q scan or ultrasound/doppler during admission <i>Note: May also include central nervous system or gastrointestinal thromboembolic disease.</i>
Psychological symptoms	Anxiety Depression Mood swings <i>Note: fatigue and sleep disturbance may also indicate the emergence of a mental health condition.</i>
Cardiovascular symptoms	Chest pain Arrhythmia Syncope Orthostatic hypotension Shortness of breath on exertion with evidence of ECG changes or raised troponin during admission COVID-19-related cardiomyopathy
Musculoskeletal symptoms	Non-specific pain Myalgia Joint pain
Reduced activity and functional level	Fatigue Assistance required with activities of daily living Reduced mobility Increased frailty score
Reduced nutritional status and weight loss	Fatigue Muscle wasting Weight loss
Post-intensive care syndrome (PICS)	One or more of the following symptoms that people experience following intensive care admission: anxiety, depression, cognitive impairment, memory loss, muscle weakness, ongoing pain, dysphagia and reduced quality of life

Source: National COVID-19 Clinical Evidence Taskforce. Care of People with Post-Acute COVID-19.⁶

POST ACUTE COVID-19 TIMELINE

- ACUTE COVID GENERALLY HAS A 4 WEEK WINDOW FROM ONSET OF SYMPTOMS.
- REPLICATION COMPETENT SARS-COV-2 HAS NOT BEEN ISOLATED BEYOND THIS POINT.
- POST-ACUTE COVID CAN BE DEFINED AS PERSISTENT SYMPTOMS/DELAYED OR LONG TERM COMPLICATIONS BEYOND THE 90 DAY MARK THAT CANNOT BE EXPLAINED BY AN ALTERNATE DIAGNOSIS.





MULTISYSTEM IMPACT



MULTISYSTEM IMPACT

Tissue damage → pulmonary fibrosis

Acute complications → thromboembolism, CVA

Chronic complications → hypoxia

Chronic Inflammatory response

Immune activation

Brain stem dysfunction

Autonomic dysfunction



MANAGEMENT OF POST ACUTE COVID

Evolving process

Recognition of problems experienced by the patient

Holistic multidisciplinary approach

Multi facet treatment – individualized on a case-by-case basis

Improved symptoms management

Pharmacological agents

Aim to return to premorbid function

Improve mental health

Community reintegration

PREVALENCE

The incidence of post-COVID-19 sequelae in those who have tested positive and who have been managed in an outpatient setting is estimated to be between 10% and 35%.

Those individuals admitted to hospital, the incidence is thought to be closer to 85%.

The incidence of prolonged illness significantly increases with age, comorbidities and initial severity of the acute illness.

Recent study of 3,000 Australians – 80% reported to be fully recovered within 1 month. 5% still experiencing symptoms after 3 months.

Studies are showing that people who contract COVID after their second dose of vaccine halve their risk of Post-COVID symptoms

WHO estimates that 10-20% of people worldwide who contract COVID end up with at least one symptom of post acute COVID-19.

RISK FACTORS

Risk factors for long COVID may include:

Number of initial COVID symptoms

Comorbidities including but not limited to - hypertension, diabetes, obesity and asthma

Demographic factors – elderly, lower socioeconomic class

A more severe initial COVID-19 infection may be associated with persistent illness however, the available studies are low quality.

According to most studies, women are more likely to develop long COVID than men.

IMPACT ON WORKFORCE

Estimated 31,000 Australians are calling in sick daily due to post covid symptoms

Three million working days lost this year so far due to staff illness, directly attributed to post covid symptoms

Resulting in a significant labour shortage and a reduction in workforce productivity

INTRODUCTION OF PRIMARY CARE CLINIC

A multi-disciplinary primary care clinic would be hugely beneficial to the management and reduction of prolonged post covid symptoms.

The primary care clinic would incorporate the use of Doctors, Registered Nurses, Exercise Physiologists, Physiotherapists, Psychologists and other members of the allied health team as required.

OTHER COHORTS LIKELY TO BENEFIT FROM PRIMARY CARE CLINICS

CALD

People living with
Disability

Aboriginal &
Torres Strait
Islanders

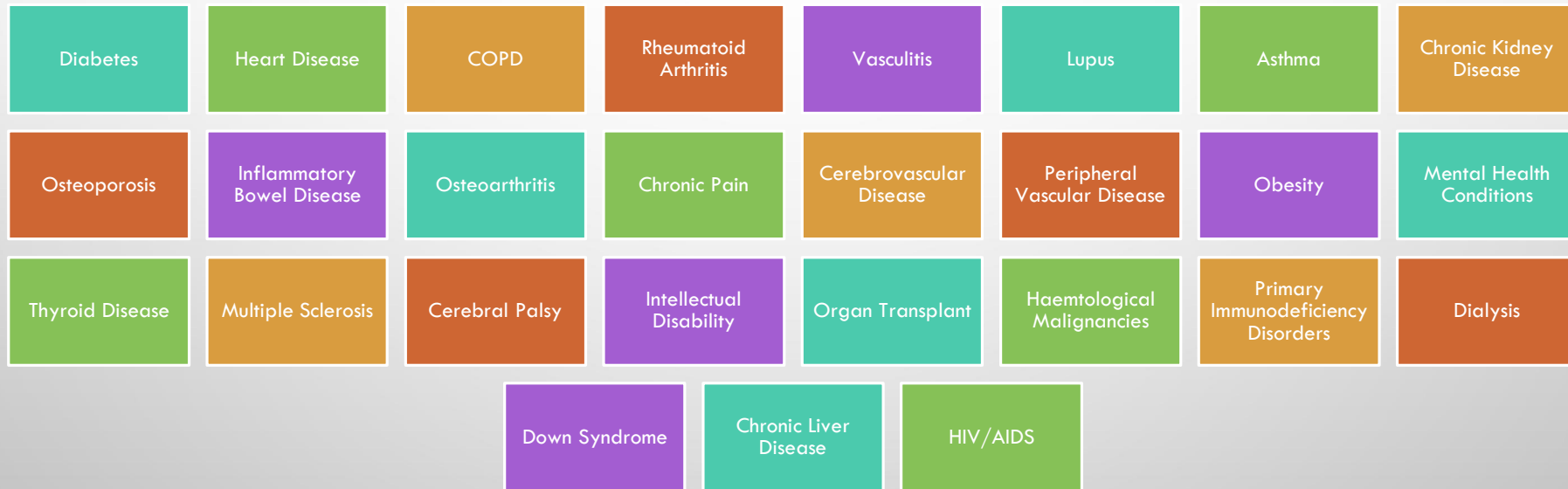
Individuals with
significant Mental
Health conditions

Elderly

Socially &
economically
disadvantaged

Geographically
Remote

OTHER HEALTH CONDITIONS LIKELY TO BENEFIT FROM PRIMARY CARE CLINICS





POST-ACUTE PHASE COVID PRIMARY CARE CLINIC

Project Proposal:

A multidisciplinary, nurse-led, post-acute phase COVID primary care clinical service for South West Sydney

Dr Kenneth McCroary



PROJECT OVERVIEW

- A multidisciplinary, nurse-led, post-acute phase COVID primary care clinical service for South West Sydney
- For patients who are:
 - experiencing signs and symptoms post-acute phase ie. 21-90 days post-initial infection
- Considered clinically stable
- Being managed outside of the intensive care unit (ICU)
- Ready for discharge from the acute care environment

Dr Kenneth McCroary



PROJECT GOALS

- reverse the decline from deconditioning
- reduce breathlessness
- reduce fatigue
- reduce pain
- improve mood
- improve balance
- increase strength
- return to functional independence

Rehabilitation following COVID-19 in the pulmonary rehabilitation setting



VISION

To develop an inclusive post-acute phase COVID primary care clinic in South West Sydney to reestablish pre-morbid function and prevent progression to long COVID.

WHO'S INVOLVED

- Registered Nurse

- General Practitioner

- Exercise Physiologist
- Physiotherapist
- Psychologist
- Social Worker
- Dietitian
- Occupational Therapist
- Pharmacist
- Podiatrist
- Neuropsychologist

STEPS

Step 1: Registered Nurse intake and assessment

Step 2: Review by General Practitioner

Step 3: Physical and Psychological assessment

Step 4: Multidisciplinary team meeting for individualised prescription

Step 5: Commence treatments

Step 6: Completion of program

Step 7: Review of program

ASSESSMENTS

Registered Nurse

- Initial triage and assessment
- Demographics
- Past history/medications
- Current COVID history
- Symptoms
- Treatment/s to date
- Baseline and vital obs.
- ECG
- Spirometry
- Cognitive screening

COVID-19 YORKSHIRE REHABILITATION SCREENING (C19-YRS)

Registered Nurse

- 22-item patient-reported outcome measure designed to evaluate the long-term impact of COVID-19 across the domains of Activities and Participation of the International Classification of Functioning, Disability, and Health and evaluate the impact of PCS rehabilitation

ASSESSMENTS

General Practitioner

- Assessment
- Examination
- Investigations
 - blood test
 - chest x-ray
 - echo
 - brain CT

ASSESSMENTS

Exercise Physiologist / Physiotherapist

- Functional capacity assessment
- Assess
 - pain
 - fatigue
 - breathing

ASSESSMENTS

Psychologist / Social Worker

- Assess:
 - Mood
 - PTSD
 - Anxiety
 - Depression
 - Financial situation
 - Family situation

ASSESSMENTS & TREATMENTS

Multidisciplinary meeting

- Registered Nurse
- General Practitioner
- Exercise Physiologist / Physiotherapist
- And:
 - Psychologist / Social Worker
 - stress, anxiety, depression, coping skills, financial strain
 - Speech Pathologist
 - taste, smell, swallowing
 - Dietitian
 - nutritional support
 - Occupational Therapist
 - ADL's, return to work/driving
 - Podiatrist
 - foot health
 - Pharmacist
 - medications

ASSESSMENTS & TREATMENTS

Multidisciplinary meeting

- Two primary goals:
 - Post-covid status and goals
 - Post-covid management
 - 'x' sessions, with
 - 'x' allied health

ASSESSMENTS & TREATMENTS

Along the way

- Regular assessment and support from the lead RN
- RN can escalate the case to the GP if required
- Patient continues with individual and/or group allied health treatment sessions as per multidisciplinary plan

STEP 6

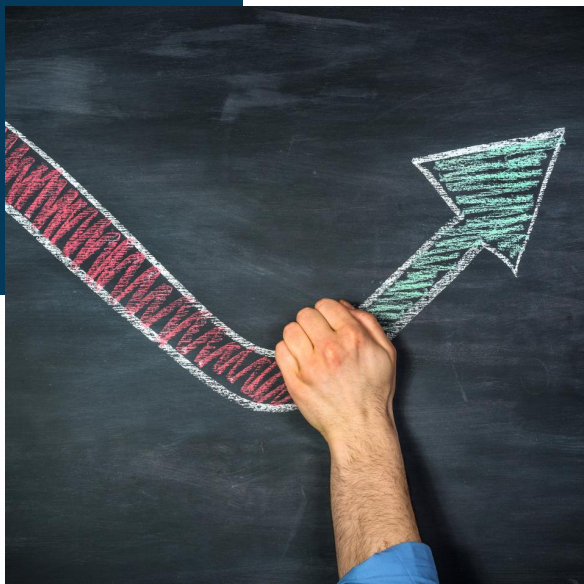
COMPLETION OF THE PROGRAM

- RN
 - re-assess patient status
 - document outcomes
 - patient score tools
- GP
 - escalation for those with long covid issues or comorbidities, to Rehab, Respiratory, Cardio, Neuropsych, Sleep
- Allied health
 - re-assess functional capacity, mood, cognition

STEP 7

REVIEW OF THE PROGRAM

- Post-program review of outcomes and performance



THANK YOU

Questions?

Comments?

Thoughts?

Next steps?

Primary Care Clinic

- Nurse-led
- GP
- Exercise Physiologist / Physiotherapist, Psychologist / Social Worker, Speech Pathologist, Occupational Therapist, Dietitian, Podiatrist and Pharmacist

Escalation Plan

- Referral on to Medical Specialist/s
- Additional nursing assessment
- More intensive allied health treatment