PR Network Meeting August 2021 Minutes

Long COVID and the evolving sphere of Pulmonary Rehabilitation

Date:	Tuesday 31st August
Time:	12:30pm to 1:30pm AEST
Location:	Via Video or Teleconference only using Zoom details below
Invitees:	All Pulmonary Rehabilitation Network Members
Meeting Chair:	Professor Jennifer Alison (JA)
LFA Reps:	Kelcie Herrmann (KH), Emma Halloran (EH)

State Rep Contact details: View here

Meeting Recording: View here

Meeting Minutes

Welcome and acknowledgement to country (5 mins)

Network Chair Jenny Alison and Emma Halloran

Poll

Participants were asked to select their preference for future topics:

- ✓ Tele-health for the elderly - psychological barriers to digital living including computer anxiety and Technophobia.
- ✓ Airborne precautions. Reducing the transmission of COVID-19 while exercising.
- ✓ Safety precautions for home PR sessions - remote monitoring of Blood pressure & oxygen saturation.
- ✓ Preferences of Pre & Post PR Assessments: St George's Questionnaire vs CAT vs CRDQ

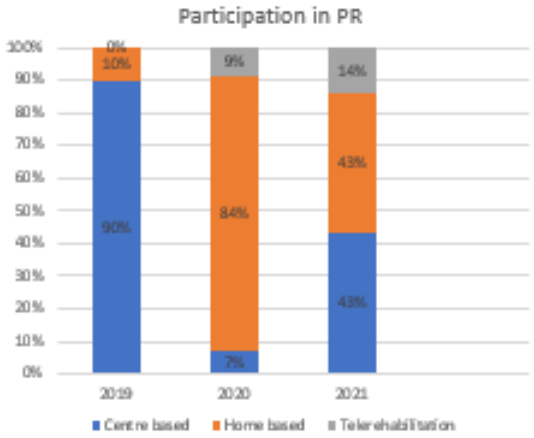
Results: Even split of choices

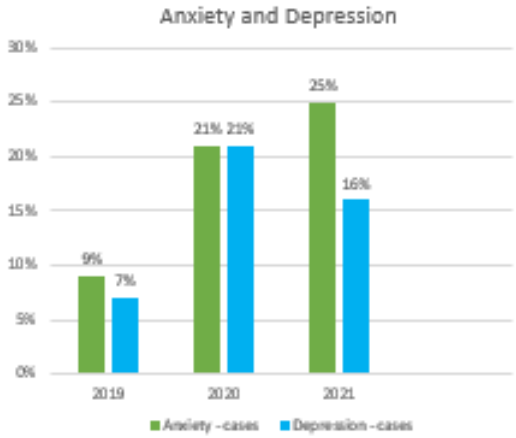
Updates from your State PR Network Representatives (30 mins)

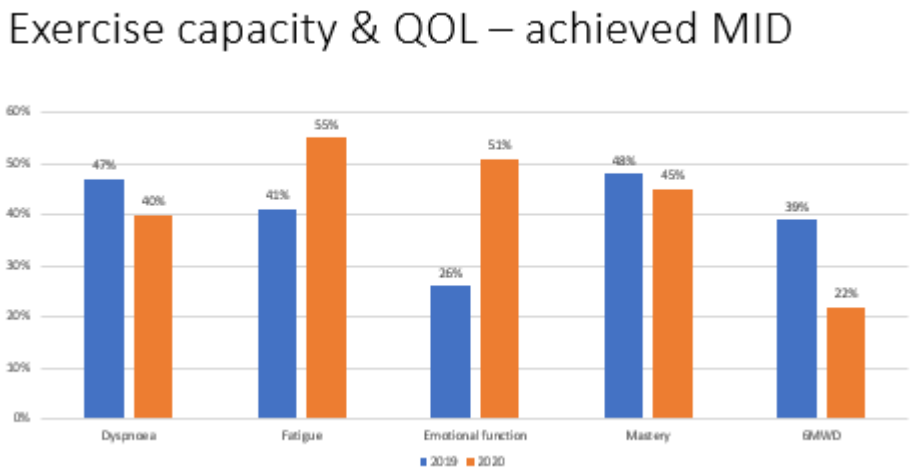
COVID 19 impact on PR and consumers. Move to virtual Health.

Janet Bondarenko – Victoria

- Suspension of onsite group activity March 2020 -> November 2020
- Rolling lockdowns 2021 -> interruption to usual 8 week programs







Future directions and challenges

- ✓ Strong demand for in-person groups despite expansion of home and telerehabilitation services
- ✓ Online support and education group

- ✓ Long COVID screening +/- rehabilitation
- ✓ Different guidelines for in-person activity across organisations during lockdowns
- ✓ Different guidelines for mask wearing in groups across organisations
- ✓ Vaccination
- ✓ Development of remote exercise testing

James Walsh – QLD

- ✓ Developing telehealth PR framework – 10 programs currently offering this. Good for rural consumers.
- ✓ Secured funding to run pilot studies across the state for telehealth PR.

Lissa Spencer - NSW

During 2020 before the current lockdown:

- ✓ In metro NSW from about Nov/Dec 2020, Face to face classes had returned to normal in some areas and reduced numbers at others.
- ✓ Depending on the hospital protocol some were only allowed to have 4 to 5 in each group, others had no limit. In some programs, patients had to exercise with masks
- ✓ However some hospitals had lost space and staff due to COVID clinics, vaccinations

Current lockdown:

- ✓ Currently there is no face-to-face attendance at PR or CR at these hospitals – aiming to reduce the traffic in and out of the hospitals and to reduce the risk to respiratory patients.
- ✓ PR (exercise training, education and support) is being offered via tele-rehabilitation at most sites, twice a week supervised with ~ 6 to 10 in a class. The classes aim to imitate face to face PR as much as possible or phone support
- ✓ Initial assessment is being done as a one-to-one session via tele-health interview and includes medical history, assessment of environment, leg strength and endurance using 5 and 1min STS tests, questionnaires and goals
- ✓ The programs are going well, better uptake of tele-rehab and good completion - no adverse events
- ✓ This year we are expecting to see many people recovering from COVID-19 and many with long COVID symptoms such as SOB, fatigue and muscle weakness who respond well to PR.

- ✓ Benefits of tele-rehab:
  - Able to offer exercise in safety of the patient's home
  - Appears to be effective and safe
  - Can reach people who live outside LHDs
  - Ideal for rural and remote
- ✓ Difficulties of tele rehab:
  - IT and WiFi issues for some people
  - Not able to perform a 6MWT or measure O2 saturation
  - Not able to provide chest physiotherapy
- ✓ What have we learnt so far:
  - Feedback shows that patients are satisfied with tele rehab esp. during a pandemic
  - Improves 5 and 1 min STS and HRQoL ≥ the MCID
  - Improves access for people who do not want to leave home, may be too unwell or using LTOT
  - It does not at this stage replace face to face PR however may remain a flexible option for some people

Coralie Brannelly – NT

Apology

Nola Cecins and Caitlin Vicary – WA

- ✓ Most programs continued to run on a face-to-face basis.
- ✓ A few telehealth appointments on home-based model.
- ✓ Referral rates not changed. More referrals from telehealth appointments but no change in uptake.
- ✓ Smaller classes due to social distancing. Less uptake when mask wearing was required.
- ✓ Rural experience in Broome – lack of parking for people to attend PR classes due to influx of people staying in the town to avoid lockdowns.

Paul Cafarella – SA

- ✓ Significant demand for face-to-face PR although program coordinators have reported that attendance has generally been down since COVID began, with reports ranging from "slightly down" to "poor".
- ✓ The reduction has been more significant in areas that have been affected by local COVID clusters such as the northern suburbs of metropolitan Adelaide (Parafield & Modbury clusters). PR programs in SA were suspended for a couple of weeks in July 2021 due to a minor outbreak and have since re-commenced.

- ✓ A number of program coordinators noted that even brief disruptions due to COVID, extreme weather conditions (i.e., heat, dust, smoky weather from bushfires etc) or clinic closures over Christmas break negatively affected the momentum of groups. Some patients declined returning to the group due to fear of contracting the virus, whilst others suspended their upcoming group attendance and chose to play it safe by self-isolating. An increase in patient anxiety concerning contracting the virus and attending onsite was noted, even after PR activity resumed post-lockdown. Programs who usually have larger classes noted small group sizes due to social distancing restrictions.
- ✓ Some programs have used tele-health options, usually involving patients coming in for an assessment and then being prescribed home exercise (with or without education). Patient confidence and competence with technology varied and some just preferred phone calls regarding home exercise sessions.
- ✓ Further challenges noted included: patients referred post-lockdown tended to be very deconditioned despite reporting being active pre-lockdown; some programs noted less improvement on 6MWD KPIs since COVID; some community exercise programs have ceased since COVID, making it more difficult to provide adequate maintenance options in the community post PR.

Long COVID and Pulmonary Rehabilitation Panel Discussion (20 mins)

Jenny Alison lead a panel discussion to examine the long-term symptoms of COVID-19 and look at the role that PR will play in supporting consumers.

Definitions

National Institute for Health Care Excellence. COVID-19 rapid guideline: managing the long-term effects of COVID-19. NICE Guideline [NG188]. London, UK: NICE; 2020

- Acute COVID-19: Signs and symptoms of COVID-19 up to 4 weeks after initial illness
- Ongoing symptomatic COVID-19: Signs and symptoms that develop during or after an infection of COVID-19 4 to 12 weeks after initial illness
- Post COVID syndrome (or Long COVID): Signs and symptoms that develop during or after an infection consistent with COVID-19, continue for ≥ 12 weeks, and not explained by an alternative diagnosis

Studies cited:

Bette Liu (epidemiologist from NSW Uni)
Whole of population-based cohort study of recovery time from COVID-19 in New South Wales Australia (Lancet- Regional Health, May 2021)

Data on nearly 3000 cases followed for persistent symptoms. At 12 weeks approx 5-7% with symptoms.

Betty Raman – An overview of Long-COVID. Cardiologist from Oxford University – video of a presentation from a European Lung Foundation Long-Covid patient conference.

Nalbandian- Nature Medicine: Post-acute COVID-19 syndrome (April 2021)
Symptoms at 12 weeks- 6 mths: **Fatigue,** Decline in quality of life, **Muscular weakness,** Joint pain, **Dyspnea, Cough,** Persistent oxygen requirement, **Anxiety/depression, Sleep disturbances,** PTSD, **Cognitive disturbances (brain fog),** Headaches, Palpitations, Chest pain, Thromboembolism, Chronic kidney disease, Hair loss.

Michelen: Characterising long term Covid-19: a living systematic review (May 2021)

Intervention studies:
Daynes **et al.** Early experiences of rehabilitation for individuals post-COVID to improve fatigue, breathlessness exercise capacity and cognition – A cohort study.
pre-post rehabilitation - significant increase: ISWT, ESWT, CAT, MoCA

Jian'an Li et al. A telerehabilitation programme in post-discharge COVID-19 patients (TERECO): a randomised controlled trial

Post COVID patient groups that may be referred to pulmonary rehabilitation because of ongoing symtoms:

- ICU patients: post ICU syndrome and potential organ damage
- Hospitalised without ICU admission
- Non-hospitalised

Articles mentioned within the discussion:

- Support for Rehabilitation Self-Management after COVID-19- Related Illness (World Health Organisation Pamphlet).

Panel:

- Janet Bondarenko and Anne Holland Alfred Hospital, Melbourne
- Lissa Spencer Royal Prince Alfred Hospital, Sydney
- Zoe Coleman Senior Liverpool Hospital, Sydney
- Mark Tran St Vincent's Hospital Melbourne
- Sally Wootton, Northern Sydney Health Service and Meredith King St Vincent's Hospital, Sydney

Watch the discussion 30 minutes into the meeting: View here

Staying Connected – Toolkit and Workplace (5 mins)

Please complete the survey to share your thoughts and ideas on the PT Toolkit.

Complete survey here.

Please register to join the new PR Community of Practice platform, workplace.

Register here.

Plans for 3 meetings of the Australian PR Network in 2022.

Please stay in touch via Workplace and/or contact Emma Halloran: emmah@lungfoundation.com.au

Questions

Q: Janet - I am interested to hear more about your face to face testing at present. How you are allowed to do this?
Janet: We are only seeing patients at home under strict COVID screening and guidelines according to our organisation. We conduct 1 home visit to perform an exercise test and develop a program for them. Then they complete the program via telehealth or the home based model.

Q: Hi Janet, are you guys seeing "high risk patients" Ie those waiting for lung transplant?
Janet: Pre-lung transplant clinic is currently via telehealth. We are continuing to see these patients like the others (as above, x 1 home visit if able, then home or telehealth)

Q; Janet mentioned long COVID screening clinics in Vic. What does the long COVID screening clinic involve? MDT? What assessments are involved?
Janet: Long COVID screening involves questionnaires to measures fatigue, breathlessness, general functioning, anxiety and depression and PTSD (impact of events) in addition to general questions around return to work/study and weight loss/gain. Prior to this latest wave/outbreak, we had also done a physical screen to determine any oxygen de-saturation and muscle strength (6MWT and 1min STS). Following the assessments, they are then referred into the services they require (rehab, psychology, nutrition, respiratory/cardiology clinics etc)

Q: Just wondering how organisations are prescribing an exercise program without seeing the client face to face for an initial assessment plus a functional exercise testing such as 6mwt. How do ensure exercises are performed safely, properly and it is effective (not sub-therapeutic) when all are done by telehealth? Seems like Janet at the Alfred are at least seeing clients initially face to face?
Janet B: We are seeing patients at home once to perform an exercise test and prescribe a program under strict COVID screening and guidelines. This may cease as case numbers grow and then we will move to either remote testing or symptom based exercise prescription. We used symptom based prescription predominantly last year and although we have no idea what improvements patients made in exercise capacity, we did see an improvement in their self- reported outcomes.

Q: I found the world physio briefing paper on safe rehabilitation in long covid very insightful. Are people screening for PEM? Is anyone is using the 'brief questionnaire to screen for post-exertional symptom exacerbation' and if so can anyone explain how to score it?
Janet B: I am not screening for PEM, but we are screening for: fatigue, general function, breathlessness, anxiety & depression, PTSD, return to work/study, and LOW. When able we are doing a physical assessment including a 6MWT and 1min STS.

Q: Has anyone been able to gain private health funding to support COVID/ Pulmonary Rehab via telehealth?
Janet B: Unsure as I work in the public system!

Q: Is anyone else using HR limited physical activity? I found this really helpful for my patients who have had the fatigue + tachycardia
Janet B: I'm not using HR limited physical activity, but using symptom based prescription -> ensuring that patients have a good understanding of the BORG scales is important. We have been giving them a bright yellow laminated BORG scale so that they can't miss it!

Q: Hi Mark what levels of tachycardia are you seeing at rest?
A: About HR/tachycardia, I have been seeing people with resting HR 100-110! And with minimal exertion it would increase to 140. May I suggest that we use the Karvonen formula (google this for more info) to prescribe exercise for this cohort. The correct level of exercise intensity would then be calculated to be HRR40-60%. Also the Karvonen formula method works really well for our tachycardic COPD patients, and also in heart failure those on beta blockers!

Does anyone think we could meet more often or for longer? Given COVID is so disruptive to our services?
The new Community of Practice platform will provide a forum to continue on with these discussions. You can arrange events and host them online via the platform.