Welcome to the 1st IPCRG Hot Topic Webinar

Breathing and feeling well through universal access to right care

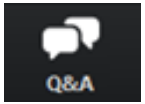
Agenda

1200hrs	**Welcome and Introductions** from Sîan Williams, CEO, IPCRG and Webinar Chair
1205hrs	**COVID-19 in Primary Care: Supporting those Suffering and Recovering** **A GP's Perspective**: *Dr Steve Holmes, UK* **A Rehabilitation Expert's Perspective**: *Matthieu Bremond, France*
1235hrs	Panel Discussion / Q&A Session
1250hrs	Comfort Break & *join our Tai Chi exercises*
1255hrs	Oral Abstract presentations
1355hrs	Closing Remarks

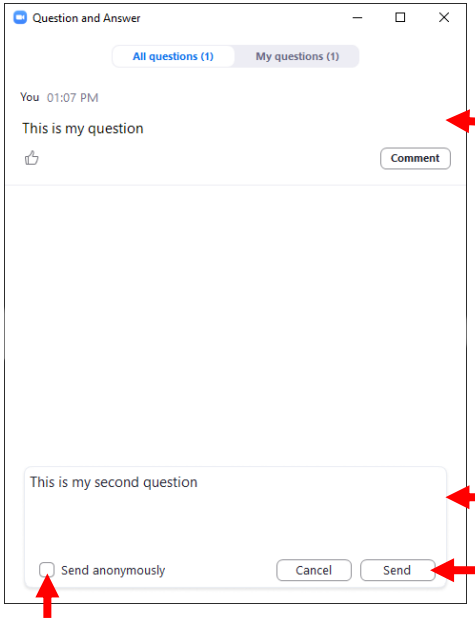
Oral Abstract Presentations

1. **What is the prevalence of Chronic Obstructive Pulmonary Disease (COPD) undiagnosed in the user population of two urban health care centres?** *Miguel Domínguez-Santaella, Spain*
2. **Association between smoking status and anxio-depressive symptoms in a pulmonary primary care sample of patients with COPD in Germany (RESPIRO Study)** *Sarah Fullenkamp, Germany*
3. **Health outcomes after initiating pulmonary rehabilitation in four countries on three continents** *Sanne van Kampen, Netherlands*
4. **Home-Based Physical Activity program for COPD Patients: can it improve dyspnoea, exercise tolerance and quality of life?** *Carina Peixoto Ferreira, Portugal*
5. **Global RECHARGE: Establishing a standard international dataset for pulmonary rehabilitation in low-and middle-income countries** *Mark Orme, UK*
6. **Improving the Assessment of Adults with Chronic Cough in Primary Care** *Alan Kaplan, Canada*

How to ask a question



Select the Q&A option from the webinar menu found at the bottom of your zoom window



Your submitted questions will appear here

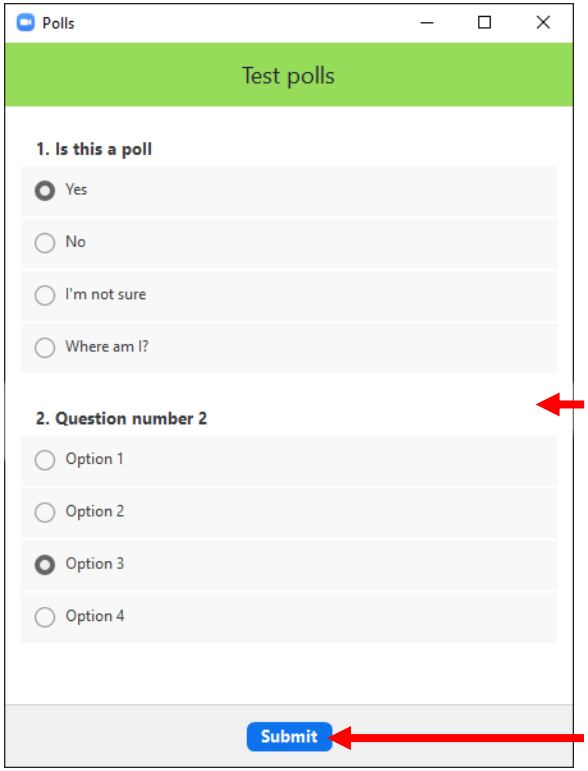
Type your question here

Press send to submit your question

Use this check box to ask a question anonymously

- Your questions will be answered live by the panellists during the Q&A sections of each presentation
- You can comment on other questions by selecting the comment button Comment
- You can upvote questions using the thumbs up icon

But first, we'd like you to complete a few questions..



Select your responses

Press the submit button to complete the survey

Presentation 1

Steve Holmes, UK

The world after acute COVID-19: A tsunami of need? – Steve Holmes (General Practitioner, Shepton Mallet, UK)

- Post discharge infection risk
- Health Care Professionals Impact

Our patients

- Social impact
- Psychological impact
- Physical impact

Declaration of Interests (1)

- General Practitioner, Park Medical Practice, Shepton Mallet
- Primary Care Respiratory Society (Education Lead, Executive and previous Chair; Primary Care Respiratory Academy Lead)
- RCGP (College Council, Severn Faculty Board, Essential Knowledge Update and Clinical Expert, Lung Health Taskforce)
- International Primary Care Respiratory Group (IPCRG) Education Committee
- Somerset CCG Respiratory Lead and Chair, Somerset Respiratory Programme Board
- Health Education England (Associate Postgraduate Dean, GP Trainer in Somerset)
- NHS England (National CVD and Respiratory Programme Board)
- NHS England (Appraiser)
- Guideline involvement (Air Travel, Asthma, COPD, Mesothelioma, Pulse oximetry, Spirometry, Tobacco Dependency)

Declarations of Interest (2)

Conference attendance / speaker engagements / educational projects / advisory board work (in the last five years)

Universities

University College, London; Universities of Birmingham, Bristol, Cardiff, Edinburgh, Sheffield, Southampton, University of South Wales

CCGs

Bristol NSSG CCG, East Lancashire CCG, Heywood, Middleton, Rochdale CCG, Rushcliffe CCG

Other providers

Best Practice, Education for Health, Guidelines in Practice, Mediconf, MIMS, Nursing in Practice, Omniamed, Pulse

Pharmaceutical / Device Companies

Astra Zeneca, Beximco, Boehringer Ingelheim, Chiesi, Glaxo Smith Kline, Johnson and Johnson, Mylan, Napp, Novartis, Nutricia, Orion, Pfizer, Roche, Sandoz, Teva, Trudell Medical International

No tobacco shares. Speaker slides are referenced and have not been “edited by others”

International Primary Care Respiratory Group
IPCRG work locally collaborate globally

Multiple marathons…

Natural history of COVID-19

- Many people who have COVID-19 are asymptomatic or have mild disease and recover quickly over a period of 7- 14 days with variable upper respiratory tract symptoms. (1)
- Imperial College(2) suggest that approximately:-
  - 50% of infections will be associated with no, or very mild, symptoms
  - 4.4% of infections will require hospitalisation
  - 30% of those hospitalised will require ventilatory support
  - 50% of those requiring ventilation or ICU care will die
- The median length of stay is approximately 10 days (16 days with ICU, 8 days without)
- The overall mortality is uncertain (most quoting around 1%; WHO quoting 3.4% in early March 2020)

1. Bai Y, Yao L, Wei T, Tian F, Jin D-Y, Chen L, et al. Presumed Asymptomatic Carrier Transmission of COVID-19. JAMA. 2020.
2. Imperial College London. MRC Centre for Global Infectious Disease Analysis: COVID19 2020 [Available from: http://www.imperial.ac.uk/mrc-global-infectious-disease-analysis/covid-19/

Post discharge infection risk

- Infection control measures still important (even after discharge)
- “median duration of viral shedding was 20·0 days (IQR 17·0–24·0) in survivors, but SARS-CoV-2 was detectable until death in non-survivors. The longest observed duration of viral shedding in survivors was 37 days.”(1)
- It is suggested that viral spread can occur via surfaces for a prolonged period of time and the infectivity from COVID-19 may be not only from aerosol transmission, but also gastrointestinal – hence infection control will continue to be important.(2)

1. Zhou F, Yu T, Du R, Fan G, Liu Y, Liu Z, et al. Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. The Lancet. 2020;395(10229):1054-62. 2. NHS England. COVID-19: infection prevention and control (IPC) 2020.

Health Care Professionals and carers impact

- Many will find it hard seeing colleagues and patients suffer and die (or survive with disability) and remembering this
- Many will reflect on clinical decisions they have made especially if adverse outcomes.
- Fear and guilt about potentially infecting vulnerable people
- Resources are being developed to help (1)
- Very significant risk of career changes and early retirement after major incident (2)
- Thomas et al (3) – reporting on a survey suggesting 20% plan to leave health care after COVID19 settles

1- Duan L, Zhu G. Psychological interventions for people affected by the COVID-19 epidemic. The Lancet Psychiatry. 2020;7(4):300-2.
2 - Yu S, Brackbill RM, Locke S, Stellman SD, Gargano LM. Impact of 9/11-related chronic conditions and PTSD comorbidity on early retirement and job loss among World Trade Center disaster rescue and recovery workers. American Journal of Industrial Medicine. 2016;59(9):731-41.
3 - Thomas C, Quilter-Pinner H. Care fit for carers: Ensuring the safety and welfare of NHS and care workers during and after Covid-19. London: IPPR; 2020.

Social impact of COVID19

No matter what disease severity:

People may well have:

- Lost friends
- Lost income / pension
- Lost their job
- Have problems with mortgage / rent repayment
- Have problems affording food

More severely affected will have problems:

- Returning to their previous work and level of function (1,2)

Significant increase in number of cases of domestic abuse being reported (3)

All countries will require provision of population based support - however there is a well recognised impact these problems have on health utilisation (4)

1 - Rasa S, Nora-Krukle Z, Henning N, Eliassen E, Shikova E, Harrer T, et al. Chronic viral infections in myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS). J Transl Med. 2018;16(1):268.
2 - Moldofsky H, Patcai J. Chronic widespread musculoskeletal pain, fatigue, depression and disordered sleep in chronic post-SARS syndrome; a case-controlled study. BMC Neurol. 2011;11:37-.
3. Government UK. Support for Victims of Domestic Abuse 2020 [Available from: https://www.gov.uk/government/publications/coronavirus-covid-19-and-domestic-abuse/coronavirus-covid-19-support-for-victims-of-domestic-abuse.
4. Andrén KG, Rosenqvist U. Heavy users of an emergency department: psycho-social and medical characteristics, other health care contacts and the effect of a hospital social worker intervention. Social Science & Medicine. 1985;21(7):761-70.

Psychological impact of COVID19

- Social implications and any physical disability will usually have psychological sequelae
- Many surviving more severe disease will have:
  - Flashbacks
  - Guilt (why did I survive and others didn't? did I give the disease to others?)
  - Irritability, poor sleep
- They may well have cognitive problems if more severe disease.
- The provision of adequate primary care support and resources, as well as talking therapies and more specialist care, needs consideration at this stage as the impact is likely to increase as the pandemic progresses and for a significant period beyond.

Holmes S, Stone R. Recovering after COVID19 - a practical guide for clinicians and commissioners. Primary Care Respiratory Update (in press) available on line at https://wwwpcrs-ukorg/resource/recovering-after-covid19-practical-guide-clinicians-and-commissioners 2020.

Physical recovery from COVID-19

- We know that many people who have COVID-19 are asymptomatic or have mild disease and recover quickly over a period of 7- 14 days with variable upper respiratory tract symptoms (1).

1. Bai Y, Yao L, Wei T, Tian F, Jin D-Y, Chen L, et al. Presumed Asymptomatic Carrier Transmission of COVID-19. JAMA. 2020.
2. Cartoon from The Corona Diary (great images!)

Normal recovery from pneumonia (often in those admitted but also some in primary care)

- No studies on COVID-19 as yet
- Likely to fit with previous coronavirus respiratory infections (SARS, MERS) influenza and community acquired pneumonia
- Learning from other infections (1-3) remembering speed of improvement will vary according to severity, co-morbidity and initial frailty
- **4 weeks** — muscle aches, chest pain and sputum production should have substantially reduced (significant sputum production is less common in COVID-19)(4)
- **6 weeks** — cough and breathlessness should have substantially reduced.
- **3 months** — most symptoms should have resolved but fatigue might still be present.
- **6 months** — symptoms should have fully resolved unless the patient has had a complicated ITU stay, in which case mobility and/or respiratory difficulties may be prolonged

1. National Institute for Clinical Excellence. CG 191 Pneumonia in adults: diagnosis and management Clinical guideline [CG191]. London: NICE; 2019. 2. British Thoracic Society. BTS Guidelines for the Management of Community Acquired Pneumonia in Adults: update 2009. London: British Thoracic Society; 2009. 3. National Institute for Clinical Excellence. Clinical Knowledge Summary: Chest infections - adult. London: NICE; 2019. 4. Zhou F, Yu T, Du R, Fan G, Liu Y, Liu Z, et al. Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. The Lancet. 2020;395(10229):1054-62.

Other potential physical complications needing management

- Heart failure
- Coagulopathy
- Myocardial infarction
- Secondary infection(1)
- Deep vein thrombosis or pulmonary embolus(2)
- Renal disease (1)

1- Zhou F, Yu T, Du R, Fan G, Liu Y, Liu Z, et al. Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. The Lancet. 2020;395(10229):1054-62.
2 - Minet C, Potton L, Bonadona A, Hamidfar-Roy R, Somohano CA, Lugosi M, et al. Venous thromboembolism in the ICU: main characteristics, diagnosis and thromboprophylaxis. Critical Care. 2015;19(1):287.

Will COVID-19 cause significant ILD?

- Potential of interstitial lung disease on CT scanning(1)
- Similar to SARS (2) – 30% had cxr finding 6mths later and 15% had abnormal spirometry
- Follow up recommended at 12 weeks (3)

1 - Hui DS, Joynt GM, Wong KT, Gomersall CD, Li TS, Antonio G, et al. Impact of severe acute respiratory syndrome (SARS) on pulmonary function, functional capacity and quality of life in a cohort of survivors. Thorax. 2005;60(5):401-9.
2 - Chua F, Armstrong-James D, Desai SR, Barnett J, Kouranos V, Kon OM, et al. The role of CT in case ascertainment and management of COVID-19 pneumonia in the UK: insights from high- incidence regions. The Lancet Respiratory Medicine. 2020.
3 - George PM, Barratt S, Desai SR, Devaraj A, Forrest I, Michael Gibbons, et al. British Thoracic Society Guidance on Respiratory Follow Up of Patients with a Clinico-Radiological Diagnosis of COVID-19 Pneumonia. 2020.

Post Viral Chronic Fatigue Syndrome

- Many viral respiratory infections have well documented significant numbers of people with CFS (1)
- This was common in the previous SARS coronavirus outbreak (2)

1 - Rasa S, Nora-Krukle Z, Henning N, Eliassen E, Shikova E, Harrer T, et al. Chronic viral infections in myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS). J Transl Med. 2018;16(1):268-.
2 - Moldofsky H, Patcai J. Chronic widespread musculoskeletal pain, fatigue, depression and disordered sleep in chronic post-SARS syndrome; a case-controlled study. BMC Neurol. 2011;11:37-.

Post intensive care recovery

- Unfamiliar to many of us in primary care (1-3)
- Patients are usually supported in specialist environment but numbers are going to be challenging.
- Much of the following description from the Society of Critical Care Medicine (21) with thanks

1. Harvey MA, Davidson JE. Postintensive care syndrome: right care, right now… and later. Critical care medicine. 2016;44(2):381-5.
2. Rawal G, Yadav S, Kumar R. Post-intensive care syndrome: an overview. J Transl Int Med. 2017;5(2):90-2.
3. Society of Critical Care Medicine. COVID-19 resources. 2020.
4. The Society of Critical Care Medicine. Post Intensive Care Syndrome 2020 [Available from: https://www.sccm.org/MyICUCare/THRIVE/Post-intensive-Care-Syndrome.

ICU Acquired Weakness (ICUAW)

- Neuromuscular condition that develops during an ICU stay.
- This is a common problem of critical illness and occurs in:
  - 33% of all patients on ventilators
  - 50% of all patients admitted with severe infection
- Features may take a year or more to resolve makes the activities of daily living difficult, including grooming, dressing, feeding, bathing and walking.

The Society of Critical Care Medicine. Post Intensive Care Syndrome 2020 [Available from: https://www.sccm.org/MyICUCare/THRIVE/Post-intensive-Care-Syndrome

Cognitive dysfunction and mental health problems after ICU

- **Cognitive or brain dysfunction**
- 30% to 80% of patients may have problems remembering, concentrating, organising and working on more complex tasks.
- Some people improve during the first year after discharge from the hospital; other people may never fully recover.

- **Mental health problems**
- Problems falling or staying asleep
- Nightmares, unwanted memories
- Memories of illness producing physical and mental symptoms

The Society of Critical Care Medicine. Post Intensive Care Syndrome 2020 [Available from: https://www.sccm.org/MyICUCare/THRIVE/Post-intensive-Care-Syndrome

Conclusions

- The impact from our discussions are long term
- Many of these will require significant primary care support
- The challenges for the health care system will be to manage effectively the physical, psychological and social implications of life post COVID-19 holistically
- It will be important to consider these issues and to provide relevant support and rehabilitation when helping patients and their families to recover optimally.

- Post discharge infection risk
- Health Care Professionals impact

Our patients

- Social impact
- Psychological impact
- Physical impact

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Presentation 2

Matthieu Bremond, France

COVID-19 in Primary Care: Supporting those Suffering and Recovering

Physical & rehabilitation aspects of the recovery from COVID-19

Matthieu BREMOND, PT MSc, France

Breathing and feeling well through universal access to right care

Declaration of Interests

- Respiratory Physiotherapist, Private Practice, Tours, FRANCE
- Australian Physiotherapy Association member & Chartered Society of Physiotherapy (UK) member
- Societe de Pneumology en Langue Francaise (Physiotherapy, Rehabilitation and ventilation group) & European Respiratory Society member
- International Primary Care Respiratory Group (IPCRG) member

Universities

- University of Tours, (education and health research team, lecturer)

Pharmaceutical / Device companies

- Astra Zeneca, Boehringer Ingelheim, Chiesi, Glaxo Smith Kline, Johnson and Johnson, Novartis, Pfizer, Roche, Teva, Trudell Medical International, Air Liquid Medical System, Linde, Philipps Respironics, Resmed

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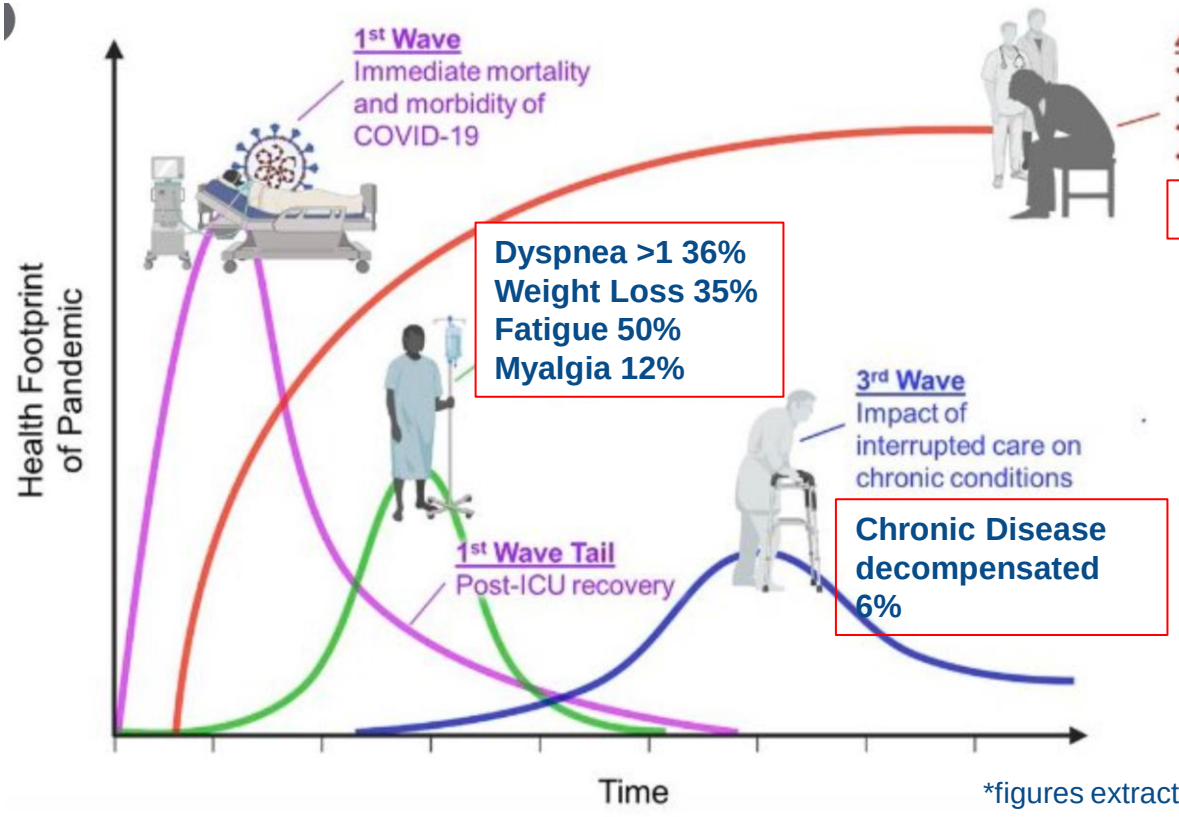
The different “waves” impacting COVID-19 patient



Injuries:
COVID-19
+ immobility
+ previous Health State

*figures extracted from Tours local Hospital surveillance

Physical medicine approach of post COVID-19 patient

COVID-19 related injuries

Organ	Impairment	Physical Therapy options
Respiratory	Exercise oxygen desaturation Broncho obstruction (secretion) Breathing pattern disorder (polypnea)	Respiratory Physiotherapy Pulmonary Rehabilitation
Neurology	Polyradiculoneuritis (Guillain-Barré) Encephalitis / Stroke Swallowing Disorder Cognitive & Psychological impairment	Physiotherapy/Occupational Therapy Speech Therapy Psychologist
Musculoskeletal	Loss of strength and endurance Physical Deconditioning (Activities of Daily Living)	Exercise training Physiotherapy / occupational therapy
Cardio-circulatory	Deep Vein Thrombosis and pulmonary embolism Post heart acute inflammational arrhythmia	Check for DVT Check for hear beat irregularity Prefer slow incremental exercise training

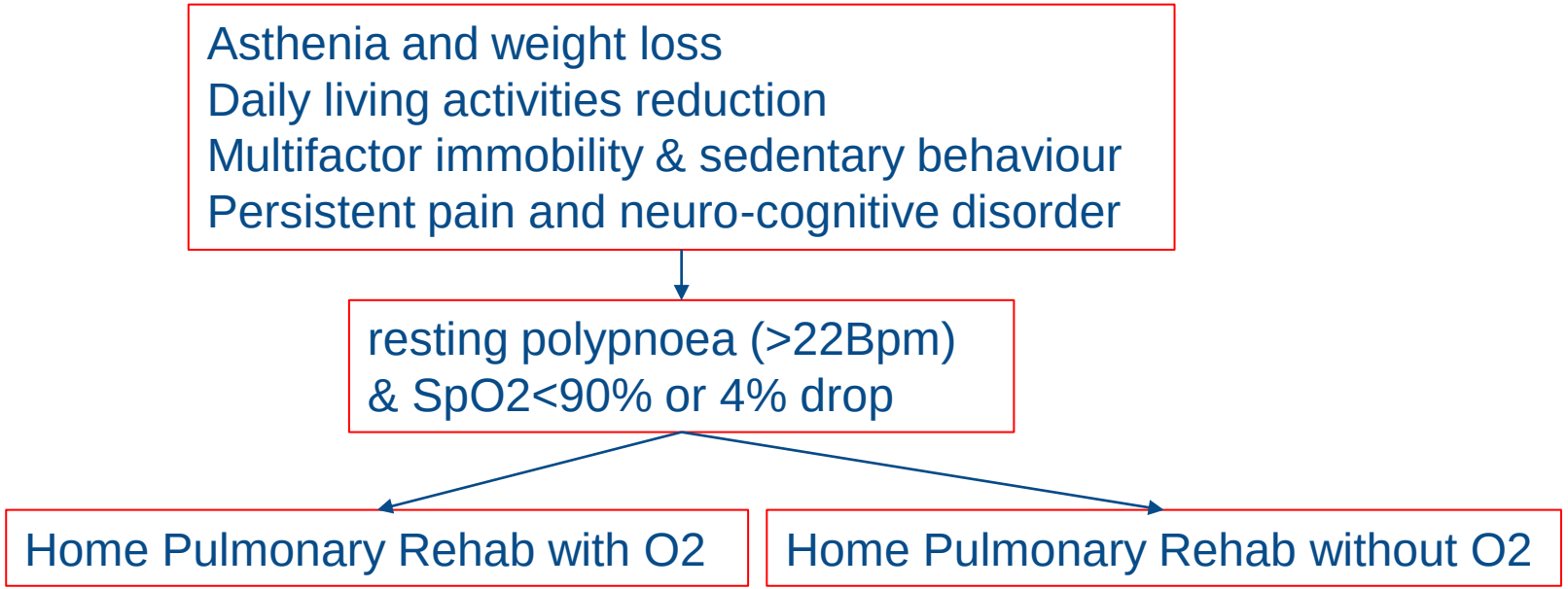
Physical medicine approach of post COVID-19 patient

Post ICU Syndrome

Organs	impairement	Physical Therapy options
Musculoskeletal	Loss of strength and endurance	Exercise training Physiotherapy / Occupational therapy
Neurology	Motor and sensitivity disorder	Exercise training Physiotherapy / Occupational therapy
Psychology	Memory / attention / functional task	Speech Therapist
Cognitive	Anxiety depression Post-traumatic syndrome	Psychiatrist / Psychologist

Ambulatory Health Care Pathway

- >14d COVID-19 first Symptoms & apyrexial >2d



Reducing virus spreading

- Home pulmonary rehab is preferred
- Providing adequate protection material
- Non-Invasive-Ventilation, High-Flow-Oxygen, Nebulization are to be used with much care and circuit should be modified
- Ensuring follow up with hospital and surveillance team with appropriate communication process
- Adapting patient environment for exercise practice

Home Pulmonary Rehab

- Home setting for minimizing virus spreading (barriers and hygiene advice)
- Pulmonary rehab fibrosis & ARDS patient like (6 month long)
- Assessing O2 needs with effort testing longer than 1 minute (6MW or 3’ sit-to-stand)
- Regularly check for DVT
- Favoring video (group) and phone session and outdoor exercise
- Providing online-video and booklet support for maximum autonomy
- Protecting health professional and carer from contamination

Discussion

Comfort Break & Tai Chi