SOCIETÀ ITALIANA
G.U.I.D.A.
PER LA GESTIONE UNIFICATA E INTERDISCIPLINARE DEL DOLORE MUSCOLO-SCHELETRICO E DELL'ALGODISTROFIA

SIMFER
SOCIETÀ ITALIANA DI MEDICINA FISICA E RIABILITATIVA
The Italian Society of Physical and Rehabilitation Medicine

Silvia Galeri

SIMPOSIO CONGIUNTO SI-G.U.I.D.A. – S.I.M.F.E.R.
La sindrome Long Covid dall'eziologia alla riabilitazione

Centro Congressi Unione Industriali
TORINO 11-13 MAGGIO 2023

LA RIABILITAZIONE

REHABILITATION OF ADULTS POST-COVID-19 CONDITION

Topic 1 Components and functions of rehabilitation care

Topic 2 **Red flags for safe rehabilitation**

Topic 3 Referral principles

Topic 4 Service delivery

Topic 5 Workforce

Topic 6 **Post-exertional symptom exacerbation**

Topic 7 **Arthralgia**

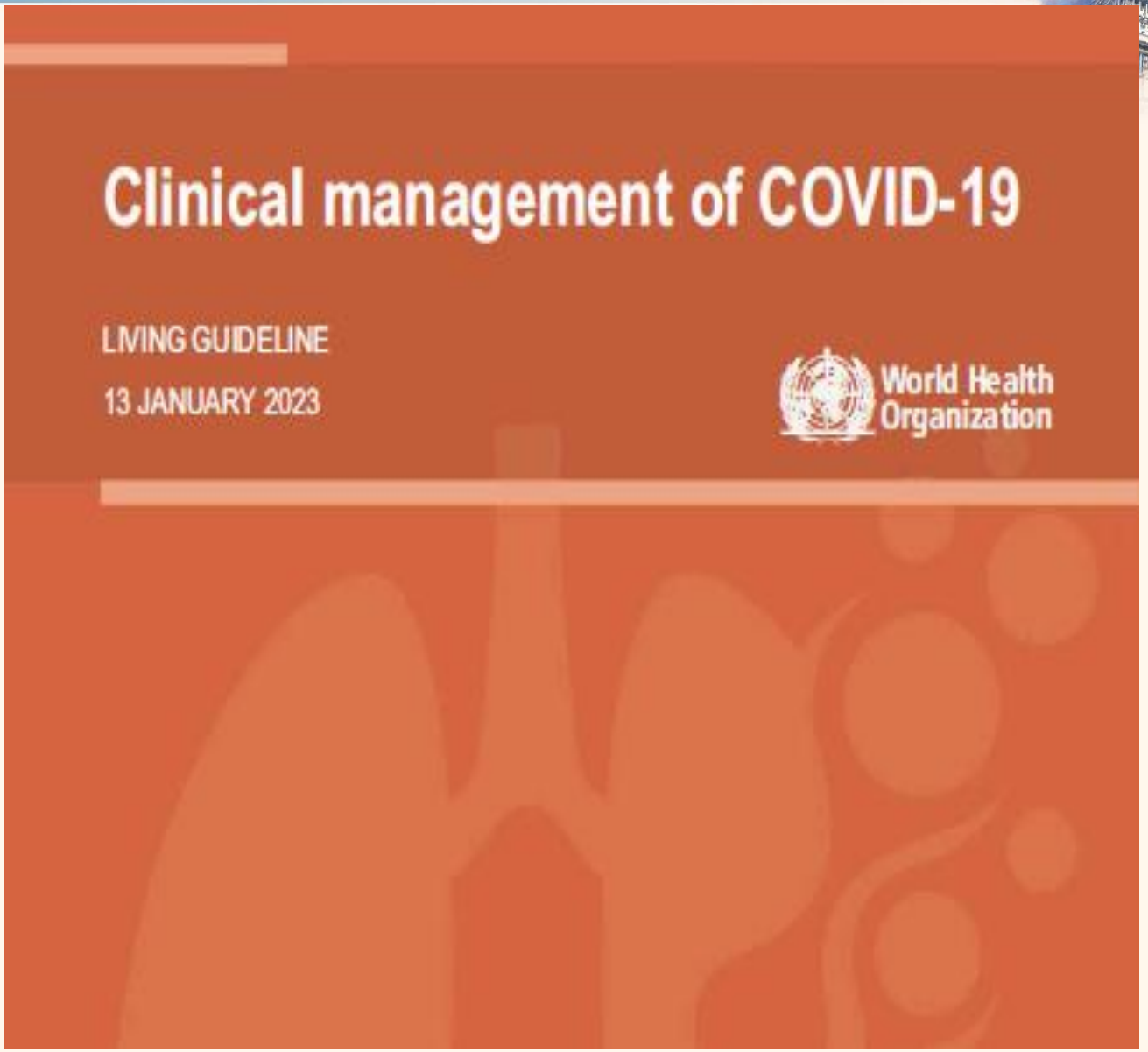
Topic 8 **Breathing impairment**

Topic 9 **Cognitive impairment**

Topic 10 **Fatigue**

Topic 11 Mental health

Topic 12 Olfactory impaiment



TOPIC 1 Components and functions of rehabilitation care

SUGGERIMENTI:

Team di riabilitazione multidisciplinare

Continuità e coordinamento della presa in carico

Centralità della persona e decisioni condivise

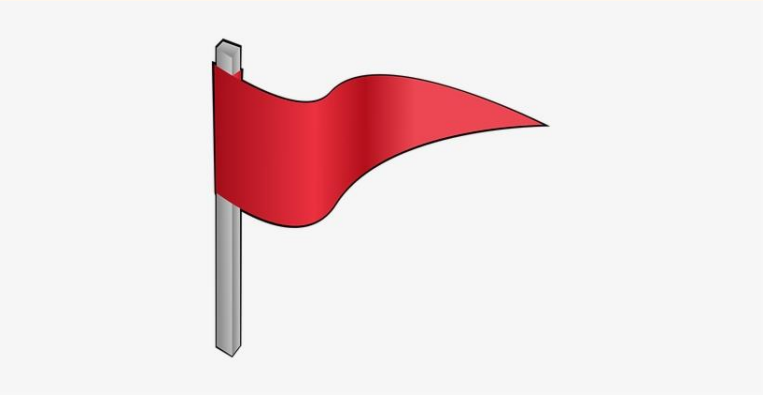
Mancanza di core-assessment

TOPIC 2 Red flags for safe rehabilitation

FORTE RACCOMANDAZIONE:

Forte raccomandazione che la **desaturazione** associata a **dispnea e l'impaiment** cardiaco conseguenti a COVID19 dovrebbero essere **escluse** e gestite prima di considerare l'avvio di un training di esercizio fisico.

- Intolleranza ortostatica
- Fatica da sforzo



STRUMENTI E MODELLI ORGANIZZATIVI- raccomandazioni di clinical management

- Forte raccomandazione che la **desaturazione** associata a **dispnea e l'impaiment** cardiaco conseguenti a COVID19 dovrebbero essere **escluse** e gestite prima di considerare l'avvio di un training di esercizio fisico
- Utilizzare training educativi e di competenze basati su **tecniche di risparmio dell'energia**, come, ad esempio, il "pacing approaches", per la riabilitazione clinica in pazienti con sintomi emergenti dopo la "Post-Exertional Symptom Exacerbation" (PESE) Syndrome.

TOPIC 3: Referral principles

RACCOMANDAZIONE *conditional:*

Precoce presa in carico riabilitativa, è possibile e consigliabile

Info pratiche:

Strumento di misurazione e valutazione/autovalutazione della condizione post COVID-19 *attualmente non disponibili …*

Post Covid-19 Functional Status Scale (PCFS): assessment numerico per pazienti altamente sintomatici

WHODAS 2.0: 12 item

Tabella 1. La scala dello stato funzionale post-COVID-19 (PCFS).

Livello della scala PCFS		Descrizione
0	Non limitazioni funzionali	Nessun sintomo, dolore, ansia o depressione.
1	Limitazioni funzionali trascurabili	Tutte le mansioni/attività usuali a casa o lavoro possono essere portate a termine allo stesso modo nonostante alcuni sintomi, dolore, ansia o depressione.
2	Limitazioni funzionali lievi	Le mansioni/attività usuali a casa o lavoro sono portate a termine ad un livello inferiore di intensità od occasionalmente evitate a causa di sintomi, dolore, ansia o depressione.
3	Limitazioni funzionali moderate	Le mansioni/attività usuali a casa o lavoro sono state rimodellate (ridotte) a causa di sintomi, dolore, ansia o depressione.
4	Limitazioni funzionali severe	Nelle attività della vita di tutti i giorni è necessaria assistenza a causa di sintomi, dolore, depressione o ansia; è richiesta assistenza infermieristica professionale o similare.
D	Decesso	–

Measuring
Health and Disability

Manual for WHO Disability Assessment Schedule

WHODAS 2.0

TB Üstün, N Kostanjsek,

S Chatterji, J Rehm

World Health Organization

https://osf.io/f26pe

TOPIC 6: Post-exertional symptom exacerbation (PESE)

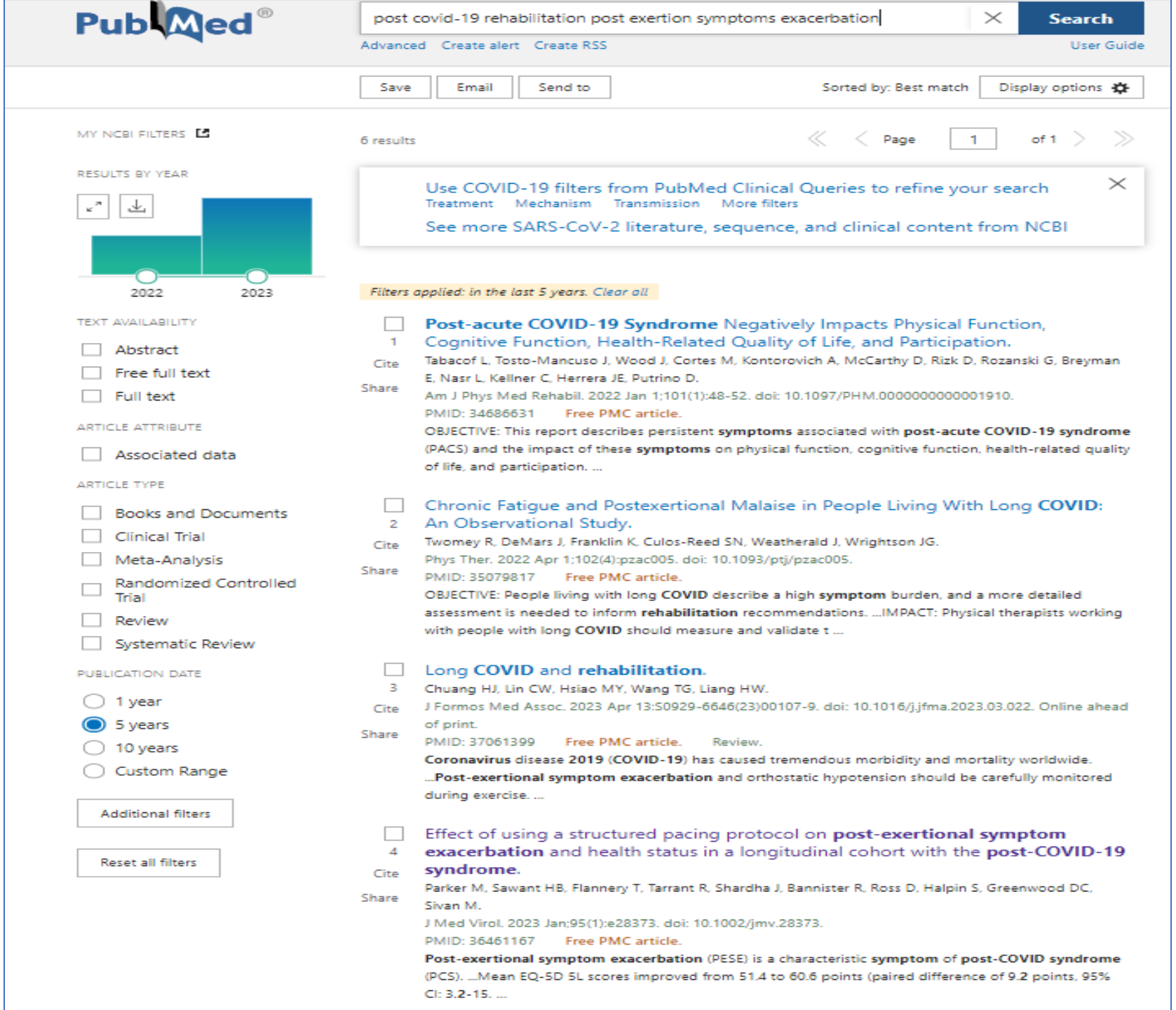
MALESSERE POST-SFORZO

«peggioramento dei sintomi a seguito di minima attività a carattere cognitivo, fisico, emotivo o sociale o altra attività che era precedentemente ben tollerata»

RACCOMANDAZIONE

Utilizzare training educativi e di competenze basati su **tecniche di risparmio dell'energia**, come, ad esempio, il "pacing approaches", conservazione dell'energia

PubMed: 4



PubMed®

post covid-19 rehabilitation post exertion symptoms exacerbation

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6 results Page 1 of 1

RESULTS BY YEAR

2022 2023

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- Free full text
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ARTICLE ATTRIBUTE

- Associated data

ARTICLE TYPE

- Books and Documents
- Clinical Trial
- Meta-Analysis
- Randomized Controlled Trial
- Review
- Systematic Review

PUBLICATION DATE

- 1 year
- 5 years
- 10 years
- Custom Range

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Use COVID-19 filters from PubMed Clinical Queries to refine your search

Treatment Mechanism Transmission More filters

See more SARS-CoV-2 literature, sequence, and clinical content from NCBI

Filters applied: in the last 5 years. Clear all

1 Cite Share

Post-acute COVID-19 Syndrome Negatively Impacts Physical Function, Cognitive Function, Health-Related Quality of Life, and Participation.

Tabacof L, Tosto-Mancuso J, Wood J, Cortes M, Kontorovich A, McCarthy D, Rizk D, Rozanski G, Breyman E, Nasr L, Kellner C, Herrera JE, Putrino D.

Am J Phys Med Rehabil. 2022 Jan 1;101(1):48-52. doi: 10.1097/PHM.0000000000001910.

PMID: 34686631 Free PMC article.

OBJECTIVE: This report describes persistent **symptoms** associated with **post-acute COVID-19 syndrome** (PACS) and the impact of these **symptoms** on physical function, cognitive function, health-related quality of life, and participation. ...

2 Cite Share

Chronic Fatigue and Postexertional Malaise in People Living With Long **COVID**: An Observational Study.

Twomey R, DeMars J, Franklin K, Culos-Reed SN, Weatherald J, Wrightson JG.

Phys Ther. 2022 Apr 1;102(4):pzac005. doi: 10.1093/ptj/pzac005.

PMID: 35079817 Free PMC article.

OBJECTIVE: People living with long **COVID** describe a high **symptom** burden, and a more detailed assessment is needed to inform **rehabilitation** recommendations. ...IMPACT: Physical therapists working with people with long **COVID** should measure and validate t ...

3 Cite Share

Long **COVID** and **rehabilitation**.

Chuang HJ, Lin CW, Hsiao MY, Wang TG, Liang HW.

J Formos Med Assoc. 2023 Apr 13:S0929-6646(23)00107-9. doi: 10.1016/j.jfma.2023.03.022. Online ahead of print.

PMID: 37061399 Free PMC article. Review.

Coronavirus disease **2019** (**COVID-19**) has caused tremendous morbidity and mortality worldwide. ...**Post-exertional symptom exacerbation** and orthostatic hypotension should be carefully monitored during exercise. ...

4 Cite Share

Effect of using a structured pacing protocol on **post-exertional symptom exacerbation** and health status in a longitudinal cohort with the **post-COVID-19 syndrome**.

Parker M, Sawant HB, Flannery T, Tarrant R, Shardha J, Bannister R, Ross D, Halpin S, Greenwood DC, Sivan M.

J Med Virol. 2023 Jan;95(1):e28373. doi: 10.1002/jmv.28373.

PMID: 36461167 Free PMC article.

Post-exertional symptom exacerbation (PESE) is a characteristic **symptom** of **post-COVID syndrome** (PCS). ...Mean EQ-5D 5L scores improved from 51.4 to 60.6 points (paired difference of 9.2 points, 95% CI: 3.2-15. ...

Received: 20 September 2022 | Accepted: 28 November 2022

DOI: 10.1002/jmv.28373

RESEARCH ARTICLE

JOURNAL OF MEDICAL VIROLOGY WILEY

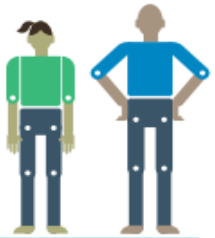
Effect of using a structured pacing protocol on post-exertional symptom exacerbation and health status in a longitudinal cohort with the post-COVID-19 syndrome

Megan Parker[1] | Hannah Brady Sawant[1] | Thuvia Flannery[1] | Rachel Tarrant[1] | Jenna Shardha[1] | Rebecca Bannister[2] | Denise Ross[1,3] | Stephen Halpin[1,3,4] | Darren C. Greenwood[5] | Manoj Sivan[1,3,4]

World Health Organization
REGIONAL OFFICE FOR Europe

Support for rehabilitation: self-management after COVID-19-related illness

second edition



Name:

Onset of COVID-19 symptoms (date):

Date this leaflet was given:

Name and contact details of health care professional providing leaflet:

Name and contact details of local health care services:

Name and contact details of rehabilitation support services:

BORG RATING PERCEIVED EXERTION CATEGORY RATIO CR-10 SCALE

TABLE 1 WHO Borg CR-10 pacing protocol

Phase	RPE (0–10)	Example activities
1 "Preparation for return to exercise"	0–1	Controlled breathing exercises Gentle stretching & balance exercises Gentle walking
2 "Low-intensity activity"	2–3	Walking Light household/gardening tasks
3 "Moderate-intensity activity"	4–5	Brisk walking Introducing inclines Jogging Resistance exercises
4 "High-intensity exercises"	5–7	Running Cycling Swimming Dancing
5 "Return to baseline"	8–10	Regular exercise/sports/ activities

Abbreviation: RPE, rating of perceived exertion.

Con la collaborazione di

SAPIENZA UNIVERSITÀ DI ROMA

Management Riabilitativo per il recupero dalla malattia COVID-19

Seconda edizione

Nome:

Inizio dei sintomi (data):

Data di consegna dell'opuscolo:

Nome e contatti dell'operatore sanitario che ha fornito l'opuscolo:

Nome e contatti dei servizi sanitari locali:

Nome e contatti dei servizi di support alla riabilitazione:

BORG RATING PERCEIVED EXERTION CATEGORY RATIO CR-10 SCALE

TABLE 1 WHO Borg CR-10 pacing protocol

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5 "Return to baseline"	8–10	Regular exercise/sports/ activities

Abbreviation: RPE, rating of perceived exertion.

FASE 1 PREPARAZIONE PER IL RITORNO ALL'ESERCIZIO
FASE 2 ESERCIZI A BASSA INTENSITA'
FASE 3 ATTIVITA' CON INTENSITA' MODERATA
FASE 4 ESERCIZI DI INTENSITA' MODERATA CON CAPACITA' DI COORDINAZIONE E FUNZIONAMENTO
FASE 5 RITORNO ATTIVITA' ESERCIZI E SPORT

BORG RATING PERCEIVED EXERTION CATEGORY RATIO CR-10 SCALE

Borg CR-10		Fase				
Punteggio	Livello dello sforzo	1	2	3	4	5
0	Riposo / nessuno sforzo					
1	Molto facile / estremamente leggero					
2	Facile / molto leggero					
3	Moderato / leggero					
4	Leggermente difficile					
5	Difficile					
6						
7	Molto difficile					
8						
9	Estremamente difficile					
10	Massimo Sforzo					

TOPIC 7: Artralgia

RACCOMANDAZIONE *conditional*

- educazione al dolore,
- training a strategie di autotrattamento (self-management),
- *skills training*,
- prescrizione di farmaci antiinfiammatori non steroidei (FANS) a breve termine
- in assenza di PESE, training di esercizio fisico

European Journal of Physical and Rehabilitation Medicine 2022 December;58(6):870-4
DOI: 10.23736/S1973-9087.22.07803-0

SYSTEMATIC REVIEW

Arthralgia: a map of Cochrane evidence relevant to rehabilitation for people with post COVID-19 condition

Claudio CORDANI [1, 2], Stefano G. LAZZARINI [3] *, Matteo J. DEL FURIA [2], Carlotte KIEKENS [4], Chiara ARIENTI [3], Stefano NEGRINI [1, 2]

[1]Department of Biomedical, Surgical and Dental Sciences, University "La Statale", Milan, Italy; [2]IRCCS Istituto Ortopedico Galeazzi, Milan, Italy; [3]IRCCS Fondazione Don Carlo Gnocchi, Milan, Italy; [4]IRCCS MultiMedica, Milan, Italy

Intervention	Osteoarthritis (hand/hip/knee/ knee+hip)				Ankylosing spondylitis					Aromatase inhibitor-induced musculoskel-etal symptoms		Hemophilia	Chronic pain		Neuropathic pain	Patellofemoral pain syndrome		Rheumatoid arthritis	
Acupuncture	M**																		
Aquatic exercise	M*																		
Exercise	M*	L*	L*	VL*	M§	L§	VL§	L§	VL*	L*	VL*	L*						VL*	VL*
NMES																VL*	VL*		
rTMS													L**	VL**					
TENS	VL**			VL**											VL**				

Figure 1.—Evidence map of interventions for arthralgia symptoms compared to control, sham intervention, no therapy.
Lines represent the interventions. Columns represent the health conditions where the searched outcome has been considered. Colors in each cell reported the type of effect (effect against the intervention – black; effect in favor of the intervention – white; no definite results – grey). Quality of evidence was reported into each cell the with the following acronyms: VL: very low-quality; L: low-quality; M: moderate-quality; H: high-quality; na: not available. Comparisons: *Control group or other intervention; **sham group; §no intervention.
rTMS: repetitive transcranial magnetic stimulation; TENS: transcutaneous electrical nerve stimulation; NMES: neuromuscular electrical stimulation.

TOPIC 8: Dispnea

RACCOMANDAZIONE *conditional*

- educazione al respiro
- training a strategie di autotrattamento, quali la respirazione nasale
- in assenza di PESE, training di esercizio fisico

TOPIC 8: Dispnea

Scala di Borg modificata per la valutazione della dispnea (M-Borg)

0	Nessuna
0,5	Molto molto lieve
1	Molto lieve
2	Lieve
3	Moderata
4	Piuttosto intensa
5	Intensa
6	
7	Molto intensa
8	
9	Molto molto intensa
10	Insopportabile

SCALA BARTHEL- DISPNEA (BI-D) (Vittacca et al. 2016 Int J Chron Obstruct Pulmon Dis. 2016; 11: 1199-206. doi: 10.2147/COPD.S104376)

Cognome e Nome..... Data.....

ITEMS	VALORIZZAZIONE				
	0	1	2	3	4
Igiene personale	0	1	3	4	5
Fare il bagno	0	1	3	4	5
Mangiare	0	2	5	8	10
Usare il WC	0	2	5	8	10
Fare le scale	0	2	5	8	10
Vestirsi	0	2	5	8	10
Controllo urine	0	2	5	8	10
Controllo alvo	0	2	5	8	10
Camminare	0	3	8	12	15
Carrozzina*	0	1	3	4	5
Trasferimenti* (letto-sedia e viceversa)	0	3	8	12	15

SCORE
TOTALE (0-100)

NOTE

Opzioni di risposta:

0= nessun segno di dispnea durante l'esecuzione delle ADLs

1= leggera dispnea che non impedisce o rallenta lo svolgimento delle ADLs

2= moderata dispnea, che può rallentare lo svolgimento delle ADLs

3= dispnea grave, che può rallentare notevolmente lo svolgimento delle ADLs

4= dispnea estremamente grave, tale da impedire o ridurre quasi sempre lo svolgimento delle ADLs *(necessità sempre di supporto)*

Sigle: ADLs, activities of daily living (attività della vita quotidiana)

Ministero della Salute

https://www.youtube.com/watch?v=1uQRRga5jWM

TOPIC 9: disturbo cognitivo - nebbia cerebrale

RACCOMANDAZIONE conditional

- educazione alla disfunzione cognitiva
- training a strategie di autotrattamento
- esercizi specifici cognitivi.
- utilizzo di tecnologie assistive e modificazioni ambientali.

TOPIC 10: Fatigue

Riduzione dell'energia fisica, mentale ed emotiva nello svolgimento delle attività quotidiane che richiedono concentrazione, attenzione, soluzione di problemi, parlare in pubblico, prendere decisioni

applied sciences

MDPI

SIMFER SOCIETÀ ITALIANA DI MEDICINA FISICA E RIABILITATIVA The Italian Society of Physical and Rehabilitation Medicine

Systematic Review

Impact of Rehabilitation on Fatigue in Post-COVID-19 Patients: A Systematic Review and Meta-Analysis

Alessandro de Sire [1], Lucrezia Moggio [1,*], Nicola Marotta [1], Francesco Agostini [2], Anna Tasselli [1], Vera Drago Ferrante [1], Claudio Curci [3], Dario Calafiore [3], Francesco Ferraro [3], Andrea Bernetti [2], Ozden Ozyemisci Taskiran [4] and Antonio Ammendolia [1]

Article	Nationality	Study Design	Study Group	Intervention	Outcome	Main Findings
Ferraro et al. Journal of Medical Virology 2020	Italy	Case series	n tot = 7 male/female = 5/2 mean age = 43.8 years LOS in ICU = 4.7 days LOS in COVID-19 Unit = 16.57 days LOS in Rehabilitation Unit = nr	Increased-intensity physical exercises 1/2 sessions per day of 30 min each for 6 days/week	Borg CR10	At baseline, 86% of patients presented COVID-19-related fatigue, but after rehabilitation treatment, 71% did not show any fatigue.
Tozato et al. Revista Brasileira de Terapia Intensiva, 2020	Brazil	Case series	n tot = 4 male/female = 2/2 mean age = 56 years LOS in ICU = 15 days LOS in COVID-19 Unit = 19.75 days LOS in Rehabilitation Unit = 90 days	Aerobic exercise 3 times/week, 30 min, resistance exercise 3 times/week, 3 series of 10 repetitions each	Borg CR10	At the end of the treatment, CR10-associated dyspnea variables were reduced for all cases.
Wootton et al. Respirology Case Reports, 2020.	Australia	Case series	n tot = 3 male/female = 3/0 mean age = 70.6 years LOS in ICU = 1.33 days LOS in COVID-19 Unit = 12 days LOS in Rehabilitation Unit = 42 days	Individual telerehabilitation program, including education and progressive exercise sessions (15–30 min each) featuring breathing, aerobic, and strength training	5 STS, 1 min STS, FSS, mMRC	Fatigue score on the FSS worsened at the six-week time-point in two cases. Patients demonstrated improvements from commencement of rehabilitation to the six-week time-point on the 5 STS and 1 min STS.
Bickton et al. American Journal of Medicine & Rehabilitation, 2021	Malawi	Case report	n tot = 1 male/female = 1/0 mean age = 46 years LOS in ICU = 0 days LOS in COVID-19 Unit = 10 days LOS in Rehabilitation Unit = 21 days	Individual telerehabilitation program, using a treatable traits approach, with weekly contact by a physiotherapist with multidisciplinary team (MDT) input	mMRC, CIS-Fatigue	At the end of the treatment, the CIS fatigue scale score was 11, indicating normal fatigue.
Ahmed et al. European Journal of Physiotherapy, 2021	Pakistan	Prospective interventional study	n tot = 20 male/female = 13/7 mean age = 39.6 years LOS in ICU = 3–5 days LOS in COVID-19 Unit = 5–8 days LOS in Rehabilitation Unit = nr	5 weeks (3 session/week) of aerobic training (20–60 min/session) and breathing exercise training (10 min/session)	6 MWT, Modified Borg dyspnea scale evaluated before and after treatment.	At the end of the treatment, there was a statistically significant improvement in performance at the 6 MWT (635.3 ± 11.6 vs. 560.3 ± 11.3; $p < 0.001$) and at the Borg Dyspnea Scale (3.1 ± 0.1 vs. 4.5 ± 0.2; $p < 0.001$)
Daynes et al. Chronic Respiratory Disease, 2021	United Kingdom	Observational study	n tot = 30 male/female = 16/14 mean age = 58 years LOS in ICU = nr LOS in COVID-19 Unit = 10 days LOS in Rehabilitation Unit = nr	6 weeks (2 session/week) of aerobic exercise, strength training of upper and lower limbs and educational discussions	ISWT, ESWT, FACIT evaluated before and after treatment.	At the end of the treatment there was significant improvements in clinical outcomes of walking capacity as ISWT (413 [229] vs. 300 [198] m; $p < 0.01$) and ESWT (837 [406] vs. 292 [260]; $p < 0.01$). Moreover, there was a statistically significant increase in FACIT values (34 vs. 29 ; $p < 0.01$)

applied sciences

MDPI

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Systematic Review

Impact of Rehabilitation on Fatigue in Post-COVID-19 Patients: A Systematic Review and Meta-Analysis

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- **SCALE DI VALUTAZIONE**: Sono state utilizzate scale di valutazione conosciute e validate: Borg CR 10, 1 min STS, Fatigue Severity Scale, FACIT, ISWT … pre e post trattamento in tutti gli studi
- **INTERVENTO RIABILITATIVO**: disomogeneo
  - **DURATA DELLO STUDIO** (FINO A 6 SETTIMANE),
  - **FREQUENZA DELLE SEDUTE** (DA 2GG A 6 GG /SETTIMANA),
  - **TIPOLOGIA DI INTERVENTO** (TRAINING AEROBICO, ESERCIZI RESPIRATORI, PROGRAMMI DI TELERIABILITAZIONE INDIVIDUALE CON MONITORAGGIO)
- **RISULTATI**: outcome favorevole (scale di valutazione)

TOPIC 14: Disfagia

RACCOMANDAZIONE conditional

- combinazione tra educazione
- training a strategie di autotrattamento
- esercizi specifici (posturali, manovre, modificazioni dietetiche, deglutizione)

World Health Organization

Expanding our understanding of post COVID-19 condition web series: Rehabilitation Care

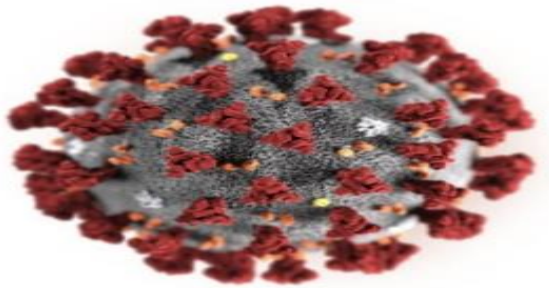
INTERVENTIONS FOR REHABILITATION OF POST COVID–19 CONDITION

Dr Akmal Hafizah Zamli
Consultant Rehabilitation Physician
Head of Rehabilitation Medicine Department
Hospital Sungai Buloh
Selangor, MALAYSIA

HOSPITAL SUNGAI BULOH

MINISTRY OF HEALTH MALAYSIA

WORLD HEALTH ORGANIZATION GLOBAL WEBINAR SERIES
06–10–2021 (WEDNESDAY)



https://www.who.int/news-room/events/detail/2021/10/06/default-calendar/expanding-our-understanding-of-post-covid-19-condition-web-series-rehabilitation-care

Intervention for rehabilitation of Post COVID-19 condition – An integrated approach

Post- COVID condition	Non-pharmacological	Pharmacological
Fatigue	▪ Energy conservation technique ▪ Sleep hygiene ▪ Graded return to physical activity & ADL ▪ Personalized graded aerobic exercise with pacing ▪ Breathing and relaxation technique ▪ Cognitive behavioral therapy ▪ Healthy life style ▪ Adaptive and assistive devices	▪ Stimulants Methyl phenidate D-amphetamine ▪ Analgesics Bupropion ▪ Anti depressants SSRIs TCAs
Exertional dyspnea	Personalized pulmonary rehab program ▪ Improve ventilation capacity: Breathing techniques, positioning, adjuncts- incentive spirometer, inspiratory muscle trainer ▪ Aerobic exercise- Conservative, intermittent, pacing gradual increment, intensity <60% max heart rate ▪ Muscle strengthening - Resistance and weights as tolerated	▪ Supplemental O_2 therapy ▪ Inhaler meds if bronchial hyperresponsiveness ▪ Anti-fibrotic if progressive FLD
Cough	Dry: Hydration, gargle, lozenges, menthol crystal steam inhalation Productive: Postural drainage, percussion, active cycle breathing technique, huffing methods	Dry: Suppressant, if sensory neural cough neuropathic medication Productive: Mucolytics, expectorants

Intervention for rehabilitation of Post COVID-19 condition – An integrated approach

Post- COVID condition	Non-pharmacological	Pharmacological
Anxiety	▪ Educate with facts on recovery process ▪ Cognitive Behavioral Therapy ▪ Sleep hygiene ▪ Relaxation and breathing techniques ▪ Psychoeducation & psychotherapy ▪ Facilitate access to mental health support	Anxiolytics Benzodiazepines Anti depressants SSRIs SNRIs TCAs
Brain Fog	▪ Sleep hygiene ▪ Breathing and relaxation technique ▪ Cognitive re-orientation ▪ Compensatory strategies - memory aids, checklist, alarm ▪ Brain exercise – puzzle, word and number game, gradual complexity ▪ Personalized graded exercise program	▪ Stimulants Methyl-phenidate if attention deficit
Chronic pain	Desensitization techniques Physical modalities – TENS, cryotherapy, ultrasound etcs Cognitive behavioral therapy Relaxation and breathing techniques Personalized graded exercise program	Neuropathic Gabapentin, Pregabalin Nociceptive NSAIDS topical / oral Opioids

Note : Integration of non pharmaceutical and pharmaceutical approach are adopted from alike symptoms management in other pathological condition. Effectiveness of its application in post-COVID-19 condition requires scientific validation.

International Journal of
Environmental Research and Public Health

MDPI

Systematic Review

Rehabilitation Interventions for Post-Acute COVID-19 Syndrome: A Systematic Review

Stefania Fugazzaro [1], Angela Contri [1,2,*], Otmen Esseroukh [1], Shaniko Kaleci [3], Stefania Croci [4], Marco Massari [5], Nicola Cosimo Facciolongo [6], Giulia Besutti [7], Mauro Iori [8], Carlo Salvarani [3,9] and Stefania Costi [1,3,†] on behalf of Reggio Emilia COVID-19 Working Group

Int. J. Environ. Res. Public Health **2022**, *19*, 5185. https://doi.org/10.3390/ijerph19095185

MR

CORSI, CONGRESSI & C.

La riabilitazione delle persone non autosufficienti nella pandemia COVID-19: riflessioni dal XIV Forum della Non Autosufficienza e dell'Autonomia possibile

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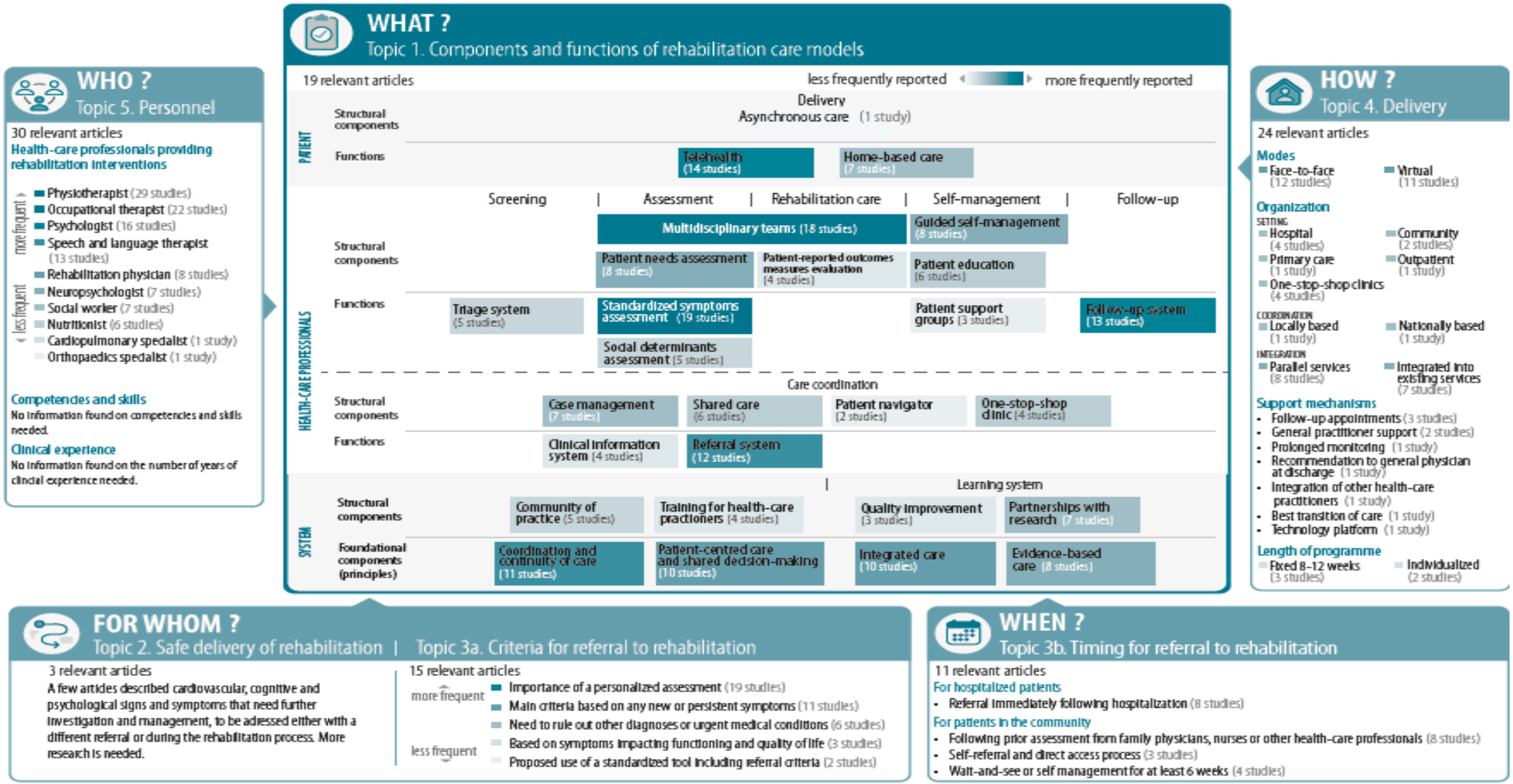
COSA ABBIAMO IMPARATO?

Scoping review of rehabilitation care models for post COVID-19 condition

Simon Décary,[a] Wouter De Groote,[b] Chiara Arienti,[c] Carlotte Kiekens,[d] Paolo Boldrini,[e] Stefano Giuseppe Lazzarini,[c] Michèle Dugas,[f] Théo Stefan,[f] Léa Langlois,[f] Frédérique Daigle,[a] Florian Naye,[a] Annie LeBlanc[f] & Stefano Negrini[g]

Fig. 4. **Concept map for the design of a rehabilitation care model for post COVID-19 condition**

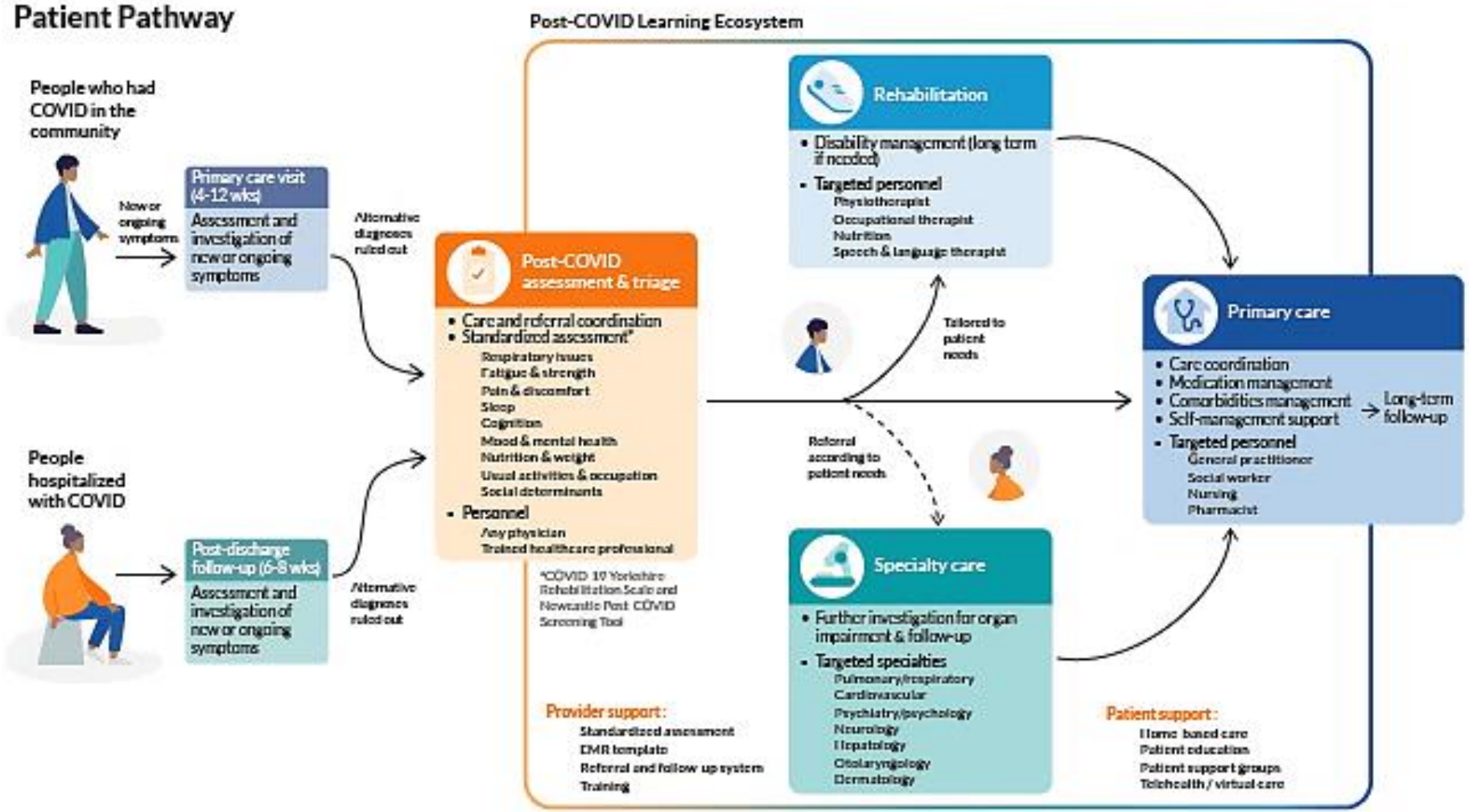


COVID-19: coronavirus disease 2019.

A proposed care pathway for Long COVID

based on a rapid systematic review of care models for Long COVID - June 2021

OVERARCHING PRINCIPLES: Patient-centered care | Patient empowerment | Evidence-based care | Integrated & coordinated care | Shared & multidisciplinary care



OUTCOMES: Quality of life | Patient experience | Provider experience | Sustainable cost

Components were included in the proposed pathway based on the frequency of their occurrence in the literature; efficacy data was not available at the time of the review.
Source: Decary S, Dugas M, Stefan T, Langlois L, Skidmore B, Bhérour A, and LeBlanc A. (2021). Care Models for Long COVID – A Rapid Systematic Review. SPOR Evidence Alliance, COVID-END Network.

Box 2. **Key policy messages on care models for post COVID-19 condition**

1. Rehabilitation care for post COVID-19 condition should not be limited to one specific approach or profession; we suggest a multilevel and multiprofessional care model.
2. Due to the complexity of post COVID-19 condition, decision-makers should leverage all available strengths of their own health system, learn and adapt from experience with other conditions to provide appropriate rehabilitation.
3. Financing for rehabilitation of people with post COVID-19 condition should include funding programmes and research using standardized measurements that target contextualized and prioritized health system needs for optimal rehabilitation outcomes.
4. Policy-making for rehabilitation of people with post COVID-19 condition should include guidance for researchers and clinicians to develop and adopt appropriate mechanisms to increase patient safety.

1 MODELLO DI CURA MULTILIVELLO E MULTIPROFESSIONALE

2 CONSIDERARE LA COMPLESSITA' DEL POST COVID E ADATTARE ESPERIENZE DA ALTRE CONDIZIONI PER LA RIABILITAZIONE

3 I FINANZIAMENTI PER RIABILITAZIONE E RICERCA UTILIZZINO SISTEMI DI VALUTAZIONE STANDARDIZZATI

4 INCLUDERE LINEE GUIDA PER RICERCATORI E CLINICI PER SVILUPPARE E ADOTTARE MECCANISMI APPROPRIATI PER LA SICUREZZA DEI PAZIENTI

CORRIERE DELLA SERA

Covid, Remuzzi: «Altri virus verranno. Ora va rafforzata la sanità pubblica»

ANSA.it › Salute&Benessere › Sanità › Ghebreyesus (Oms), problema nuove epidemie, non se ma quando

Ghebreyesus (Oms), problema nuove epidemie, non se ma quando

Lezione Urbani anche per Covid, più equità su vaccini e cure

Redazione ANSA ANCONA 03 aprile 2023 14:33

Scrivi alla redazione Stampa

COUNTRY NEED FOR REHABILITATION SERVICES

Total population: **60 313 168 inhabitants**
World Bank classification: **High income**

27 117 057 people have at least one condition that would benefit from rehabilitation services, contributing to **3 660 525** years lived with disability.

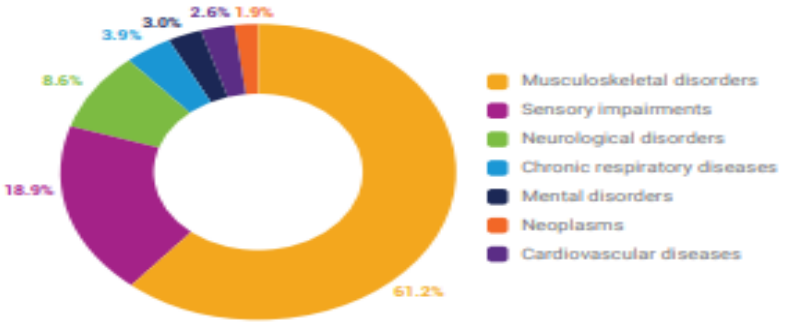
Who?

Prevalence of people with at least one condition that would benefit from rehabilitation services, according to age and sex

0–14 years		15–64 years		≥65 years	
Female	Male	Female	Male	Female	Male
326 724	386 150	7 431 739	7 906 424	6 322 574	4 743 446
712 874		15 338 163		11 066 020	
27 117 057					

What?

Health conditions contributing to the prevalence of the need for rehabilitation services



All data are from 2019
Data sources: (4, 44)

SOCIETÀ ITALIANA G.U.I.D.A.
PER LA GESTIONE UNIFICATA E INTERDISCIPLINARE DEL DOLORE MUSCOLO-SCHELETRICO E DELL'ALGODISTROFIA

SIMFER
SOCIETÀ ITALIANA DI MEDICINA FISICA E RIABILITATIVA
The Italian Society of Physical and Rehabilitation Medicine

COVID-19 Assistenza riabilitativa

Teleriabilitazione

Venerdì 3 aprile 2020
alle ore 15.00

Testimonianze dirette e confronto tra i professionisti che stanno vivendo situazioni analoghe in questa difficile contingenza

Link al video

su Youtube: https://www.youtube.com/watch?v=7_xG5r0HrMQ&feature=youtu.be

0018435-17/11/2020-GAB-MDS-A - Allegato Utente 2 (A02)

Allegato A all'Accordo Stato-Regioni

All. A

Ministero della Salute

INDICAZIONI NAZIONALI PER L'EROGAZIONE DI PRESTAZIONI IN TELEMEDICINA

Per i Soci in regola con le quote di iscrizione, è ora possibile rivedere i webinar organizzati dalla SIMFER

Allegato 2

Ministero della Salute

INDICAZIONI NAZIONALI PER L'EROGAZIONE DI PRESTAZIONI E SERVIZI DI TELERIABILITAZIONE DA PARTE DELLE PROFESSIONI SANITARIE

9 aprile 2021

Versione 5.9