

# Meeting Nazionale ITACARE-P 2025

La Cardiologia Riabilitativa e Preventiva  
come snodo fondamentale  
della cura della persona con cardiopatia

*Quando il training è “advanced”.  
Prescrivere esercizio fisico al cardiopatico  
complesso.*



CENTRO CONGRESSI FRENTANI  
Roma, 21-22 novembre 2025

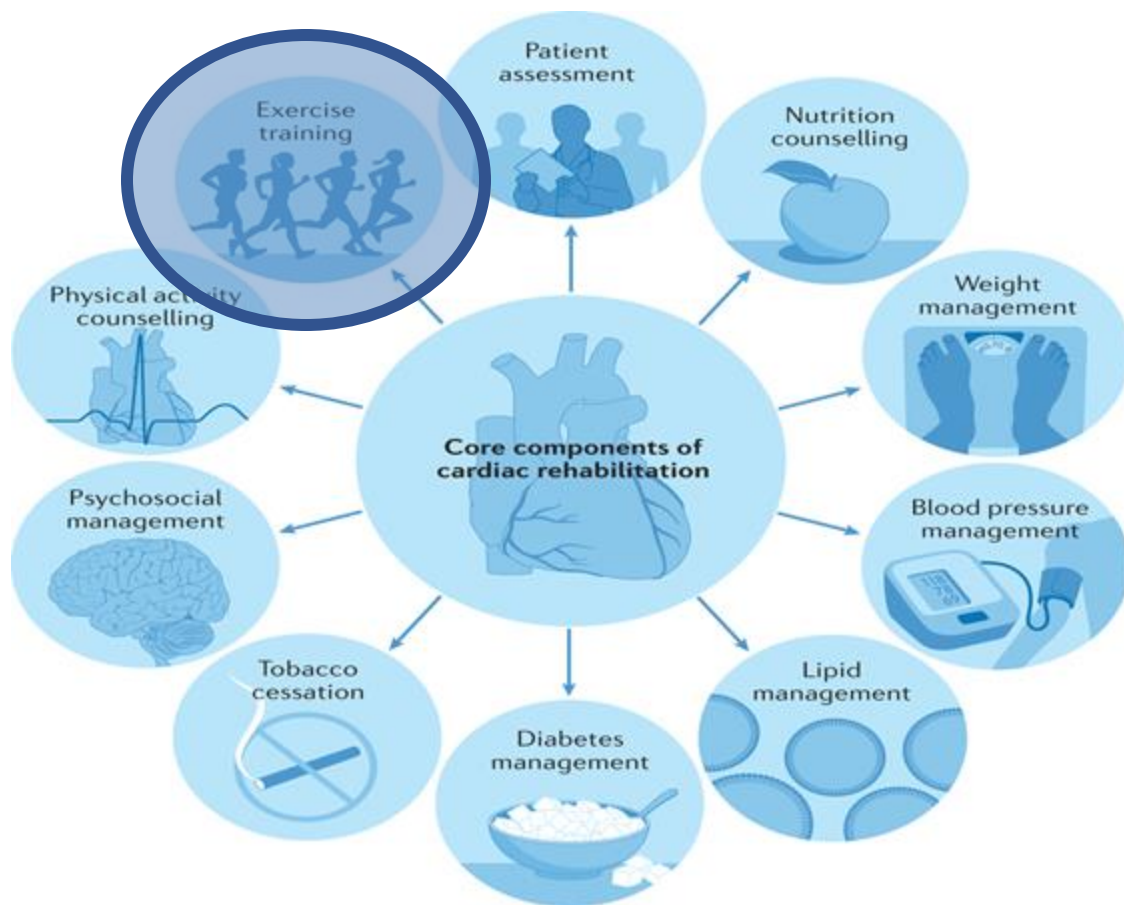
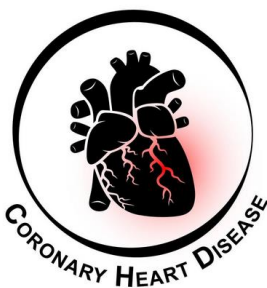
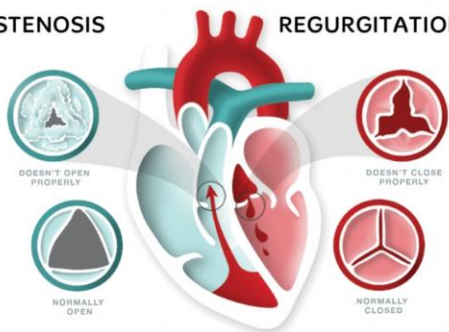
**Dott. Claudio Stefano Centorbi**  
Centro di Cardiologia e riabilitazione  
Cagliari

**CONSALUS**



# L'esercizio fisico come componente fondante la riabilitazione cardiovascolare

STENOSIS REGURGITATION



European Journal of Preventive Cardiology (2021) 28, 460–495  
doi:10.1177/2047487320913379

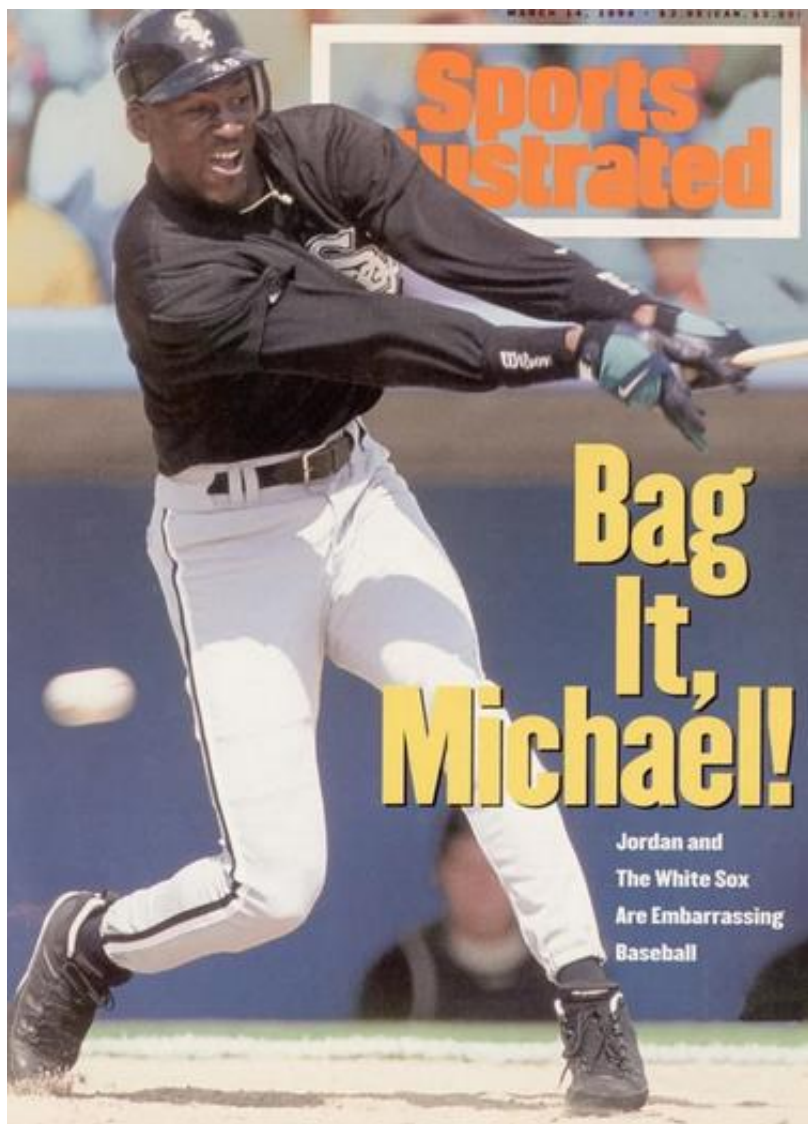
POSITION PAPER  
Cardiac rehabilitation

**Secondary prevention through comprehensive cardiovascular rehabilitation: From knowledge to implementation. 2020 update. A position paper from the Secondary Prevention and Rehabilitation Section of the European Association of Preventive Cardiology**













***Il Cardiopatico “complesso” non è da proteggere DALL’attività fisica,  
ma da proteggere CON l’attività fisica, “cucita su misura”***





# Ruolo del CPET

**Table I** Core components and objectives common to all clinical conditions.

## Components

### Patient assessment

- Clinical history: screening for cardiovascular risk factors, comorbidities and disabilities
- Symptoms: cardiovascular disease (NYHA class for dyspnoea, CCS class for angina, and Fontaine/Rutherford class for lower extremities PAD)
- Adherence: to the medical regime, adequate lifestyle, and self-monitoring (weight, BP, symptoms)
- Physical examination: general health status, heart failure signs, cardiac and carotid murmurs, BP control, extremities for presence of arterial pulses and orthopaedic pathology, cerebrovascular events with/without neurological sequelae
- ECG: heart rate, rhythm, repolarization changes
- Cardiac imaging (two-dimensional and Doppler echocardiography): in particular left ventricular systolic and diastolic function, right ventricular systolic function and heart valve diseases evaluation when appropriate
- Blood testing: routine biochemical assay, fasting blood glucose, HbA1C, total cholesterol, LDL-C, HDL-C, triglycerides, uric acid, parameters of renal function, peptides
- Physical activity level: domestic, occupational and recreational needs, activities relevant to age, gender and daily life, readiness to change behaviour, self-confidence, barriers to increased physical activity, and social support in making positive changes
- Evaluation of frailty by validated scores (see the Frailty subsection)

- Peak exercise capacity: symptom-limited exercise testing, either on bicycle ergometer or on treadmill, by means of CPET as a gold standard. If the patient cannot do any treadmill or bicycle (not so frequent) a test like 6MWT or ISWT should be performed (but only as necessary alternative). In frail patients or patients unable to walk, the SPPB or other chair based tests should be considered.



European Journal of Preventive Cardiology (2021) 28, 460–495  
doi:10.1177/2047487320913379

**POSITION PAPER**  
Cardiac rehabilitation

**Secondary prevention through comprehensive cardiovascular rehabilitation: From knowledge to implementation. 2020 update. A position paper from the Secondary Prevention and Rehabilitation Section of the European Association of Preventive Cardiology**



**Table 2** Classification of aerobic exercise intensity<sup>17</sup>

Intensity	VO <sub>2</sub> max (%)	HRmax (%)	HRR (%)	RPE scale	Training zone
Low intensity, light exercise	<40	<55	<40	10–11	Aerobic
Moderate intensity exercise	40–69	55–74	40–69	12–13	Aerobic
High intensity	70–85	75–90	70–85	14–16	Aerobic + lactate
Very high intense exercise	>85	>90	>85	17–19	Aerobic + lactate + anaerobic

*Studio delle soglie*

Reproduced with permission from reference.<sup>17</sup>

HR<sub>max</sub>, maximal heart rate; HRR, heart rate reserve; RPE, ratings of perceived exertion; VO<sub>2peak</sub>, peak oxygen uptake.

**BORG**

6MWT

vs

EXERCISE TESTING

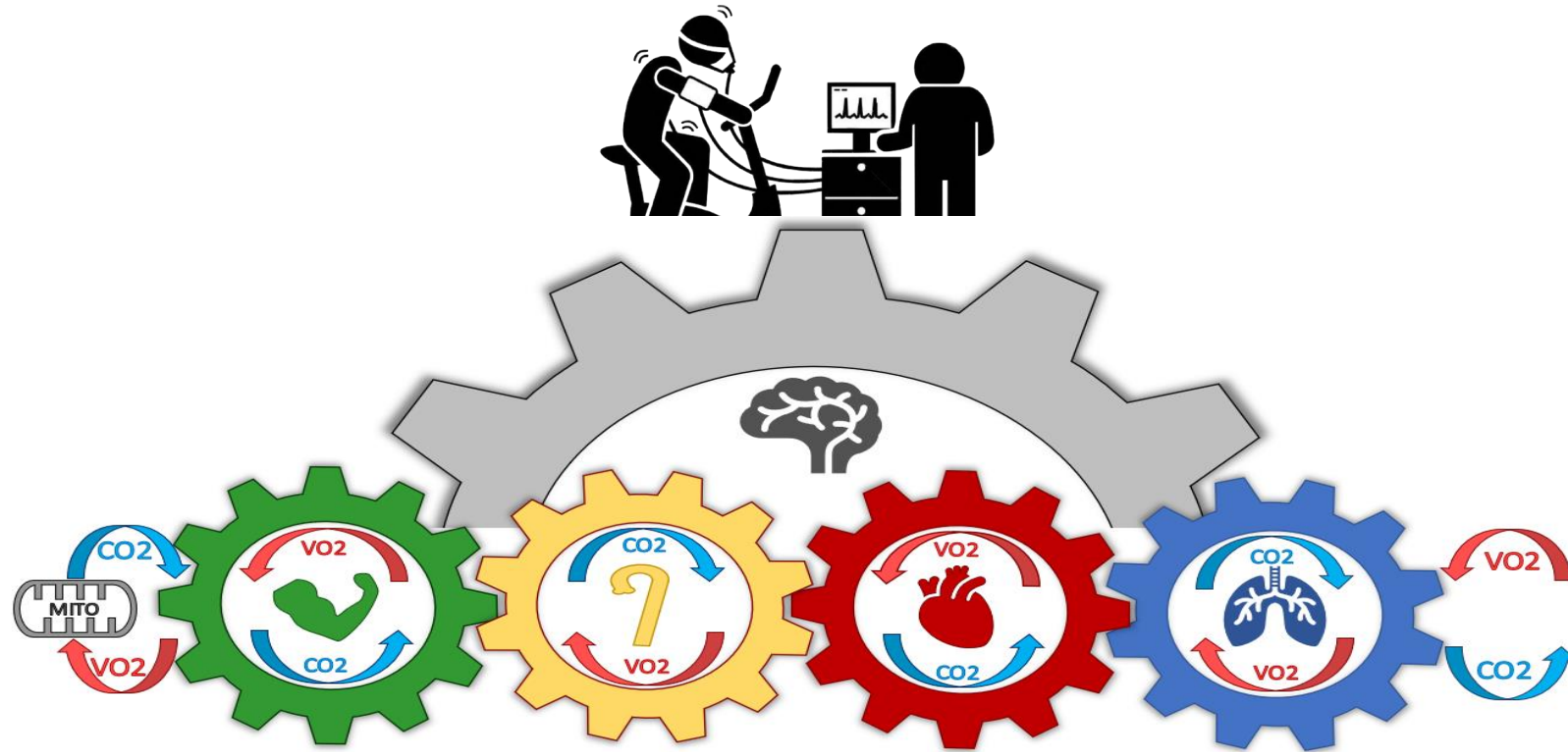
vs

CARDIOPULMONARY EXERCISE TESTING





# Test Cardiopolmonare



**Ruoto fondamentale in ambito:**

**Diagnostico**

**Prescrittivo**

**Prognostico**

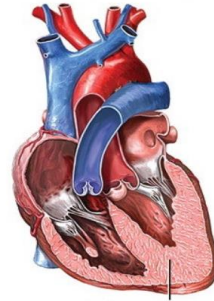




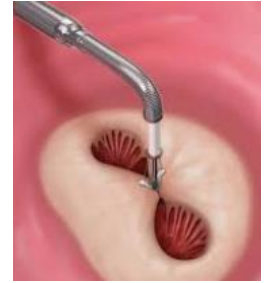
## ***Il Cardiopatico “complesso”: il suo identikit***



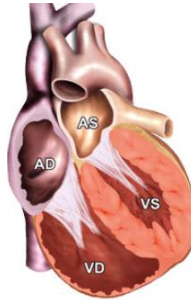
- **Cardiomiopatia ipertrofica**



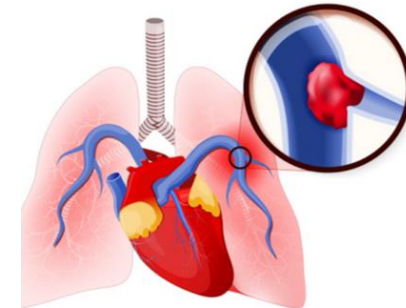
- **Cardiopatie pre-intervento**



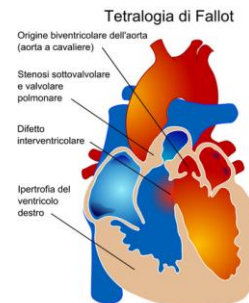
- **Cardiomiopatia aritmogena**



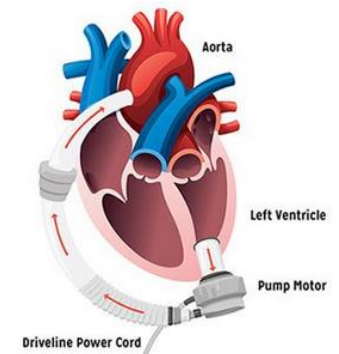
- **Cardiopatia post-embolia polmonare e/o ipertensione polmonare**



- **Cardiopatie congenite**



- **Portatori di Device avanzati (LVAD)**





# Cardiomiopatia ipertrofica

## CENTRAL ILLUSTRATION Physiological Effects of Low-Intensity Exercise, MIE, and HIE In Patients With HCM

Patient With Hypertrophic Cardiomyopathy	Low Intensity	ACCF/AHA Guidelines <sup>10</sup> <ul style="list-style-type: none"><li>• Low intensity Class Ia sports</li><li>• Limited evidence (Level C) for recommendations</li></ul>	
	Moderate Intensity	RCT (RESET-HCM) Saberi et al. 2017 <sup>17</sup> <ul style="list-style-type: none"><li>↑ VO<sub>2</sub> max</li><li>↑ Quality of life</li><li>↓ Arrhythmia burden</li><li>↔ Adverse burden</li><li>↔ Cardiac morphology</li><li>↔ Cardiac function</li></ul>	Single-Group Intervention Klempfner et al. 2015 <sup>29</sup> <ul style="list-style-type: none"><li>↑ Functional capacity</li><li>↑ Exercise time</li><li>↑ Heart rate recovery</li><li>↓ NYHA class</li><li>↑ Subjective improvement</li><li>↔ Adverse events</li></ul>
	High Intensity	Observational: Athletes With HCM vs HCM Non-Athletes Sheikh et al. 2015 <sup>45</sup> <ul style="list-style-type: none"><li>↓ LV end diastolic diameter/volume</li><li>↓ LV wall thickness</li><li>↑ Cardiac function</li><li>↑ VO<sub>2</sub> max</li><li>↓ Blunted BP response</li><li>↓ Resting LVOT gradient</li><li>↔ Fibrosis</li></ul>	Observational: Athletes With HCM vs HCM Non-Athletes Deigaard et al. 2018 <sup>46</sup> <ul style="list-style-type: none"><li>↓ LV end diastolic diameter/volume</li><li>↓ LV end systolic diameter/volume</li><li>↑ Diastolic function</li><li>↑ Stroke volume</li><li>↔ Fibrosis</li><li>↔ LVOT gradient</li></ul>

Dias, K.A. et al. J Am Coll Cardiol. 2018;72(10):1157-65.

Although American College of Cardiology Foundation/American Heart Association (ACCF/AHA) clinical guidelines recommend low-intensity Class IA sports for patients with HCM, this is based on expert opinion and case studies. To date, 2 published studies have assessed the efficacy of MIE training on cardiorespiratory fitness, arrhythmia burden, cardiac function and structure, and quality of life. Two observational studies in athletes with HCM suggest that engaging in HIE is related to favorable physiological outcomes. BP = blood pressure; HCM = hypertrophic cardiomyopathy; HIE = high-intensity exercise; LV = left ventricle; LVOT = left ventricular outflow tract; MIE = moderate-intensity exercise; NYHA = New York Heart Association; VO<sub>2</sub>max = maximal oxygen uptake.

## THE PRESENT AND FUTURE

### JACC REVIEW TOPIC OF THE WEEK

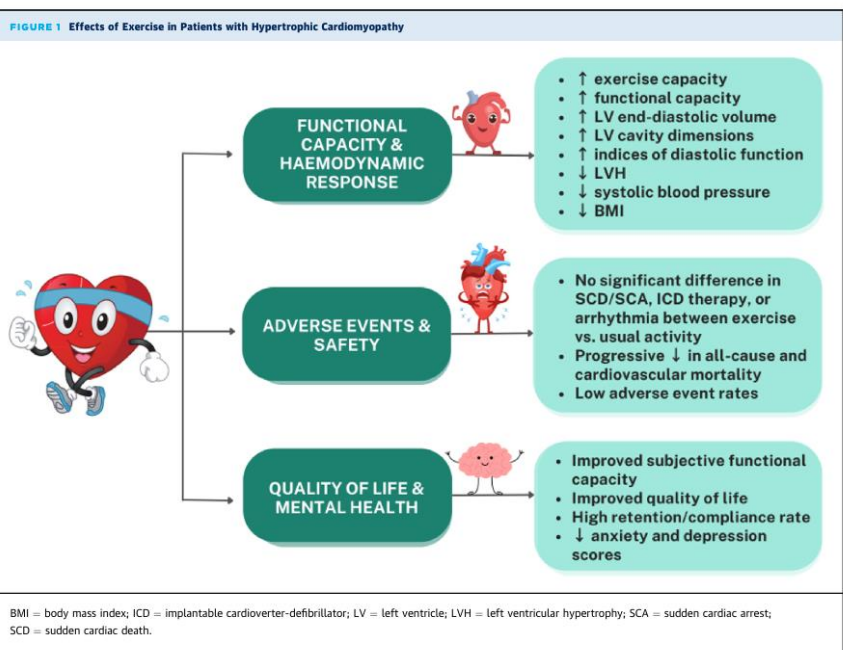
## Exercise Training for Patients With Hypertrophic Cardiomyopathy

### JACC Review Topic of the Week

Katrin A. Dias, PhD,<sup>a,b</sup> Mark S. Link, MD,<sup>b</sup> Benjamin D. Levine, MD,<sup>a,b</sup>



W



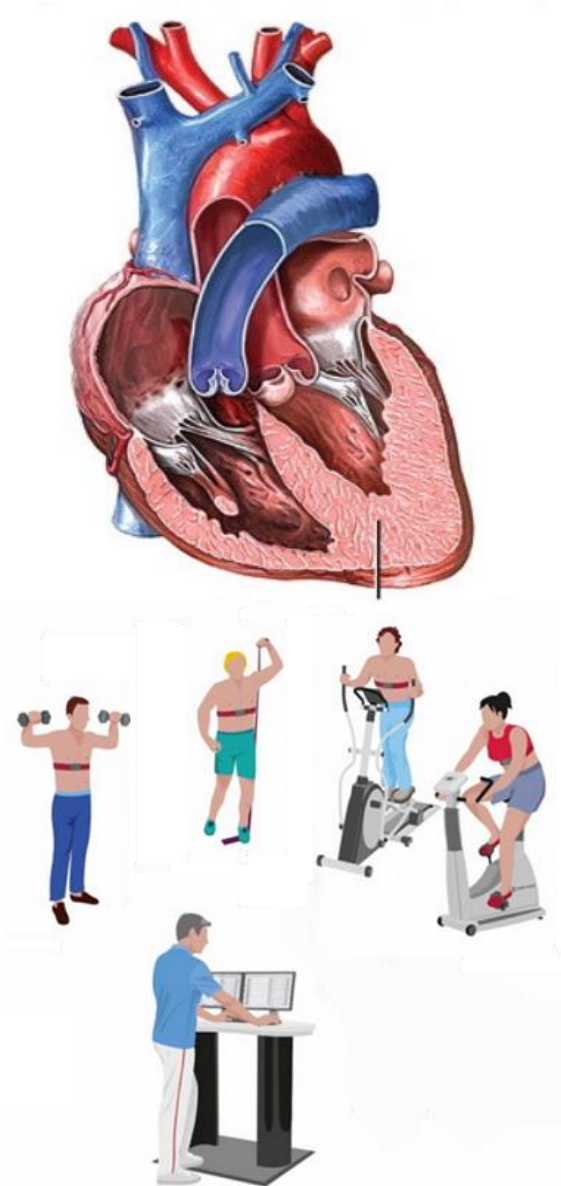
## JOURNAL ARTICLE

## Efficacy of exercise training in symptomatic patients with hypertrophic cardiomyopathy: Results of a structured exercise training program in a cardiac rehabilitation center

Robert Klempfner ✉, Tamir Kamerman, Ehud Schwammenthal, Amira Nahshon, Ilan Hay, Ilan Goldenberg, Freimark Dov, Michael Arad, MD

European Journal of Preventive Cardiology, Volume 22, Issue 1, 1 January 2015, Pages 13–19, <https://doi.org/10.1177/2047487313501277>

Published: 29 August 2020 Article history ▼

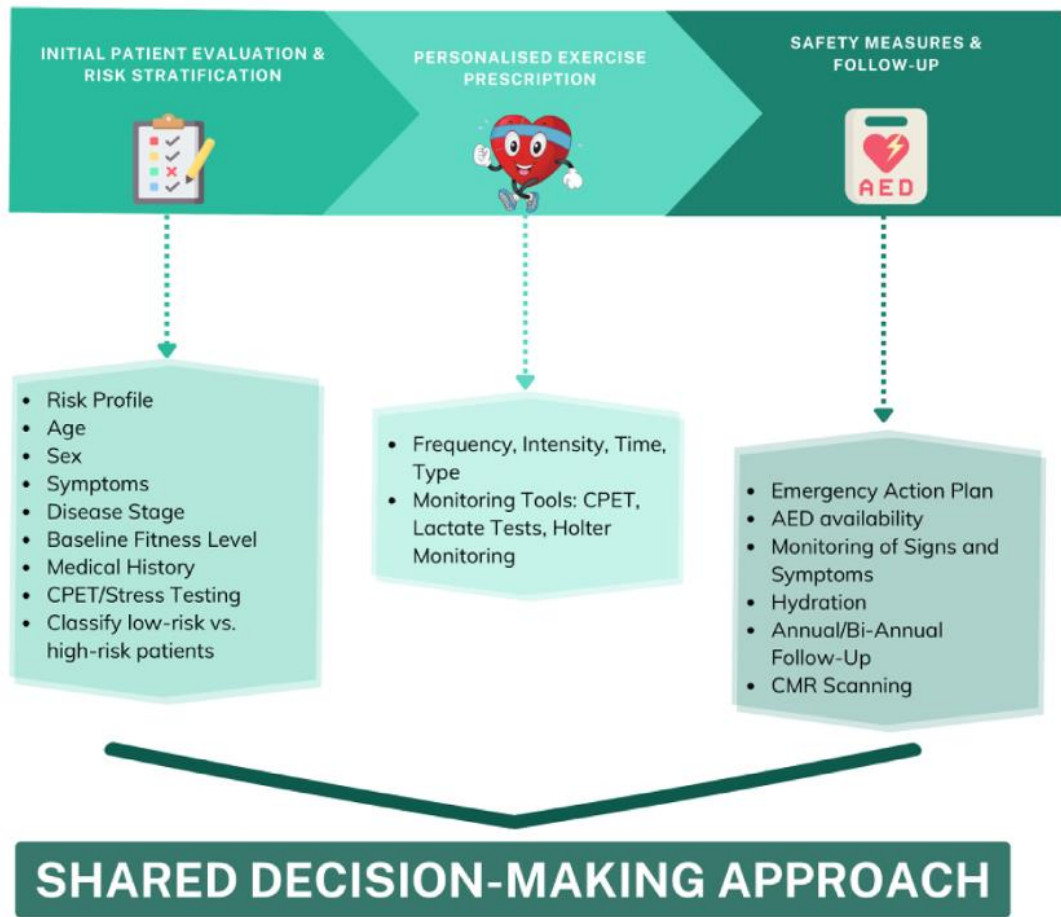






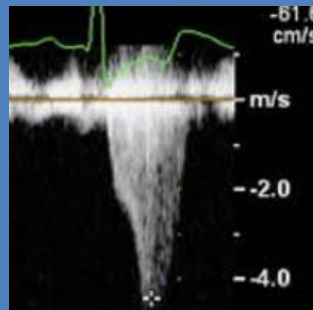
# Cardiomiopatia ipertrofica

FIGURE 2 Individualised Approach to Exercise Prescription in Patients with Hypertrophic Cardiomyopathy

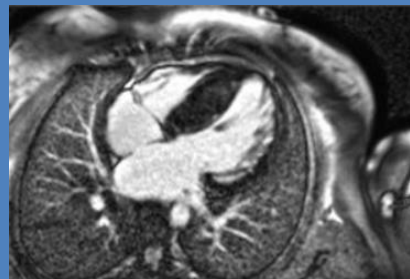


AED = automated external defibrillator; CMR = cardiac magnetic resonance; CPET = cardiopulmonary exercise testing.

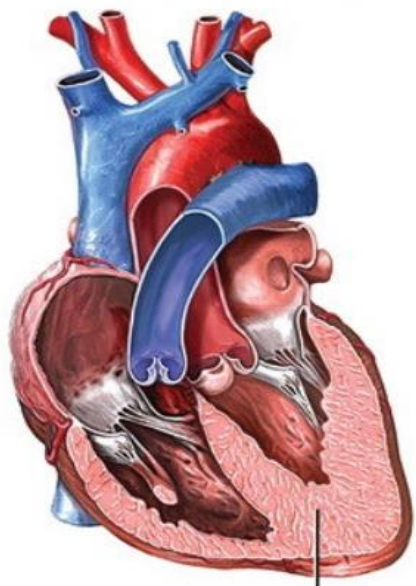
Ostruzione LVOT



FE  
Fibrosi



Profilo:  
• Aritmico  
• Emodinamico



prescription is recommended in all patients with cardiomyopathy.

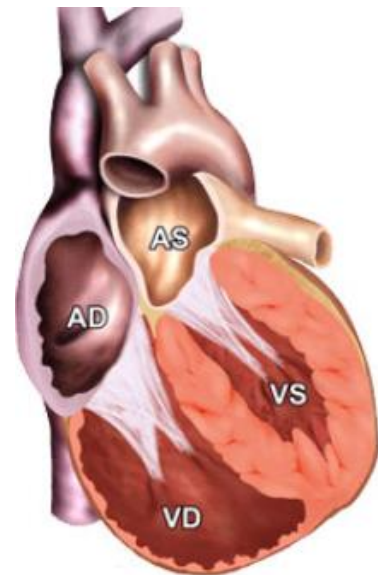
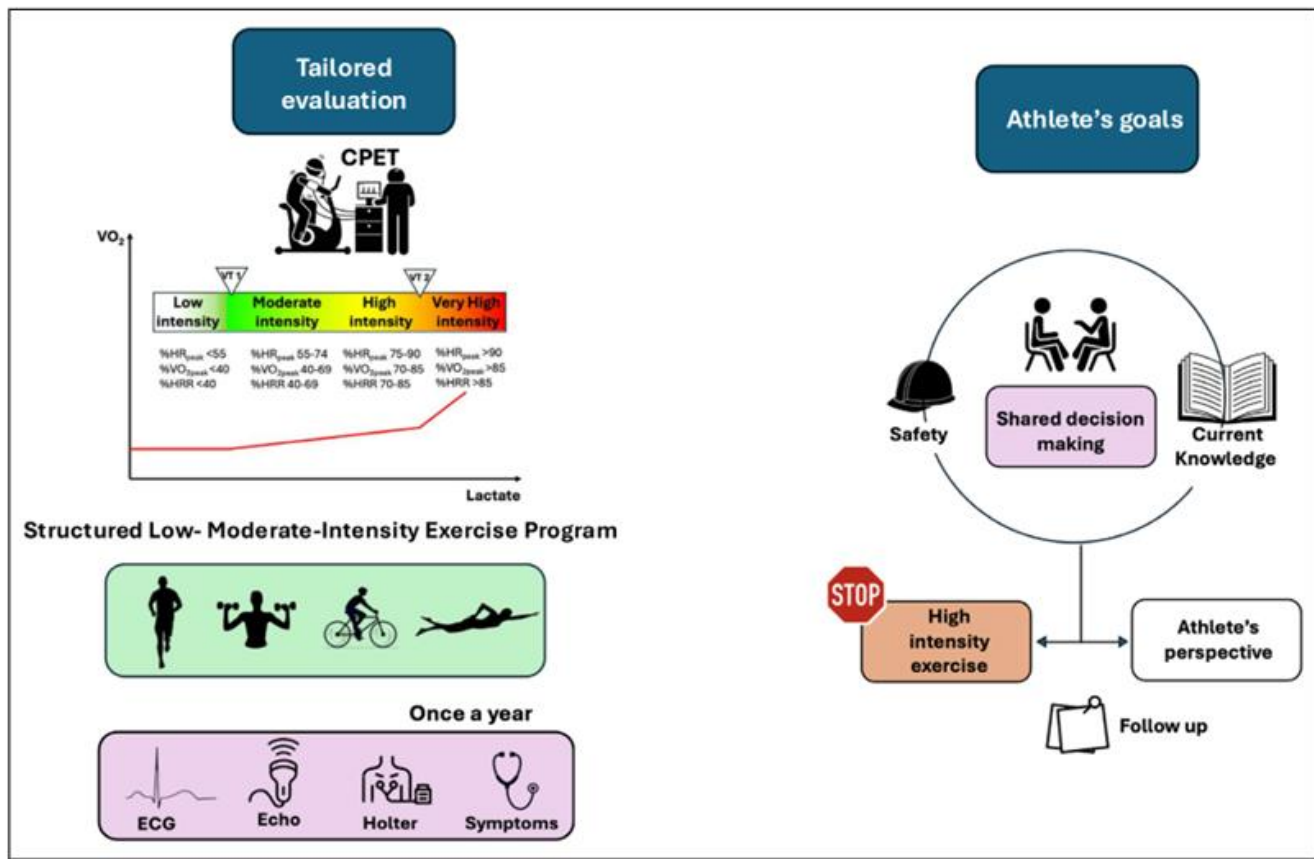


# Cardiomiopatia Aritmogena

## Safety of American Heart Association minimum exercise for de

Abhishek C. Sawant, MD, MPH, Annelin  
Brittney Murray, MS, Aditya Bhonsale,  
Hugh Calkins, MD, FHRS, Cynthia A. Ja

From the Department of Medicine, Division of



## CONTEMPORARY REVIEW

### Exercise Prescription in Arrhythmogenic Cardiomyopathy: Finding the Right Balance Between Risks and Benefits

Lorenzo-Lupo Dei , MD; Jennie Han , MD; Silvio Romano , MD; Luigi Sciarra , MD;  
Angeliki Asimaki , MSc, PhD; Michael Papadakis , MBBS, MRCP, MD; Sanjay Sharma , BSc, MD;  
Gherardo Finocchiaro , MD, PhD





# Cardiomiopatia Aritmogena



ESC

European Society  
of Cardiology

European Heart Journal (2023) 00, 1–124  
<https://doi.org/10.1093/eurheartj/ehad194>

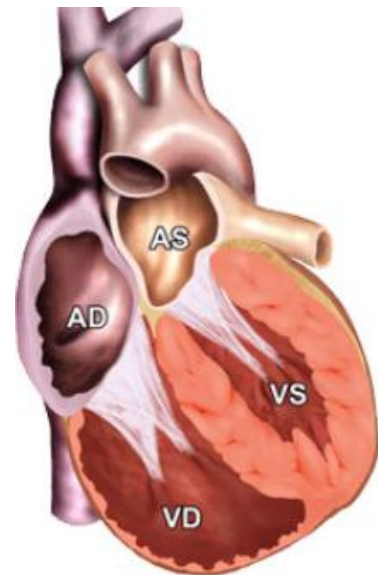
ESC GUIDELINES

## 2023 ESC Guidelines for the management of cardiomyopathies

Developed by the task force on the management of cardiomyopathies of the European Society of Cardiology (ESC)

**Recommendation Table 31** — Exercise recommendations for patients with cardiomyopathy

Recommendations	Class <sup>a</sup>	Level <sup>b</sup>
<b>All cardiomyopathies</b>		
Regular low- to moderate-intensity exercise is recommended in all able individuals with cardiomyopathy.	I	C
An individualized risk assessment for exercise prescription is recommended in all patients with cardiomyopathy.	I	C



### ARVC

Avoidance of high-intensity exercise, including competitive sport, may be considered in genotype-positive/phenotype-negative individuals in families with ARVC. [1111,1116,1117](#)

IIb

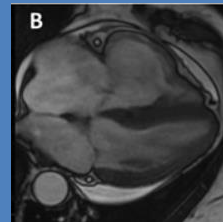
C

Moderate- and/or high-intensity exercise, including competitive sport, is not recommended in individuals with ARVC. [181,1111–1114](#)

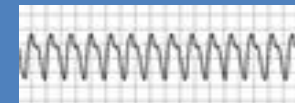
III

B

Funzione  
Ventricolare



Profilo Aritmico





# Cardiopatie congenite

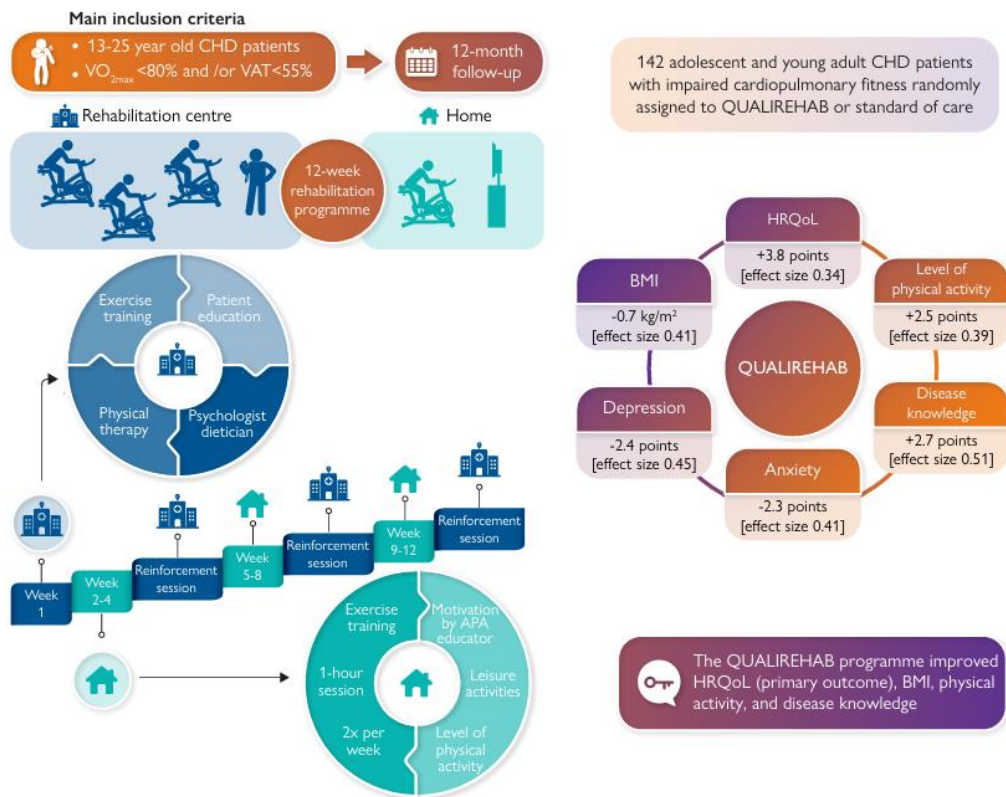


European Heart Journal (2024) 00, 1–16  
European Society of Cardiology  
<https://doi.org/10.1093/eurheartj/ehae085>

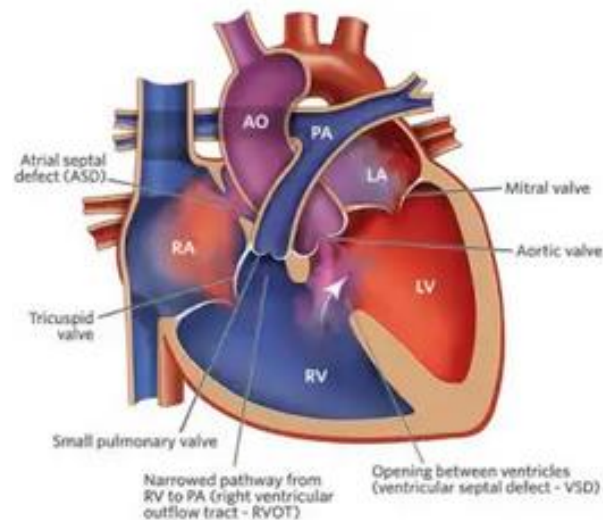
## CLINICAL RESEARCH

Congenital heart disease

### Early hybrid cardiac rehabilitation in congenital heart disease: the QUALIREHAB trial



## QoL







# Cardiopatie congenite

POSITION PAPER

L'attività fisica nei soggetti con cardiopatia congenita in storia naturale ed operata. Task Force sull'attività fisica nel cardiopatico congenito della Società Italiana di Cardiologia Pediatrica e delle Cardiopatie Congenite

Raffaella Marzullo<sup>1</sup>, Anna Balducci<sup>2</sup>, Giulia Cafiero<sup>3</sup>, Barbara Cifra<sup>4</sup>, Gianluca Trocchio<sup>5</sup>, Maurizio Varnier<sup>6</sup>, Pierluigi Colonna<sup>1</sup> (Coordinatore)

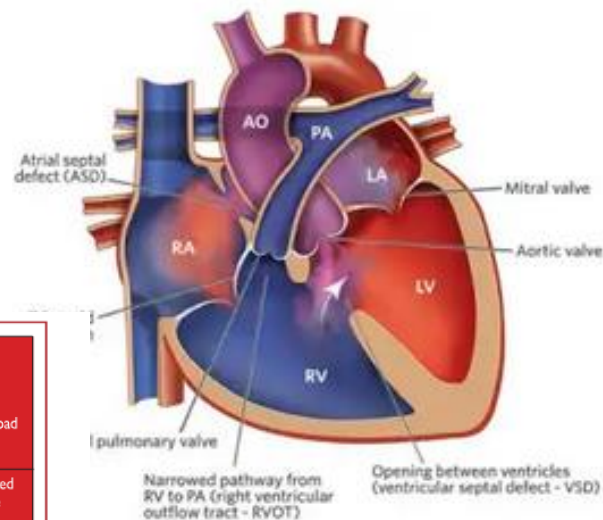


European Heart Journal (2021) 42, 17–96  
doi:10.1093/eurheartj/ehaa605

ESC GUIDELINES

## 2020 ESC Guidelines on sports cardiology and exercise in patients with cardiovascular disease

The Task Force on sports cardiology and exercise in patients with cardiovascular disease of the European Society of Cardiology (ESC)



©ESC 2020

1. Ventricles	No systolic dysfunction No hypertrophy No pressure load No volume load	No systolic dysfunction No hypertrophy Mild pressure load Mild volume I	Mild systolic dysfunction Mild hypertrophy Single ventricle physiology Systemic right ventricle	Moderate systolic dysfunction Moderate hypertrophy Moderate pressure load	Severe systolic dysfunction Severe hypertrophy Severe pressure load Moderate/severe volume load
2. Pulmonary artery pressure	Low pulmonary artery pressure	Low pulmonary artery pressure	Mildly elevated pulmonary artery pressure		Moderately/severely elevated pulmonary artery pressure
3. Aorta	No/mild dilatation	Moderate dilatation	Severe dilatation	Dilatation approaching indication for repair	
4. Arrhythmia	No arrhythmia	No arrhythmia	Mild arrhythmic burden Non-malignant arrhythmia		Significant arrhythmic burden Malignant arrhythmia
5. Saturation at rest/during exercise	No central cyanosis	No central cyanosis	No central cyanosis	Central cyanosis	
	A	B	C	D	E
	When all applicable	When at least one applicable			When at least one applicable
Static component of sport	Up to high static	Up to moderate static			Low static
Relative intensity of sport	<b>HIGH INTENSITY</b> RPE Borg scale: 15–17 Training HR: 75%–90% of achieved MHR during CPET		<b>MODERATE INTENSITY</b> RPE Borg scale: 13–14 Training HR: 60%–75% of achieved MHR during CPET	<b>LOW INTENSITY</b> RPE Borg scale: 11–12 Training HR: <60% of achieved MHR during CPET	

Solid lines indicate recommendation; if option for sports with high static component, reduce intensity (dotted lines).

Figura 1. Percorso di valutazione clinico-funzionale finalizzato alla personalizzazione delle modalità e della tipologia di attività fisica.



# Cardiopatie pre-intervento

**La pre-riabilitazione è un intervento multidisciplinare finalizzato a migliorare lo stato psicofisico prima dell'intervento chirurgico e favorire il decorso post-operatorio, sia per una più veloce ripresa sia per ridurre gli eventi avversi.**

## JOURNAL ARTICLE

**The impact of prehabilitation on post-surgical complications in patients undergoing non-urgent cardiovascular surgical intervention: Systematic review and meta-analysis**

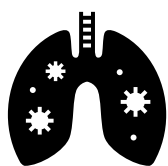
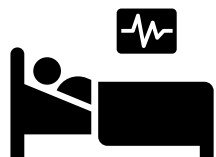
Filipe Marmelo ✉, Vânia Rocha, Daniel Moreira-Gonçalves

European Journal of Preventive Cardiology, Volume 25, Issue 4, 1 March 2018, Pages 404–417, <https://doi.org/10.1177/2047487317752373>

Published: 29 August 2020 Article history ▼

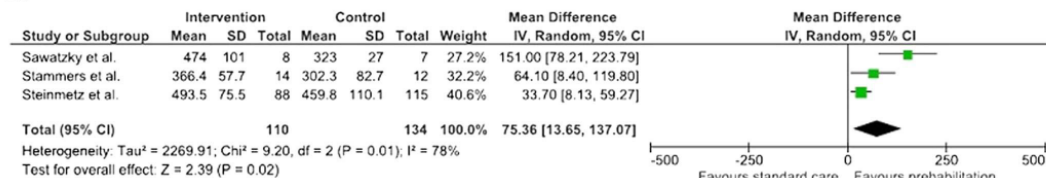
Capacità  
funzionale

Complicanze  
polmonari

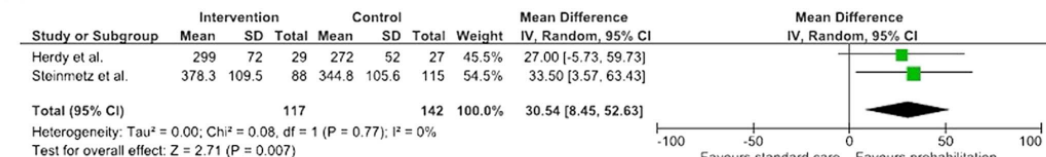


Ospedalizzazione

3.1



3.2



3.3

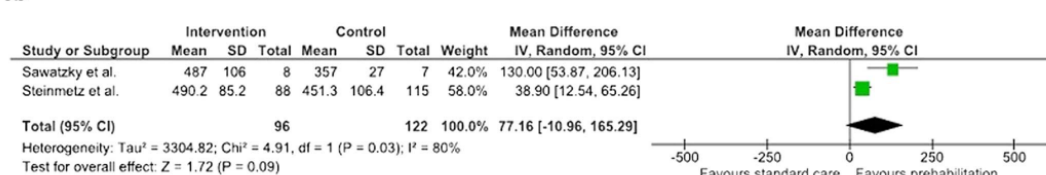


FIGURE 3. 1, Forest plot of the effect of prehabilitation versus standard care on 6MWD after intervention. 2, Forest plot of the effect of prehabilitation versus standard care on 6MWD after surgery. 3, Forest plot of the effect of prehabilitation versus standard care on 6MWD follow-up.

ORIGINAL RESEARCH ARTICLE

OPEN

Efficacy of Prehabilitation Before Cardiac Surgery

A Systematic Review and Meta-analysis

Carolyn Steinmetz, PhD, Birna Bjarnason-Wehrens, PhD, Thomas Walther, MD,  
Tim Fabian Schaffland, PhD, and Claudia Walther, MD







# Cardiopatie pre-intervento



Riabilitazione respiratoria



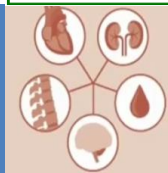
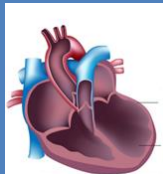
Riabilitazione fisica aerobica

## Stato clinico:

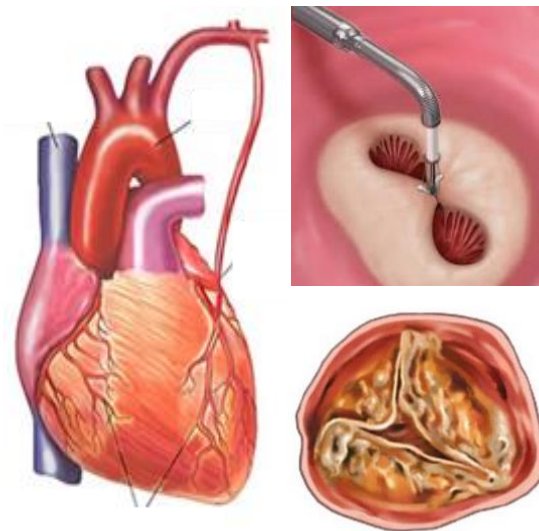
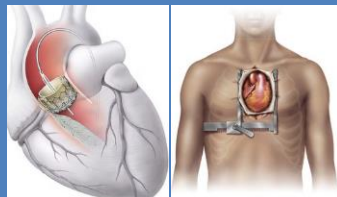
- Ischemico
- Aritmico
- Emodinamico



Cardiopatia di base  
Condizioni generali  
Terapia  
Comorbidità



## Tipologia di intervento





# Post-embolia polmonare e/o ipertensione polmonare

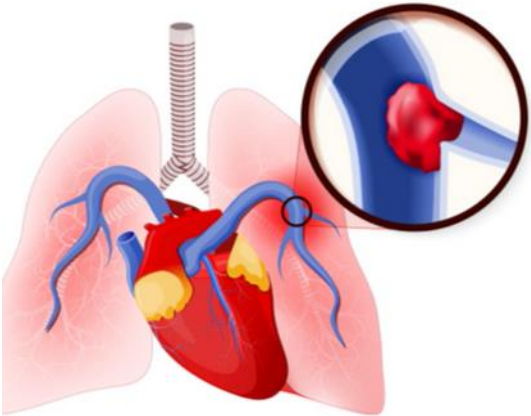
Review

## The Role of Early Rehabilitation in Treatment of Acute Pulmonary Embolism—A Narrative Review

Kamil Salwa <sup>1</sup>, Karol Kaziród-Wolski <sup>1,2</sup>, Dorota Rębak <sup>3</sup> and Janusz Sielski <sup>1,2,\*</sup>

Authors	Year	Country	Type of Research	Specificity	Results
Cires-Drouet et al. [143]	2020	Netherlands	Prospective study	A structured 3-month physical conditioning regimen.	Exercise therapy at differentiated levels demonstrated safety following acute PE episodes.
Rolving et al. [144]	2020	Denmark	Randomized clinical trial	A short nursing-guided consultation combined with an 8-week home-based physical conditioning regimen.	No improvement was observed in physical performance or dyspnea symptoms. Furthermore, no additional adverse effects were recorded.
Nopp et al. [7]	2020	Austria	Prospective study	A structured rehabilitation program involving different types training lasting a minimum of 6 weeks.	The 6-minute walk test indicated enhanced outcomes. Significant positive motor function increases were also recorded. Additionally, 78% of patients exhibited improved health status during extended follow-up.
Boon et al. [4]	2021	Netherlands	Observational cohort study	A 12-week outpatient pulmonary rehabilitation program with consultations from a pulmonologist and physiotherapist.	Enhanced training intensity resulted in improvements in PE-specific quality of life, reduced fatigue, and better functional status.
Gleditsch et al. [88]	2022	Norway	Cohort sub-study	An outpatient pulmonary rehabilitation program supervised during 1-hour training sessions, twice a week, for 8 weeks.	CMR parameters were compared before and after the intervention. Both absolute RV global longitudinal strain and RV lateral longitudinal strain showed significant reductions.
Azzarito et al. [8]	2024	Italy	Prospective study	A 4-week inpatient cardiopulmonary rehabilitation program began 8 days following the pulmonary event.	All patients demonstrated improvements in both dyspnea and physical performance. No adverse effects related to the rehabilitation program were reported.

QoL



Functional capacity





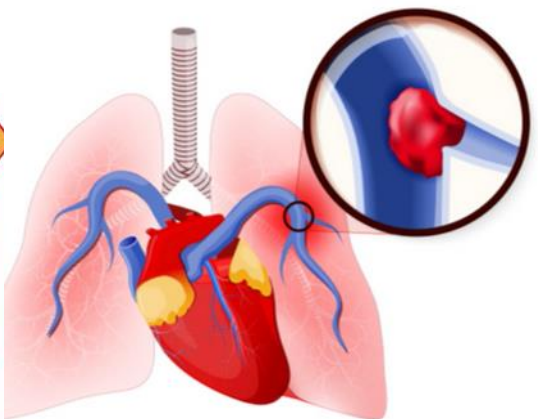


# Post-embolia polmonare e/o ipertensione polmonare

ESC  
European Society  
of Cardiology  
European Heart Journal (2022) 43, 183–189  
<https://doi.org/10.1093/eurheartj/ehab816>

SPECIAL ARTICLE

**Optimal follow-up after acute pulmonary embolism: a position paper of the European Society of Cardiology Working Group on Pulmonary Circulation and Right Ventricular Function, in collaboration with the European Society of Cardiology Working Group on Atherosclerosis and Vascular Biology, endorsed by the European Respiratory Society**





# Post-embolia polmonare e/o ipertensione polmonare



Riabilitazione respiratoria



Riabilitazione fisica aerobica

## STUDY PROTOCOL

## Open Access

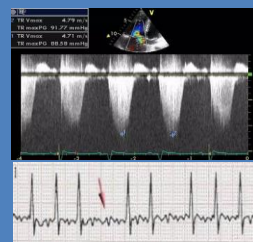
Pulmonary rehabilitation to improve physical capacity, dyspnea, and quality of life following pulmonary embolism (the PeRehab study): study protocol for a two-center randomized controlled trial

Stacey Haukeland-Parker<sup>1,2\*</sup>, Øyvind Jervan<sup>2,3</sup>, Hege Hølmo Johannessen<sup>1,4</sup>, Jostein Gleditsch<sup>2,5</sup>, Knut Stavem<sup>2,6,7</sup>, Kjetil Steine<sup>2,8</sup>, Martijn A. Spruit<sup>9,10,11</sup>, René Holst<sup>2,3</sup>, Mazdak Tavoly<sup>3,12</sup>, Frederikus A. Klok<sup>1,3</sup> and Waleed Ghanima<sup>2,14</sup>

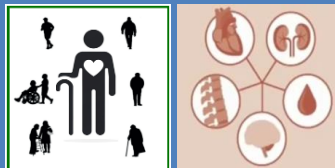


### Stato clinico:

- Dispnea residua
- Aritmico
- Emodinamico



Condizioni generali  
Terapia  
Comorbidità



Contents lists available at ScienceDirect

Thrombosis Research

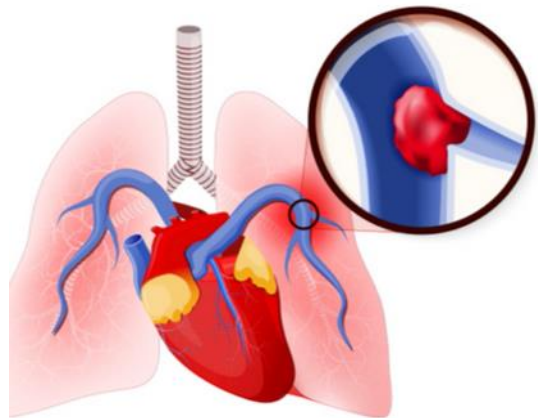
journal homepage: [www.elsevier.com/locate/thromres](http://www.elsevier.com/locate/thromres)



Full Length Article

Efficacy and safety of a 12-week outpatient pulmonary rehabilitation program in Post-PE Syndrome

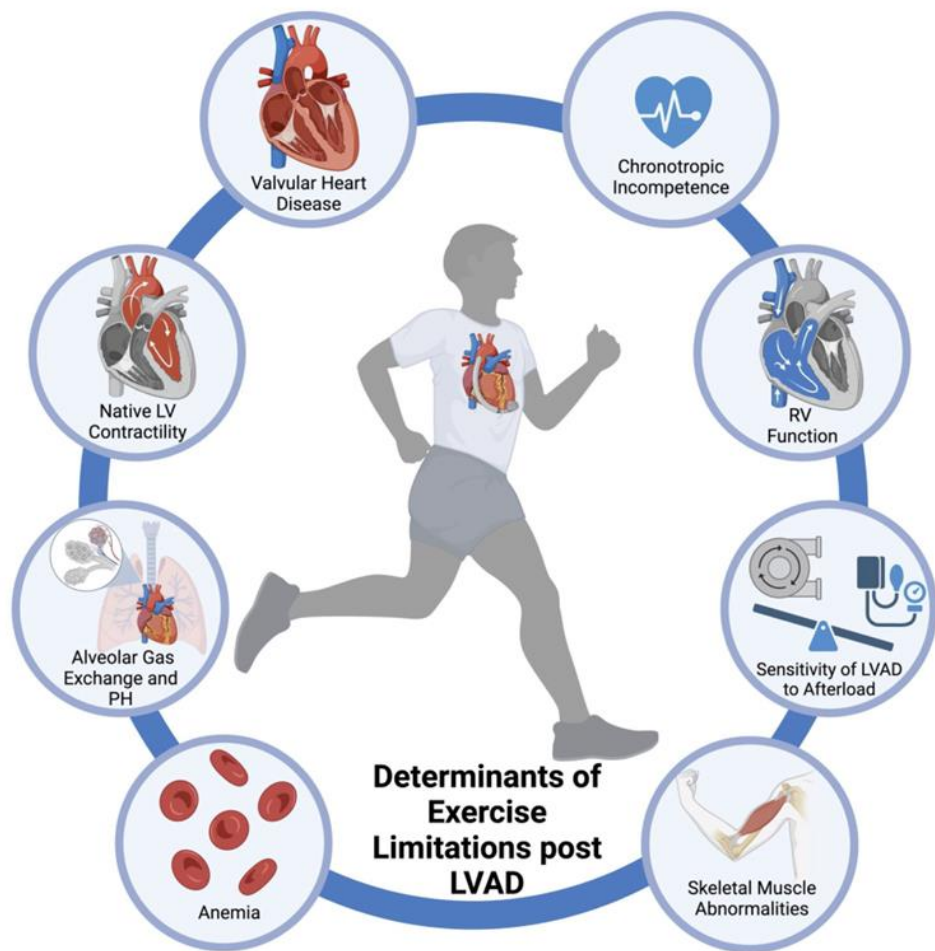
Gudula J.A.M. Boon<sup>a</sup>, Steffi M.J. Janssen<sup>b</sup>, Stefano Barco<sup>c,d</sup>, Harm Jan Bogaard<sup>e</sup>, Waleed Ghanima<sup>f,g</sup>, Lucia J.M. Kroft<sup>h</sup>, Lilian J. Meijboom<sup>i</sup>, Maarten K. Ninaber<sup>j</sup>, Esther J. Nossent<sup>e</sup>, Martijn A. Spruit<sup>k,l,m</sup>, Petr Symersky<sup>n</sup>, Hubert W. Vliegen<sup>o</sup>, Anton Vonk Noordegraaf<sup>e</sup>, Menno V. Huisman<sup>a</sup>, Bob Siegerink<sup>b,q</sup>, Jannie J. Abbink<sup>b</sup>, Frederikus A. Klok<sup>a,\*</sup>







# Portatori di Device Avanzati: LVAD



Heart Failure Reviews (2025) 30:469–476  
<https://doi.org/10.1007/s10741-024-10477-9>

REVIEW

Exercise and cardiac rehabilitation after LVAD implantation

Emily Newman<sup>1</sup> · Yevgeniy Brailovsky<sup>1</sup> · Indraneel Rajagopalan<sup>2</sup>

Accepted: 16 December 2024 / Published online: 27 December 2024  
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↑ QoL



↑ Functional capacity

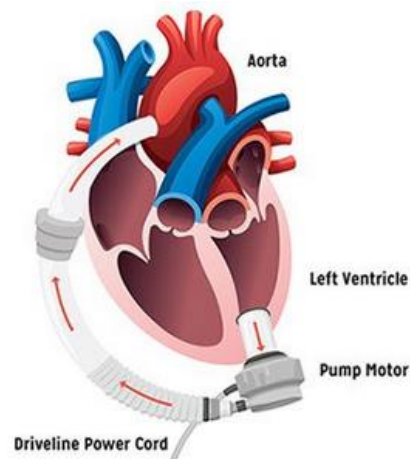


Hospitalization ↓



Exercise-based cardiac rehabilitation in patients with left ventricular assist devices: an updated systematic review and meta-analysis of randomized controlled trials

Mohamed Abuelazm, Ahmed A. Ibrahim, Ahmed Mazen Amin, Mahmoud Shaaban Abdelgalil, Ubaid Khan, Hazem Rezq, Hossam Elbenawi, Maha T. Abuelazm, Mustafa Turkmani, Basel Abdelazeem, Christopher Bianco & Sudarshan Balla



Stato Emodinamico



Condizioni generali

- Fragilità
- Sarcopenia
- Comorbidità







## ***Dove realizzare la prescrizione?***







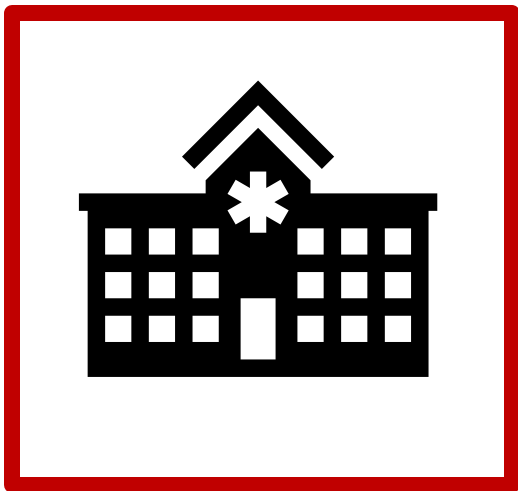
La Cardiologia Preventiva e Riabilitativa “3.0”:  
dalle acuzie alla cronicità. Position paper  
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Roberto F.E. Pedretti<sup>1</sup>, Francesco Fattori<sup>2</sup>, Raffaele Griffo<sup>3</sup>, Marco Ambrosetti<sup>1</sup>, Elisabetta Angelino<sup>4</sup>,  
Silvia Brazzo<sup>5</sup>, Ugo Corrà<sup>6</sup>, Nicolò Dasseni<sup>7</sup>, Pompilio Faggiano<sup>7</sup>, Giuseppe Favretto<sup>8</sup>, Oreste Febo<sup>9</sup>,  
Marina Ferrari<sup>10</sup>, Francesco Giallauria<sup>11</sup>, Cesare Greco<sup>12</sup>, Manuela Iannucci<sup>13</sup>, Maria Teresa La Rovere<sup>10</sup>,  
Mario Mallardo<sup>14</sup>, Antonio Mazza<sup>1</sup>, Massimo Piepoli<sup>15</sup>, Carmine Riccio<sup>16</sup>, Simonetta Scavini<sup>17</sup>,  
Luigi Tavazzi<sup>18</sup>, Pier Luigi Temporelli<sup>16</sup>, Gian Francesco Mureddu<sup>12</sup>

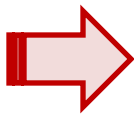
*Revisori del Documento*

Daniele Bertoli<sup>19</sup>, Andrea Bianco<sup>20</sup>, Pasqualina Calisi<sup>21</sup>, Carlo Ciglia<sup>22</sup>, Furio Colivicchi<sup>23</sup>, Anna Frisinghelli<sup>24</sup>, Michele Gabriele<sup>25</sup>,  
Giuseppe Ciancamerla<sup>26</sup>, Rocco Lajola<sup>27</sup>, Roberto Marini<sup>28</sup>, Bruna Miserrafiti<sup>29</sup>, Salvatore Pirelli<sup>30</sup>, Matteo Ruzzolini<sup>31</sup>,  
Gianpaolo Scorcù<sup>32</sup>, Franco Tarro Genta<sup>33</sup>, Nidal Tourkmani<sup>34</sup>, Elio Venturini<sup>35</sup>, Marika Werren<sup>36</sup>, Gianni Zoppi<sup>37</sup>

## *I modelli Riabilitativi*



**Ospedale**



**Riabilitazione  
Degenziale**



## **Riabilitazione Ambulatoriale**

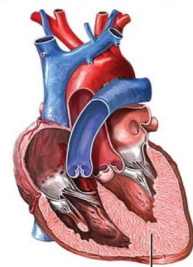
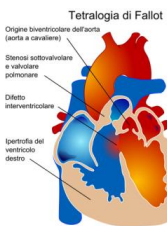
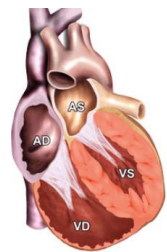
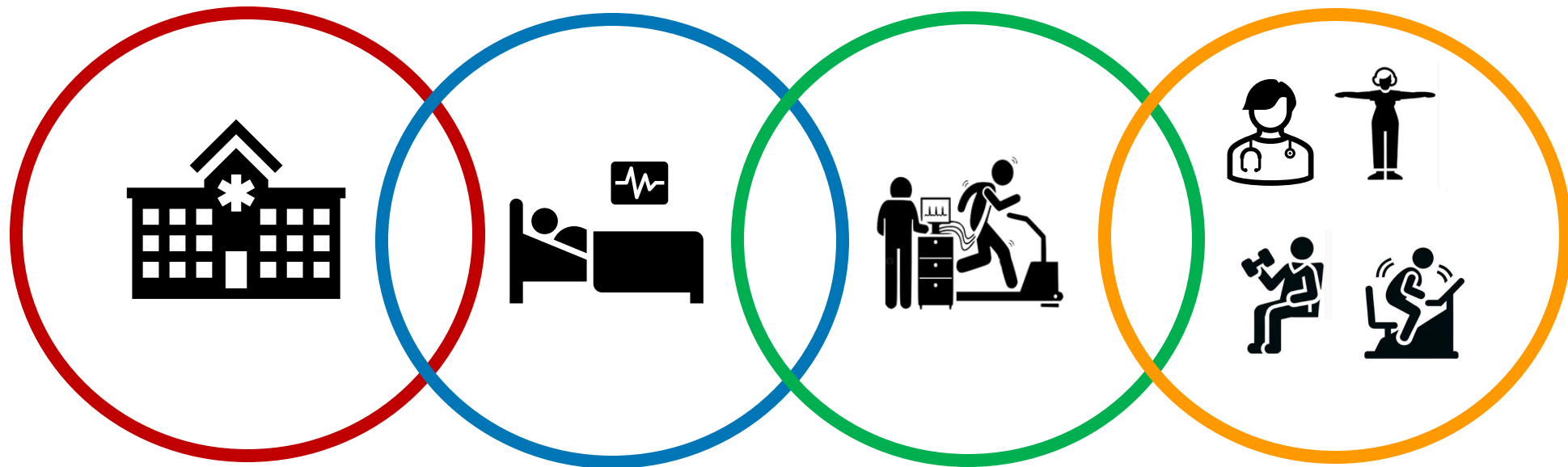
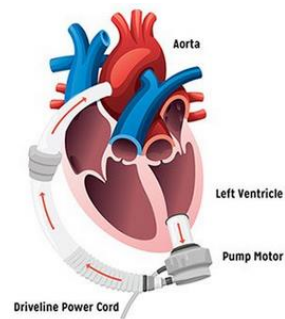
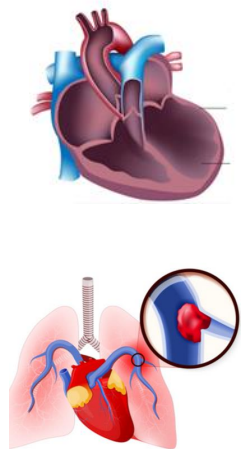
**Strutture di  
Riabilitazione  
Ambulatoriale**



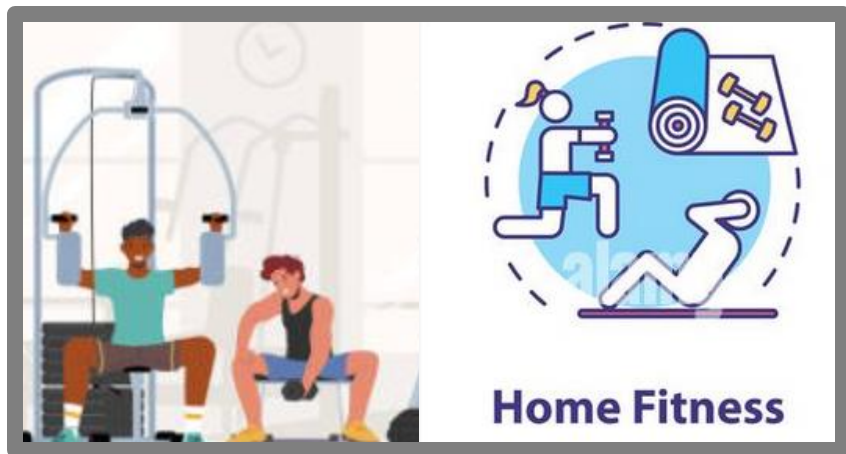
**Ambulatori di  
Prevenzione  
Secondaria**



# Un continuum



**Palestre  
(della Salute)**



**Casa propria  
In autonomia**





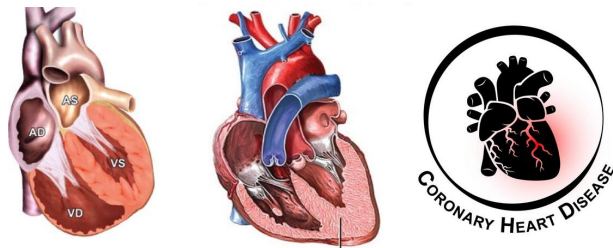
# ***Gli Ambulatori di Prevenzione Secondaria: Un valido intervento riabilitativo mirato***

La Cardiologia Preventiva e Riabilitativa “3.0”:  
dalle acuzie alla cronicità. Position paper  
del Gruppo Italiano di Cardiologia Riabilitativa  
e Preventiva (GICR-IACPR)

Roberto F.E. Pedretti<sup>1</sup>, Francesco Fattiroli<sup>2</sup>, Raffaele Griffo<sup>3</sup>, Marco Ambrosetti<sup>1</sup>, Elisabetta Angelino<sup>4</sup>,  
Silvia Brazzo<sup>5</sup>, Ugo Corrà<sup>6</sup>, Nicolò Dasseni<sup>7</sup>, Pompilio Faggiano<sup>8</sup>, Giuseppe Favretto<sup>9</sup>, Oreste Febo<sup>9</sup>,  
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## ***Obiettivi***

- strutture ambulatoriali a bassa complessità (ambulatori di prevenzione secondaria);
- strutture ambulatoriali in grado di erogare percorsi complessi di CPR [in alcune Regioni ancora inquadrati in un regime di ricovero in ospedalità diurna (day-hospital), in altre in percorsi ambulatoriali integrati come, ad esempio,

- stratificazione prognostica e stabilizzazione clinica,
- counseling sull'attività fisica,
- prescrizione di un programma di training fisico personalizzato,
- counseling su dieta e nutrizione,
- gestione del peso corporeo,
- gestione della dislipidemia,
- controllo e gestione della pressione arteriosa,
- interruzione dell'abitudine al fumo,
- intervento psicologico e sociale.

Per i pazienti a basso rischio, stabili, l'intervento di CR ambulatoriale essenzialmente focalizzato sugli aspetti preventivi ed educativi, può invece essere erogabile in strutture ambulatoriali a bassa complessità (ambulatori di prevenzione secondaria).

### **LA PRESCRIZIONE DELL'ESERCIZIO FISICO IN AMBITO CARDIOLOGICO**

 **sicsport**  
Società Italiana di Cardiologia dello Sport

 **FMSI**  
FEDERAZIONE MEDICO  
SPORTIVA ITALIANA



## TAKE HOME MESSAGE

- **Il Cardiopatico “complesso” rappresenta una sfida nell’ambito della prescrizione dell’esercizio fisico ma ne riconosciamo l’indubbia utilità in termini di miglioramento della qualità della vita, della riduzione degli eventi cardiovascolari e della capacità funzionale.**
- **Abbiamo una forte necessità di aprire le porte delle nostre realtà riabilitative e mettere a disposizione le nostre competenze al servizio delle “nuove” patologie cardiache che hanno una forte domanda di prescrizione dell’esercizio fisico appropriato (*cardiomiopatia ipertrofica, aritmogena ecc*).**
- **Per rispondere alla complessità clinica ed organizzativa, è necessario creare davvero nel prossimo futuro il vero “continuum” nella presa in carico: dall’alta complessità (ospedale → riabilitazione degenziale) al territorio (riabilitazione ambulatoriale → ambulatori prevenzione secondaria → palestre della salute e casa)**

**Prescrivere l’esercizio fisico del cardiopatico complesso significa iniziare un viaggio: il nostro contributo consente che esso prenda la direzione giusta**





***Grazie per l'attenzione***