Table S1. PRISMA 2009 Checklist

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	1
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	1
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	2
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	2,3
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	3
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	6, 7
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	3
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	3
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	4
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	5
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	6, 7
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	5, SM (Table S2)
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	5
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	Not applicable

Section/topic	#	Checklist item	Reported on page #
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	5, SM (Figure S1)
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	Not applicable
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	5
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	6, 7
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	SM (Table S2)
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	8 – 14, SM (Table S3)
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	Not applicable
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	SM (Figure S1)
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	Not applicable
DISCUSSION			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	14, 15
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	15
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	16
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	16

Table S2. Methodological quality summary: review authors' judgements about each methodological quality item for each included study

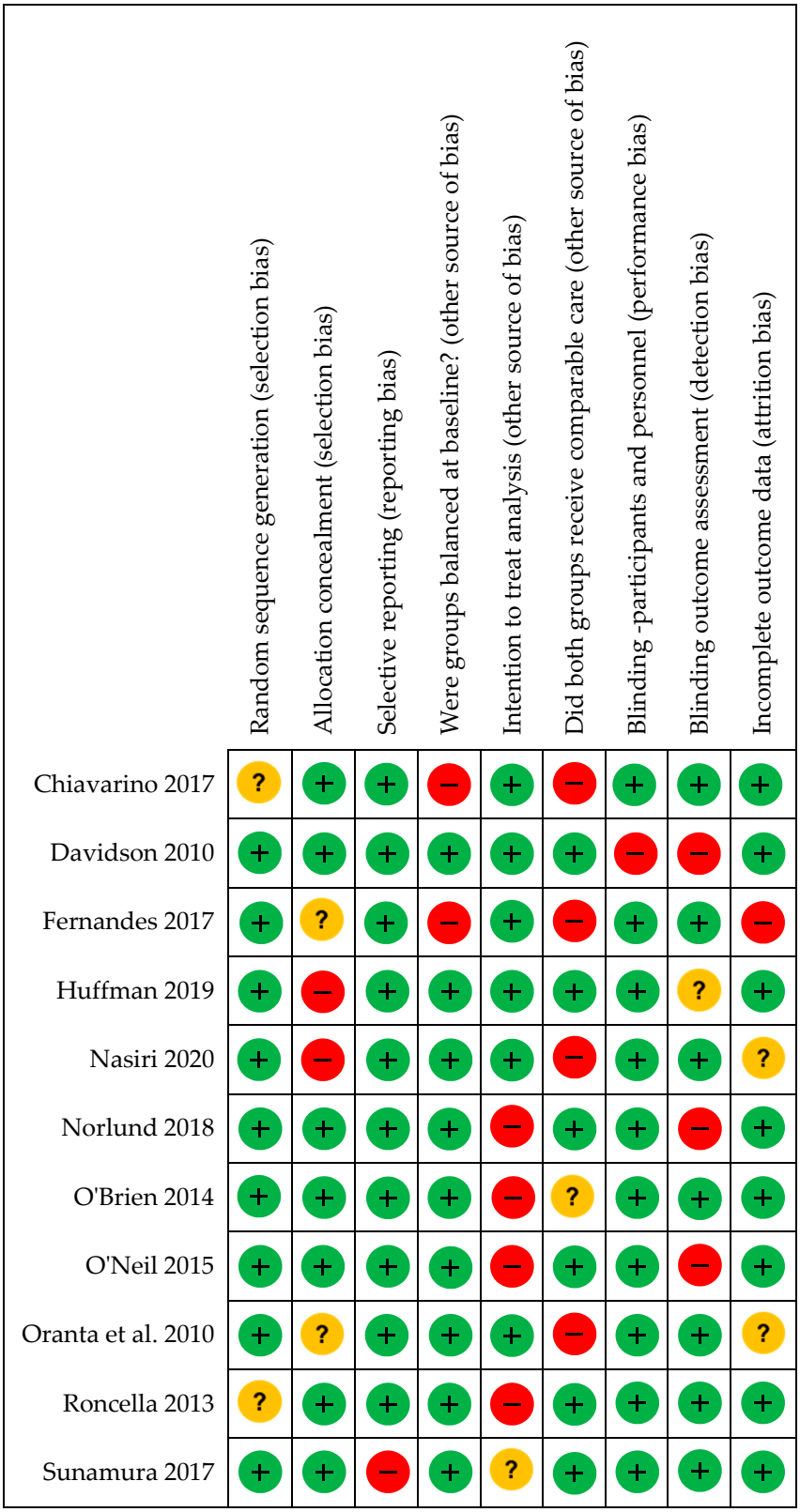

Figure S1. Risk of bias across studies, N = 11

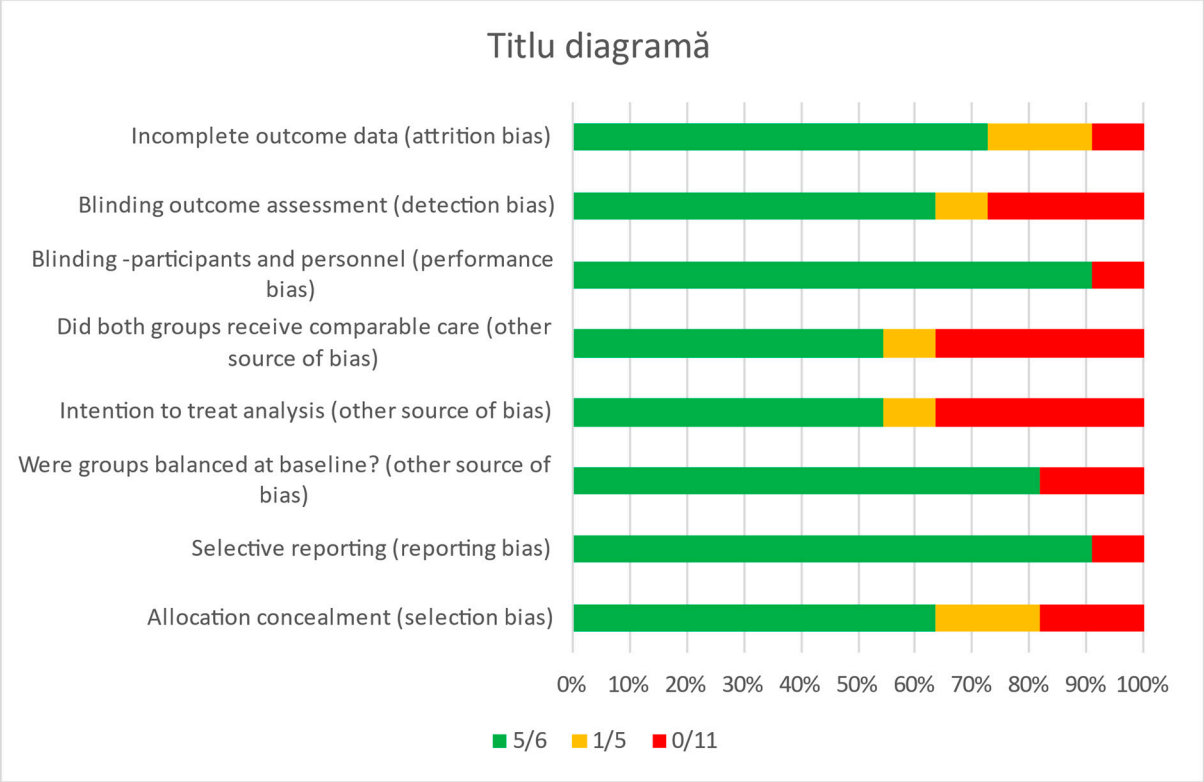

Table S3. Outcomes summary of outcomes for each included study

Outcome	Measure	P value	Effect size at maxim follow-up
CHIVARINO et al. 2016			
Quality of life	World Health Organization Quality of Life Brief:		
	total score	**p < 0.001**	F(1, 52): 14.8
	physical health	**p < 0.001**	F(1, 52): 13.3
	psychological health	**p < 0.001**	F(1, 52): 12.3
	social relationships	**p < 0.001**	F(1, 52): 13.7
	environment	**p = 0.026**	F(1, 52): 5.2
Medical variable	Systolic blood pressure	**p = 0.019**	F(1, 58): 5.8
	Diastolic blood pressure	p > 0.265	All F < 1.3
	Low-density lipoprotein cholesterol	**p < 0.001**	F(1, 43): 18.2
	High-density lipoprotein cholesterol	**p < 0.001**	F(1, 43): 28.5
	Triglycerides	**p = 0.047**	F(1, 44): 4.2
	Glycemia	p > 0.123	All F < 2.5
	Creatinine	**p = 0.002**	F(1, 46): 10.3
	Body mass index	p > 0.164	All F < 2.0
	Heart rate	**p = 0.023**	F(1, 56): 5.5
	Ventricular ejection fraction	**p = 0.021**	F(1, 57): 5.7

Psychological variables			
Coping strategies	Brief Coping Orientations to Problems Experienced:		
	total score	**p = 0.027**	F(1, 59): 5.2
	emotion-focused subscale	**p = 0.001**	F(1, 59): 12.3
	problem-focused subscale	**p = 0.002**	F(1, 59): 10.2
	dysfunctional coping subscale	p > 0.759	All F < 0.1
Emotional awareness	Twenty-Item Toronto Alexithymia Scale:		
	total score	**p = 0.035**	F(1, 58): 4.6
	externally oriented thinking subscale	**p = 0.003**	F(1, 58): 9.3
	difficulty identifying feelings subsclale	p > 0.166	all F < 2.0
Self-esteem	difficulty describing feelings	p > 0.166	all F < 2.0
Health locus of control	subscale	p > 0.652	all F < 0.2
	General Self-Efficacy Scale	**p = 0.002**	F(1, 29): 11.7
	Multidimensional Health Locus of Control Scale		
Behavioral variables	Smoking stopp	p = 0.361	NS
	Physical exercise continued	**p = 0.001**	
DAVIDSON et a. 2010			
Patients satisfaction about the intervention	Patients reporting depression care as excellent or very good	p < 0.001	OR (95% CI): 5.4 (2.2- 12.9)
MACE events		**p = 0.047**	NS
Depression	Beck Depression Inventory	**p = 0.005**	OR (95% CI): 0.59 (0.18- 1.00)
FERNANDES et al. 2017			
Emotional state	Portuguese versions of the Hospital Anxiety and Depression Scale:		
	total score	**p < 0.001**	M(SD): 5.520 (0.635) vs 28.092 (0.690)
	anxiety	**p < 0.001**	M(SD): 2.847 (0.339) vs 12.017 (0.367)
	depression	**p < 0.001**	M(SD): 2.623 (0.374 vs 16.134 (0.406)
Illness cognitions	Portuguese versions of the Brief Illness Perception Questionnaire:		M(SD):
	Consequences	**p < 0.001**	1.892 (0.060) vs 3.643 (0.065)
	Timeline	**p < 0.001**	1.937 (0.070) vs 3.429 (0.075)
	Personal control	**p < 0.001**	2.860 (0.094) vs 0.617 (0.102)
	Treatment control	**p < 0.001**	3.148 (0.107) vs 2.221 (0.116)
	Identity	**p < 0.001**	0.399 (0.092) vs 0.912 (0.100)
	Concern	**p < 0.001**	1.757 (0.085) vs 3.550 (0.091)
	Comprehensibility	**p < 0.001**	3.394 (0.100) vs 0.728 (0.107)
	Emotions	**p < 0.001**	1.493 (0.093) vs 3.499 (0.101)
FERNANDES et al. 2018			

Knowledge about ACS	Portuguese versions of the Knowledge Questionnaire	**p = 0.000**	M(SD): 15.70 (0.342) vs 2.92 (0.370)
NASIRI et al. 2010			
Perceived stress	Perceived Stress Scale-14	**p < 0.001**	M(SD) = 23.03 (7.79) vs 33.75 (3.78)
Brief illness perception	Brief Illness Perception Questionnaire	**p < 0.001**	
NORLUND at al. 2018			
Depression/anxiety	Hospital Anxiety and Depression scale:		
	total score	p = 0.53	ES (95% CI): −0.47 (−1.95 to 1.00)
	anxiety subscale	p = 0.82	ES (95% CI): −0.09 (−0.91 to 0.72)
	depression subscale	p = 0.32	ES (95% CI): −0.45 (−1.34 to 0.44)
	Montgomery-Åsberg Depression Rating Scale-Self rating	p = 0.48	ES (95% CI): −0.58 (−2.20 to 1.04)
	The Behavioral Activation for Depression Scale-Short Form	p = 0.58	ES (95% CI): −0.50 (−2.31 to 1.30)
Cardiac Anxiety	Cardiac Anxiety Questionnaire	p = 0.50	ES (95% CI): −0.73 (−2.83 to 1.38)
O'BRIEN et al. 2014			
Knowledge about ACS symptoms	Dichotomous scale (26 items):		
	5 items assessed knowledge of ACS facts (true/false)	**p < 0.001**	NS
	21 items measured recognition of ACS symptoms (yes/no)		F (2,1111): 12.750
Atitude	Attitude scale (5 items)	**p = 0.003**	F (2,1111): 5.111
Belief	Beliefs scale (9 items)	**p < 0.001**	M(SD)(95%CI): 2.22 (4.30)(-2.57 -1.87) vs -1.32 (3.77)(-1.32 -1.64)
O'NEIL et al. 2015			
Depression	Cardiac Depression Scale	p = 0.558	ES (95% CI): 3.06 (-7.8 to 4.3)
	Patient Health Questionnaire 9	**p = 0.025**	ES (95% CI): 0.81 (-0.2 to -3.4)
Quality of life	SF-12 Physical component score	p = 0.117	ES (95% CI): 1.42 (-0.6 to 5.1)
	SF-12 Mental component score	p = 0.070	ES (95% CI): 1.74 (-0.3 to 6.6)
SUNAMURA et al. 2017			
The 10-year CVD mortality risk	SCORE Risk Score	p = 0.48	ES: 3.30% (25%–75% IQR, 1.01–5.59) vs 3.47% (25%–75% IQR, 0.86– 6.28)
Quality of life	MacNew Questionnaire:		
	Emotional scale	**p = 0.004**	NS
	Physical scale	**p = 0.015**	

Anxiety	Anxiety Score	**p = 0.036**	NS
Cardiovascular risk factors	Smoking	**p < 0.001**	ES: 13.4% vs 21.3%
	Total cholesterol (mmol/L)	**p < 0.001**	ES: 3.9 vs 4.3 mmol/L
	Systolic blood presure (mmHg)	p > 0.05	
	Waist circumference (cm)	p > 0.05	
TER HOEVE et al. 2018			
Physical behavior	Step count (nr of steps per min of wear time)	**p = 0.035**	ES (95% CI): 0.45 (0.03 to 0.86)
	Time in prolonged moderate-to-vigorous physical activity	**p = 0.002**	ES (95% CI): 1.77 (1.20 to 2.60)
ORANTA et al. 2010			
Depression	Beck Depression Inventory	**p = 0.009**	OR (95% CI): 0.31 (0.16 to 0.61) vs 1.15 (0.60 to 0.22)
Distress	Symptom Checklist-25	p = 0.299	OR (95% CI): 0.42 (0.21–0.84) vs 0.90 (0.43–1.86)
ORANTA et al. 2011			
Quality of life	EuroQol-5D questionnaires		
	Mobility	p = 0.33	NS
	Self-Care	p = 0.77	
	Anxiety/Depression	p = 0.99	
ORANTA 2012			
Use of Healthcare Services	Any specialized healthcare service	**p = 0.007**	NS
HUFFMAN et al. 2019			
Physical behavior	Moderate to vigorous physical activity (Accelerometer)	**p = 0.026**	EMD: 15.08; ES: 6.75
	Number of steps	p = 0.14	EMD: 1617; ES: 1081
Positive affect	Positive and Negative Affect Schedule	**p < 0.001**	EMD: 7.34; SE: 2.16
Quality of life	SF-12 Physical component score	p = 0.55	EMD: 4.29; SE: 2.24
	SF-12 Mental component score	p = 0.80	EMD: 4,44; SE: 2.54
Health behavior	Self-reported health behavior adherence (Medical Outcomes StudySpecific Adherence Scale)	p = 0.22	EMD: 8.91; SE: 3.58
RONCELLA et al. 2013			
Combined incidence of new cardiovascular events		**p = 0.0006**	I (%) (N): 21/49 (43%) (33) vs 35/45 (78%) (78)

Cardiovascular events	Reinfarction Death Stroke Revascularization Major adverse cardiac and cerebrovascular events Life-threatening ventricular arrhythmia Recurrence of typical angina	p = 0.67 p = 0.33 p = 0.24 p = 0.23 **p = 0.04**	I (%) (N) for recurrence of typical angina: 14/49 (29%) (14) vs 22/45 (49%) (23)
New non-cardiovascular events		**p < 0. 0001**	I (%) (N): 5/49 (10%) (5) vs 25/45 (56%) (37)
Re-hospitalizations	Total	**p = 0.02**	M(95% CI): 0.77 (0.53–0.98) vs 1.2 (0.92–1.57)
	Cardiovascular	P = 0.14	M(95% CI): 0.69 (0.48–0.90) vs 1.0 (0.71–1.38)
	Non-Cardiovascular	P = 0.25	M(95% CI): 0.08 (0.002–0.16) vs 0.2 (0.05–0.35)
NYHA class	NYHA class ≥2	**p = 0.01**	I (%): 1/49 (2%) vs 8/45 (18%)
Distress	Self-evaluation test Assessing global psychological distress	p = 0.85	ES(IQR): 5 (3 to 8) vs 5 (3 to 7)
Vital exhaustion	Maastricht Questionnaire	p= 0.32	M(SD): 56.5 (8.1) vs 59. 7 (14.5)
Depression	Beck Depression Inventory	**p = 0.03**	ES(IQR): 6 (3 to 8) vs 8 (5 to 14)
Quality of life	MacNew Questionnaire: Global Score	p = 0.07	ES(IQR): 6.07 (5.48 to 6.39) vs 5.67 (4.89 to 6. 31)
	MacNew Questionnaire: Emotional Score	p = 0.38	ES(IQR): 5.79 (5.36 to 6.35) vs 5.79 (5.0 to 6.32)
	MacNew Questionnaire: Physical Score	**p = 0.03**	ES(IQR): 6.23 (5.70 to 6.53) vs 5.69 (4.85 to 6. 29)
	MacNew Questionnaire: Social Score	p = 0.06	ES(IQR): 6.15 (5.69 to 6.61) vs 5.86 (5.0 to 6.46)
PRISTIPINO et al. 2019			
Combined incidence of new cardiovascular events		p = 0.929	I (%) (N): 13/40 (33%) (21) vs 13/36 (36%) (22)

Cardiovascular events	Reinfarction	p = 1.00	I (%) (N) for recurrence of typical angina: 2/40 (5%) (2) vs 6/36 (17%) (6)
	Death	p = 1.00	
	Stroke	-	
	Revascularization	p = 1.00	
	Major adverse cardiac and cerebrovascular events	p = 1.00	
	Life-threatening ventricular arrhythmia	p = 1.00	
	Recurrence of typical angina	p = 0.20	
New non-cardiovascular events		p = 1.00	I (%) (N): 11/40 (28%) (15) vs 9/36 (25%) (15)
Re-hospitalizations	Total	p = 0.968	Events x 100 patient-year (95% CI) for total re-hospitalizations: 48.0 (38.4 to 57.6) vs 57.4 (45.3 to 69.5)
	Cardiovascular	p = 1.00	
	Non-Cardiovascular	p = 1.00	
NYHA class	NYHA class ≥ 2	**p = 0.018**	I (%): 0/43 (4%) vs 6/36 (17%)

MACE = major adverse cardiovascular event; ACS = acute coronary syndrome; CVD = cardiovascular disease; SF-12 = 12-item short form survey; NS = not specified; OR = odds ratio; CI = confidence interval of the difference; M = Mean; SD = standard derviation; ES = effect size; IQR = Interquartile range; EMD = estimated mean difference; I = Incident proportion; N = Nr. of events