Bijlage Zoekverantwoording

Zoekverantwoording module Markering

Onderzoeksvraag
Welke 'markeringspunten' (zoals diagnose, ziekenhuisopname etc.) zijn bij patiënten met hartfalen aanleiding voor proactieve zorgplanning?

Patients/Patiënten	Patiënten met hartfalen NYHA klasse III-IV of gevorderd hartfalen
Intervention/Interventie	Prognostische factoren: - Kwaliteit van leven - Functionele status, 6-minuten wandeltest - Nutritional index, nutritional status, nutritional tools - BMI, gewicht - Frailty - Labbepalingen: CRP, albumine, Hb, ijzermetabolisme - Heropnames - Antwoord 'nee' op de surprise question
Comparison/Vergelijking	
Outcome(s)/Uitkomst(en)	Sterfte

Zoekstrategie

Ovid MEDLINE(R) <1946 to December 20, 2024>
1 exp Heart Failure/ (157666)
2 (heart adj2 failure*).tw. (196268)
3 (cardiac adj2 failure*).tw. (15523)
4 (myocardial adj2 failure*).tw. (3591)
5 (heart adj2 decompensat*).tw. (4815)
6 heart failure.tw. (195474)
7 cardiac failure.tw. (11956)
8 NYHA III.mp. (826)
9 NYHA IV.mp. (288)
10 NYHA 3.mp. (42)
11 NYHA 4.mp. (8)
12 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 (249367)
13 predict*.mp. (1930550)
14 validat*.mp. (725059)
15 scor*.mp. (1253457)
16 observ*.mp. (3824633)
17 risk assessment/ or risk factors/ (1233004)
18 evaluation.mp. (1809252)
19 exp Prognosis/ (2032859)
20 prognostic factor*.mp. (115479)
21 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 (9519932)
22 (mortality or survival or death).mp. (2885071)
23 Mortality/ (50667)
24 Survival/ (4946)
25 22 or 23 or 24 (2885071)
26 statistics as topic/ or exp regression analysis/ (558858)
27 statistic*.mp. (2465370)
28 (logistic adj2 model*).mp. (232266)
29 (likelihood adj2 function*).mp. (24960)
30 regression*.mp. (1082615)

31 exp mathematical concepts/ (1203835)
32 algorithm*.mp. (453537)
33 mathematic*.mp. (181052)
34 multivariate analysis/ (132944)
35 exp models, biological/ or exp models, statistical/ or logistic models/ (1372220)
36 area under curve/ (46947)
37 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 (5253356)
38 12 and 21 and 25 and 37 (25179)
39 meta-analysis.mp,pt. or review.pt. or search:.tw. (3470911)
40 38 and 39 (2262)
41 limit 40 to yr="2016 -Current" (1078)

Ovid MEDLINE(R) Epub Ahead of Print <December 20, 2024>
Ovid MEDLINE(R) Daily Update <December 20, 2024>
1 exp Heart Failure/ (205)
2 (heart adj2 failure*).tw. (3429)
3 (cardiac adj2 failure*).tw. (123)
4 (myocardial adj2 failure*).tw. (56)
5 (heart adj2 decompensat*).tw. (86)
6 heart failure.tw. (3425)
7 cardiac failure.tw. (79)
8 NYHA III.mp. (9)
9 NYHA IV.mp. (2)
10 NYHA 3.mp. (0)
11 NYHA 4.mp. (1)
12 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 (3534)
13 predict*.mp. (32208)
14 validat*.mp. (16318)
15 scor*.mp. (26547)
16 observ*.mp. (50306)
17 risk assessment/ or risk factors/ (1631)
18 evaluation.mp. (21088)
19 exp Prognosis/ (2708)
20 prognostic factor*.mp. (1430)
21 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 (115552)
22 (mortality or survival or death).mp. (37055)
23 Mortality/ (32)
24 Survival/ (0)
25 22 or 23 or 24 (37055)
26 statistics as topic/ or exp regression analysis/ (296)
27 statistic*.mp. (23366)
28 (logistic adj2 model*).mp. (2365)
29 (likelihood adj2 function*).mp. (53)
30 regression*.mp. (20603)
31 exp mathematical concepts/ (1869)
32 algorithm*.mp. (7646)
33 mathematic*.mp. (1427)
34 multivariate analysis/ (34)
35 exp models, biological/ or exp models, statistical/ or logistic models/ (1529)
36 area under curve/ (18)
37 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 (49271)
38 12 and 21 and 25 and 37 (291)
39 meta-analysis.mp,pt. or review.pt. or search:.tw. (60988)

40 38 and 39 (44)
41 limit 40 to yr="2016 -Current" (33)

Cochrane Library: 22-12-2024

#1 MeSH descriptor: [Heart Failure] explode all trees 14997
#2 (heart and failure*):ti,ab 38423
#3 (cardiac and failure*):ti,ab 15840
#4 (myocardial and failure*):ti,ab 9932
#5 (heart and decompensat*):ti,ab 2108
#6 #1 or #2 or #3 or #4 or #5 44441
#7 predict*:ti,ab 122612
#8 validat*:ti,ab 55012
#9 scor*:ti,ab 386607
#10 observ*:ti,ab 346382
#11 prognostic factor*:ti,ab 11940
#12 MeSH descriptor: [Risk Assessment] explode all trees 13796
#13 MeSH descriptor: [Risk Factors] explode all trees 38726
#14 evaluation:ti,ab 196898
#15 MeSH descriptor: [Prognosis] explode all trees 231075
#16 #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 995872
#17 (mortality or survival or death):ti,ab 243755
#18 MeSH descriptor: [Mortality] explode all trees 19035
#19 MeSH descriptor: [Survival] explode all trees184
#20 #17 or #18 or #19 246937
#21 MeSH descriptor: [Statistics as Topic] explode all trees 159904
#22 MeSH descriptor: [Regression Analysis] explode all trees 26449
#23 MeSH descriptor: [Mathematical Concepts] explode all trees 38749
#24 MeSH descriptor: [Multivariate Analysis] explode all trees 7252
#25 MeSH descriptor: [Models, Biological] explode all trees 4738
#26 MeSH descriptor: [Models, Statistical] explode all trees 23252
#27 MeSH descriptor: [Logistic Models] explode all trees 7344
#28 MeSH descriptor: [Area Under Curve] explode all trees 9120
#29 statistic*:ti,ab 251562
#30 (logistic and model*):ti,ab 13095
#31 (likelihood and function*):ti,ab 2296
#32 regression*:ti,ab 78287
#33 algorithm*:ti,ab 16309
#34 mathematic*:ti,ab 2280
#35 #21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 454999
#36 #6 and #16 and #20 and #35 with Cochrane Library publication date Between Jan 2016 and Dec 2024 3334

Embase: 22-12-2024

#1.	'heart failure'/exp	724814
#2.	(heart NEAR/2 failure*):ab,ti	385351
#3.	(myocardial NEAR/2 failure*):ab,ti	6155
#4.	(cardiac NEAR/2 failure*):ab,ti	26800
#5.	(heart NEAR/2 decompensat*):ab,ti	12111
#6.	#1 OR #2 OR #3 OR #4 OR #5	791052
#7.	predict*:ti,ab OR validat*:ti,ab OR (prognostic:ti,ab AND factor*:ti,ab)	4090689
#8.	'risk assessment'/exp OR 'risk factor'/exp OR 'prognosis'/exp	2942929

#9.	predict*:ti,ab OR validat*:ti,ab OR (prognostic:ti,ab AND factor*:ti,ab) OR 'risk assessment'/exp OR 'risk factor'/exp OR 'prognosis'/exp	6248881
#10.	'mortality'/exp OR 'survival'/exp	2776206
#11.	((logistic NEAR/2 model*):ti,ab) OR ((likelihood NEAR/2 function*):ti,ab) OR regression*:ti,ab OR algorithm*:ti,ab	2185404
#12.	'regression analysis'/exp OR 'mathematical phenomena'/exp OR 'biological model'/exp OR 'statistical model'/exp OR 'area under the curve'/exp	8638930
#13.	#11 OR #12	9583450
#14.	#6 AND #9 AND #10 AND #13	60667
#15.	#6 AND #9 AND #10 AND #13 AND ([cochrane review]/lim OR [systematic review]/lim OR [meta analysis]/lim) AND ([article]/lim OR [article in press]/lim OR [review]/lim) AND ([dutch]/lim OR [english]/lim) AND [embase]/lim AND [2016-2025]/py	1591

Tabel 1. Resultaten van zoekactie van onderzoeksvraag 1

Database	**Aantal**
Medline	1078
PreMedline	33
CDSR	29
Embase	1591
Totaal aantal resultaten	**2731**
Aantal geëxcludeerd (dubbelen, taal)	227
Totaal aantal unieke resultaten	**2504**

Tabel 2. Overzicht van geëxcludeerde studies gebaseerd op beoordeling van de volledige tekst van onderzoeksvraag 1

Referentie	**Reden voor exclusie**
Aalders, M. and W. Kok, Comparison of hemodynamic factors predicting prognosis in heart failure: A systematic review. Journal of Clinical Medicine, 2019. 8(10).	Prognostische factor = Hemodynamische factoren
Abouzid, M.R., et al., Assessing Stroke and Mortality Risk in Heart Failure: The CHA2DS2-VASc Score's Prognostic Value in Patients With and Without Atrial Fibrillation: A Meta-Analysis. Cardiology in Review, 2024. 15: p. 15.	Geen evaluatie van prognostische factoren
Adelborg, K., Neurological and psychiatric comorbidity in patients with heart failure: risk and prognosis. Danish Medical Journal, 2018. 65(4).	Geen systematische review
Aguiló, O., et al., The prognostic significance of bundle branch block in acute heart failure: a systematic review and meta-analysis. Clinical Research in Cardiology, 2023. 112(8): p. 1020-1043.	Prognostische factor = Bundeltakblock
Ahmad, F.S., et al., Performance of risk models to predict mortality risk for patients with heart failure: evaluation in an integrated health system. Clinical Research in Cardiology, 2024. 113(9): p. 1343-1354.	Cohort studie
Aimo, A., et al., Meta-Analysis of Soluble Suppression of Tumorigenicity-2 and Prognosis in Acute Heart Failure. JACC Heart Failure, 2017. 5(4): p. 287-296.	Prognostische factor = Soluble Suppression of Tumorigenicity-2
Aimo, A., et al., Prognostic value of high-sensitivity troponin T in chronic heart failure an individual patient data meta-analysis. Circulation, 2018. 137(3): p. 286-297.	Prognostische factor = Troponine T
Aimo, A., et al., Prognostic Value of Soluble Suppression of Tumorigenicity-2 in Chronic Heart Failure: A Meta-Analysis. JACC Heart Failure, 2017. 5(4): p. 280-286.	Prognostische factor = Soluble Suppression of Tumorigenicity-2

Alba, A.C., et al., Predicting 1-Year Mortality in Outpatients With Heart Failure With Reduced Left Ventricular Ejection Fraction: Do Empiric Models Outperform Physician Intuitive Estimates? A Multicenter Cohort Study. Circulation: Heart Failure, 2023. 16(7): p. e010312.	Cohort studie
Allen, L.A., et al., Use of Risk Models to Predict Death in the Next Year Among Individual Ambulatory Patients With Heart Failure. JAMA Cardiology, 2017. 2(4): p. 435-441.	Cohort studie
Álvarez-Zaballos, S. and M. Martínez-Sellés, Impact of Sex and Diabetes in Patients with Heart Failure. Current Heart Failure Reports, 2024. 21(4): p. 389-395.	Narrative review
Anastasiou, V., et al., The prognostic value of right ventricular longitudinal strain in heart failure: a systematic review and meta-analysis. Heart Failure Reviews, 2023. 28(6): p. 1383-1394.	Prognostische factor = Right ventricular longitudinal strain
Ang, S.P., et al., Prognostic Value of Neutrophil-to-Lymphocyte Ratio in Patients with Acute Decompensated Heart Failure: A Meta-Analysis. Journal of Clinical Medicine, 2024. 13(5).	Prognostische factor = Neutrophil-to-Lymphocyte Ratio
Behnoush, A.H., et al., Circulating brain-derived neurotrophic factor levels and heart failure: A systematic review and meta-analysis. ESC Heart Failure, 2024. 11(5): p. 3253-3263.	Prognostische factor = Circulating brain-derived neurotrophic factor
Beldhuis, I.E., et al., Renin-Angiotensin System Inhibition, Worsening Renal Function, and Outcome in Heart Failure Patients with Reduced and Preserved Ejection Fraction: A Meta-Analysis of Published Study Data. Circulation: Heart Failure, 2017. 10(2).	Prognostische factor = RAS inhibitie en nierfunctie
Buchan, T.A., et al., Prognostic value of natriuretic peptides in heart failure: systematic review and meta-analysis. Heart Failure Reviews, 2022. 27(2): p. 645-654.	Prognostische factor = Natriuretic peptides
Chen, X., et al., Effect of estimated plasma volume status and left atrial diameter on prognosis of patients with acute heart failure. Frontiers in Cardiovascular Medicine, 2023. 10.	Cohort studie
Chen, Y., et al., A heart failure phenotype stratified model for predicting 1-year mortality in patients admitted with acute heart failure: results from an individual participant data meta-analysis of four prospective European cohorts. BMC Medicine, 2021. 19(1): p. 21.	Cohort studie
Chen, Y.S., et al., Using the galectin-3 test to predict mortality in heart failure patients: A systematic review and meta-analysis. Biomarkers in Medicine, 2016. 10(3): p. 329-342.	Prognostische factor = Galectin-3
Cheng, W., et al., Galectin-3 levels and long-term all-cause mortality and hospitalization in heart failure patients: a meta-analysis. ESC heart failure, 2024. 11(5): p. 2566-2577.	Prognostische factor = Galectin-3
Cheng, Y., et al., Performance of Prognostic Risk Scores in Elderly Chinese Patients with Heart Failure. Clinical Interventions In Aging, 2021. 16: p. 1669-1677.	Cohort studie
Chirinos, J.A., et al., Multiple Plasma Biomarkers for Risk Stratification in Patients With Heart Failure and Preserved Ejection Fraction. Journal of the American College of Cardiology, 2020. 75(11): p. 1281-1295.	Cohort studie
Cinier, G., et al., Prognostic nutritional index as the predictor of long-term mortality among HFrEF patients with ICD. Pacing & Clinical Electrophysiology, 2021. 44(3): p. 490-496.	Cohort studie
Codina, P., et al., Head-to-head comparison of contemporary heart failure risk scores. European Journal of Heart Failure, 2021. 23(12): p. 2035-2044.	Cohort studie
Codina, P., et al., Heart failure risk scores in advanced heart failure patients: insights from the LEVO-D registry. ESC heart failure, 2023. 10(5): p. 2875-2881.	Cohort studie
Corra, U., et al., Comparison among different multiparametric scores for risk stratification in heart failure patients with reduced ejection fraction. European Journal of Preventive Cardiology, 2020. 27(2_suppl): p. 12-18.	Narrative review

D'Amario, D., et al., Impact of coronary microvascular dysfunction in heart failure with preserved ejection fraction: a meta-analysis. ESC heart failure, 2024. 11(4): p. 2063-2075.	Prognostische factor = Coronary microvascular dysfunction
Di Tanna, G.L., et al., Evaluating risk prediction models for adults with heart failure: A systematic literature review. PLoS ONE [Electronic Resource], 2020. 15(1): p. e0224135.	Resultaten niet bruikbaar
Dong, G., et al., Long-Term and Short-Term Prognostic Value of Circulating Soluble Suppression of Tumorigenicity-2 Concentration in Chronic Heart Failure: A Systematic Review and Meta-Analysis. Cardiology, 2021. 146(4): p. 433-440.	Prognostische factor = Soluble Suppression of Tumorigenicity-2
Duan, S., Y. Li, and P. Yang, Predictive value of blood urea nitrogen in heart failure: a systematic review and meta-analysis. Frontiers in Cardiovascular Medicine, 2023. 10.	Prognostische factor = Blood urea nitrogen
Emmons-Bell, S., C. Johnson, and G. Roth, Prevalence, incidence and survival of heart failure: a systematic review. Heart, 2022. 108(17): p. 1351-1360.	Geen evaluatie van prognostische factoren
Fabbri, M., et al., Health Literacy and Outcomes Among Patients With Heart Failure: A Systematic Review and Meta-Analysis. JACC Heart Failure, 2020. 8(6): p. 451-460.	Prognostische factor = Health literacy
Foroutan, F., et al., Global Comparison of Readmission Rates for Patients With Heart Failure. Journal of the American College of Cardiology, 2023. 82(5): p. 430-444.	Geen evaluatie van prognostische factoren
Fu, X., Y. Wei, and J. Fang, A meta-analysis of the relationship between glycaemic variability and the mortality of patients with heart failure. ESC Heart Failure, 2024. 11(3): p. 1305-1316.	Prognostische factor = Glycaemic variability
Fu, Z., et al., U-Shaped Relationship of Sodium-to-chloride Ratio on admission and Mortality in Elderly Patients with Heart Failure: A Retrospective Cohort Study. Current Problems in Cardiology, 2023. 48(1): p. 101419.	Cohort studie
Fujimoto, Y., et al., Association and Prognostic Value of Multidomain Frailty Defined by Cumulative Deficit and Phenotype Models in Patients With Heart Failure. Canadian Journal of Cardiology, 2024. 40(4): p. 677-684.	Cohort studie
Georgiopoulos, G., et al., Comparison of Demographic, Clinical, Biochemical, and Imaging Findings in Hypertrophic Cardiomyopathy Prognosis: A Network Meta-Analysis. JACC Heart Failure, 2023. 11(1): p. 30-41.	Foute populatie
Han, X. and X. Wang, Does subclinical hypothyroidism affect the prognosis of patients with chronic systolic heart failure: A systematic review and meta-analysis. Medicine, 2024. 103(23): p. e38410.	Prognostische factor = Subklinische hypothyroidie
He, Y., et al., Prevalence and Prognosis of HFimpEF Developed From Patients With Heart Failure With Reduced Ejection Fraction: Systematic Review and Meta-Analysis. Frontiers in Cardiovascular Medicine, 2021. 8.	Geen evaluatie van prognostische factoren
Holm, H., et al., Cognitive test results are associated with mortality and rehospitalization in heart failure: Swedish prospective cohort study. ESC heart failure, 2020. 7(5): p. 2948-2955.	Cohort studie
Huang, G., et al., Prognostic value of serum uric acid in patients with acute heart failure: A meta-analysis. Medicine, 2019. 98(8): p. e14525.	Prognostische factor = Urinezuur
Huang, Z.M., et al., Prognostic Impact of Metabolic Syndrome in Patients With Heart Failure: A Meta-Analysis of Observational Studies. Frontiers in Cardiovascular Medicine, 2021. 8.	Prognostische factor = Metabool syndroom
Inazumi, H., et al., Prognostic significance of changes in cystatin C during treatment of acute cardiac decompensation. Journal of Cardiology, 2016. 67(1): p. 98-103.	Prognostische factor = Cystatin C
Ismail, M.F., et al., Temporal trends, prevalence, predictors, and outcomes of heart failure in patients with hypertrophic cardiomyopathy in the United States: Insights from the national inpatient sample. Current Problems in Cardiology, 2024. 49(8): p. 102665.	Cohort studie

Iwakami, N., et al., Optimal sampling in derivation studies was associated with improved discrimination in external validation for heart failure prognostic models. Journal of Clinical Epidemiology, 2020. 121: p. 71-80.	Enkel gezocht in PubMed
Jansen, M., et al., Blood-based biomarkers for the prediction of hypertrophic cardiomyopathy prognosis: a systematic review and meta-analysis. ESC Heart Failure, 2022. 9(5): p. 3418-3434.	Foute populatie
Jawadi, Z., et al., Predicting in-hospital mortality among patients admitted with a diagnosis of heart failure: a machine leARNI'sng approach. ESC heart failure, 2024. 11(5): p. 2490-2498.	Cohort studie
Jia, F., et al., Prognostic Value of Left Atrial Strain in Heart Failure: A Systematic Review and Meta-Analysis. Frontiers in Cardiovascular Medicine, 2022. 9.	Prognostische factor = Left Atrial Strain
Jia, Y.Y., et al., Prognostic models for patients suffering a heart failure with a preserved ejection fraction: a systematic review. ESC heart failure, 2024. 11(3): p. 1341-1351.	Resultaten niet bruikbaar
Jiang, J., P. Miao, and G. Xin, Prognostic value of albumin-based indices for mortality after heart failure: a systematic review and meta-analysis. BMC Cardiovascular Disorders, 2024. 24(1).	Geen prognostische factoren zoals benoemd in de PICO
Jones, N.R., et al., Survival of patients with chronic heart failure in the community: a systematic review and meta-analysis. European Journal of Heart Failure, 2019. 21(11): p. 1306-1325.	Geen evaluatie van prognostische factoren
Joo, J., et al., Incremental Value of a Metabolic Risk Score for Heart Failure Mortality: A Population-Based Study. Circulation. Genomic and Precision Medicine, 2024. 17(2): p. e004312.	Cohort studie
Kadoglou, N.P.E., et al., Assessment of acute heart failure prognosis: the promising role of prognostic models and biomarkers. Heart Failure Reviews, 2022. 27(2): p. 655-663.	Resultaten niet bruikbaar
Kasireddy, T.R., et al., Association of Psychosocial Risk Factors and Outcomes in Heart Failure: Does COVID-19 Affect Outcomes? Current Problems in Cardiology, 2023. 48(10): p. 101795.	Cohort studie
Khan, M.S., et al., Association of liver stiffness and cardiovascular outcomes in patients with heart failure: A systematic review and meta-analysis. European Journal of Preventive Cardiology, 2020. 27(3): p. 331-334.	Prognostische factor = Liver stiffness
Kharawala, A., et al., Incidence, predictors and outcomes of new onset systolic heart failure following orthotopic liver transplant: A systematic review. Transplantation Reviews, 2023. 37(2).	Foute populatie
Konig, S., et al., Machine leARNI'sng algorithms for claims data-based prediction of in-hospital mortality in patients with heart failure. ESC heart failure, 2021. 8(4): p. 3026-3036.	Cohort studie
Kuku, K.O., et al., Development and Validation of a Protein Risk Score for Mortality in Heart Failure : A Community Cohort Study. Annals of Internal Medicine, 2024. 177(1): p. 39-49.	Cohort studie
Kwon, J.M., et al., Artificial intelligence algorithm for predicting mortality of patients with acute heart failure. PLoS ONE [Electronic Resource], 2019. 14(7): p. e0219302.	Cohort studie
Lan, T., et al., Mortality and readmission rates after heart failure: A systematic review and meta-analysis. Therapeutics and Clinical Risk Management, 2021. 17: p. 1307-1320.	Geen prognostische factoren zoals benoemd in de PICO
Lanfear, D.E., et al., Polygenic Score for β-Blocker Survival Benefit in European Ancestry Patients With Reduced Ejection Fraction Heart Failure. Circulation: Heart Failure, 2020. 13(12): p. E007012.	Cohort studie

Lau, K., et al., Resting Heart Rate as an Important Predictor of Mortality and Morbidity in Ambulatory Patients With Heart Failure: A Systematic Review and Meta-Analysis. Journal of Cardiac Failure, 2021. 27(3): p. 349-363.	Prognostische factor = Hartritme in rust
Lee, K., et al., Prognostic significance of phase analysis using SPECT myocardial perfusion imaging in heart failure: a systematic review and meta-analysis. The International Journal of Cardiovascular Imaging, 2024. 13: p. 13.	Prognostische factor = Phase analysis using SPECT myocardial perfusion imaging
Lee, M.H., et al., Prognostic value of blood pressure in ambulatory heart failure: a meta-analysis and systematic review. Ambulatory blood pressure predicts heart failure prognosis. Heart Failure Reviews, 2022. 27(2): p. 455-464.	Prognostische factor = Bloeddruk
Li, L., et al., Relationship between serum uric acid levels and uric acid lowering therapy with the prognosis of patients with heart failure with preserved ejection fraction: a meta-analysis. Frontiers in Cardiovascular Medicine, 2024. 11.	Prognostische factor = Urinezuur
Li, L., et al., Stress hyperglycemia ratio and the clinical outcome of patients with heart failure: a meta-analysis. Frontiers in Endocrinology, 2024. 15: p. 1404028.	Prognostische factor = Stress hyperglycemia ratio
Li, W., et al., Gut microbiota-derived trimethylamine N-oxide is associated with poor prognosis in patients with heart failure. Medical Journal of Australia, 2020. 213(8): p. 374-379.	Prognostische factor = Gut microbiota-derived trimethylamine N-oxide
Li, X., et al., Trimethylamine N-Oxide in Heart Failure: A Meta-Analysis of Prognostic Value. Frontiers in Cardiovascular Medicine, 2022. 9.	Prognostische factor = Trimethylamine N-Oxide
Liang, M., B. Bian, and Q. Yang, Characteristics and long-term prognosis of patients with reduced, mid-range, and preserved ejection fraction: A systemic review and meta-analysis. Clinical Cardiology, 2022. 45(1): p. 5-17.	Geen evaluatie van prognostische factoren
Liu, L., et al., Association between haemoglobin, albumin, lymphocytes, and platelets and mortality in patients with heart failure. ESC heart failure, 2024. 11(2): p. 1051-1060.	Cohort studie
Long, C., et al., Sex Differences in Dilated Cardiomyopathy Prognosis A Systematic Review and Meta-analysis. International Heart Journal, 2022. 63(1): p. 36-42.	Prognostische factor = geslacht
Luo, J.W., et al., A Meta-Analysis of Growth Differentiation Factor-15 and Prognosis in Chronic Heart Failure. Frontiers in Cardiovascular Medicine, 2021. 8.	Prognostische factor = Growth Differentiation Factor-15
Macerola, N., et al., Prognostic value of liver stiffness in patients hospitalized for acute decompensated heart failure: a meta-analysis. Journal of Ultrasound, 2024. 27(3): p. 551-557.	Prognostische factor = Liver stiffness
Mai, L., et al., Association between prediabetes and adverse outcomes in heart failure. Diabetes, Obesity and Metabolism, 2021. 23(11): p. 2476-2483.	Prognostische factor = Prediabetes
Maraey, A., et al., Trends and Predictors of Poor Outcomes in Patients With Right Heart Failure: Insights From the National Readmission Database. Current Problems in Cardiology, 2023. 48(6): p. 101625.	Cohort studie
Marsh, A.M., et al., Clinical use of high mobility group box 1 and the receptor for advanced glycation end products in the prognosis and risk stratification of heart failure: a literature review. Canadian Journal of Physiology & Pharmacology, 2017. 95(3): p. 253-259.	Prognostische factor = high mobility group box 1 and the receptor for advanced glycation end products
McDowell, K., et al., Prognostic Models for Mortality and Morbidity in Heart Failure With Preserved Ejection Fraction. JAMA Cardiology, 2024. 9(5): p. 457-465.	Cohort studie
McGranaghan, P., et al., Performance of a cardiac lipid panel compared to four prognostic scores in chronic heart failure. Scientific Reports, 2021. 11(1): p. 8164.	Cohort studie

Meng, Y., et al., Prognostic Significance of Nutrition-Associated Markers in Heart Failure with Preserved Ejection Fraction: A Systematic Review and Meta-Analysis. Arquivos Brasileiros de Cardiologia, 2023. 120(5).	Portugees
Mpanya, D., et al., Machine leARNI'sng and statistical methods for predicting mortality in heart failure. Heart Failure Reviews, 2021. 26(3): p. 545-552.	Narrative review
Mpanya, D., et al., Predicting mortality and hospitalization in heart failure using machine leARNI'sng: A systematic literature review. IJC Heart and Vasculature, 2021. 34.	Geen evaluatie van prognostische factoren
Ni, J., et al., Predicting prognosis of heart failure using common malnutrition assessment tools: A systematic review and meta-analysis. Scottish Medical Journal, 2022. 67(4): p. 157-170.	Retracted
Niu, Z., J. Zhou, and Y. Li, Prognostic significance of delirium in patients with heart failure: a systematic review and meta-analysis. Frontiers in Cardiovascular Medicine, 2023. 10.	Prognostische factor = Delirium
Papanastasiou, C.A., et al., The prognostic value of right ventricular ejection fraction by cardiovascular magnetic resonance in heart failure: A systematic review and meta-analysis. International Journal of Cardiology, 2022. 368: p. 94-103.	Prognostische factor = Right ventricular ejection fraction by cardiovascular magnetic resonance
Pontico, M., et al., The prognostic value of 123I-mIBG SPECT cardiac imaging in heart failure patients: a systematic review. Journal of Nuclear Cardiology, 2022. 29(4): p. 1799-1809.	Prognostische factor = 123I-mIBG SPECT cardiac imaging
Prameswari, H.S., et al., Role of N-terminal pro-B type natriuretic peptide as a predictor of poor outcomes in patients with HFrEF receiving primary prevention implantable cardioverter-defibrillator therapy: A systematic review and dose-response meta-analysis. Open Heart, 2023. 10(1).	Cohort studie
Pranata, R., et al., Differences in clinical characteristics and outcome of de novo heart failure compared to acutely decompensated chronic heart failure - systematic review and meta-analysis. Acta Cardiologica, 2021. 76(4): p. 410-420.	Gaat niet primair over prognostische factoren
Prokopidis, K., et al., Natriuretic peptides and C-reactive protein in in heart failure and malnutrition: a systematic review and meta-analysis. ESC Heart Failure, 2024. 11(5): p. 3052-3064.	Overleving is geen uitkomstmaat
Qi, X., et al., Non-thyroidal illness syndrome and the prognosis of heart failure: a systematic review and meta-analysis. Endocrine Connections, 2023. 12(8).	Prognostische factor = Non-thyroidal illness syndrome
Radjef, R., et al., Performance of the Meta-Analysis Global Group in Chronic Heart Failure Score in Black Patients Compared With Whites. Circulation. Cardiovascular Quality & Outcomes, 2019. 12(7): p. e004714.	Cohort studie
Ru, S.C., S.B. Lv, and Z.J. Li, Incidence, mortality, and predictors of acute kidney injury in patients with heart failure: a systematic review. ESC Heart Failure, 2023. 10(6): p. 3237-3249.	Prognostische factor = Acuut nierfalen
Saito, M., K. Negishi, and T.H. Marwick, Meta-Analysis of Risks for Short-Term Readmission in Patients with Heart Failure. American Journal of Cardiology, 2016. 117(4): p. 626-632.	Mortaliteit niet apart gerapporteerd
Schjodt, I., et al., Risk factors for hospital readmission in adult patients with heart failure with reduced ejection fraction: a systematic review. JBI Evidence Synthesis, 2020. 18(8): p. 1641-1700.	Overleving niet primair eindpunt
Scrutinio, D., P. Guida, and A. Passantino, Prognostic Value of 6-Minute Walk Test in Advanced Heart Failure With Reduced Ejection Fraction. American Journal of Cardiology, 2023. 199: p. 37-43.	Cohort studie

Shi, Y., et al., Diagnostic and prognostic value of serum soluble suppression of tumorigenicity-2 in heart failure with preserved ejection fraction: A systematic review and meta-analysis. Frontiers in Cardiovascular Medicine, 2022. 9.	Prognostische factor = Soluble Suppression of Tumorigenicity-2
Shin, S., et al., Machine leARNI'sng vs. conventional statistical models for predicting heart failure readmission and mortality. ESC heart failure, 2021. 8(1): p. 106-115.	Geen evaluatie van prognostische factoren
Singh, S., A. Pandey, and I.J. Neeland, Diagnostic and prognostic considerations for use of natriuretic peptides in obese patients with heart failure. Progress in Cardiovascular Diseases, 2020. 63(5): p. 649-655.	Narrative review
Siranart, N., et al., Proenkephalin as a Novel Prognostic Marker in Heart Failure Patients: A Systematic Review and Meta-Analysis. International Journal of Molecular Sciences, 2023. 24(5).	Prognostische factor = Proenkephalin
Somech, J., et al., Comparison of Questionnaire and Performance-Based Physical Frailty Scales to Predict Survival and Health-Related Quality of Life in Patients With Heart Failure. Journal of the American Heart Association, 2023. 12(6): p. e026951.	Cohort studie
Sun, Z., et al., Comparing Machine LeARNI'sng Models and Statistical Models for Predicting Heart Failure Events: A Systematic Review and Meta-Analysis. Frontiers in Cardiovascular Medicine, 2022. 9.	Geen evaluatie van prognostische factoren
Szczurek, W., et al., Prognostic value of selected risk scales in patients with end-stage heart failure. Kardiologia Polska, 2018. 76(9): p. 1320-1326.	Cohort studie
Szlacheta, P., et al., Long-term prognostic scores may underestimate the risk of death in patients with heart failure with reduced ejection fraction in whom red cell distribution width is elevated. Polish Archives Of Internal Medicine, 2023. 133(11): p. 29.	Cohort studie
Vakhshoori, M., et al., Neutrophil to lymphocyte ratio (NLR) prognostic effects on heart failure; a systematic review and meta-analysis. BMC Cardiovascular Disorders, 2023. 23(1).	Prognostische factor = Neutrophil-to-Lymphocyte Ratio
Vishram-Nielsen, J.K.K., et al., Performance of Prognostic Risk Scores in Heart Failure Patients: Do Sex Differences Exist? Canadian Journal of Cardiology, 2020. 36(1): p. 45-53.	Cohort studie
Vongmany, J., et al., Anxiety in chronic heart failure and the risk of increased hospitalisations and mortality: A systematic review. European Journal of Cardiovascular Nursing, 2016. 15(7): p. 478-485.	Prognostische factor = Anxiety
Wang, J., W. Zhou, and X. Yin, Improvement of hyponatremia is associated with lower mortality risk in patients with acute decompensated heart failure: a meta-analysis of cohort studies. Heart Failure Reviews, 2019. 24(2): p. 209-217.	Prognostische factor = Hyponatremia
Wang, N., et al., Echocardiographic predictors of cardiovascular outcome in heart failure with preserved ejection fraction. European Journal of Heart Failure, 2024. 26(8): p. 1778-1787.	Prognostische factor = Echocardiografie
Wang, X., et al., Prognostic value of neutrophil to lymphocyte ratio in heart failure patients. Clinica Chimica Acta, 2018. 485: p. 44-49.	Prognostische factor = Neutrophil-to-Lymphocyte Ratio
Wang, Y., et al., Prognostic Value of Lung Ultrasound for Clinical Outcomes in Heart Failure Patients: A Systematic Review and Meta-Analysis. Arquivos Brasileiros de Cardiologia, 2021. 116(3): p. 383-392.	Portugees
Wehbe, R.M., et al., Predicting High-Risk Patients and High-Risk Outcomes in Heart Failure. Heart Failure Clinics, 2020. 16(4): p. 387-407.	Narrative review
Wei, B., et al., The Prognostic Value of Peripheral Artery Disease in Heart Failure: Insights from a Meta-analysis. Heart Lung and Circulation, 2016. 25(12): p. 1195-1202.	Prognostische factor = Perifeer vaatlijden

Wussler, D., et al., Mortality prediction in acute heart failure: scores or biomarkers? Swiss Medical Weekly, 2020. 150: p. w20320.	Narrative review
Yamashina, A., et al., Identification of predictive factors interacting with heart rate reduction for potential beneficial clinical outcomes in chronic heart failure: A systematic literature review and meta-analysis. IJC Heart and Vasculature, 2022. 43.	Gaat over mediërende factoren bij het effect van behandelingen die invloed hebben op de hartfrequentie
Yang, J., et al., Prognostic value of microRNAs in heart failure: A meta-analysis. Medicine (United States), 2021. 100(46): p. E27744.	Prognostische factor = MicroRNA
Yu, Q., Z. Wang, and X. Ding, Serum prealbumin as a predictor of adverse outcomes in patients with heart failure: A systematic review and meta-Analysis. Biomarkers in Medicine, 2022. 16(7): p. 569-575.	Geen prognostische factoren zoals benoemd in de PICO
Zangiabadian, M., et al., Fragmented QRS, a strong predictor of mortality and major arrhythmic events in patients with nonischemic cardiomyopathy: A systematic review and meta-analysis. Health Science Reports, 2024. 7(2).	Prognostische factor = Fragmented QRS
Zhang, H., et al., Association of Cognitive Impairment With Mortality and Readmission in Patients With Heart Failure: A Meta-analysis. Current Problems in Cardiology, 2022. 47(12).	Prognostische factor = Verstandelijke beperking
Zhang, Y., et al., Development of a prediction model for the risk of 30-day unplanned readmission in older patients with heart failure: A multicenter retrospective study. Nutrition Metabolism & Cardiovascular Diseases, 2023. 33(10): p. 1878-1887.	Cohort studie
Zhang, Y., et al., Low systolic blood pressure for predicting all-cause mortality in patients hospitalised with heart failure: a systematic review and meta-analysis. European Journal of Preventive Cardiology, 2019. 26(4): p. 439-443.	Prognostische factor = Bloeddruk
Zhao, H., et al., Is There a Sex Difference in the Prognosis of Hypertrophic Cardiomyopathy? A Systematic Review and Meta-Analysis. Journal of the American Heart Association, 2023. 12(11).	Prognostische factor = geslacht
Zhao, Q., et al., Sedentary behavior and health outcomes in patients with heart failure: a systematic review and meta-analysis. Heart Failure Reviews, 2022. 27(4): p. 1017-1028.	Prognostische factor = Sedentair gedrag
Zhu, X., et al., Blood Urea Nitrogen to Creatinine Ratio and Long-Term Mortality in Patients with Acute Heart Failure: A Prospective Cohort Study and Meta-Analysis. Cardiorenal Medicine, 2020. 10(6): p. 415-428.	Prognostische factor = Blood Urea Nitrogen to Creatinine Ratio

Zoekverantwoording module Proactieve zorgplanning

Onderzoeksvraag

Leidt proactieve zorgplanning bij patiënten met hartfalen (NYHA-klasse III-IV) tot een betere kwaliteit van leven en/of hogere tevredenheid van de patiënt en de naasten?

Patients/Patiënten	Patiënten met hartfalen NYHA klasse III-IV of gevorderd hartfalen
Intervention/Interventie	Proactieve zorgplanning
Comparison/Vergelijking	Geen proactieve zorgplanning
Outcome(s)/Uitkomst(en)	Tevredenheid van de patiënt, tevredenheid van de familieleden, tevredenheid van de zorgverlener, kwaliteit van leven, kwaliteit van sterfte, heropname, percentage reanimatie in eindstadium

Zoekstrategie

Ovid MEDLINE(R) <1946 to December 20, 2024>

1 exp Heart Failure/ (157666)

2 (heart adj2 failure*).tw. (196268)

3 (cardiac adj2 failure*).tw. (15523)
4 (myocardial adj2 failure*).tw. (3591)
5 (heart adj2 decompensat*).tw. (4815)
6 heart failure.tw. (195474)
7 cardiac failure.tw. (11956)
8 or/1-7 (249073)
9 exp Advance Care Planning/ (11815)
10 (advance care adj (plan or plans or planning)).tw. (4456)
11 (advance adj (directive* or decision*)).tw. (4183)
12 living will*.tw. (1296)
13 Right to Die/ (4978)
14 right to die.tw. (936)
15 ((patient or patients) adj5 (advocat* or advocacy)).tw. (8205)
16 power of attorney.tw. (483)
17 ((end of life or EOL) adj5 (care or discuss* or decision* or plan or plans or planning or preference*)).tw. (18490)
18 Terminal Care/ (33167)
19 Treatment Refusal/ (12250)
20 exp Withholding Treatment/ (16432)
21 (treatment adj5 (refus* or withhold* or withdraw*)).tw. (17603)
22 future care planning.mp. (52)
23 anticipating care.mp. (3)
24 early palliative care.mp. (648)
25 timely palliative care.mp. (53)
26 *"Palliative Care"/ (37171)
27 or/9-26 (124671)
28 8 and 27 (1993)
29 randomized controlled trial.pt. (628208)
30 controlled clinical trial.pt. (95641)
31 randomized.ab. (577217)
32 placebo.ab. (230106)
33 clinical trials as topic.sh. (204063)
34 randomly.ab. (373364)
35 trial.ti. (279480)
36 29 or 30 or 31 or 32 or 33 or 34 or 35 (1461416)
37 exp animals/ not humans.sh. (5291474)
38 36 not 37 (1332206)
39 meta-analysis.mp,pt. or review.pt. or search:.tw. (3470911)
40 38 or 39 (4566996)
41 28 and 40 (662)
42 limit 41 to yr="2016 -Current" (314)

Ovid MEDLINE(R) Epub Ahead of Print <December 20, 2024>
Ovid MEDLINE(R) Daily Update <December 20, 2024>
1 exp Heart Failure/ (205)
2 (heart adj2 failure*).tw. (3429)
3 (cardiac adj2 failure*).tw. (123)
4 (myocardial adj2 failure*).tw. (56)
5 (heart adj2 decompensat*).tw. (86)
6 heart failure.tw. (3425)
7 cardiac failure.tw. (79)
8 or/1-7 (3530)
9 exp Advance Care Planning/ (19)

10 (advance care adj (plan or plans or planning)).tw. (218)
11 (advance adj (directive* or decision*)).tw. (72)
12 living will*.tw. (9)
13 Right to Die/ (0)
14 right to die.tw. (4)
15 ((patient or patients) adj5 (advocat* or advocacy)).tw. (253)
16 power of attorney.tw. (12)
17 ((end of life or EOL) adj5 (care or discuss* or decision* or plan or plans or planning or preference*)).tw. (643)
18 Terminal Care/ (34)
19 Treatment Refusal/ (2)
20 exp Withholding Treatment/ (10)
21 (treatment adj5 (refus* or withhold* or withdraw*)).tw. (218)
22 future care planning.mp. (3)
23 anticipating care.mp. (0)
24 early palliative care.mp. (24)
25 timely palliative care.mp. (3)
26 *"Palliative Care"/ (50)
27 or/9-26 (1349)
28 8 and 27 (31)
29 randomized controlled trial.pt. (1021)
30 controlled clinical trial.pt. (8)
31 randomized.ab. (10414)
32 placebo.ab. (2653)
33 clinical trials as topic.sh. (82)
34 randomly.ab. (5209)
35 trial.ti. (5208)
36 29 or 30 or 31 or 32 or 33 or 34 or 35 (17681)
37 exp animals/ not humans.sh. (3557)
38 36 not 37 (17489)
39 meta-analysis.mp,pt. or review.pt. or search:.tw. (60988)
40 38 or 39 (74103)
41 28 and 40 (14)
42 limit 41 to yr="2016 -Current" (11)

Embase:

#1.	'heart failure'/exp	724814
#2.	(heart NEAR/2 failure*):ab,ti	385351
#3.	(myocardial NEAR/2 failure*):ab,ti	6155
#4.	(cardiac NEAR/2 failure*):ab,ti	26800
#5.	(heart NEAR/2 decompensat*):ab,ti	12111
#6.	(((nyha:ab,ti AND 3:ab,ti OR nyha:ab,ti) AND 4:ab,ti OR nyha:ab,ti) AND iii:ab,ti OR nyha:ab,ti) AND iv:ab,ti	14569
#7.	#1 OR #2 OR #3 OR #4 OR #5 OR #6	794592
#8.	living will'/exp OR 'right to die'/exp OR 'patient advocacy'/exp OR 'power of attorney'/exp OR 'terminal care'/exp OR 'treatment refusal'/exp OR 'treatment withdrawal'/exp	438338
#9.	(living NEAR/1 will*):ab,ti	1819

#10.	('advance care' NEAR/1 (plan OR plans OR planning)):ab,ti	8764
#11.	'right to die':ab,ti	1024
#12.	((patient OR patients) NEAR/5 (advocat* OR advocacy)):ab,ti	15179
#13.	'power of attorney':ab,ti	878
#14.	(('end of life' OR eol) NEAR/5 (care OR discuss* OR decision* OR plan OR plans OR planning OR preference*)):ab,ti	32075
#15.	'terminal care':ab,ti	2083
#16.	(treatment NEAR/2 (refus* OR withhold* OR withdraw*)):ab,ti	15678
#17.	#8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16	468588
#18.	#7 AND #17	22660
#19.	#18 AND ([article]/lim OR [article in press]/lim OR [review]/lim) AND ([dutch]/lim OR [english]/lim) AND ([embase]/lim OR [medline]/lim) AND [2016-2024]/py	8245
#20.	#18 AND ([article]/lim OR [article in press]/lim OR [review]/lim) AND ([dutch]/lim OR [english]/lim) AND ([embase]/lim OR [medline]/lim) AND [2016-2024]/py AND ([cochrane review]/lim OR [systematic review]/lim OR [meta analysis]/lim OR [randomized controlled trial]/lim)	1186

Cochrane: 23/12/2024

#1 MeSH descriptor: [Advance Care Planning] explode all trees 492
#2 MeSH descriptor: [Right to Die] explode all trees 5
#3 MeSH descriptor: [Terminal Care] explode all trees 782
#4 MeSH descriptor: [Treatment Refusal] explode all trees 390
#5 MeSH descriptor: [Withholding Treatment] explode all trees 582
#6 MeSH descriptor: [Patient Advocacy] explode all trees 141
#7 ("advance care" and (plan or plans or planning)):ti,ab 950
#8 (advance and (directive* or decision*)):ti,ab 1191
#9 living will*:ti,ab 15100
#10 "right to die":ti,ab 1
#11 ((patient or patients) and (advocat* or advocacy)):ti,ab 3863
#12 "power of attorney":ti,ab 51
#13 (("end of life" or EOL) and (care or discuss* or decision* or plan or plans or planning or preference*)):ti,ab 1701
#14 (treatment and (refus* or withhold* or withdraw*)):ti,ab 27022
#15 "terminal care":ti,ab 62
#16 "palliative approach":ti,ab 71
#17 #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 49275
#18 MeSH descriptor: [Heart Failure] explode all trees 14997
#19 (heart and failure*):ti,ab 38423
#20 (cardiac and failure*):ti,ab 15840
#21 (myocardial and failure*):ti,ab 9932
#22 (heart and decompensat*):ti,ab 2108
#23 #18 or #19 or #20 or #21 or #22 44441
#24 #17 and #23 with Cochrane Library publication date Between Dec 2016 and Dec 2024 1276

Tabel 1. Resultaten van zoekactie van onderzoeksvraag 2

Database	Aantal
Medline	314
PreMedline	11
CDSR	32
CENTRAL	1243
Embase	1186
Totaal aantal resultaten	**2786**
Aantal geëxcludeerd (dubbelen, taal)	573
Totaal aantal unieke resultaten	**2213**

Tabel 2. Overzicht van geëxcludeerde studies gebaseerd op beoordeling van de volledige tekst van onderzoeksvraag 2

Referentie	Reden voor exclusie
Bakitas, M.A., et al., Effect of an Early Palliative Care Telehealth Intervention vs Usual Care on Patients With Heart Failure: The ENABLE CHF-PC Randomized Clinical Trial. JAMA Internal Medicine, 2020. 180(9): p. 1203-1213.	Geen aflijnbare ACP interventie
Balata, M., et al., Early integration of palliative care versus standard cardiac care for patients with heart failure (EPCHF): a multicentre, parallel, two-arm, open-label, randomised controlled trial. The Lancet Healthy Longevity, 2024. 5(10): p. 100637.	Geen aflijnbare ACP interventie
Boyd, K., et al. Future care planning in advanced heart disease. Palliative medicine, 2016. 30, S15 DOI: 10.1177/0269216316631462.	Abstract
Chang, Y.K., et al., Referral Criteria to Palliative Care for Patients With Heart Failure: A Systematic Review. Circulation: Heart Failure, 2020. 13(9): p. e006881.	Gaat niet specifiek over ACP
Datla, S., et al., Multi-disciplinary palliative care is effective in people with symptomatic heart failure: A systematic review and narrative synthesis. Palliative Medicine, 2019. 33(8): p. 1003-1016.	Gaat niet specifiek over ACP
Denvir, M., et al. Future care planning in advanced heart disease; a stepped wedge randomised, controlled trial. Palliative medicine, 2016. 30, Np57 DOI: 10.1177/0269216316646056.	68% had hartfalen
Denvir, M.A., et al., Phase 2 Randomised Controlled Trial and Feasibility Study of Future Care Planning in Patients with Advanced Heart Disease. Scientific Reports, 2016. 6: p. 24619.	Abstract
Dionne-Odom, J.N., et al., Effects of a Telehealth Early Palliative Care Intervention for Family Caregivers of Persons With Advanced Heart Failure: The ENABLE CHF-PC Randomized Clinical Trial. JAMA Network Open, 2020. 3(4): p. e202583.	Geen aflijnbare ACP interventie
Diop, M.S., et al., Palliative Care Interventions for Patients with Heart Failure: A Systematic Review and Meta-Analysis. Journal of Palliative Medicine, 2017. 20(1): p. 84-92.	Gaat niet specifiek over ACP
Douglas, M.L., et al., Efficacy of Advance Care Planning Videos for Patients: A Randomized Controlled Trial in Cancer, Heart, and Kidney Failure Outpatient Settings. Medical Decision Making, 2021. 41(3): p. 292-304.	Gaat over interventie om ACP te faciliteren
El-Jawahri, A., et al., Randomized, controlled trial of an advance care planning video decision support tool for patients with advanced heart failure. Circulation, 2016. 134(1): p. 52-60.	Gaat over interventie om ACP te faciliteren
Fadol, A.P., et al., Palliative care referral criteria and outcomes in cancer and heart failure: a systematic review of literature. Cardio-Oncology, 2021. 7(1).	Gaat niet specifiek over ACP

Fernandes Pedro, J. and P. Reis-Pina, Palliative Care in Patients with Advanced Heart Failure: A Systematic Review. Acta Medica Portuguesa, 2022. 35(2): p. 111-118.	Gaat niet specifiek over ACP
Hicks, S., et al., Effectiveness and cost effectiveness of palliative care interventions in people with chronic heart failure and their caregivers: a systematic review. BMC Palliative Care, 2022. 21(1).	Gaat niet specifiek over ACP als interventie op zich
Hopp, F.P., et al., Results of a Hospital-Based Palliative Care Intervention for Patients With an Acute Exacerbation of Chronic Heart Failure. Journal of Cardiac Failure, 2016. 22(12): p. 1033-1036.	Interventie is een palliatieve zorg consultatie
João, F.P. and R.P. Paulo, Palliative Care in Patients with Advanced Heart Failure: A Systematic Review. Acta Medica Portuguesa, 2022. 35(2): p. 111-118.	Gaat niet specifiek over ACP
Li, Y., et al., Effectiveness of palliative care interventions on patient-reported outcomes and all-cause mortality in community-dwelling adults with heart failure: A systematic review and meta-analysis. International Journal of Nursing Studies, 2024. 160: p. 104887.	Gaat niet specifiek over ACP
Malhotra, C., et al. Effectiveness of advance care planning in improving end of life care for patients with advanced heart failure. BMJ supportive and palliative care, 2019. 9, A23-a24 DOI: 10.1136/spcare-2019-ACPICONGRESSABS.69.	Abstract
Malhotra, C., et al., Impact of advance care planning on the care of patients with heart failure: study protocol for a randomized controlled trial. Trials [Electronic Resource], 2016. 17(1): p. 285.	Study protocol
Malhotra, C., et al., Instability in End-of-Life Care Preference Among Heart Failure Patients: Secondary Analysis of a Randomized Controlled Trial in Singapore. Journal of General Internal Medicine, 2020. 35(7): p. 2010-2016.	Secundaire analyse van RCT
Malhotra, C., et al., Instability in Preference for Place of Death Among Patients With Symptoms of Advanced Heart Failure. Journal of the American Medical Directors Association, 2021. 22(2): p. 349.e29-349.e34.	Secundaire analyse van RCT
Maqsood, M.H., M.S. Khan, and H.J. Warraich, Association of Palliative Care Intervention With Health Care Use, Symptom Burden and Advance Care Planning in Adults With Heart Failure and Other Noncancer Chronic Illness. Journal of Pain and Symptom Management, 2021. 62(4): p. 828-835.	ACP eerder als uitkomstmaat gerapporteerd dan als interventie
McCreedy, E.M., et al., Effect of advance care planning video on do-not-hospitalize orders for nursing home residents with advanced illness. BMC Geriatrics, 2022. 22(1): p. 298.	Gaat over interventie om ACP te faciliteren; secundaire analyse van RCT
Metzger, M., et al., A randomized controlled pilot trial to improve advance care planning for LVAD patients and their surrogates. Heart & Lung, 2016. 45(3): p. 186-92.	Selectieve populatie
Ng, A.Y.M. and F.K.Y. Wong, Effects of a Home-Based Palliative Heart Failure Program on Quality of Life, Symptom Burden, Satisfaction and Caregiver Burden: A Randomized Controlled Trial. Journal of Pain & Symptom Management, 2018. 55(1): p. 1-11.	Geen aflijnbare ACP interventie
Nishikawa, Y., et al., Advance care planning for heart failure. Cochrane Database of Systematic Reviews, 2018. 2018(5).	Updated
O'Donnell, A., et al. A Randomized Controlled Trial of a Social Worker-Aided Palliative Care Intervention in High Risk Patients with Heart Failure (SWAP-HF). Journal of cardiac failure, 2016. 22, 940.	Abstract
O'Riordan, D.L., et al., Feasibility of Implementing a Palliative Care Intervention for People with Heart Failure: LeARNI'sngs from a Pilot Randomized Clinical Trial. Journal of Palliative Medicine, 2019. 22(12): p. 1583-1588.	Geen aflijnbare ACP interventie

Pan, L., et al., Effectiveness of Timely Implementation of Palliative Care on the Well-Being of Patients With Chronic Heart Failure: A Randomized Case-Control Study. Journal of Palliative Care, 2024. 39(4): p. 282-288.	Geen aflijnbare ACP interventie
Sahlollbey, N., et al., The impact of palliative care on clinical and patient-centred outcomes in patients with advanced heart failure: a systematic review of randomized controlled trials. European Journal of Heart Failure, 2020. 22(12): p. 2340-2346.	Gaat niet specifiek over ACP
Sánchez, B., et al., Evaluating the efficacy of an Advanced Care Planning Program for Health Decisions in patients with advanced heart failure: protocol for a Randomized Clinical Trial. BMC Cardiovascular Disorders, 2020. 20(1).	Study protocol
Schallmo, M.K., S. Dudley-Brown, and P.M. Davidson, Healthcare Providers' Perceived Communication Barriers to Offering Palliative Care to Patients With Heart Failure: An Integrative Review. Journal of Cardiovascular Nursing, 2019. 34(2): p. E9-E18.	Gaat niet specifiek over ACP
Schichtel, M., et al., Clinician barriers and facilitators to heart failure advance care plans: a systematic literature review and qualitative evidence synthesis. BMJ supportive & palliative care, 2019. 22: p. 22.	Kwalitatief onderzoek
Schichtel, M., et al., Clinician-targeted interventions to improve advance care planning in heart failure: a systematic review and meta-analysis. Heart, 2019. 105(17): p. 1316-1324.	Gaat over interventies om ACP te faciliteren
Schichtel, M., et al., Effect of Behavior Change Techniques Targeting Clinicians to Improve Advance Care Planning in Heart Failure: A Systematic Review and Meta-Analysis. Annals of Behavioral Medicine, 2021. 55(5): p. 383-398.	Gaat over interventies om ACP te faciliteren
Singh, G.K., et al., Palliative care in chronic heart failure: a theoretically guided, qualitative meta-synthesis of decision-making. Heart Failure Reviews, 2020. 25(3): p. 457-467.	Kwalitatief onderzoek
Singh, G.K., et al., The Perspectives of Health Care Professionals on Providing End of Life Care and Palliative Care for Patients With Chronic Heart Failure: An Integrative Review. Heart Lung and Circulation, 2019. 28(4): p. 539-552.	Kwalitatief onderzoek

Steinberg, L., et al., Approach to advanced heart failure at the end of life. Canadian Family Physician, 2017. 63(9): p. 674-680.	Narrative review
Ventura Mde, M., Effectiveness and cost-effectiveness of home palliative care services for adults with advanced illness and their caregivers. Sao Paulo Medical Journal = Revista Paulista de Medicina, 2016. 134(1): p. 93-4.	Comment
Wong, F.K., et al., Effects of a transitional palliative care model on patients with end-stage heart failure: a randomised controlled trial. Heart, 2016. 102(14): p. 1100-8.	Gaat niet specifiek over ACP
Wong, F.K.Y., et al., Cost-effectiveness of a transitional home-based palliative care program for patients with end-stage heart failure. Palliative Medicine, 2018. 32(2): p. 476-484.	Gaat niet specifiek over ACP
Xu, Z., et al., Effect of Palliative Care for Patients with Heart Failure. International Heart Journal, 2018. 59(3): p. 503-509.	Gaat niet specifiek over ACP

Zoekverantwoording module Medicamenteuze behandeling

Onderzoeksvraag

Wat is het effect van staken van de volgende medicatie op de kwaliteit van leven bij patiënten met hartfalen NYHA klasse III-IV in de fase voor het overlijden?

- *Diurectica (eplerenone, spironolacton, furosemide, bumetanide, hydrochlorothiazide, SGLT2-remmers [empagliflozine, dapagliflozine])*
- *Beta-blokkers (metoprolol, carvedilol, nebivolol en bisoprolol)*

- *ACE-remmers, angiotensine receptor antagonisten of angiotensin receptor/neprilysin inhibitor (ARNI's (Entresto ®)]*
- *Antistolling (thrombocytenaggregatieaggregatieremmers [acetylsalicyslzuur, clopidogrel, prasugrel, ticagrelor], vitamin K-antagonisten [fenprocoumon, acenocoumarol], directe orale anti-coagulantia [dabigatran, rivaroxaban, apixaban, edoxaban])*
- *Inotropica (dobutamine, dopamine, fosfodi-esterase-3-remmers [enoximone, milrinone])*

Patients/Patiënten	Patiënten met hartfalen NYHA klasse III-IV (laatste levensfase: in eerste instantie laatste 4 weken; als er geen studies zijn dan patiënten met hele korte levensverwachting)
Intervention/Interventie	Staken of afbouwen van medicatie (zie hierboven)
Comparison/Vergelijking	Continueren van medicatie (zie hierboven)
Outcome(s)/Uitkomst(en)	Tevredenheid van de patiënt, tevredenheid van de familieleden, tevredenheid van de zorgverlener, kwaliteit van leven, kwaliteit van sterfte, heropname, percentage reanimatie in eindstadium

Zoekstrategie

Ovid MEDLINE(R) <1946 to December 23, 2024>
1 exp Heart Failure/ (157702)
2 (heart adj2 failure*).tw. (196327)
3 (cardiac adj2 failure*).tw. (15526)
4 (myocardial adj2 failure*).tw. (3593)
5 (heart adj2 decompensat*).tw. (4817)
6 heart failure.tw. (195533)
7 cardiac failure.tw. (11956)
8 or/1-7 (249137)
9 Palliative Care/ (66328)
10 "Hospice and Palliative Care Nursing"/ (2597)
11 exp Palliative Medicine/ (607)
12 exp Terminal Care/ (59128)
13 Terminally Ill/ (6887)
14 palliat*.mp. (108909)
15 ((terminal* or advance*) adj6 (care or caring or ill* or sick* or stage*)).mp. (139954)
16 (terminal-stage* or (terminal adj1 stage*) or dying or (close adj6 death)).mp. (42906)
17 (end adj3 life).mp. (31430)
18 hospice*.mp. (21121)
19 ((end-stage* or (end adj1 stage*)) adj6 (disease* or ill* or care or caring)).mp. (60804)
20 ((incurable or advanced) adj6 (ill* or disease*)).mp. (64557)
21 (reduced adj1 life adj2 expectanc*).mp. (1055)
22 or/9-21 (383979)
23 8 and 22 (8690)
24 diuretics/ or bumetanide/ or furosemide/ or hydrochlorothiazide/ or spironolactone/ or eplerenone/ (50369)
25 Sodium-Glucose Transporter 2 Inhibitors/ (7507)
26 eplerenon*.ti,ab. (1363)
27 spironolacton*.ti,ab. (6276)
28 furosemide.ti,ab. (12256)
29 bumetanide.ti,ab. (3139)
30 hydrochlorothiazide.ti,ab. (6623)
31 empagliflozin*.ti,ab. (2376)
32 dapagliflozin*.ti,ab. (2350)
33 or/24-32 (68176)
34 23 and 33 (357)
35 nebivolol/ or carvedilol/ or bisoprolol/ or metoprolol/ (10039)

36 Adrenergic beta-Antagonists/ (42387)
37 metoprolol.ti,ab. (7346)
38 carvedilol.ti,ab. (3443)
39 nebivolol.ti,ab. (1008)
40 bisoprolol.ti,ab. (1618)
41 or/35-40 (50377)
42 23 and 41 (139)
43 angiotensin-converting enzyme inhibitors/ or captopril/ or enalapril/ or lisinopril/ or perindopril/ or ramipril/ (47662)
44 angiotensin receptor antagonists/ or losartan/ or valsartan/ (19773)
45 Angiotensin II Type 2 Receptor Blockers/ (590)
46 captopril.ti,ab. (11485)
47 enalapril.ti,ab. (6567)
48 lisinopril.ti,ab. (2539)
49 perindopril.ti,ab. (1964)
50 ramipril.ti,ab. (2287)
51 losartan.ti,ab. (8931)
52 valsartan.ti,ab. (4600)
53 candesartan.ti,ab. (2715)
54 entresto.ti,ab. (75)
55 sacubitril.ti,ab. (1501)
56 or/43-55 (67838)
57 23 and 56 (342)
58 platelet aggregation inhibitors/ or aspirin/ or clopidogrel/ or prasugrel hydrochloride/ or ticagrelor/ (81584)
59 coumarins/ or acenocoumarol/ or phenprocoumon/ (18145)
60 acenocoumarol.ti,ab. (933)
61 phenprocoumon.ti,ab. (884)
62 fenprocoumon.ti,ab. (2)
63 fenprocoumon.ti,ab. (2)
64 dabigatran.ti,ab. (4932)
65 rivaroxaban.ti,ab. (6239)
66 apixaban.ti,ab. (4163)
67 edoxaban.ti,ab. (1714)
68 or/58-67 (109290)
69 23 and 68 (28)
70 dobutamine/ or dopamine/ or enoximone/ or milrinone/ (83848)
71 dobutamine.ti,ab. (8753)
72 dopamine.ti,ab. (130395)
73 enoximone.ti,ab. (496)
74 milrinone.ti,ab. (2059)
75 or/70-74 (160223)
76 23 and 75 (97)
77 34 or 42 or 57 or 69 or 76 (774)
78 limit 77 to yr="2016 -Current" (383)
79 exp Withholding Treatment/ (16434)
80 discontinu*.ti,ab. (137327)
81 withdraw*.ti,ab. (128691)
82 suspend*.ti,ab. (41426)
83 (step-down or "step down").ti,ab. (3728)
84 deprescrib*.ti,ab. (1516)
85 down-titration.ti,ab. (156)
86 79 or 80 or 81 or 82 or 83 or 84 or 85 (315759)
87 33 or 41 or 56 or 68 or 75 (434885)

88 8 and 86 and 87 (1348)
89 limit 88 to yr="2016 -Current" (498)
90 89 not 78 (465)
91 78 or 89 (848)

Ovid MEDLINE(R) Epub Ahead of Print <December 23, 2024>
Ovid MEDLINE(R) Daily Update <December 23, 2024>
1 exp Heart Failure/ (241)
2 (heart adj2 failure*).tw. (3493)
3 (cardiac adj2 failure*).tw. (126)
4 (myocardial adj2 failure*).tw. (58)
5 (heart adj2 decompensat*).tw. (87)
6 heart failure.tw. (3489)
7 cardiac failure.tw. (79)
8 or/1-7 (3599)
9 Palliative Care/ (85)
10 "Hospice and Palliative Care Nursing"/ (3)
11 exp Palliative Medicine/ (1)
12 exp Terminal Care/ (64)
13 Terminally Ill/ (1)
14 palliat*.mp. (2096)
15 ((terminal* or advance*) adj6 (care or caring or ill* or sick* or stage*)).mp. (2390)
16 (terminal-stage* or (terminal adj1 stage*) or dying or (close adj6 death)).mp. (726)
17 (end adj3 life).mp. (1179)
18 hospice*.mp. (405)
19 ((end-stage* or (end adj1 stage*)) adj6 (disease* or ill* or care or caring)).mp. (922)
20 ((incurable or advanced) adj6 (ill* or disease*)).mp. (1085)
21 (reduced adj1 life adj2 expectanc*).mp. (36)
22 or/9-21 (6546)
23 8 and 22 (213)
24 diuretics/ or bumetanide/ or furosemide/ or hydrochlorothiazide/ or spironolactone/ or eplerenone/ (22)
25 Sodium-Glucose Transporter 2 Inhibitors/ (56)
26 eplerenon*.ti,ab. (27)
27 spironolacton*.ti,ab. (71)
28 furosemide.ti,ab. (83)
29 bumetanide.ti,ab. (11)
30 hydrochlorothiazide.ti,ab. (44)
31 empagliflozin*.ti,ab. (89)
32 dapagliflozin*.ti,ab. (106)
33 or/24-32 (420)
34 23 and 33 (10)
35 nebivolol/ or carvedilol/ or bisoprolol/ or metoprolol/ (5)
36 Adrenergic beta-Antagonists/ (19)
37 metoprolol.ti,ab. (45)
38 carvedilol.ti,ab. (31)
39 nebivolol.ti,ab. (21)
40 bisoprolol.ti,ab. (26)
41 or/35-40 (126)
42 23 and 41 (1)
43 angiotensin-converting enzyme inhibitors/ or captopril/ or enalapril/ or lisinopril/ or perindopril/ or ramipril/ (30)
44 angiotensin receptor antagonists/ or losartan/ or valsartan/ (18)
45 Angiotensin II Type 2 Receptor Blockers/ (0)

46 captopril.ti,ab. (37)
47 enalapril.ti,ab. (46)
48 lisinopril.ti,ab. (30)
49 perindopril.ti,ab. (13)
50 ramipril.ti,ab. (27)
51 losartan.ti,ab. (70)
52 valsartan.ti,ab. (89)
53 candesartan.ti,ab. (22)
54 entresto.ti,ab. (2)
55 sacubitril.ti,ab. (64)
56 or/43-55 (306)
57 23 and 56 (3)
58 platelet aggregation inhibitors/ or aspirin/ or clopidogrel/ or prasugrel hydrochloride/ or ticagrelor/ (40)
59 coumarins/ or acenocoumarol/ or phenprocoumon/ (21)
60 acenocoumarol.ti,ab. (5)
61 phenprocoumon.ti,ab. (5)
62 fenprocoumon.ti,ab. (0)
63 fenprocoumon.ti,ab. (0)
64 dabigatran.ti,ab. (84)
65 rivaroxaban.ti,ab. (147)
66 apixaban.ti,ab. (120)
67 edoxaban.ti,ab. (53)
68 or/58-67 (315)
69 23 and 68 (1)
70 dobutamine/ or dopamine/ or enoximone/ or milrinone/ (45)
71 dobutamine.ti,ab. (45)
72 dopamine.ti,ab. (1029)
73 enoximone.ti,ab. (1)
74 milrinone.ti,ab. (19)
75 or/70-74 (1086)
76 23 and 75 (1)
77 34 or 42 or 57 or 69 or 76 (15)
78 limit 77 to yr="2016 -Current" (14)
79 exp Withholding Treatment/ (12)
80 discontinu*.ti,ab. (2528)
81 withdraw*.ti,ab. (3938)
82 suspend*.ti,ab. (505)
83 (step-down or "step down").ti,ab. (54)
84 deprescrib*.ti,ab. (84)
85 down-titration.ti,ab. (4)
86 79 or 80 or 81 or 82 or 83 or 84 or 85 (6954)
87 33 or 41 or 56 or 68 or 75 (2203)
88 8 and 86 and 87 (23)
89 limit 88 to yr="2016 -Current" (18)
90 89 not 78 (15)
91 78 or 89 (29)

Cochrane Library: 24/12/2024

#1	MeSH descriptor: [Palliative Care] explode all trees	2661
#2	MeSH descriptor: [Terminal Care] explode all trees	782
#3	MeSH descriptor: [Palliative Medicine] explode all trees	4
#4	MeSH descriptor: [Hospice and Palliative Care Nursing] explode all trees	98
#5	MeSH descriptor: [Terminally Ill] explode all trees	123

#6 palliat*:ti,ab 8719
#7 ((terminal* or advance*) NEAR/6 (care or caring or ill* or sick* or stage*)):ti,ab 10797
#8 (terminal-stage* or (terminal NEAR/1 stage*) or dying or (close NEAR/6 death)):ti,ab 1803
#9 (end NEAR/3 life):ti,ab 2390
#10 hospice*:ti,ab 1000
#11 ((end-stage* or (end NEAR/1 stage*)) NEAR/6 (disease* or ill* or care or caring)):ti,ab 6624
#12 ((incurable or advanced) NEAR/6 (ill* or disease*)):ti,ab 8594
#13 (reduced NEAR/1 life NEAR/2 expectanc*):ti,ab 136
#14 {or #1-#13} 34558
#15 MeSH descriptor: [Heart Failure] explode all trees 14997
#16 (heart and failure*):ti,ab 38423
#17 (cardiac and failure*):ti,ab 15840
#18 (myocardial and failure*):ti,ab 9932
#19 (heart and decompensat*):ti,ab 2108
#20 {or #15-#19} 44441
#21 MeSH descriptor: [Withholding Treatment] explode all trees 582
#22 discontinu*:ti,ab 50775
#23 withdraw*:ti,ab 36600
#24 suspend*:ti,ab 1968
#25 (step-down or "step down"):ti,ab 1050
#26 deprescrib*:ti,ab 373
#27 down-titration:ti,ab 197
#28 {or #21-#27} 85904
#29 eplerenon*:ti,ab 561
#30 spironolacton*:ti,ab 2033
#31 furosemide:ti,ab 2428
#32 bumetanide:ti,ab 267
#33 hydrochlorothiazide:ti,ab 3660
#34 empagliflozin*:ti,ab 2132
#35 dapagliflozin*:ti,ab 2357
#36 metoprolol:ti,ab 3034
#37 carvedilol:ti,ab 1407
#38 nebivolol:ti,ab 575
#39 bisoprolol:ti,ab 1031
#40 captopril:ti,ab 2284
#41 enalapril:ti,ab 2957
#42 lisinopril:ti,ab 1232
#43 perindopril:ti,ab 1071
#44 ramipril:ti,ab 1369
#45 losartan:ti,ab 2623
#46 valsartan:ti,ab 2738
#47 candesartan:ti,ab 1241
#48 entresto:ti,ab 73
#49 sacubitril:ti,ab 798
#50 acenocoumarol:ti,ab 218
#51 phenprocoumon:ti,ab 209
#52 fenprocoumon:ti,ab 3
#53 dabigatran:ti,ab 1108
#54 rivaroxaban:ti,ab 2322
#55 apixaban:ti,ab 1303
#56 edoxaban:ti,ab 738
#57 dobutamine:ti,ab 1380
#58 dopamine:ti,ab 7606

#59 enoximone:ti,ab 174
#60 milrinone:ti,ab 477
#61 {or #29-#60} 42793
#62 #28 and #61 2821
#63 #14 or #62 37284
#64 #20 and #63 with Cochrane Library publication date Between Jan 2016 and Dec 2024 1653

Embase: 24/12/2024

#1.	'heart failure'/exp	724907
#2.	(heart NEAR/2 failure*):ab,ti	385415
#3.	(myocardial NEAR/2 failure*):ab,ti	6155
#4.	(cardiac NEAR/2 failure*):ab,ti	26801
#5.	(heart NEAR/2 decompensat*):ab,ti	12113
#6.	#1 OR #2 OR #3 OR #4 OR #5	791156
#7.	'palliative therapy'/exp	154989
#8.	'terminal care'/exp	92655
#9.	'terminally ill patient'/exp	10030
#10.	palliat*:ti,ab	160180
#11.	(terminal* NEAR/6 (care OR caring OR ill*)):ti,ab	15431
#12.	(end NEAR/3 life):ti,ab	51201
#13.	hospice*:ti,ab	29760
#14.	'terminal stage*':ti,ab	5051
#15.		56923
#16.	(close NEAR/6 death):ti,ab	1766
#17.	((incurable OR advanced) NEAR/6 (ill* OR disease*)):ti,ab	124748
#18.	#7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17	463760
#19.	#6 AND #18	18763
#20.	'diuretic agent'/exp	504324
#21.	'bumetanide'/exp	7234
#22.	'furosemide'/exp	71555
#23.	'hydrochlorothiazide'/exp	30728
#24.	'spironolactone'/exp	40308
#25.	'eplerenone'/exp	6307

#26.	'sodium glucose cotransporter 2 inhibitor'/de	18670
#27.	'empagliflozin'/exp	10576
#28.	'dapagliflozin'/exp	10485
#29.	eplerenon*:ti,ab OR spironolacton*:ti,ab OR furosemide:ti,ab OR bumetanide:ti,ab OR hydrochlorothiazide:ti,ab OR empagliflozin*:ti,ab OR dapagliflozin*:ti,ab	55888
#30.	#20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29	525281
#31.	#19 AND #30	1868
#32.	beta adrenergic receptor blocking agent'/de OR 'carvedilol'/exp OR 'nebivolol'/exp OR 'bisoprolol'/exp OR 'metoprolol'/exp	212633
#33.	metoprolol:ti,ab OR carvedilol:ti,ab OR nebivolol:ti,ab OR bisoprolol:ti,ab	22673
#34.	#32 OR #33	214716
#35.	#19 AND #34	1243
#36.	dipeptidyl carboxypeptidase inhibitor'/de OR 'captopril'/exp OR 'enalapril'/exp OR 'lisinopril'/exp OR 'perindopril'/exp OR 'ramipril'/exp	204399
#37.	angiotensin receptor antagonist'/de OR 'losartan'/exp OR 'valsartan'/exp	95676
#38.	angiotensin 2 receptor antagonist'/de OR 'sacubitril plus valsartan'/exp	13978
#39.	captopril:ti,ab OR enalapril:ti,ab OR lisinopril:ti,ab OR perindopril:ti,ab OR ramipril:ti,ab OR losartan:ti,ab OR valsartan:ti,ab OR candesartan:ti,ab OR entresto:ti,ab OR sacubitril:ti,ab	58343
#40.	#36 OR #37 OR #38 OR #39	248376
#41.	#19 AND #40	1332
#42.	antithrombocytic agent'/de OR 'acetylsalicylic acid'/exp OR 'clopidogrel'/exp OR 'prasugrel'/exp OR 'ticagrelor'/exp	328351
#43.	coumarin derivative'/de OR 'acenocoumarol'/exp OR 'phenprocoumon'/exp	30801
#44.	dabigatran'/exp OR 'rivaroxaban'/exp OR 'apixaban'/exp OR 'edoxaban'/exp	48094
#45.	acenocoumarol:ti,ab OR phenprocoumon:ti,ab OR fenprocoumon:ti,ab OR dabigatran:ti,ab OR rivaroxaban:ti,ab OR apixaban:ti,ab OR edoxaban:ti,ab	29947
#46.	#42 OR #43 OR #44 OR #45	390634
#47.	#19 AND #46	677
#48.	dobutamine'/exp OR 'dopamine'/exp OR 'enoximone'/exp OR 'milrinone'/exp	167504
#49.	dobutamine:ti,ab OR dopamine:ti,ab OR enoximone:ti,ab OR milrinone:ti,ab	196239
#50.	#48 OR #49	260099
#51.	#19 AND #50	672

#52.	#31 OR #35 OR #41 OR #47 OR #51	3270
#53.	(#31 OR #35 OR #41 OR #47 OR #51) AND ([article]/lim OR [article in press]/lim OR [review]/lim) AND ([dutch]/lim OR [english]/lim) AND [embase]/lim AND [2016-2025]/py	1223
#54.	'treatment withdrawal'/exp	298233
#55.	discontinu*:ti,ab OR withdraw*:ti,ab OR suspend*:ti,ab OR 'step down':ti,ab OR deprescrib*:ti,ab OR 'down titration':ti,ab	564517
#56.	#54 OR #55	749644
#57.	#30 OR #34 OR #40 OR #46 OR #50	1334802
#58.	#56 AND #57	71887
#59.	#6 AND #58	11395
#60.	#6 AND #58 AND ([article]/lim OR [article in press]/lim OR [review]/lim) AND ([dutch]/lim OR [english]/lim) AND ([embase]/lim OR [medline]/lim) AND [2016-2025]/py AND [medline]/lim	2539
#61.	#53 OR #60	3673

Tabel 1. Resultaten van zoekactie van onderzoeksvraag 3

Database	**Aantal**
Medline	848
PreMedline	29
CDSR	47
CENTRAL	1606
Embase	3673
Totaal aantal resultaten	**6203**
Aantal geëxcludeerd (dubbelen, taal)	1118
Totaal aantal unieke resultaten	**5085**

Tabel 2. Overzicht van geëxcludeerde studies gebaseerd op beoordeling van de volledige tekst van onderzoeksvraag 3

Referentie	**Reden voor exclusie**
Balata, M., et al., Early integration of palliative care versus standard cardiac care for patients with heart failure (EPCHF): a multicentre, parallel, two-arm, open-label, randomised controlled trial. The Lancet Healthy Longevity, 2024. 5(10).	Geen medicatie aanpassingen als (deel van) interventie
Bień, B., Prevalent medication-related harm identified in patients admitted to a geriatric ward: Cross-sectional and survival-based contributors. Polish Archives of Internal Medicine, 2021. 131(1): p. 9-16.	Geen vergelijking zoals omschreven in PICO
Brandts, J. and N. Marx Blinded Withdrawal of Long-term Randomized Treatment with Empagliflozin or Placebo in Patients With Heart Failure. Diabetologie und stoffwechsel, 2024. 19, S95-s96 DOI: 10.1055/s-0044-1785428.	Abstract
Chen, Y.L., et al., Feature and impact of guideline-directed medication prescriptions for heart failure with reduced ejection fraction accompanied by chronic kidney disease. International Journal of Medical Sciences, 2021. 18(12): p. 2570-2580.	Geen medicatie aanpassingen als (deel van) interventie

Cutshall, B.T., et al., Assessing Guideline-Directed Medication Therapy for Heart Failure in End-Stage Renal Disease. American Journal of the Medical Sciences, 2018. 355(3): p. 247-251.	Gaat niet over palliatieve setting
Duong, M.H., et al., The effect of down-titration and discontinuation of heart failure pharmacotherapy in older people: A systematic review and meta-analysis. British Journal of Clinical Pharmacology, 2024.	Gaat niet over palliatieve setting
Garred, C.H., et al., Adherence and Discontinuation of Optimal Heart Failure Therapies According to Age: A Danish Nationwide Study. Journal of the American Heart Association, 2022. 11(19): p. e026187.	Gaat niet over palliatieve setting
Granger, B., et al. Polypharmacy in Palliative Care for Advanced Heart Failure: the PAL-HF Experience. Journal of cardiac failure, 2022. 28, 334-338 DOI: 10.1016/j.cardfail.2021.08.021.	Gaat niet over end-of-life
Hopp, F., et al. Results of a Hospital-Based Palliative Care Intervention for Patients With an Acute Exacerbation of Chronic Heart Failure. Journal of cardiac failure, 2016. 22, 1033-1036 DOI: 10.1016/j.cardfail.2016.04.004.	Interventie is een palliatieve zorg consultatie
Johnson, M., et al. The feasibility of a randomised controlled trial to compare the cost-effectiveness of palliative cardiology or usual care in people with advanced heart failure: two exploratory prospective cohorts. Palliative medicine, 2018. 32, 1133-1141 DOI: 10.1177/0269216318763225.	Geen medicatie aanpassingen als (deel van) interventie
Ju, C., et al., Use of heart failure medical therapy before and after a cancer diagnosis: A longitudinal study. ESC heart failure, 2024. 11(6): p. 3911-3923.	Gaat niet over end-of-life
Juraschek, S.P., et al., Effects of Antihypertensive Deprescribing Strategies on Blood Pressure, Adverse Events, and Orthostatic Symptoms in Older Adults: Results From TONE. American Journal of Hypertension, 2022. 35(4): p. 337-346.	Gaat niet over palliatieve setting
Khajehpoor, M., P. Shahrbabaki, and E. Nouhi Effects of a home-based palliative heart failure program on quality of life among the elderly: a clinical trial study. BMC palliative care, 2023. 22, 130 DOI: 10.1186/s12904-023-01245-x.	Geen medicatie aanpassingen als (deel van) interventie
Knafl, G.J., et al., Discontinuation of angiotensin-converting enzyme inhibitors or beta-blockers and the impact on heart failure hospitalization rates. European Journal of Cardiovascular Nursing, 2019. 18(8): p. 667-678.	Gaat niet over palliatieve setting
Lee, D.S., et al., Discontinuation of beta-blockers among nursing home residents at end of life. Journal of the American Geriatrics Society, 2022. 70(1): p. 200-207.	Louter beschrijvend, geen effect op uitkomsten gerapporteerd
Liu, Y., et al. The impact of palliative care on the physical and mental status and quality of life of patients with chronic heart failure: a randomized controlled trial. Medicine, 2023. 102, E36607 DOI: 10.1097/MD.0000000000036607.	Geen medicatie aanpassingen als (deel van) interventie
Malhotra, C., et al. Effectiveness of advance care planning in improving end of life care for patients with advanced heart failure. BMJ supportive and palliative care, 2019. 9, A23-a24 DOI: 10.1136/spcare-2019-ACPICONGRESSABS.69.	Abstract
Martínez-Sellés, M. and T. Grodzicki, Modification of Cardiovascular Drugs in Advanced Heart Failure: A Narrative Review. Frontiers in Cardiovascular Medicine, 2022. 9.	Narrative review, maar wel interessante overwegingen
Mathew, R.O., et al., Patterns of Use and Clinical Outcomes with Angiotensin-Converting Enzyme Inhibitors and Angiotensin Receptor Blockers in Acute Heart Failure and Changes in Kidney Function: An Analysis of the Veterans' Health Administrative Database. Cardiorenal Medicine, 2021. 11(5-6): p. 226-236.	Gaat niet over palliatieve setting

Mentz, R., et al. Palliative care and hospital readmissions in patients with advanced heart failure: insights from the PAL-HF trial. American heart journal, 2018. 204, 202-204 DOI: 10.1016/j.ahj.2018.07.010.	Geen medicatie aanpassingen als (deel van) interventie
Mentz, R., et al. Palliative care and hospital readmissions in patients with advanced heart failure: insights from the PAL-HF trial. Circulation, 2016. 134.	Letter
Molnar, A., et al. The association of beta-blocker use with mortality in elderly patients with congestive heart failure and advanced chronic kidney disease. Nephrology, dialysis, transplantation, 2020. 35, 782-789 DOI: 10.1093/ndt/gfz167.	Gaat niet over palliatieve setting
Okoye, C., et al., Discontinuation of Loop Diuretics in Older Patients with Chronic Stable Heart Failure: A Narrative Review. Drugs & Aging, 2023. 40(11): p. 981-990.	Gaat niet over palliatieve setting
Onder, G., et al., Deprescribing in Nursing Home Residents on Polypharmacy: Incidence and Associated Factors. Journal of the American Medical Directors Association, 2019. 20(9): p. 1116-1120.	Geen effect op uitkomsten beschreven
Packer, M., et al., Blinded Withdrawal of Long-Term Randomized Treatment With Empagliflozin or Placebo in Patients With Heart Failure. Circulation, 2023. 148(13): p. 1011-1022.	Gaat niet over palliatieve setting
Palau, P., et al., Effect of β-Blocker Withdrawal on Functional Capacity in Heart Failure and Preserved Ejection Fraction. Journal of the American College of Cardiology, 2021. 78(21): p. 2042-2056.	Gaat niet over palliatieve setting
Palau, P., et al., β-Blocker Withdrawal and Functional Capacity Improvement in Patients with Heart Failure with Preserved Ejection Fraction. JAMA Cardiology, 2024. 9(4): p. 392-396.	Gaat niet over palliatieve setting
Qin, H., et al., Achieved dose and treatment discontinuation of candesartan in men and women with chronic heart failure: data from CHARM. ESC heart failure, 2024. 11(4): p. 1880-1887.	Gaat niet over palliatieve setting
Quek, H.W., et al., The effect of deprescribing interventions on mortality and health outcomes in older people: An updated systematic review and meta-analysis. British Journal of Clinical Pharmacology, 2024. 90(10): p. 2409-2482.	"Studies that included only moribund, terminal or palliative participants were excluded"
Rogers, J., et al. Palliative Care in Heart Failure: results of a Randomized, Controlled Clinical Trial. Journal of cardiac failure, 2016. 22, 940.	Abstract
Rogers, J., et al. Palliative Care in Heart Failure: the PAL-HF Randomized, Controlled Clinical Trial. Journal of the American College of Cardiology, 2017. 70, 331-341 DOI: 10.1016/j.jacc.2017.05.030.	Geen medicatie aanpassingen als (deel van) interventie
Sami, F., et al., Palliative Inotropes in Advanced Heart Failure: Comparing Outcomes Between Milrinone and Dobutamine. Journal of Cardiac Failure, 2022. 28(12): p. 1683-1691.	Effect van staken of verminderen van medicatie niet onderzocht
Savarese, G., et al., Heart failure drug titration, discontinuation, mortality and heart failure hospitalization risk: a multinational observational study (US, UK and Sweden). European Journal of Heart Failure, 2021. 23(9): p. 1499-1511.	Gaat niet over palliatieve setting
Scalvini, S., et al., Treatment prescription, adherence, and persistence after the first hospitalization for heart failure: A population-based retrospective study on 100785 patients. International Journal of Cardiology, 2021. 330: p. 106-111.	Gaat niet over palliatieve setting
Schnettler, J.K., et al., Safety of Contemporary Heart Failure Therapy in Patients with Continuous-Flow Left Ventricular Assist Devices. Journal of Cardiac Failure, 2021. 27(12): p. 1328-1336.	Effect van staken of verminderen van medicatie niet onderzocht

Sivanathan, V., et al., The Palliative Approach and Terminal Heart Failure Admissions – Are We Getting it Right? Heart Lung and Circulation, 2022. 31(6): p. 841-848.	Louter beschrijvend, geen effect op uitkomsten gerapporteerd
Slavich, M., et al., Clinical and functional effects of beta-blocker therapy discontinuation in patients with biventricular heart failure. Journal of Cardiovascular Medicine, 2024. 25(2): p. 141-148.	Gaat niet over palliatieve setting
Sukumar, S., et al., Polypharmacy in Older Heart Failure Patients: a Multidisciplinary Approach. Current Heart Failure Reports, 2022. 19(5): p. 290-302.	Narrative review
	Gaat niet over palliatieve setting
Taylor, G.J., et al., Palliative Care for Advanced Heart Failure in a Department of Veterans Affairs Regional Hospice Program: Patient Selection, a Treatment Protocol, and Clinical Course. Journal of Palliative Medicine, 2017. 20(10): p. 1068-1073.	Effect van staken of verminderen van medicatie niet onderzocht
Tomasoni, D., et al. Advanced heart failure: guideline-directed medical therapy, diuretics, inotropes, and palliative care. ESC heart failure, 2022. 9, 1507-1523 DOI: 10.1002/ehf2.13859.	Narrative review
Turgeon, R.D., et al., Higher versus lower doses of ACE inhibitors, angiotensin-2 receptor blockers and betablockers in heart failure with reduced ejection fraction: Systematic review and meta-analysis. PLoS ONE, 2019. 14(2).	Gaat niet over palliatieve setting
van Poelgeest, E., et al., The effects of diuretic deprescribing in adult patients: A systematic review to inform an evidence-based diuretic deprescribing guideline. British Journal of Clinical Pharmacology, 2024.	Gaat niet over palliatieve setting
van Poelgeest, E.P., et al., Diuretics, SGLT2 inhibitors and falls in older heart failure patients: to prescribe or to deprescribe? A clinical review. European Geriatric Medicine, 2023. 14(4): p. 659-674.	Narrative review
Walgraeve, K., et al., Feasibility of optimizing pharmacotherapy in heart failure patients admitted to an acute geriatric ward: role of the clinical pharmacist. European Geriatric Medicine, 2018. 9(1): p. 103-111.	Effect van staken of verminderen van medicatie niet onderzocht
Wolfe, A., et al., Use and Discontinuation of Milrinone for Advanced Heart Failure in an Academic Palliative Care Unit: A Case Report and Discussion of Recommendations. Journal of Pain & Palliative Care Pharmacotherapy, 2022. 36(1): p. 24-33.	Case report, met interessante overwegingen

Zoekverantwoording module Niet-medicamenteuze behandeling

Onderzoeksvraag

Wat is het effect van niet-medicamenteuze behandeling bij patiënten met hartfalen (NYHA III-IV en advanced) op kwaliteit van leven en aantal heropnames?

Patients/Patiënten	Patiënten met hartfalen NYHA klasse III-IV, patients with advanced heart failure
Intervention/Interventie	Search 1: - Hulpmiddelen bij het lopen - Zuurstof - Luchtbevochtiging - Psychotherapie - Aromatherapie - Acupunctuur - Handventilator

	- Fysiotherapie: ademhalingsoefeningen, spierversterkende oefeningen en ontspanningsoefeningen Search 2: - Virtual reality - Vochtrestrictie - Zoutrestrictie - Remote monitoring (invasief en non-invasief)
Comparison/Vergelijking	Geen interventie, andere interventie
Outcome(s)/Uitkomst(en)	Tevredenheid van de patiënt, tevredenheid van de familieleden, tevredenheid van de zorgverlener, kwaliteit van leven, kwaliteit van sterfte, heropname, percentage reanimatie in eindstadium

Zoekstrategie

Ovid MEDLINE(R) <1946 to December Week 2 2024>

1 exp Heart Failure/ (157461)
2 (heart adj2 failure*).tw. (195909)
3 (cardiac adj2 failure*).tw. (15510)
4 (myocardial adj2 failure*).tw. (3588)
5 (heart adj2 decompensat*).tw. (4806)
6 or/1-5 (248695)
7 Palliative Care/ (66243)
8 "Hospice and Palliative Care Nursing"/ (2594)
9 exp Palliative Medicine/ (606)
10 exp Terminal Care/ (59064)
11 Terminally Ill/ (6886)
12 palliat*.mp. (108746)
13 ((terminal* or advance*) adj6 (care or caring or ill* or sick* or stage*)).mp. (139687)
14 (terminal-stage* or (terminal adj1 stage*) or dying or (close adj6 death)).mp. (42866)
15 (end adj3 life).mp. (31345)
16 hospice*.mp. (21077)
17 ((end-stage* or (end adj1 stage*)) adj6 (disease* or ill* or care or caring)).mp. (60690)
18 ((incurable or advanced) adj6 (ill* or disease*)).mp. (64434)
19 (reduced adj1 life adj2 expectanc*).mp. (1053)
20 or/7-19 (383344)
21 6 and 20 (8665)
22 Breathing Exercises/ (4129)
23 (breath$ adj3 (exercis$ or retrain$)).ti,ab. (3121)
24 buteyko.ti,ab. (42)
25 (diaphragm$ adj3 breath$).ti,ab. (644)
26 (breath$ adj3 control$).ti,ab. (3894)
27 (relax$ adj3 breath$).ti,ab. (503)
28 tidal breath$.ti,ab. (1561)
29 Respiratory therapy/ (7108)
30 physiotherap$.ti,ab. (29723)
31 physical therapy.ti,ab. (19748)
32 yoga.mp. or exp Yoga/ (5806)
33 meditation.mp. or exp Meditation/ (6966)
34 imagery.mp. or exp "Imagery (Psychotherapy)"/ (17981)
35 visualisation.mp. (7698)
36 exp Relaxation/ or relaxation.mp. (131336)
37 exp Music/ or music.mp. (26811)
38 32 or 33 or 34 or 35 or 36 or 37 (190559)

39 oxygen*.mp. (782217)
40 ventilat*.mp. (210580)
41 exp Humidifiers/ (187)
42 exp Humidity/ (18551)
43 "Nebulizers and Vaporizers"/ (10578)
44 Walking/ (44240)
45 Dependent Ambulation/ (207)
46 Canes/ (664)
47 Walkers/ (677)
48 Crutches/ (700)
49 walking aid$.mp. (1238)
50 Oxygenators/ (1357)
51 Aromatherapy/ (1163)
52 aromatherap*.mp. (1807)
53 exp Psychotherapy/ (228072)
54 psychotherap*.mp. (97279)
55 exp Acupuncture Therapy/ (31152)
56 exp Acupuncture/ (2103)
57 exp Meridians/ (9459)
58 meridian*.tw,kf. (5989)
59 Electroacupuncture.tw,kf. (5438)
60 dry needl*.tw,kf. (821)
61 acupuncture.tw,kf. (24832)
62 trigger points/ (893)
63 trigger point*.tw,kf. (2392)
64 exp Exercise Therapy/ (68765)
65 or/39-64 (1346991)
66 21 and 65 (618)

Ovid MEDLINE(R) Epub Ahead of Print <December 19, 2024>
Ovid MEDLINE(R) Daily Update <December 19, 2024>
1 exp Heart Failure/ (174)
2 (heart adj2 failure*).tw. (3384)
3 (cardiac adj2 failure*).tw. (120)
4 (myocardial adj2 failure*).tw. (56)
5 (heart adj2 decompensat*).tw. (85)
6 or/1-5 (3481)
7 Palliative Care/ (51)
8 "Hospice and Palliative Care Nursing"/ (3)
9 exp Palliative Medicine/ (1)
10 exp Terminal Care/ (47)
11 Terminally Ill/ (0)
12 palliat*.mp. (2046)
13 ((terminal* or advance*) adj6 (care or caring or ill* or sick* or stage*)).mp. (2300)
14 (terminal-stage* or (terminal adj1 stage*) or dying or (close adj6 death)).mp. (711)
15 (end adj3 life).mp. (1157)
16 hospice*.mp. (395)
17 ((end-stage* or (end adj1 stage*)) adj6 (disease* or ill* or care or caring)).mp. (898)
18 ((incurable or advanced) adj6 (ill* or disease*)).mp. (1044)
19 (reduced adj1 life adj2 expectanc*).mp. (35)
20 or/7-19 (6361)
21 6 and 20 (203)
22 Breathing Exercises/ (5)

23 (breath$ adj3 (exercis$ or retrain$)).ti,ab. (73)
24 buteyko.ti,ab. (0)
25 (diaphragm$ adj3 breath$).ti,ab. (12)
26 (breath$ adj3 control$).ti,ab. (33)
27 (relax$ adj3 breath$).ti,ab. (17)
28 tidal breath$.ti,ab. (14)
29 Respiratory therapy/ (5)
30 physiotherap$.ti,ab. (738)
31 physical therapy.ti,ab. (620)
32 yoga.mp. or exp Yoga/ (158)
33 meditation.mp. or exp Meditation/ (152)
34 imagery.mp. or exp "Imagery (Psychotherapy)"/ (356)
35 visualisation.mp. (128)
36 exp Relaxation/ or relaxation.mp. (1618)
37 exp Music/ or music.mp. (461)
38 32 or 33 or 34 or 35 or 36 or 37 (2766)
39 oxygen*.mp. (8509)
40 ventilat*.mp. (2293)
41 exp Humidifiers/ (0)
42 exp Humidity/ (11)
43 "Nebulizers and Vaporizers"/ (10)
44 Walking/ (55)
45 Dependent Ambulation/ (0)
46 Canes/ (0)
47 Walkers/ (0)
48 Crutches/ (0)
49 walking aid$.mp. (39)
50 Oxygenators/ (0)
51 Aromatherapy/ (3)
52 aromatherap*.mp. (52)
53 exp Psychotherapy/ (238)
54 psychotherap*.mp. (861)
55 exp Acupuncture Therapy/ (41)
56 exp Acupuncture/ (0)
57 exp Meridians/ (15)
58 meridian*.tw,kf. (52)
59 Electroacupuncture.tw,kf. (81)
60 dry needl*.tw,kf. (24)
61 acupuncture.tw,kf. (289)
62 trigger points/ (2)
63 trigger point*.tw,kf. (44)
64 exp Exercise Therapy/ (144)
65 or/39-64 (12070)
66 21 and 65 (6)

Cochrane Library, 20/12/2024
#1 MeSH descriptor: [Palliative Care] explode all trees 2661
#2 MeSH descriptor: [Terminal Care] explode all trees 782
#3 MeSH descriptor: [Palliative Medicine] explode all trees 4
#4 MeSH descriptor: [Hospice and Palliative Care Nursing] explode all trees 98
#5 MeSH descriptor: [Terminally Ill] explode all trees 123
#6 palliat*:ti,ab 8719
#7 ((terminal* or advance*) NEAR/6 (care or caring or ill* or sick* or stage*)):ti,ab 10797

#8 (terminal-stage* or (terminal NEAR/1 stage*) or dying or (close NEAR/6 death)):ti,ab 1803
#9 (end NEAR/3 life):ti,ab 2390
#10 hospice*:ti,ab 1000
#11 ((end-stage* or (end NEAR/1 stage*)) NEAR/6 (disease* or ill* or care or caring)):ti,ab 6624
#12 ((incurable or advanced) NEAR/6 (ill* or disease*)):ti,ab 8594
#13 (reduced NEAR/1 life NEAR/2 expectanc*):ti,ab 136
#14 {or #1-#13} 34558
#15 MeSH descriptor: [Heart Failure] explode all trees 14997
#16 (heart and failure*):ti,ab 38423
#17 (cardiac and failure*):ti,ab 15840
#18 (myocardial and failure*):ti,ab 9932
#19 (heart and decompensat*):ti,ab 2108
#20 #14 and #19 61

Embase, 22/12/2024

#1.	'heart failure'/exp	724814
#2.	(heart NEAR/2 failure*):ab,ti	385351
#3.	(myocardial NEAR/2 failure*):ab,ti	6155
#4.	(cardiac NEAR/2 failure*):ab,ti	26800
#5.	(heart NEAR/2 decompensat*):ab,ti	12111
#6.	#1 OR #2 OR #3 OR #4 OR #5	791052
#7.	'palliative therapy'/exp	154973
#8.	'terminal care'/exp	92645
#9.	'terminally ill patient'/exp	10029
#10.	palliat*:ti,ab	160138
#11.	(terminal* NEAR/6 (care OR caring OR ill*)):ti,ab	15429
#12.	(end NEAR/3 life):ti,ab	51190
#13.	hospice*:ti,ab	29758
#14.	'terminal stage*':ti,ab	5051
#15.	dying:ti,ab	56910
#16.	(close NEAR/6 death):ti,ab	1766
#17.	((incurable OR advanced) NEAR/6 (ill* OR disease*)):ti,ab	124718
#18.	#7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17	463665
#19.	#6 AND #18	18763
#20.	'breathing exercise'/exp	12252

#21.	(breath* NEAR/3 (exercis* OR retrain*)):ti,ab	5930
#22.	buteyko:ti,ab	74
#23.	(diaphragm* NEAR/3 breath*):ti,ab	1298
#24.	(breath* NEAR/3 control*):ti,ab	6324
#25.	(relax* NEAR/3 breath*):ti,ab	1092
#26.	(tidal NEAR/1 breath*):ti,ab	3016
#27.	'respiratory care'/exp	6060
#28.	physiotherap*:ti,ab	64699
#29.	(physical NEAR/1 therapy):ti,ab	38636
#30.	yoga:ti,ab	10879
#31.	'yoga'/exp	13160
#32.	meditation:ti,ab	9903
#33.	'meditation'/exp	12072
#34.	imagery:ti,ab	24558
#35.	'imagery'/exp	12363
#36.	visualisation:ti,ab	14318
#37.	'leisure'/exp	49861
#38.	relaxation:ti,ab	157386
#39.	music:ti,ab	29249
#40.	'music'/exp	24936
#41.	oxygen*:ti,ab	889546
#42.	ventilat*:ti,ab	326153
#43.	'humidity'/exp	95075
#44.	'humidifier'/exp	8429
#45.	'nebulizer'/exp	15252
#46.	'walking'/exp	150769
#47.	'walking difficulty'/exp	17948
#48.	'cane'/exp	1494
#49.	'walker'/exp	4446
#50.	'crutch'/exp	2500

#51.	(walking NEAR/1 aid*):ti,ab	2305
#52.	'oxygenator'/exp	8994
#53.	'aromatherapy'/exp	3315
#54.	aromatherap*:ti,ab	2705
#55.	psychotherap*:ti,ab	77538
#56.	'psychotherapy'/exp	339989
#57.	'acupuncture'/exp	62181
#58.	'electroacupuncture'/exp	10476
#59.	'body meridian'/exp	1670
#60.	'trigger point'/exp	3274
#61.	meridian*:ti,ab	8893
#62.	electroacupuncture:ti,ab	9135
#63.	(dry NEAR/1 needl*):ti,ab	1380
#64.	acupuncture:ti,ab	41429
#65.	(trigger NEAR/1 point*):ti,ab	4421
#66.	'kinesiotherapy'/exp	112573
#67.	#20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47 OR #48 OR #49 OR #50 OR #51 OR #52 OR #53 OR #54 OR #55 OR #56 OR #57 OR #58 OR #59 OR #60 OR #61 OR #62 OR #63 OR #64 OR #65 OR #66	2247646
#68.	#19 AND #67	2221
#69.	#19 AND #67 AND ([article]/lim OR [article in press]/lim OR [review]/lim) AND ([dutch]/lim OR [english]/lim) AND [embase]/lim AND [2016-2025]/py	570

Ovid MEDLINE(R) <1946 to Febraury 25, 2025>

1 exp Heart Failure/ (158540)
2 (heart adj2 failure*).tw. (197879)
3 (cardiac adj2 failure*).tw. (15563)
4 (myocardial adj2 failure*).tw. (3624)
5 (heart adj2 decompensat*).tw. (4864)
6 or/1-5 (250771)
7 Palliative Care/ (66727)
8 "Hospice and Palliative Care Nursing"/ (2607)
9 exp Palliative Medicine/ (622)
10 exp Terminal Care/ (59399)
11 Terminally Ill/ (6900)
12 palliat*.mp. (109631)
13 ((terminal* or advance*) adj6 (care or caring or ill* or sick* or stage*)).mp. (141274)

14 (terminal-stage* or (terminal adj1 stage*) or dying or (close adj6 death)).mp. (43131)
15 (end adj3 life).mp. (31797)
16 hospice*.mp. (21233)
17 ((end-stage* or (end adj1 stage*)) adj6 (disease* or ill* or care or caring)).mp. (61242)
18 ((incurable or advanced) adj6 (ill* or disease*)).mp. (65079)
19 (reduced adj1 life adj2 expectanc*).mp. (1070)
20 or/7-19 (386785)
21 6 and 20 (8775)
22 virtual reality/ (7753)
23 Virtual Reality Exposure Therapy/ (1100)
24 Computers/ (53968)
25 Computer Simulation/ (220582)
26 Computer Graphics/ (15057)
27 Computer-Assisted Instruction/ (12845)
28 User-Computer Interface/ (40247)
29 Therapy, Computer-Assisted/ (7035)
30 Video Games/ (8065)
31 ("virtual realit*" or "virtual rehabilitation*" or "virtual therap*" or "virtual treatment*" or "virtual environment*" or "virtual simulation*" or "virtual world*" or "virtual object*" or "virtual system*" or "virtual program*" or computer* or simulation* or "user interface*" or videogame* or "video gam*" or "serious gam*" or "interactive gam*" or "exergam*" or gaming).ti,ab. (613131)
32 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 (793932)
33 21 and 32 (67)
34 exp Telemedicine/ (51412)
35 exp Telecommunications/ (136182)
36 exp Telemetry/ (16069)
37 Monitoring, Physiologic/ (60146)
38 tele med*.tw. (177)
39 telecare*.tw. (725)
40 telecardiol*.tw. (215)
41 telemonitor*.tw. (1992)
42 teleconsult*.tw. (1899)
43 teleconferenc*.tw. (1341)
44 telecommunicat*.tw. (3337)
45 telephon*.tw. (69218)
46 telehealth*.tw. (10759)
47 telemetry.tw. (7106)
48 (remote* adj3 consult*).tw. (1078)
49 Monitoring, Ambulatory/ (8756)
50 telehome.tw. (21)
51 phone*.tw. (43314)
52 telefon*.tw. (728)
53 telemed*.tw. (17487)
54 ehealth.tw. (3733)
55 mobile health.tw. (5485)
56 mhealth.tw. (4569)
57 ((remote* or distan*) adj2 (care or caring or monitor* or program* or help or support*)).tw. (9537)
58 bluetooth.tw. (1450)
59 (impedance adj2 monitor*).tw. (1296)
60 or/34-59 (304061)
61 21 and 60 (168)
62 exp Sodium, Dietary/ (18173)
63 Diet, Sodium-Restricted/ (6589)

64 (dietary salt or dietary sodium).tw. (5293)
65 (diet$ adj5 (salt$ or sodium)).ti. (4270)
66 (diet$ adj10 (salt$ or sodium)).ab. (18558)
67 ((salt$ or sodium) adj5 (restrict$ or intak$ or change$ or high or low)).ti. (9918)
68 ((salt$ or sodium) adj10 (restrict$ or intak$ or change$ or high or low)).ab. (68575)
69 62 or 63 or 64 or 65 or 66 or 67 or 68 (89432)
70 21 and 69 (60)
71 exp Fluid Therapy/ (22644)
72 ((fluid* or hydrat* or liquid* or rehydrat* or water) adj4 (consum* or depriv* or diuresis or diuretic or drink* or enteral* or feed* or intake or intravenous* or IV or manag* or oral* or parenteral* or restrict* or supply or therap*)).ti,ab. (148141)
73 71 or 72 (162140)
74 21 and 73 (75)
75 33 or 61 or 70 or 74 (350)

Ovid MEDLINE(R) Epub Ahead of Print <February 25, 2025>
Ovid MEDLINE(R) Daily Update <February 25, 2025>
1 exp Heart Failure/ (159)
2 (heart adj2 failure*).tw. (3463)
3 (cardiac adj2 failure*).tw. (137)
4 (myocardial adj2 failure*).tw. (66)
5 (heart adj2 decompensat*).tw. (91)
6 or/1-5 (3568)
7 Palliative Care/ (92)
8 "Hospice and Palliative Care Nursing"/ (5)
9 exp Palliative Medicine/ (3)
10 exp Terminal Care/ (53)
11 Terminally Ill/ (3)
12 palliat*.mp. (2016)
13 ((terminal* or advance*) adj6 (care or caring or ill* or sick* or stage*)).mp. (2390)
14 (terminal-stage* or (terminal adj1 stage*) or dying or (close adj6 death)).mp. (755)
15 (end adj3 life).mp. (1127)
16 hospice*.mp. (362)
17 ((end-stage* or (end adj1 stage*)) adj6 (disease* or ill* or care or caring)).mp. (920)
18 ((incurable or advanced) adj6 (ill* or disease*)).mp. (1102)
19 (reduced adj1 life adj2 expectanc*).mp. (37)
20 or/7-19 (6486)
21 6 and 20 (202)
22 virtual reality/ (65)
23 Virtual Reality Exposure Therapy/ (6)
24 Computers/ (1)
25 Computer Simulation/ (327)
26 Computer Graphics/ (4)
27 Computer-Assisted Instruction/ (7)
28 User-Computer Interface/ (19)
29 Therapy, Computer-Assisted/ (2)
30 Video Games/ (31)
31 ("virtual realit*" or "virtual rehabilitation*" or "virtual therap*" or "virtual treatment*" or "virtual environment*" or "virtual simulation*" or "virtual world*" or "virtual object*" or "virtual system*" or "virtual program*" or computer* or simulation* or "user interface*" or videogame* or "video gam*" or "serious gam*" or "interactive gam*" or "exergam*" or gaming).ti,ab. (12041)
32 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 (12194)
33 21 and 32 (3)

34 exp Telemedicine/ (178)
35 exp Telecommunications/ (331)
36 exp Telemetry/ (26)
37 Monitoring, Physiologic/ (51)
38 tele med*.tw. (5)
39 telecare*.tw. (11)
40 telecardiol*.tw. (3)
41 telemonitor*.tw. (48)
42 teleconsult*.tw. (59)
43 teleconferenc*.tw. (43)
44 telecommunicat*.tw. (69)
45 telephon*.tw. (926)
46 telehealth*.tw. (556)
47 telemetry.tw. (81)
48 (remote* adj3 consult*).tw. (60)
49 Monitoring, Ambulatory/ (5)
50 telehome.tw. (1)
51 phone*.tw. (839)
52 telefon*.tw. (17)
53 telemed*.tw. (479)
54 ehealth.tw. (88)
55 mobile health.tw. (152)
56 mhealth.tw. (127)
57 ((remote* or distan*) adj2 (care or caring or monitor* or program* or help or support*)).tw. (322)
58 bluetooth.tw. (39)
59 (impedance adj2 monitor*).tw. (24)
60 or/34-59 (3596)
61 21 and 60 (4)
62 exp Sodium, Dietary/ (16)
63 Diet, Sodium-Restricted/ (3)
64 (dietary salt or dietary sodium).tw. (43)
65 (diet$ adj5 (salt$ or sodium)).ti. (37)
66 (diet$ adj10 (salt$ or sodium)).ab. (194)
67 ((salt$ or sodium) adj5 (restrict$ or intak$ or change$ or high or low)).ti. (126)
68 ((salt$ or sodium) adj10 (restrict$ or intak$ or change$ or high or low)).ab. (773)
69 62 or 63 or 64 or 65 or 66 or 67 or 68 (908)
70 21 and 69 (2)
71 exp Fluid Therapy/ (17)
72 ((fluid* or hydrat* or liquid* or rehydrat* or water) adj4 (consum* or depriv* or diuresis or diuretic or drink* or enteral* or feed* or intake or intravenous* or IV or manag* or oral* or parenteral* or restrict* or supply or therap*)).ti,ab. (1873)
73 71 or 72 (1882)
74 21 and 73 (2)
75 33 or 61 or 70 or 74 (11)

Cochrane Library, 26/2/2025
#1 MeSH descriptor: [Palliative Care] explode all trees 2605
#2 MeSH descriptor: [Terminal Care] explode all trees 767
#3 MeSH descriptor: [Palliative Medicine] explode all trees 4
#4 MeSH descriptor: [Hospice and Palliative Care Nursing] explode all trees 89
#5 MeSH descriptor: [Terminally Ill] explode all trees 122
#6 palliat*:ti,ab 8640
#7 ((terminal* or advance*) NEAR/6 (care or caring or ill* or sick* or stage*)):ti,ab 10732

#8 (terminal-stage* or (terminal NEAR/1 stage*) or dying or (close NEAR/6 death)):ti,ab 1803
#9 (end NEAR/3 life):ti,ab 2353
#10 hospice*:ti,ab 987
#11 ((end-stage* or (end NEAR/1 stage*)) NEAR/6 (disease* or ill* or care or caring)):ti,ab 6588
#12 ((incurable or advanced) NEAR/6 (ill* or disease*)):ti,ab 8553
#13 (reduced NEAR/1 life NEAR/2 expectanc*):ti,ab 133
#14 {or #1-#13} 34343
#15 MeSH descriptor: [Heart Failure] explode all trees 14681
#16 (heart and failure*):ti,ab 38067
#17 (cardiac and failure*):ti,ab 15750
#18 (myocardial and failure*):ti,ab 9830
#19 (heart and decompensat*):ti,ab 2088
#20 #14 and #19 60

Embase, 26/2/2025

#1.	'heart failure'/exp	735433
#2.	(heart NEAR/2 failure*):ab,ti	391183
#3.	(myocardial NEAR/2 failure*):ab,ti	6239
#4.	(cardiac NEAR/2 failure*):ab,ti	26976
#5.	(heart NEAR/2 decompensat*):ab,ti	12307
#6.	#1 OR #2 OR #3 OR #4 OR #5	802055
#7.	'palliative therapy'/exp	156391
#8.	'terminal care'/exp	93529
#9.	'terminally ill patient'/exp	10108
#10.	palliat*:ti,ab	162094
#11.	(terminal* NEAR/6 (care OR caring OR ill*)):ti,ab	15551
#12.	(end NEAR/3 life):ti,ab	51869
#13.	hospice*:ti,ab	30262
#14.	'terminal stage*':ti,ab	5080
#15.	dying:ti,ab	57330
#16.	(close NEAR/6 death):ti,ab	1773
#17.	((incurable OR advanced) NEAR/6 (ill* OR disease*)):ti,ab	126239
#18.	#7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17	468720
#19.	#6 AND #18	19027
#20.	'virtual reality'/de	32068

#21.	'virtual reality exposure therapy'/de	1134
#22.	'computer'/de	101930
#23.	'computer simulation'/de	146158
#24.	'computer graphics'/de	11423
#25.	'computer assisted education'/de	77
#26.	'computer interface'/de	37942
#27.	'computer assisted therapy'/de	4893
#28.	'video game'/de	7224
#29.	virtual realit*':ti,ab OR 'virtual rehabilitation*':ti,ab OR 'virtual therap*':ti,ab OR 'virtual treatment*':ti,ab OR 'virtual environment*':ti,ab OR 'virtual simulation*':ti,ab OR 'virtual world*':ti,ab OR 'virtual object*':ti,ab OR 'virtual system*':ti,ab OR 'virtual program*':ti,ab OR computer*:ti,ab OR simulation*:ti,ab OR 'user interface*':ti,ab OR videogame*:ti,ab OR 'video gam*':ti,ab OR 'serious gam*':ti,ab OR 'interactive gam*':ti,ab OR 'exergam*':ti,ab OR gaming:ti,ab	982382
#30.	#20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29	1120919
#31.	#19 AND #30	168
#32.	'telemedicine'/exp	82616
#33.	'telecommunication'/exp	135119
#34.	'telemetry'/exp	46429
#35.	'physiologic monitoring'/de	7653
#36.	telecare*:ti,ab OR telecardiol*:ti,ab OR telemonitor*:ti,ab OR teleconsult*:ti,ab OR teleconferenc*:ti,ab OR telecommunicat*:ti,ab OR telephon*:ti,ab OR telehealth*:ti,ab OR telemetry:ti,ab OR ((remote* NEAR/3 consult*):ti,ab) OR telehome:ti,ab OR phone*:ti,ab OR telefon*:ti,ab OR telemed*:ti,ab OR ehealth:ti,ab OR 'mobile health':ti,ab OR mhealth:ti,ab OR (((remote* OR distan*) NEAR/2 (care OR caring OR monitor* OR program* OR help OR support*)):ti,ab) OR bluetooth:ti,ab OR ((impedance NEAR/2 monitor*):ti,ab)	292697
#37.	'ambulatory monitoring'/de	12555
#38.	#32 OR #33 OR #34 OR #35 OR #36 OR #37	398104
#39.	#19 AND #38	503
#40.	'sodium intake'/de	12594
#41.	'sodium restriction'/de	11814
#42.	'dietary salt':ti,ab OR 'dietary sodium':ti,ab	7416
#43.	(diet* NEAR/5 (salt* OR sodium)):ti,ab	24792

#44.	((salt* OR sodium) NEAR/5 (restrict* OR intak* OR change* OR high OR low)):ti,ab	78959
#45.	#40 OR #41 OR #42 OR #43 OR #44	95244
#46.	#19 AND #45	110
#47.	'fluid restriction'/exp	239
#48.	'fluid therapy'/de	26398
#49.	((fluid* OR hydrat* OR liquid* OR rehydrat* OR water) NEAR/4 (consum* OR depriv* OR diuresis OR diuretic OR drink* OR enteral* OR feed* OR intake OR intravenous* OR iv OR manag* OR oral* OR parenteral* OR restrict* OR supply OR therap*)):ti,ab	237085
#50.	#47 OR #48 OR #49	254798
#51.	#19 AND #50	193
#52.	#31 OR #39 OR #46 OR #51	932
#53.	(#31 OR #39 OR #46 OR #51) AND ([article]/lim OR [article in press]/lim OR [review]/lim) AND ([dutch]/lim OR [english]/lim) AND [embase]/lim	433

Tabel 1. Resultaten van zoekactie 1 van onderzoeksvraag 4

Database	**Aantal**
Medline	618
PreMedline	6
Embase	570
CDSR	2
CENTRAL	59
Totaal aantal resultaten	**1261**
Aantal geëxcludeerd (dubbelen + taal)	158
Totaal aantal unieke resultaten	**1103**

Tabel 2. Resultaten van zoekactie 2 van onderzoeksvraag 4

Database	**Aantal**
Medline	350
PreMedline	11
Embase	433
CDSR	2
CENTRAL	58
Totaal aantal resultaten	**854**
Aantal geëxcludeerd (dubbelen + taal)	144
Totaal aantal unieke resultaten	**710**

Tabel 3. Overzicht van geëxcludeerde studies gebaseerd op beoordeling van de volledige tekst van onderzoeksvraag 4: search 1

Referentie	Reden voor exclusie
Bausewein, C., et al., Non-pharmacological interventions for breathlessness in advanced stages of malignant and non-malignant diseases. Cochrane Database of Systematic Reviews, 2008(2): p. CD005623.	Withdrawn
Bulow, H.H. and B. Thorsager, Non-invasive ventilation in do-not-intubate patients: five-year follow-up on a two-year prospective, consecutive cohort study. Acta Anaesthesiologica Scandinavica, 2009. 53(9): p. 1153-7.	Geen interventie vermeld in de PICO
Carratala, J.M., et al., Oxygen therapy and palliative care in patients with heart failure. Revista Espanola de Cardiologia, 2020. 73(7): p. 598.	Letter
Cranston, J.M., A. Crockett, and D. Currow, Oxygen therapy for dyspnoea in adults. Cochrane Database of Systematic Reviews, 2008(3): p. CD004769.	Geen studies over hartfalen
Currow, D.C., et al., Does palliative home oxygen improve dyspnoea? A consecutive cohort study. Palliative Medicine, 2009. 23(4): p. 309-16.	Hoofdzakelijk kankerpatiënten
Demuro, M., et al., Quality of Life in Palliative Care: A Systematic Meta-Review of Reviews and Meta-Analyses. Clinical Practice and Epidemiology in Mental Health, 2024. 20.	Effect van behandelingen niet beschreven
Emin, A., C.A. Rogers, and N.R. Banner, Quality of life of advanced chronic heart failure: medical care, mechanical circulatory support and transplantation. European Journal of Cardio-Thoracic Surgery, 2016. 50(2): p. 269-73.	Effect van behandelingen niet beschreven
Gomes, B., et al., Effectiveness and cost-effectiveness of home palliative care services for adults with advanced illness and their caregivers. Cochrane Database of Systematic Reviews, 2016. 2016(3).	Geen interventie vermeld in de PICO
Hopp, F., et al. Results of a Hospital-Based Palliative Care Intervention for Patients With an Acute Exacerbation of Chronic Heart Failure. Journal of cardiac failure, 2016. 22, 1033-1036 DOI: 10.1016/j.cardfail.2016.04.004.	Interventie is een palliatieve zorg consultatie
Howie-Esquivel, J., et al., Getting Into Light Exercise (GENTLE-HF) for Patients With Heart Failure: the Design and Methodology of a Live-Video Group Exercise Study. Journal of Cardiac Failure, 2023. 29(8): p. 1175-1183.	Study protocol
Huitema, A.A., et al., Therapies for Advanced Heart Failure Patients Ineligible for Heart Transplantation: Beyond Pharmacotherapy. Canadian Journal of Cardiology, 2020. 36(2): p. 234-243.	Narrative review
Hung, W.W., Noninvasive Ventilation Use among Medicare Beneficiaries at the End of Life. Journal of Clinical Outcomes Management, 2021. 28(1): p. 3-5.	Effect van behandelingen niet beschreven
Klaus L, Beniaminovitz A, Choi L, et al. Pilot study of guided imagery use in patients with severe heart failure. Am J Cardiol. 2000; 86(1):101–104	Geen vergelijkende studie
Lenk, K., et al., Exercise training leads to a reduction of elevated myostatin levels in patients with chronic heart failure. European Journal of Preventive Cardiology, 2012. 19(3): p. 404-11.	Gaat niet over palliatieve setting
Levy, M., et al., Outcomes of patients with do-not-intubate orders treated with noninvasive ventilation. Critical Care Medicine, 2004. 32(10): p. 2002-7.	Geen interventie vermeld in de PICO
Lindgren, M. and M. Börjesson, The importance of physical activity and cardiorespiratory fitness for patients with heart failure. Diabetes Research and Clinical Practice, 2021. 176.	Narrative review
McGuigan, K., et al., Effectiveness of interventions for informal caregivers of people with end-stage chronic illness: a systematic review. Systematic Reviews, 2024. 13(1).	Interventies gericht op zorgverleners
Ng, D.L., et al., The Efficacy of a Single Session of 20-Minute Mindful Breathing in Reducing Dyspnea Among Patients With Acute Decompensated Heart Failure: A	Geen palliatieve setting, geen

Referentie	Reden voor exclusie
Randomized Controlled Trial. American Journal of Hospice & Palliative Medicine, 2021. 38(3): p. 246-252.	uitkomsten zoals vermeld in PICO
Nuhr MJ, Pette D, Berger R, Quittan M, Crevanna R, Huelsman M, et al. Beneficial elects of chronic low-frequency stimulation of thigh muscles in patients with advanced chronic heart failure. European Heart Journal 2004;25:136-43	Geen full-tekst
O'Donnell, A., et al. A Randomized Controlled Trial of a Social Worker-Aided Palliative Care Intervention in High Risk Patients with Heart Failure (SWAP-HF). Journal of cardiac failure, 2016. 22, 940.	Abstract
Restrick LJ, Davies SW, Noone L, Wedzicha JA. Ambulatory oxygen in chronic heart failure. Lancet 1992;340:1192-3	Geen uitkomsten uit PICO
Scala, R., et al., Ventilator support and oxygen therapy in palliative and end-of-life care in the elderly. Turkish Thoracic Journal, 2020. 21(1): p. 54-60.	Narrative review
Ugurlu, A.O., et al., Use and outcomes of noninvasive ventilation for acute respiratory failure in different age groups. Respiratory Care, 2016. 61(1): p. 36-43.	Geen interventie vermeld in de PICO
Wang, X., et al., Simvastatin Combined with Resistance Training Improves Outcomes in Patients with Chronic Heart Failure by Modulating Mitochondrial Membrane Potential and the Janus Kinase/Signal Transducer and Activator of Transcription 3 Signaling Pathways. Cardiovascular therapeutics, 2022. 2022: p. 8430733.	Geen palliatieve context
Wood, M., C. Walshe, and A. McCullagh, What are the digitally enabled psychosocial interventions delivered by trained practitioners being offered to adults with life-shortening illnesses and palliative care needs and their informal and professional caregivers? A scoping review. Palliative & Supportive Care, 2023. 21(4): p. 727-740.	Geen relevante studies over hartfalen

Tabel 4. Overzicht van geëxcludeerde studies gebaseerd op beoordeling van de volledige tekst van onderzoeksvraag 4: search 2

Referentie	Reden voor exclusie
Bakitas, M.A., et al., Effect of an Early Palliative Care Telehealth Intervention vs Usual Care on Patients With Heart Failure: The ENABLE CHF-PC Randomized Clinical Trial. JAMA Internal Medicine, 2020. 180(9): p. 1203-1213.	Geen remote monitoring
Bekelman, D.B., et al., Nurse and Social Worker Palliative Telecare Team and Quality of Life in Patients With COPD, Heart Failure, or Interstitial Lung Disease: The ADAPT Randomized Clinical Trial. JAMA, 2024. 331(3): p. 212-223.	Geen remote monitoring
DeGroot, L., et al., Feasibility of a digital palliative care intervention (Convoy-Pal) for older adults with heart failure and multiple chronic conditions and their caregivers: a waitlist randomized control trial. BMC Palliative Care, 2024. 23(1): p. 234.	Geen remote monitoring
Dionne-Odom, J.N., et al., Effects of a Telehealth Early Palliative Care Intervention for Family Caregivers of Persons With Advanced Heart Failure: The ENABLE CHF-PC Randomized Clinical Trial. JAMA Network Open, 2020. 3(4): p. e202583.	Geen remote monitoring
Dorsch, M., et al. A Patient-Centered Mobile Intervention to Promote Self-Management and Improve Patient Outcomes in Chronic Heart Failure: the ManageHF Trial. Journal of cardiac failure, 2019. 25, S104 DOI: 10.1016/j.cardfail.2019.07.296.	Abstract
Ezekowitz JA, Colin-Ramirez E, Ross H, Escobedo J, Macdonald P, Troughton R, et al. SODIUM-HF investigators. Reduction of dietary sodium to less than 100 mmol in heart failure (SODIUM-HF): an international, open-label, randomised, controlled trial. Lancet. (2022) 399:1391–400	Slechts 27% had NYHA III/IV, geen aparte analyses
Fabricio CG, Tanaka DM, Souza Gentil JR, Ferreira Amato CA, Marques F, Schwartzmann PV, et al. A normal sodium diet preserves serum sodium levels during	Geen relevante uitkomsten

Referentie	Reden voor exclusie
treatment of acute decompensated heart failure: a prospective, blind and randomized trial. Clin Nutr ESPEN. (2019) 32:145–52	
Graven, L.J., L. Abbott, and G. Schluck, The coping in heart failure (COPE-HF) partnership intervention for heart failure symptoms: Implications for palliative care. Progress in Palliative Care, 2023. 31(3): p. 169-178.	Geen remote monitoring
Hernandez-Quiles, C., et al., A randomized clinical trial of home telemonitoring in patients with advanced heart and lung diseases. Journal of Telemedicine & Telecare, 2024. 30(2): p. 356-364.	Studie protocol
Hindricks G, Taborsky M, Glikson M, Heinrich U, Schumacher B, Katz A et al. Implant-based multiparameter telemonitoring of patients with heart failure (IN-TIME): a randomised controlled trial. Lancet 2014; 384(9943): 583-590	Ongeveer 43% had NYHA II, geen aparte analyses voor NYHA III
Hofmann, R., et al., First outline and baseline data of a randomized, controlled multicenter trial to evaluate the health economic impact of home telemonitoring in chronic heart failure - CardioBBEAT. Trials [Electronic Resource], 2015. 16: p. 343.	Slechts 31% had NYHA III-IV, geen aparte analyses; enkel publicatie van baseline karakteristieken
Koehler F, Koehler K, Deckwart O, Prescher S, Wegscheider K, Kirwan BA et al. Efficacy of telemedical interventional management in patients with heart failure (TIM-HF2): a randomised, controlled, parallel-group, unmasked trial. Lancet 2018; 392(10152): 1047-1057	>50% had NYHA I/II, geen aparte analyses voor III/IV
Koehler F, Winkler S, Schieber M, Sechtem U, Stangl K, Böhm M et al. Impact of remote telemedical management on mortality and hospitalizations in ambulatory patients with chronic heart failure: the telemedical interventional monitoring in heart failure study. Circulation 2011; 123(17): 1873-1880	Ongeveer 50% had NYHA II, geen aparte analyses voor NYHA III
Lennie, T.A., et al., Nutrition intervention to decrease symptoms in patients with advanced heart failure. Research in Nursing & Health, 2013. 36(2): p. 120-45.	Studie protocol
Mirshahi, A., et al., The feasibility and acceptability of an early tele-palliative care intervention to improve quality of life in heart failure patients in Iran: A protocol for a randomized controlled trial. Contemporary Clinical Trials Communications, 2023. 33.	Studie protocol
Mirshahi, A., et al., The impact of an integrated early palliative care telehealth intervention on the quality of life of heart failure patients: a randomized controlled feasibility study. BMC Palliative Care, 2024. 23(1): p. 22.	Geen remote monitoring
Ng, A.Y.M. and F.K.Y. Wong, Effects of a Home-Based Palliative Heart Failure Program on Quality of Life, Symptom Burden, Satisfaction and Caregiver Burden: A Randomized Controlled Trial. Journal of Pain & Symptom Management, 2018. 55(1): p. 1-11.	Geen remote monitoring
Olivari, Z., et al., The effectiveness of remote monitoring of elderly patients after hospitalisation for heart failure: The renewing health European project. International Journal of Cardiology, 2018. 257: p. 137-142.	Ongeveer 48% had NYHA II, geen aparte analyses voor NYHA III/IV
Sardu C, Santamaria M, Rizzo MR, Barbieri M, Di Marino M, Paolisso G et al. Telemonitoring in heart failure patients treated by cardiac resynchronisation therapy with defibrillator (CRT-D): the TELECART study. Int J Clin Pract 2016; 70(7): 569-576	Ongeveer 45% had NYHA II
Sebastian, S.A., Y. Shah, and C. Arsene, Effectiveness of integrated palliative care telehealth intervention in patients with chronic heart failure: A systematic review and meta-analysis of randomized controlled trials. Current Problems in Cardiology, 2024. 49(9): p. 102685.	Geen remote monitoring