Appendix 1. Search strategy performed in 01 April 2020

# **PUBMED**

Limits	NOT animals
Search	Randomized controlled trial
	#1 "Randomized Controlled Trials as Topic"[Mesh] OR "Controlled
	Clinical Trials as Topic"[Mesh] OR "Clinical Trials as Topic"[Mesh] OR
	"Randomized Controlled Trial"[Publication Type] OR "Controlled Clinical
	Trial"[Publication Type] OR "Clinical Trial" [Publication Type] OR
	"Random Allocation"[Mesh] OR "Single-Blind Method"[Mesh] OR
	"Double-Blind Method"[Mesh] OR "Research Design"[Mesh] OR
	"Comparative Study" [Publication Type] OR "Evaluation Studies"
	[Publication Type] OR "Evaluation Studies as Topic"[Mesh] OR "Drug
	Therapy"[Mesh] OR "drug therapy"[Subheading] OR "Follow-Up
	Studies"[Mesh] OR "Cross-Over Studies"[Mesh] OR "Prospective
	Studies" [Mesh] OR "Clinical Study" [Publication Type] OR "Controlled
	Before-After Studies" [Mesh] OR "Multicenter Studies as Topic" [Mesh]
	OR "Multicenter Study" [Publication Type] OR "Placebos" [Mesh] OR
	Random*[tiab] OR "latin square"[tiab] OR pragmatic trial*[tiab] OR
	clinical article*[tiab] OR placebo*[tiab] OR ((singl*[tiab] OR doubl*[tiab]
	OR trebl*[tiab] OR tripl*[tiab]) AND (mask*[tiab] OR blind*[tiab] OR
	dumm*[tiab])) OR RCT*[tiab] OR ((comparative[tiab] OR control*[tiab]
	OR clinical[tiab] OR prospectiv*[tiab]) AND (study[tiab] OR studies[tiab]
	OR trial*[tiab])) OR volunteer*[tiab] OR "Cross-Over"[tiab] OR
	crossover[tiab] OR allocat*[tiab] OR assign*[tiab] OR factorial[tiab]
	Economic evaluation
	#2 "Economics, Medical" [Mesh] OR "Cost-Benefit Analysis" [Mesh] OR
	"Cost-effectiveness Analysis"[Mesh] OR "Cost-utility Analysis"[Mesh]
	OR "Cost-minimization Analysis" [Mesh] OR "Health Care Costs" [Mesh]
	OR "Economics, Pharmaceutical" [Mesh] OR "Economics" [Mesh:NoExp]
	OR "Costs and Cost Analysis" [Mesh] OR "Economics, Hospital" [Mesh]
	OR "Economics, Nursing" [Mesh] OR "Quality-Adjusted Life
	Years"[Mesh] OR (economic*[tiab] AND (study[tiab] OR studies[tiab] OR

impact[tiab] OR value[tiab] OR factor\*[tiab] OR analys\*[tiab] OR evaluati\*[tiab])) OR ((cost[tiab] OR costs[tiab] OR costly[tiab] OR costing[tiab] OR price[tiab] OR prices[tiab] OR pricing[tiab] OR pharmacoeconomic\*[tiab] OR marginal[tiab]) AND (health care[tiab] OR healthcare[tiab] OR medical care[tiab] OR treatment[tiab] OR analys\*[tiab] OR data[tiab] OR measure\*[tiab] OR comparison\*[tiab] OR savings[tiab] OR hospital[tiab] OR medical[tiab] OR utilit\*[tiab] OR effectiv\*[tiab] OR efficac\*[tiab] OR benefit\*[tiab] OR consequence\*[tiab] OR unit[tiab] OR drug\*[tiab])) OR CEA[tiab] OR CUA[tiab] OR CBA[tiab] OR budget\*[tiab] OR qol[tiab] OR qoly[tiab] OR qoly\*[tiab] OR hrqol[tiab] OR qaly[tiab] OR qalys[tiab] OR qale[tiab] OR qales[tiab] OR sensitivityanalys\*[tiab] OR "willingnesstopay"[tiab] OR quality-adjusted life year\*[tiab] OR quality-adjusted life expectanc\*[tiab] OR Healthy Years Equivalent\*[tiab] OR "Models, Economic"[Mesh] OR "Markov Chains" [Mesh] OR "Markov" [tiab] OR "Decision Trees" [Mesh] OR "health economic model"[tiab] OR "health economic models"[tiab]

Fibromyalgia

#3 (fibromyalgia OR fibrositis OR "myofascial pain syndromes"[Mesh] OR "Fibromyalgia"[Mesh])

Final connections

#4 ((#1 AND #2 AND #3) NOT (animals[mh] NOT humans[mh]))

Hits: 539

### **EMBASE**

### Search | Randomized controlled trial

#1 'controlled clinical trial'/exp OR 'controlled clinical trial (topic)'/exp OR 'randomized controlled trial'/exp OR 'clinical article'/exp OR 'clinical study'/exp OR 'controlled study'/de OR 'major clinical study'/exp OR 'triple blind procedure'/exp OR 'methodology'/de OR 'comparative study'/de OR 'evaluation study'/exp OR 'follow up'/exp OR 'randomization'/exp OR 'single blind procedure'/exp OR 'double blind

procedure'/exp OR 'drug therapy'/exp OR 'crossover procedure'/exp OR 'prospective study'/exp OR 'epidemiology'/de OR 'multicenter study (topic)'/exp OR 'placebo'/exp OR random\*:ti,ab OR 'latin square':ti,ab OR 'pragmatic trial\*':ti,ab OR 'clinical article\*':ti,ab OR placebo\*:ti,ab OR (singl\*:ti,ab OR doubl\*:ti,ab OR trebl\*:ti,ab OR tripl\*:ti,ab AND (mask\*:ti,ab OR blind\*:ti,ab OR dumm\*:ti,ab)) OR rct\*:ti,ab OR (comparative:ti,ab OR control\*:ti,ab OR clinical:ti,ab OR prospectiv\*:ti,ab AND (study:ti,ab OR studies:ti,ab OR trial\*:ti,ab)) OR volunteer\*:ti,ab OR 'cross-over':ti,ab OR crossover:ti,ab OR allocat\*:ti,ab OR assign\*:ti,ab OR factorial:ti,ab

#### Economic evaluation

2# 'Economics, Medical'/exp OR 'Cost-Benefit Analysis'/exp OR 'Costeffectiveness Analysis'/exp OR 'Cost-utility Analysis'/exp OR 'Costminimization Analysis'/exp OR 'Health Care Costs'/exp OR 'Economics, Pharmaceutical'/exp OR 'Economics'/de OR 'Costs and Cost Analysis'/exp OR 'Economics, Hospital'/exp OR 'Economics, Nursing'/exp OR 'Quality-Adjusted Life Years'/exp OR (economic\*:ti,ab AND (study:ti,ab OR studies:ti,ab OR impact:ti,ab OR value:ti,ab OR factor\*:ti,ab OR analys\*:ti,ab OR evaluati\*:ti,ab)) OR ((cost:ti,ab OR costs:ti,ab OR costly:ti,ab OR costing:ti,ab OR price:ti,ab OR prices:ti,ab OR pricing:ti,ab OR pharmacoeconomic\*:ti,ab OR marginal:ti,ab) AND ("health care":ti,ab OR healthcare:ti,ab OR "medical care":ti,ab OR treatment:ti,ab OR analys\*:ti,ab OR data:ti,ab OR measure\*:ti,ab OR comparison\*:ti,ab OR savings:ti,ab OR hospital:ti,ab OR medical:ti,ab OR utilit\*:ti,ab OR effectiv\*:ti,ab OR efficac\*:ti,ab OR benefit\*:ti,ab OR consequence\*:ti,ab OR unit:ti,ab OR drug\*:ti,ab)) OR CEA:ti,ab OR CUA:ti,ab OR CBA:ti,ab OR budget\*:ti,ab OR qol:ti,ab OR qoly:ti,ab OR qoly\*:ti,ab OR hrqol:ti,ab OR qaly:ti,ab OR qalys:ti,ab OR qale:ti,ab OR qales:ti,ab OR sensitivityanalys\*:ti,ab OR willingnesstopay:ti,ab OR "quality-adjusted life year\*":ti,ab OR "quality-adjusted life expectanc\*":ti,ab OR "Healthy Years Equivalent\*":ti,ab OR 'Models, Economic'/exp OR 'Markov Chains'/exp

OR Markov:ti,ab OR 'Decision Trees'/exp OR "health economic model":ti,ab OR "health economic models":ti,ab

Fibromyalgia
#3 (fibromyalgia OR fibrositis OR 'myofascial pain syndromes'/exp OR 'Fibromyalgia'/exp)

Final connections
#4 #1 AND #2 AND #3 NOT ([animals]/lim NOT [humans]/lim)

Hits: 2,005

## **CINAHL**

Limits	Human	
Search	Randomized controlled trial	
	S1 (MH "Randomized Controlled Trials as Topic+") OR (MH "Controlled	
	Clinical Trials as Topic+") OR (MH "Clinical Trials as Topic+") OR	
	"Randomized Controlled Trial[Publication Type]" OR "Controlled Clinical	
	Trial[Publication Type]" OR "Clinical Trial [Publication Type]" OR (MH	
	"Random Allocation+") OR (MH "Single-Blind Method+") OR (MH	
	"Double-Blind Method+") OR (MH "Research Design+") OR	
	"Comparative Study [Publication Type]" OR "Evaluation Studies	
	[Publication Type]" OR (MH "Evaluation Studies as Topic+") OR (MH	
	"Drug Therapy+") OR "drug therapy[Subheading]" OR (MH "Follow-Up	
	Studies+") OR (MH "Cross-Over Studies+") OR (MH "Prospective	
	Studies+") OR "Clinical Study [Publication Type]" OR (MH "Controlled	
	Before-After Studies+") OR (MH "Multicenter Studies as Topic+") OR	
	"Multicenter Study [Publication Type]" OR (MH "Placebos+") OR TI	
	Random* OR AB Random* OR TI "latin square" OR AB "latin square"	
	OR TI "pragmatic trial*" OR AB "pragmatic trial*" OR TI "clinical	
	article*" OR AB "clinical article*" OR TI placebo* OR AB placebo* OR	
	((TI singl* OR AB singl* OR TI doubl* OR AB doubl* OR TI trebl* OR	
	AB trebl* OR TI tripl* OR AB tripl*) AND (TI mask* OR AB mask* OR	
	TI blind* OR AB blind* OR TI dumm* OR AB dumm*)) OR TI RCT*	

OR AB RCT\* OR ((TI comparative OR AB comparative OR TI control\* OR AB control\* OR TI clinical OR AB clinical OR TI prospectiv\* OR AB prospectiv\*) AND (TI study OR AB study OR TI studies OR AB studies OR TI trial\* OR AB trial\*)) OR TI volunteer\* OR AB volunteer\* OR TI Cross-Over OR AB Cross-Over OR TI crossover OR AB crossover OR TI allocat\* OR AB allocat\* OR TI assign\* OR AB assign\* OR TI factorial OR AB factorial

#### Economic evaluation

S2 (MH "Economics, Medical+") OR (MH "Cost-Benefit Analysis+") OR (MH "Cost-effectiveness Analysis+") OR (MH "Cost-utility Analysis+") OR (MH "Cost-minimization Analysis+") OR (MH "Health Care Costs+") OR (MH "Economics, Pharmaceutical+") OR (MH "Economics") OR (MH "Costs and Cost Analysis+") OR (MH "Economics, Hospital+") OR (MH "Economics, Nursing+") OR (MH "Quality-Adjusted Life Years+") OR (TI economic\* OR AB economic\* AND (TI study OR AB study OR TI studies OR AB studies OR TI impact OR AB impact OR TI value OR AB value OR TI factor\* OR AB factor\* OR TI analys\* OR AB analys\* OR TI evaluati\* OR AB evaluati\*)) OR ((TI cost OR AB cost OR TI costs OR AB costs OR TI costly OR AB costly OR TI costing OR AB costing OR TI price OR AB price OR TI prices OR AB prices OR TI pricing OR AB pricing OR TI pharmacoeconomic\* OR AB pharmacoeconomic\* OR TI marginal OR AB marginal) AND (TI "health care" OR AB "health care" OR TI healthcare OR AB healthcare OR TI "medical care" OR AB "medical care" OR TI treatment OR AB treatment OR TI analys\* OR AB analys\* OR TI data OR AB data OR TI measure\* OR AB measure\* OR TI comparison\* OR AB comparison\* OR TI savings OR AB savings OR TI hospital OR AB hospital OR TI medical OR AB medical OR TI utilit\* OR AB utilit\* OR TI effectiv\* OR AB effectiv\* OR TI efficac\* OR AB efficac\* OR TI benefit\* OR AB benefit\* OR TI consequence\* OR AB consequence\* OR TI unit OR AB unit OR TI drug\* OR AB drug\*)) OR TI CEA OR AB CEA OR TI CUA OR AB CUA OR TI CBA OR AB CBA OR TI budget\* OR AB budget\* OR TI qol OR AB qol OR TI qoly OR AB

qoly OR TI qoly\* OR AB qoly\* OR TI hrqol OR AB hrqol OR TI qaly OR AB qaly OR TI qalys OR AB qalys OR TI qale OR AB qale OR TI qales OR AB qales OR TI sensitivity-analys\* OR AB sensitivity-analys\* OR TI willingnesstopay OR AB willingnesstopay OR TI "quality-adjusted life year\*" OR AB "quality-adjusted life year\*" OR TI "quality-adjusted life expectanc\*" OR AB "quality-adjusted life expectanc\*" OR TI "Healthy Years Equivalent\*" OR (MH "Models, Economic+") OR (MH "Markov Chains+") OR TI Markov OR AB Markov OR (MH "Decision Trees+") OR TI "health economic model" OR AB "health economic models" OR TI "health economic models" OR AB "health economic models"

Fibromyalgia

S3 (fibromyalgia OR fibrositis OR (MH "myofascial pain syndromes+") OR (MH "Fibromyalgia+"))

Final connections

S4 S1 AND S2 AND S3

**Hits: 157** 

### **CENTRAL**

Limits	Trials
Search	#1 Fibromyalgia
	(fibromyalgia OR fibrositis OR [mh "myofascial pain syndromes"] OR [mh
	Fibromyalgia])
	Economic evaluation
	#2 cost-effectiveness OR economic evaluation
	Final connections
	#3 #1 AND #2
	Hits: 47

#### **PEDRO**

Search

Final connections

fibromyalgia AND cost-effectiveness

Hits: 8

## **PsycINFO**

Search

Randomized controlled trial

#1 "Randomized Controlled Trials as Topic" OR "Controlled Clinical Trials as Topic" OR "Clinical Trials as Topic" OR Randomized Controlled Trial[Publication Type] OR Controlled Clinical Trial[Publication Type] OR Clinical Trial [Publication Type] OR "Random Allocation" OR "Single-Blind Method" OR "Double-Blind Method" OR "Research Design" OR Comparative Study [Publication Type] OR Evaluation Studies [Publication Type] OR "Evaluation Studies as Topic" OR "Drug Therapy" OR drug therapy[Subheading] OR "Follow-Up Studies" OR "Cross-Over Studies" OR "Prospective Studies" OR Clinical Study [Publication Type] OR "Controlled Before-After Studies" OR "Multicenter Studies as Topic" OR Multicenter Study [Publication Type] OR Placebos OR Random\*.ti,ab OR latin square.ti,ab OR pragmatic trial\*.ti,ab OR clinical article\*.ti,ab OR placebo\*.ti,ab OR ((singl\*.ti,ab OR doubl\*.ti,ab OR trebl\*.ti,ab OR tripl\*.ti,ab) AND (mask\*.ti,ab OR blind\*.ti,ab OR dumm\*.ti,ab)) OR RCT\*.ti,ab OR ((comparative.ti,ab OR control\*.ti,ab OR clinical.ti,ab OR prospectiv\*.ti,ab) AND (study.ti,ab OR studies.ti,ab OR trial\*.ti,ab)) OR volunteer\*.ti,ab OR Cross-Over.ti,ab OR crossover.ti,ab OR allocat\*.ti,ab OR assign\*.ti,ab OR factorial.ti,ab

#### Economic evaluation

#2 "Economics, Medical" OR "Cost-Benefit Analysis" OR "Costeffectiveness Analysis" OR "Cost-utility Analysis" OR "Cost-minimization
Analysis" OR "Health Care Costs" OR "Economics, Pharmaceutical" OR
Economics OR "Costs and Cost Analysis" OR "Economics, Hospital" OR
"Economics, Nursing" OR "Quality-Adjusted Life Years" OR
(economic\*.ti,ab AND (study.ti,ab OR studies.ti,ab OR impact.ti,ab OR
value.ti,ab OR factor\*.ti,ab OR analys\*.ti,ab OR evaluati\*.ti,ab)) OR

((cost.ti,ab OR costs.ti,ab OR costly.ti,ab OR costing.ti,ab OR price.ti,ab OR prices.ti,ab OR prices.ti,ab OR pricing.ti,ab OR pharmacoeconomic\*.ti,ab OR marginal.ti,ab) AND (health care.ti,ab OR healthcare.ti,ab OR medical care.ti,ab OR treatment.ti,ab OR analys\*.ti,ab OR data.ti,ab OR measure\*.ti,ab OR comparison\*.ti,ab OR savings.ti,ab OR hospital.ti,ab OR medical.ti,ab OR utilit\*.ti,ab OR effectiv\*.ti,ab OR efficac\*.ti,ab OR benefit\*.ti,ab OR consequence\*.ti,ab OR unit.ti,ab OR drug\*.ti,ab)) OR CEA.ti,ab OR CUA.ti,ab OR CBA.ti,ab OR budget\*.ti,ab OR qol.ti,ab OR qoly\*.ti,ab OR qalys.ti,ab OR qalys.ti,ab OR qales.ti,ab OR qales.ti,ab OR hrqol.ti,ab OR qalys.ti,ab OR willingnesstopay.ti,ab OR quality-adjusted life year\*.ti,ab OR quality-adjusted life expectanc\*.ti,ab OR Healthy Years Equivalent\*.ti,ab OR "Models, Economic" OR "Markov Chains" OR Markov.ti,ab OR "Decision Trees" OR health economic models.ti,ab OR health economic models.ti,ab

Fibromyalgia

#3 (fibromyalgia OR fibrositis OR "myofascial pain syndromes" OR Fibromyalgia)

Final connections

#4 #S1 AND #S2 AND #S3

**Hits: 96** 

### **EconLit**

# Search

Economic evaluation

S1 "economic evaluation" OR "economic analysis" OR ("cost\*" AND ("benefit\*" or "utilit\*" OR "effective\*".ab,ti,kw OR "minimization" OR "minimization")) OR "models" OR "Markov Chains" OR "Decision Trees"

Fibromyalgia

S2 "fibromyalgia" OR "fibrositis" OR "myofascial pain syndromes" OR "Fibromyalgia"

Final connections

S3 S1 AND S2

Hits: 2

## NHS EED

Search	Fibromyalgia
	(fibromyalgia OR fibrositis OR [mh "myofascial pain syndromes"] OR [mh
	Fibromyalgia])
	Hits: 22

# HTA

Search	Fibromyalgia
	(fibromyalgia OR fibrositis OR [mh "myofascial pain syndromes"] OR [mh
	Fibromyalgia])
	Hits: 23

Appendix 2. Reasons for exclusion of the 66 full-text articles assessed for eligibility

Study	Reason
Arreola-Ornelas H, Buzzo AR, García L, Aguilar JD,	Without non-
Hernández IC, Quevedo JFM. Cost-effectiveness analysis of	pharmacological
pharmacologic treatment of fibromyalgia in Mexico.	intervention group
Reumatol Clin 2012;8:120-7.	
Arreola-Ornelas H, Rosado-Buzzo AA, Garcia-Mollinedo	Conference abstract
MDL, Dorantes-Aguilar J, Mould-Quevedo J, Davila-Loaiza	
G. Cost-effectiveness of pregabalin in patients with	
fibromyalgia: A Mexican perspective. Value Health	
2009;12:A133-4.	
Bateman L, Sarzi-Puttini P, Burbridge CL, Landen JW,	Not economic
Masters ET, Badra-Brown P, Scavone JM, Emir B, Vissing	evaluation
RS, Clair AG, Pauer LR. Burden of illness in fibromyalgia	
patients with comorbid depression. Clin Exp Rheumatol	
2016;34: S106-13.	
Beard S, Le TK, Zhao Y, Roskell N. The cost-effectiveness of	Conference abstract
duloxetine in the treatment of fibromyalgia in the United	
States. Value Health (2010);13:A466.	
Beard SM, Roskell N, Le TK, Zhao Y, Coleman A, Ang D,	Without non-
Lawson K. Cost effectiveness of duloxetine in the treatment	pharmacological
of fibromyalgia in the United States. J Med Econ 2011;14:	intervention group
463-76.	
Brown TM, Garg S, Chandran AB, McNett M, Silverman SL,	Not economic
Hadker N. The impact of 'best-practice' patient care in	evaluation
fibromyalgia on practice economics. J Eval Clin Pract	
2012;18:793-8.	
Burke JP, Sanchez RJ, Joshi AV, Cappelleri JC, Kulakodlu	Not economic
M, Halpern R. Health Care Costs in Patients with	evaluation
Fibromyalgia on Pregabalin vs. Duloxetine. Pain Pract	
2012;12:14-22.	

Cappelleri JC, Bushmakin AG, Zlateva G, Chandran A.	Conference abstract
Estimating the economic benefits of positive shifts in	
fibromyalgia severity. Value Health 2011;14:A133.	
Cappelleri JC, Bushmakin AG, Zlateva G, Chandran A.	Not economic
Estimating the economic benefits of positive shifts in	evaluation
fibromyalgia severity: An exploratory analysis based on	
modeling of clinical trial data of pregabalin. J Med Econ	
2013;16:55-61.	
Carleton RN, Asmundson GJG, Korol SL, LeBouthillier DM,	Not economic
Hozempa K, Katz JD, Vlaeyen, JWS, Crombez G. Evaluating	evaluation
the efficacy of an attention modification program for patients	
with fibromyalgia: a randomized controlled trial. Pain	
2020;161:584-94.	
Casanueva-Fernández B, Llorca J, Rubió JB, Rodero-	Not economic
Fernández B, González-Gay MA. Efficacy of a	evaluation
multidisciplinary treatment program in patients with severe	
fibromyalgia. Rheumatol Int 2012;32:2497-502.	
Chandran A, Brown T, Garg S, McNett M, Silverman S,	Conference abstract
Hadker N. Impact of efficient practices in the care of patients	
with fibromyalgia. J Pain 2011;12:P20.	
Chandran A, Leslie D, Tai K, Zlateva G, Gore M. Clinical	Conference abstract
comorbidities, treatment patterns and healthcare costs among	
patients with Fibromyalgia newly prescribed pregabalin or	
duloxetine in usual care. J Pain 2011;12:P47.	
Chandran A, Zlateva G, Leslie D, Tai K, Gore M. Clinical	Conference abstract
characteristics, pharmacotherapy and healthcare resource use	
among patients with fibromyalgia newly prescribed	
pregabalin or tricyclic antidepressants. J Pain 2011;12:P48.	
Choy E, Richards S, Bowrin K, Watson P, Loyud A, Sadosky	Without non-
A, Zlateva G. Cost effectiveness of pregabalin in the	pharmacological
treatment of fibromyalgia from a UK perspective. Curr Med	intervention group
Res Opin 2010;26:965-75.	
L	1

Collazo-Chao E. Effectiveness of acupuncture in relieving	Not fibromyalgia
pain refractory to conventional pharmacological therapy. Rev	
de la Soc Espanola del Dolor 2009;16:79-86.	
Collazo-Chao E. Effectiveness of acupuncture therapy for	Not economic
pain relief in patients with fibromyalgia. Rev Int de Acupunt	evaluation
2010;4:52-8.	
Da Costa D, Abrahamowicz M, Lowensteyn I, Bernatsky S,	Not economic
Dritsa M, Fitzcharles MA, Dobkin PL. A randomized clinical	evaluation
trial of an individualized home-based exercise programme for	
women with fibromyalgia. Rheumatology 2005;44:1422-27.	
Davis MC, Zautra AJ. An online mindfulness intervention	Not economic
targeting socioemotional regulation in fibromyalgia: results of	evaluation
a randomized controlled trial. Ann Behav Med 2013;46:273-	
84.	
De Andrade SC, Carvalho RFPP, Soares AS, Freitas RPA,	Not economic
Guerra LMM, Vilar MJ. Thalassotherapy for fibromyalgia: a	evaluation
randomized controlled trial comparing aquatic exercises in sea	
water and water pool. Rheumatol Int 2008;29:147-52.	
Ellis JJ, Sadosky AB, Eyck LLT, Cappeleri JC, Brown CR,	Not economic
Suehs BT, Parsons B. Impact of potential pregabalin or	evaluation
duloxetine drug-drug interactions on health care costs and	
utilization among Medicare members with fibromyalgia.	
Clinicoecon Outcomes Res 2014;6:389-99.	
Feliu-Soler A, Borrà X, Peñarrubia-María MT, Rozadilla-	Not randomized
Sacanell A, D'Amico F, Moss-Morris R, Howard MA, Fayed	controlled trial
N, Soriano-Mas C, Puebla-Guedea M, Serrano-Blanco A,	
Pérez-Aranda A, Tuccillo R, Luciano JV. Cost-utility and	
biological underpinnings of Mindfulness-Based Stress	
Reduction (MBSR) versus a psychoeducational programme	
(FibroQoL) for fibromyalgia: a 12-month randomised	
controlled trial (EUDAIMON study). BMC Complement	
Altern Med 2016;16.	

Fjorback L, Arendt M, Carstensen T, Fink P, Oernboel E,	Conference abstract
Rehfeld E, Walach H. Mindfulness therapy for Bodily distress	
syndrome: Economic evaluation alongside a randomized trial.	
J Psychosom Res 2012;72:480.	
Fjorback LO, Carstensen T, Arendt M, Ørnbøl E, Walach H,	Not fibromyalgia
Rehfeld E, Fink P. Mindfulness therapy for somatization	
disorder and functional somatic syndromes: analysis of	
economic consequences alongside a randomized trial. J	
Psychosom Res 2013;74:41-8.	
Fraser K, Boulanger L, Chen S, Wu N, Peng X, Zhao Y.	Conference abstract
Duloxetone treatment patterns and healthcare costs among	
fibromyalgia patients with medicare supplemental insurance. J	
Pain 2010;11:S39.	
Fraser K, Chen S, Wu N, Boulanger L, Peng X, Zhao Y. An	Conference abstract
assessment of treatment patterns and healthcare costs among	
working-aged individuals initiated with duloxetine for	
fibromyalgia. J Pain 2010;11:39.	
Fraser K, Wu N, Chen S, Lamothe K, Boulanger L, Zhao Y.	Conference abstract
Treating fibromyalgia with duloxetine among elderly patients:	
What is the association between average daily dose,	
medication adherence, and healthcare costs? J Pain	
2010;11:S38.	
Frech F, Qian C, Gore M, Zhang Q. Treatment initiation	Conference abstract
timing and healthcare costs in newly diagnosed patients with	
fibromyalgia. Neurology 2016;86.	
Gore M, Sadosky A, Zlateva G, Claw D. Patterns of pain-	Conference abstract
related pharmacotherapy and healthcare resource use among	
elderly patients with fibromyalgia prescribed pregabalin.	
Arthritis Rheum 2009;60:1411.	
Gore M, Sadosky AB, Zlateva G, Claw DJ. Clinical	Not economic
characteristics, pharmacotherapy and healthcare resource use	evaluation
among patients with fibromyalgia newly prescribed	
gabapentin or pregabalin. Pain Pract 2009;9:363-74.	
	l

Gore M, Sadosky A, Zlateva G, Claw D. Initial use of	Not economic
pregabalin, patterns of pain-related pharmacotherapy, and	evaluation
healthcare resource use among older patients with	
fibromyalgia. Am J Manag Care 2010;16:S144-53.	
Gore M, Tai K, Chandran A, Zlateva G, Leslie D. Clinical	Not economic
characteristics, pharmacotherapy, and healthcare resource use	evaluation
among patients with fibromyalgia newly prescribed	
pregabalin or tricyclic antidepressants. J Med Econ	
2012;15:32-44.	
Gore M, Tai K, Chandran A, Zlateva G, Leslie D. Clinical	Not economic
comorbidities, treatment patterns, and healthcare costs among	evaluation
patients with fibromyalgia newly prescribed pregabalin or	
duloxetine in usual care. J Med Econ 2012;15:19-31.	
Graboski CL, Gray DS, Burnham RS. Botulinum toxin A	Not fibromyalgia
versus bupivacaine trigger point injections for the treatment of	
myofascial pain syndrome: A randomised double blind	
crossover study. Pain 2005;118:170-5.	
Gumà-Uriel L, Peñarrubia-María MT, Cerdà-Lafont M,	Not randomized
Cunillera-Puertolas O, Almeda-Ortega J, Fernández-Vergel R,	controlled trial
García-Campayo J, Luciano JV. Impact of IPDE-SQ	
personality disorders on the healthcare and societal costs of	
fibromyalgia patients: a cross-sectional study. BMC Fam	
Pract 2016;17:1-10.	
Harnett J, Margolis J, Cao Z, Fowler R, Sanchez RJ,	Not economic
Mardekian J, Silverman SL. Real-World Evaluation of	evaluation
Health-Care Resource Utilization and Costs in Employees	
with Fibromyalgia Treated with Pregabalin or Duloxetine.	
Pain Pract 2011;11:217-29.	
Henriksson C, Carlberg U, Ilman MK, Lundberg G,	Not economic
Henriksson KG. Evaluation of four outpatient educational	evaluation
programmes for patients with longstanding fibromyalgia. J	
Rehabil Med 2004;36:211-9.	
L	l

Juday T, Blum S, Erder MH. Cost of opioid use in a	Conference abstract
commercially insured population of fibromyalgia patients.	
Value Health 2009;12:A134-5.	
Kemani MK, Olsson GL, Lekander M, Hesser H, Andersson	Not fibromyalgia
E, Wicksell RK. Efficacy and cost-effectiveness of acceptance	
and commitment therapy and applied relaxation for	
longstanding pain: A Randomized Controlled Trial. Clin J	
Pain 2015;31:1004-16.	
Kleinman NL, Sanchez R, Beren I, Lynch WD, Cappeleri JC,	Conference abstract
Joshi AV. Health outcomes and costs among employees with	
fibromyalgia treated with pregabalin vs standard of care. Pain	
Med 2011;12:488.	
Kleinman NL, Sanchez RJ, Lynch WD, Cappeleri JC, Beren	Not economic
IA, Joshi AV. Health Outcomes and Costs among Employees	evaluation
with Fibromyalgia Treated with Pregabalin vs. Standard of	
Care. Pain Pract 2011;11:540-51.	
Kroese ME, Severens JL, Schulpen GJ, Bessems MC, Nijhuis	Not economic
FJ, Landewé RB. Specialized rheumatology nurse substitutes	evaluation
for rheumatologists in the diagnostic process of fibromyalgia:	
a cost-consequence analysis and a randomized controlled trial.	
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Appendix 3. Complete description of the interventions, outcomes, and cost categories

Study	Description of the interventions according to the TIDIER guide	Description of the costs' categories
Goossens et al., 1996[10]	Educational cognitive group: intervention was offered in an outpatient clinic of a rehabilitation	Healthcare costs: interventions, general
	centre, in groups of six patients. This group received an educational program for 12 2-hour	practitioner contacts, outpatient specialist
	sessions spread over six weeks, provided by one member of the interdisciplinary rehabilitation	contacts, physical therapy, alternative
	staff. Additionally, patients received a cognitive treatment for 12 90-minute sessions spread	healthcare, hospitalizations, home help,
	over six weeks. The cognitive treatment was grouped into three phases: reconceptualization,	prescribed medications and over the
	skills acquisition with relaxation supported by an EMG biofeedback, and generalization,	counter medications <sup>a</sup> .
	provided by a psychologist with 10 years' experience in cognitive behaviour therapy for	Patient and family costs: paid and unpaid
	chronic pain. Patients were given and asked to complete homework assignments each session.	help, transportation costs, out of pocket
	At the end of the program, an individual tailored audiotape and texts were given to patients use	expenses for pain related activities and
	after discharge.	purchases.
	Educational discussion group: intervention was offered in an outpatient clinic of a	Lost productivity costs: absence from
	rehabilitation centre, in groups of six patients. The educational program lasted for 12 2-hour	work and days lost from usually daily
	sessions spread over six weeks, and consisted of information about psychosocial factors that	activities.
	influence pain, ergonomic principles applied to daily activities, and social security legislation,	Costs were collected using a weekly cost
	for chronic pain in general, provided by one member of the interdisciplinary rehabilitation	diary.
	staff. Each session ended with a physical exercise, such as swimming and bicycling. This group	
	also participated in a group discussion program for 12 90-minute sessions spread over six	
	weeks, during which patients were requested to read parts of a book about pain, to share the	
	information and their own thoughts with other group members, and to listen to various	

	audiotaped music. The intervention was provided by a psychologist with 10 years' experience	
	in cognitive behaviour therapy for chronic pain.	
	Waiting list condition group: included only to measure short term effects.	
Oliver et al., 2001[34]	Social support group: intervention was delivered in group for 10 weekly meetings, followed by	Healthcare costs: contacts with
	10 monthly meetings. Each meeting had two hours. At the first group meeting, group members	physicians, mental health specialist,
	were told by the investigators that support groups can be effective in helping people to deal	rehabilitation specialist (e.g., physical
	with their fibromyalgia symptoms. Beginning at the second meeting, no staff members were	therapist, occupational therapist),
	present during the discussions. The social support group tasks were assigned by the	technicians, nurse practitioner, nurse and
	investigators, given to the group in written form at the beginning of the meetings, and ranged	physician' assistant, medical tests,
	from electing a group chairperson to lead the group throughout the study to discussing common	emergency room visits, inpatient stays,
	emotions associated with fibromyalgia. Attendance was about 40%.	and medications.
	Social support and education group: intervention was delivered in group, for 10 weekly	Costs were collected from the participant
	meetings, followed by 10 monthly meetings, with one hour of education and one hour of social	medical records.
	support. Intervention consisted of health education provided in lecture format followed by	
	social support. Materials for the education intervention were adapted from the fibromyalgia	
	literature and lectures were given by professional health educators. Attendance was about 40%.	
	Control group: did not receive treatment and participated in the assessment interviews only.	
Ziljstra et al	Spa treatment group: intervention was delivered in a hotel in Jerba, Tunisia.	Healthcare costs: spa treatment, general
2007[53]	Thalassotherapy was provided in a thalassocentre by qualified Tunisian staff. Patients were	practitioner, specialist, paramedical
	assessed by the spa doctor, who composed a therapy programme according to their individual	professionals, alternative medicine,
	demands. Each session included four out of the following modalities: Turkish bath, hot packs	hospitalization (including general and
	with algae, massage while lying under a shower, whirlpool, underwater jetstream massage,	

pool exercise and massage, and lasted for approximately three hours. The thalassotherapy programme consisted of seven or eight sessions divided over 15 days. Supervised group exercise programme included warming-up, gentle stretching and various forms of low-impact aerobic exercise. This programme was offered in groups of four to five patients, consisted of seven 1-hour sessions, with moderate intensity, scheduled on days when no thalassotherapy was given, and provided by a sports instructor. Patient education programme included general information on fibromyalgia, importance of physical fitness and exercise, the role of emotions in fibromyalgia, finding a balance between workload and capacity, stress handling, coping with reactions from others, sense and nonsense about drugs, diets, complementary and alternative medicine. The patient education programme consisted of seven sessions of 1.5 hours, was provided by a rheumatologist, and delivered in small groups (the first and seventh sessions were plenary sessions).

*Control group*: participants were told they were participating in an observational study to assess the impact of fibromyalgia on several aspects of health and social functioning. They continued treatment as usual provided by their own physicians.

university hospital), prescription drugs and over the counter medications<sup>a</sup>.

Patient and family costs: paid household help, informal care, travel costs for visit medical care and professional domestic

Lost productivity costs: absenteeism from work.

Costs were collected using a monthly questionnaire.

care.

Gusi and Tomas-Carus, 2008[11] *Exercise group*: received usual care with the addition of a water-based exercise programme, in the facilities of the University of Extremadura, Spain. The exercise programme was performed in a waist-high pool of warm water (33 degrees). Each session included 10 min of warm-up, 10 min of aerobic exercises at 60-65% of maximal heart rate, 20 min of overall mobility and lower limb strength exercises, another set of 10 min of aerobics at 60-65% of maximal heart rate, and 10 min of cooling down exercises. The intervention was offered three times a week for one

Healthcare costs: hospital stays, drug usage, secondary and primary care appointments, personnel, sport technician, nurse, insurances and prevention, facilities (renting pool and safeguards), management and medication.

hour per session over a period of eight months, provided in a group by a qualified exercise leader.

Control group: received standard medical attention in the public system (hospital and outpatient clinic including primary care) and the social support of the local fibromyalgia association. This care could be considered the average standard of care or better for patients with fibromyalgia. Participants continued their daily activities, which did not include any form of physical exercise similar to that in the programme.

Patient and family costs: time spent in therapy and in displacements, clothing, and travel costs.

Luciano et al., 2013[28]

Intervention group: received a psychoeducative program added to usual care, in groups with a maximum of 18 patients per group, in a conference room of a general practice unit of Barcelona, Spain. The educative part of the program (five sessions) included information about typical symptoms, usual course, comorbid medical conditions, potential causes of the illness, the influence of psychosocial factors on pain, current pharmacological and non-pharmacological treatments, the benefits of regular exercise, and the typical barriers to behavioural change. The autogenic training was especially recommended for immediate physical and mental relaxation, pain relief, and stress reduction. Other objectives were to create a space in which the conflictual emotional experiences manifested in the patient's bodies could be elaborated and to facilitate emotive exchange with other patients suffering from the same condition. The intervention was offered for nine 2-hour sessions delivered over a 2-month period (one afternoon session per week). The educational sessions were intercalated with the autogenic training sessions until the nine weeks were completed. The speakers of the educative part included four general practitioners and one rheumatologist, and the autogenic training was led by a clinical psychologist. This group achieved 68% of adherence.

Healthcare costs: medication, service receipt (emergency service, general medical inpatient hospital admissions, outpatient healthcare services as visits to general practitioner, nurse, social worker, psychologist, and other community healthcare professionals), diagnostic tests and costs of the staff responsible for the intervention.

Lost productivity costs: days of sick leave. Costs were collected using the Client Service Receipt Inventory adapted. *Control group*: patients received individual usual care in a healthcare centre provided by a general practitioner. The treatment provided was mainly pharmacological and adjusted to the symptomatic profile of the patient. In addition, counselling about aerobic exercise adjusted to patient's physical limitations was usually provided.

Luciano et al., 2014[24]

Cognitive behavioural therapy group: the intervention was delivered by trained therapists in the Torrero health centre, in groups with a maximum of eight patients per group. The cognitive behavioural therapy group intervention consisted of two major components: cognitive restructuring and coping. Nine standard cognitive behavioural therapy sessions and an additional pain catastrophizing session that began after the coping session were provided (this additional session was directed especially at participants who showed high rumination). Only minor analgesics were allowed. The duration of the intervention was 10 to 12 weeks, with 10 weekly 90-minute sessions.

Food and Drug Administration-recommended pharmacological treatment group: treatment with pregabalin (300 to 600 mg/day) and duloxetine (60 to 120 mg/day) was administered individually to patients with major depressive disorder for six months, by two psychiatrists. Treatment-as-usual group: received the individual standard care offered by general practitioners in the health centres. To improve this group's treatment, the doctors received a "Guide for the Treatment of Fibromyalgia in Primary Care". Treatment as usual implies that doctors selected a pharmacological treatment. However, the treatment recommended in the guide matched that of the recommended pharmacological intervention. In addition, patients received counselling to aerobic exercises adjusted to patients' physical level. The general practitioner determined the frequency of patient visits for six months.

Healthcare costs: medication use, service receipt (emergency service, general medical inpatient hospital admissions, and outpatient healthcare services, including total visits to general practitioner, nurse, social worker, psychologist, and other community healthcare professionals), diagnostic tests and costs of the staff running the cognitive behavioural therapy intervention.

Lost productivity costs: days of sick leave. Costs were assessed using the Client and Service Receipt Inventory-Spanish version. Van Eijk-Hustings et al., 2016[47]

Multidisciplinary intervention group: received intervention in an outpatient convalescence setting affiliated to the Maastricht University Medical Centre and a community gym, in groups of nine to 10 patients, by a trained and experienced multidisciplinary team. The intervention was designed as a two-phase group. In phase 1, sociotherapy included education, was based on transactional analysis and aimed to increase social behaviour strategies and social support. Sociotherapy was given twice a week at the start and at the end of the week. Physical therapy was given twice a week and comprised aerobic exercise, strength training of the arms and legs, different forms of relaxation, and exercises. Physical therapy was scheduled based on the individual patient's results on the 6-min walk test, the 3-min step test and on 3 min working with the shoulder press measured by the physical therapist at the start of the program. If necessary, instruction and support by an occupational therapist could take part of the physical therapy. Psychotherapy was given once a week and consisted of general information about fibromyalgia and pain mechanisms. Creative arts therapy was given once a week and focused on the opportunity to express feelings by visual arts instead of verbal expressions. The purpose of phase 2 meetings was to repeat the key messages about coping in order to preserve the behavioural change achieved in phase 1. Phase 1 consisted of a 12-week course, three half days per week, with two therapy sessions of 1.5-hour duration per day. Phase 2 was an aftercare program and consisted of five meetings, scheduled over a period of nine months. In addition to these meetings, a maximum of seven individual therapy sessions with one of the therapists could be scheduled if considered necessary by the therapist and the patient. Seven patients did not attend more than 70% of the scheduled sessions.

Healthcare costs: contacts with general practitioners, medical specialists (e.g. rheumatologists, orthopaedists), physical therapists and other paramedical therapists (e.g. psychotherapists), medication, assistive devices, and intervention costs.

Patient and family costs: professional home help per week received, participation in different types of health activities, over the counter medications, help from spouses, other relatives or paid household help per week, and prepared meals used.

Costs were measured retrospectively using a two-monthly cost questionnaire.

Aerobic exercise group: received 12-week course given twice a week in a community gym in groups of nine to 10 patients, provided by a trained physical therapist. Every session started with a 10-min warm-up, comprising aerobic exercise and stretching, followed by an aerobic part for 30 minutes. The low intensity aerobic part aimed to reach 55–64 % of the predicted maximum heart rate. Then, resistance training was applied during 15 min to strengthen major muscle groups. During the course, the intensity of the resistance training increased in weights, frequency, and time. Finally, every session was finished with a 5-min cool down. Participants received a digital video disc presenting exercises to do at home once a week. Only eight patients attended more than 70% of the scheduled sessions.

*Usual care group*: received individual care as usual that comprised at least education about fibromyalgia and lifestyle advice but could also include a diversity of other treatments such as physical therapy, additional counselling by the rheumatology nurse or social support. One or two consultations were offered by a rheumatologist or a specialised rheumatology nurse.

Luciano et al., 2017[25]

Acceptance and commitment therapy group: received eight 2.5-hour sessions in groups ranging from 10 to 15 patients, provided by an experienced clinical psychologist trained in acceptance and commitment therapy and group management, and with clinical experience treating patients with fibromyalgia. The sessions of the structured intervention covered specific exercises and topics within the context of acceptance and commitment therapy practice and training, including various types of formal mindfulness practice. All group sessions included a 15-min break to mitigate fatigue. Patients were asked to commit to daily homework assignments of 15 to 30 minutes. Only occasional analgesics were permitted in this group.

Healthcare costs: medication use, service receipt, including emergency services (total visits), general medical inpatient hospital admissions (total days), and outpatient healthcare services (total visits to general practitioner, nurse, social worker, psychologist, and other community health care professionals), diagnostic tests and cost of the staff

Recommended pharmacological treatment group: individual treatment with pregabalin (300-600 mg/day), duloxetine (60-120 mg/d) for patients who fulfilled the criteria for major depression, and other complementary pharmacological treatments, such as analgesics, benzodiazepines, and hypnotics, according to clinical guidelines, was prescribed by general practitioners, who were provided with the Spanish Consensus for the Treatment of Fibromyalgia, and a 2-hour information session for the treatment of patients with fibromyalgia. Two of the authors with experience in treating patients with fibromyalgia reviewed the medical records to confirm that the treatment was administered according to the aforementioned clinical guidelines, and the general practitioners were informed when any deviation was observed. Waiting list group: patients received no active treatment, just usual care, over the study period and were offered their preferred intervention at the conclusion of the randomized controlled trial.

running acceptance and commitment therapy intervention.

Lost productivity costs: days in sick leave.
Costs were measured using the Client
Service Receipt Inventory Spanish
version.

Hedman-Lagerlof et al., 2019[14] Internet-delivery exposure therapy group: treatment was administered online by a secure web platform for 10 weeks. Treatment progress was closely monitored by four licensed psychologists and two masters-level psychology students who were in their final year of training. In the first weeks of treatment, participants identified their personal avoidance behaviours in an online behaviour diary, which was then used to design individually tailored exposure exercises. The content was primarily text-based and divided into eight parts to which the participant gained gradual access by completing homework assignments. Initially, participants learned about the role of avoidance behaviours. The next step in the treatment protocol was psychoeducation about exposure. After the psychoeducation and planning phase, the focus of the treatment was exposure. The last part of the treatment consisted of a relapse

Healthcare costs: healthcare consumption
(e.g., visits to a general practitioner or specialist doctor), medication
consumption and costs of the intervention.

Patient and family costs: healthenhancing activities (e.g., visits to massage therapist) and reduced work capacity in the domestic realm.

Lost productivity costs: days of sick leave and reduced work capacity.

prevention program, including an intervention on life values. Therapists responded to messages on the platform within 24 hours on weekdays. If a participant had been inactive for four days, the therapist sent a text message via the platform or called the participant. Throughout the treatment, scheduled mindfulness practices were used as a way to facilitate exposure, i.e., to stay in the pain experience and refrain from distraction. Participants had regular (about one to three times/week) contact with the therapist through asynchronous text messages. The total mean therapist time was 175 minutes (SD=127) and average number of completed modules was 5.7 (SD = 2.4) out of eight.

Waiting list control group: received no treatment during the first 10 weeks. After that, the

Costs were measured using the Trimbos and Institute of Medical Technology
Assessment Cost Questionnaire for Psychiatry.

## Pérez-Aranda et al., 2019[35]

participants crossed over to treatment.

Mindfulness-based stress reduction added to treatment-as-usual group: received intervention in groups of approximately 15 patients per group, provided by a properly trained mindfulness-based stress reduction instructor for eight weekly 2-hour sessions with an optional half-day of silent retreat (6-hour session between weeks 6 and 7). The intervention was based on structured training in mindfulness to help patients to relate to their physical and psychological conditions in more accepting and non-judgemental ways, using the protocol developed at the University of Massachusetts Medical School. The book Con rumbo propio and audiotapes were provided to the patients to facilitate practice at home, which was recorded in a practice log. Adherence rate was of 56%.

FibroQoL added to treatment-as-usual group: received intervention in groups of 15 patients per group, for eight weekly 2-hour sessions, provided by one or two members of the FibroQoL team, which was composed by two psychologists (one of which oversaw the four sessions of

Healthcare costs: medication, service receipt (total visits to emergency services, total days of general inpatient hospital admissions, number of diagnostic tests administered, and total visits to general practitioner, nurse, social worker, psychologist, psychiatrist, group psychotherapy, and other community health care professionals) and costs of the interventions.

Lost productivity costs: days on sick leave.

training in self-hypnosis), three family physicians, and a rheumatologist. Four sessions of psychoeducation in which patients received updated information about pathophysiology, diagnosis, and management of fibromyalgia symptoms, and another four sessions of training in relaxation and self-hypnosis through different techniques with goals to generate a state of deep relaxation, achieve control over the body and pain, and imagine one's life in the future without pain were offered. Audiotapes were provided to the patients to facilitate practice at home, and the Beginner's Guide to Fibromyalgia was also provided for giving updated information about fibromyalgia. Adherence rate was of 65%.

Treatment-as-usual group: patients received no active treatment over the study period but

Costs were measured using The Client Service Receipt Inventory Spanish Version.

# D'Amico et al., 2020[8]

Attachment-based compassion therapy added to treatment-as-usual: received intervention in groups of up to 12 participants, provided by a psychologist with accredited experience and a general practitioner for eight weekly 2-hour sessions plus three booster monthly sessions. The intervention included formal practices of mindfulness and visualizations based on self-compassion and the attachment style that was generated in childhood. The program included daily homework assignments that took approximately 15 to 20 minutes to complete. Treatment as usual included pharmacological treatment as the frontline option. Additionally, the patient could be referred to another specialist as required. 83% of the participants attended six or more interventions sessions.

continued their regular pattern of medication, if any.

Relaxation added to treatment-as-usual: received intervention in groups of up to 12 participants, provided by a psychologist with experience on relaxation training and a general practitioner for eight weekly 2-hour sessions plus three booster sessions after completing the

Healthcare costs: medication, total visits to emergency services, total days of general medical inpatient hospital admissions, outpatient healthcare services (total visits to general practitioner, nurse, social worker, psychologist, among others), costs of the staff running the interventions, and diagnostic services. Costs were measured using the Client Service Receipt Inventory.

eight sessions. Participants received a low-intensity and non-specific intervention that included some relaxation techniques such as imagery, progressive muscle relaxation, autogenic training, and breathing. The program included daily homework assignments that took approximately 15 to 20 minutes to complete. Additionally, the patients received the same treatment as usual of the other group. 95% of the participants attended six or more sessions.

EMG: electromyography, SD: standard deviation

<sup>a</sup>Over the counter medications were considered as healthcare costs to maintain fidelity with the results of the study.