

# Appendix A: Literature search strategies

## Contents

<b>Introduction</b>	<b>Search methodology</b>
<b>Section A.1</b>	<b>Standard population search strategy</b> This population was used for all search questions unless stated
<b>Section A.2</b>	<b>Study filter terms</b>
A.2.1	Systematic reviews (SRs)
A.2.2	Randomized controlled trials (RCTs)
A.2.3	Observational studies
A.2.4	Qualitative studies
A.2.5	Health economic studies
A.2.6	Quality of life studies
<b>Section A.3</b>	<b>Searches for specific questions with intervention</b> (and population where different from A.1)
A.3.1	Omega 3
A.3.2	Fish diet
A.3.3	Cardiac rehabilitation: interventions
A.3.4	Cardiac rehabilitation: barriers
A.3.5	ACEi
A.3.6	ACEi initiation
A.3.7	ACEi titration
A.3.8	Clopidogrel
A.3.9	Antiplatelets
A.3.10	Anticoagulants
A.3.11	Beta blockers
<b>Section A.4</b>	<b>Economics searches</b>
A.4.1	Economics search
A.4.2	Quality of life search

Search strategies used for the myocardial infarction: secondary prevention guideline are outlined below and were run in accordance with the methodology in the NICE Guidelines Manual 2009.<sup>{NICE2009}</sup> All searches were run up to 25 March 2013 unless otherwise stated. Any studies added to the databases after this date were not included unless specifically stated in the text. Where possible searches were limited to retrieve material published in English.

Searches for the **clinical reviews** were run in Medline (OVID), Embase (OVID) and the Cochrane Library (Wiley). Additional searches were run in CINAHL (EBSCOHost), AMED (Ovid) and PsychInfo (Ovid) for some questions. Usually, searches were constructed in the following way:

- A PICO format was used for **intervention** searches where population (P) terms were combined with intervention (I) and sometimes comparison (C) terms. An intervention can be a drug,

a procedure or a diagnostic test. Outcomes (O) are rarely used in search strategies for interventions. Search filters were also added to the search where appropriate.

- A PEO format was used for **prognosis** searches where population (P) terms were combined with exposure (E) terms and sometimes outcomes (O). Search filters were added to the search where appropriate.

Searches for the **health economic reviews** were run in Medline (Ovid), Embase (Ovid), the NHS Economic Evaluations Database (NHS EED), the Health Technology Assessment (HTA) database and the Health Economic Evaluation Database (HEED). HTA and NHS EED searches were carried out via the Centre for Reviews and Dissemination (CRD) interface. Searches in NHS EED and HEED were constructed only using population terms. For Medline and Embase an economic filter (instead of a study type filter) was added to the same clinical search strategy.

## A.1 Population search strategies

### Medline search terms

1	acute coronary syndrome/
2	exp myocardial infarction/
3	coronary thrombosis/
4	heart arrest/
5	(acute coronary adj2 syndrome*).ti,ab.
6	((myocardial or heart) adj infarct*).ti,ab.
7	(heart adj (attack* or event*)).ti,ab.
8	((heart or cardiac) adj arrest*).ti,ab.
9	(coronary adj2 thrombosis).ti,ab.
1	(stemi or st-segment or st segment or st-elevation or st elevation).ti,ab.
1	"non-st-segment elevation".ti,ab.
1	(non-stemi or nstemi or nonstemi).ti,ab.
1	"q wave myocardial infarction".ti,ab.
1	nste-acs.ti,ab.
1	(subendocardial adj3 infarct*).ti,ab.
1	or/1-15
1	letter/
1	editorial/
1	news/
2	exp historical article/
2	anecdotes as topic/

2	comment/
2	case report/
2	(letter or comment*).ti.
2	or/17-24
2	randomized controlled trial/ or random*.ti,ab.
2	25 not 26
2	animals/ not humans/
2	animals, laboratory/
3	exp animal experiment/
3	exp animal model/
3	exp rodentia/
3	(rat or rats or mouse or mice).ti.
3	or/27-33
3	16 not 34

#### Embase search terms

1	acute coronary syndrome/
2	exp heart infarction/
3	heart arrest/
4	exp coronary artery thrombosis/
5	st segment elevation/
6	st segment elevation myocardial infarction/
7	non st segment elevation acute coronary syndrome/
8	q wave/
9	(acute coronary adj2 syndrome*).ti,ab.
1	((myocardial or heart) adj infarct*).ti,ab.
1	(heart adj (attack* or event*)).ti,ab.
1	((heart or cardiac) adj arrest*).ti,ab.
1	(coronary adj2 thrombosis).ti,ab.
1	(stemi or st-segment or st segment or st-elevation or st elevation).ti,ab.
1	"non-st-segment elevation".ti,ab.

1	(non-stemi or nstemi or nonstemi).ti,ab.
1	"q wave myocardial infarction".ti,ab.
1	nste-acs.ti,ab.
1	(subendocardial adj3 infarct*).ti,ab.
2	or/1-19
2	letter.pt. or letter/
2	note.pt.
2	editorial.pt.
2	case report/ or case study/
2	(letter or comment*).ti.
2	or/21-25
2	randomized controlled trial/ or random*.ti,ab.
2	26 not 27
2	animal/ not human/
3	nonhuman/
3	exp animal experiment/
3	exp experimental animal/
3	animal model/
3	exp rodent/
3	(rat or rats or mouse or mice).ti.
3	or/28-35
3	20 not 36

#### **Cochrane search terms**

#	MeSH descriptor Acute Coronary Syndrome, this term only
#	MeSH descriptor Myocardial Infarction explode all trees

#	MeSH descriptor Coronary Thrombosis, this term only
#	MeSH descriptor Heart Arrest, this term only
#	(coronary NEAR/2 thrombos*):ti,ab
#	((myocardial or heart) NEXT infarct*):ti,ab
#	(heart NEXT (attack* or event*)):ti,ab
#	((heart or cardiac) NEXT arrest*):ti,ab
#	(stemi or st-segment or (st segment) or st-elevation or (st elevation)):ti,ab
#	"non-st-segment elevation":ti,ab
#	(non-stemi or nstemi or nonstemi):ti,ab
#	(Q NEXT wave NEXT myocardial NEXT infarction):ti,ab
#	nste-acs:ti,ab
#	(subendocardial NEAR/3 infarct*):ti,ab
#	(acute NEXT coronary NEAR/2 syndrome*):ti,ab
#	(#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)

#### AMED search terms

1	cardiovascular disease/ or coronary disease/ or myocardial infarction/
2	heart disease/ or heart arrest/
3	(acute coronary adj2 syndrome*).ti,ab.
4	((myocardial or heart) adj infarct*).ti,ab.
5	(heart adj attack*).ti,ab.
6	((heart or cardiac) adj (arrest* or event*)).ti,ab.
7	(coronary adj2 thrombosis).ti,ab.
8	(stemi or st-segment or st segment or st-elevation or st elevation).ti,ab.
9	non-st-segment elevation.ti,ab.
1	(non-stemi or nstemi or nonstemi).ti,ab.
1	q wave myocardial infarction.ti,ab.
1	nste-acs.ti,ab.

1	(subendocardial adj3 infarct*).ti,ab.
1	or/1-13

#### CINAHL search terms

S	(MH "Acute Coronary Syndrome") OR (MH "Angina Pectoris+") OR (MH "Myocardial Infarction+") OR (MH "Coronary Thrombosis") OR (MH "Heart Arrest")
S	acute coronary n2 syndrome* OR heart n1 attack* OR coronary n2 thrombosis
S	((myocardial or heart) n1 infarct*)
S	((heart or cardiac) n1 (arrest* or event*))
S	(stemi or st-segment or st segment or st-elevation or st elevation)
S	non-st-segment elevation or non-stemi or nstemi or nonstemi
S	q wave myocardial infarction or nste-acs or subendocardial n3 infarct*
S	S1 or S2 or S3 or S4 or S5 or S6 or S7
S	PT anecdote or PT audiovisual or PT bibliography or PT biography or PT book or PT book review or PT brief item or PT cartoon or PT commentary or PT computer program or PT editorial or PT games or PT glossary or PT historical material or PT interview or PT letter or PT listservs or PT masters thesis or PT obituary or PT pamphlet or PT pamphlet chapter or PT pictorial or PT poetry or PT proceedings or PT "questions and answers" or PT response or PT software or PT teaching materials or PT website
S	S8 NOT S9

#### PsychInfo search terms

1	exp heart disorders/
2	(acute coronary adj2 syndrome*).ti,ab.
3	((myocardial or heart) adj infarct*).ti,ab.
4	(heart adj attack*).ti,ab.
5	((heart or cardiac) adj (arrest* or event*)).ti,ab.
6	(coronary adj2 thrombosis).ti,ab.
7	(stemi or st-segment or st segment or st-elevation or st elevation).ti,ab.
8	"non-st-segment elevation".ti,ab.
9	(non-stemi or nstemi or nonstemi).ti,ab.
1	"q wave myocardial infarction".ti,ab.
1	nste-acs.ti,ab.
1	(subendocardial adj3 infarct*).ti,ab.
1	or/1-12

--	--

## A.2 Study filter search terms

### A.2.1 Systematic reviews (SRs) search terms

#### Medline search terms

1	meta-analysis/
2	meta-analysis as topic/
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic* or evidence*) adj2 (review* or overview*)).ti,ab.
5	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
6	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
7	(search* adj4 literature).ab.
8	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
9	cochrane.jw.
1	((indirect or mixed) adj2 comparison*).ti,ab.
1	or/1-10

#### Embase search terms

1	systematic review/
2	meta-analysis/
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic or evidence) adj2 (review* or overview*)).ti,ab.
5	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
6	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
7	(search* adj4 literature).ab.
8	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
9	((pool* or combined) adj2 (data or trials or studies or results)).ab.
1	cochrane.jw.
1	((indirect or mixed) adj2 comparison*).ti,ab.
1	or/1-11

### A.2.2 Randomised controlled studies (RCTs) search terms

#### Medline search terms

1	randomized controlled trial.pt.
2	controlled clinical trial.pt.

3	randomi#ed.ab.
4	placebo.ab.
5	randomly.ab.
6	clinical trials as topic.sh.
7	trial.ti.
8	or/1-7

#### Embase search terms

1	random*.ti,ab.
2	factorial*.ti,ab.
3	(crossover* or cross over*).ti,ab.
4	((doubl* or singl*) adj blind*).ti,ab.
5	(assign* or allocat* or volunteer* or placebo*).ti,ab.
6	crossover procedure/
7	single blind procedure/
8	randomized controlled trial/
9	double blind procedure/
1	or/1-9

### A.2.3 Observational studies search terms

#### Medline search terms

1	epidemiologic studies/
2	exp case control studies/
3	exp cohort studies/
4	cross-sectional studies/
5	case control.ti,ab.
6	(cohort adj (study or studies or analys*)).ti,ab.
7	((follow up or observational or uncontrolled or non randomi#ed or nonrandomi#ed or epidemiologic*) adj (study or studies)).ti,ab.
8	((longitudinal or retrospective or prospective or cross sectional) and (study or studies or review or analys* or cohort*)).ti,ab.
9	or/1-8

#### Embase search terms

1	clinical study/
2	exp case control study/
3	family study/
4	longitudinal study/
5	retrospective study/
6	prospective study/
7	cross-sectional study/
8	cohort analysis/
9	follow-up/
1	cohort*.ti,ab.
1	9 and 10

1	case control.ti,ab.
1	(cohort adj (study or studies or analys*)).ti,ab.
1	((follow up or observational or uncontrolled or non randomi#ed or nonrandomi#ed or epidemiologic*) adj (study or studies)).ti,ab.
1	((longitudinal or retrospective or prospective or cross sectional) and (study or studies or review or analys* or cohort*)).ti,ab.
1	or/1-8,11-15

#### A.2.4 Qualitative search terms

##### Medline search terms

1	qualitative research/
2	exp interviews as topic/
3	exp questionnaires/
4	health care surveys/
5	(qualitative or interview* or focus group* or theme* or questionnaire* or survey*).ti,ab.
6	or/1-5

##### Embase search terms

1	qualitative research/
2	exp interview/
3	exp questionnaire/
4	health care survey/
5	(qualitative or interview* or focus group* or theme* or questionnaire* or survey*).ti,ab.
6	or/1-5

##### CINAHL search terms

S	qualitative or interview* or focus group* or theme* or questionnaire* or survey*
S	(MH "Questionnaires+") OR (MH "Qualitative Validity+") OR (MH "Qualitative Studies+")
S	(MH "Interviews+") OR (MH "Focus Groups") OR (MH "Surveys")
S	S1 or S2 or S3

##### PsychInfo search terms

1	qualitative research/
2	exp interviews/ or interviewing/ or questioning/
3	exp questionnaires/ or exp surveys/
4	(qualitative or interview* or focus group* or theme* or questionnaire* or survey*).ti,ab.
5	or/1-4

## A.2.5 Health economic search terms

### Medline search terms

1	economics/
2	value of life/
3	exp "costs and cost analysis"/
4	exp economics, hospital/
5	exp economics, medical/
6	economics, nursing/
7	economics, pharmaceutical/
8	exp "fees and charges"/
9	exp budgets/
1	budget*.ti,ab.
1	cost*.ti.
1	(economic* or pharmaco?economic*).ti.
1	(price* or pricing*).ti,ab.
1	(cost* adj2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*)).ab.
1	(financ* or fee or fees).ti,ab.
1	(value adj2 (money or monetary)).ti,ab.
1	or/1-16

### Embase search terms

1	*health economics/
2	exp *economic evaluation/
3	exp *health care cost/
4	exp *fee/
5	budget/
6	funding/
7	budget*.ti,ab.
8	cost*.ti.
9	(economic* or pharmaco?economic*).ti.
1	(price* or pricing*).ti,ab.
1	(cost* adj2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*)).ab.
1	(financ* or fee or fees).ti,ab.
1	(value adj2 (money or monetary)).ti,ab.
1	or/1-13

## A.2.6 Quality of life search terms

### Medline search terms

1	quality-adjusted life years/
2	sickness impact profile/
3	(quality adj2 (wellbeing or well being)).ti,ab.
4	sickness impact profile.ti,ab.
5	disability adjusted life.ti,ab.
6	(qal* or qtime* or qwb* or daly*).ti,ab.
7	(euroqol* or eq5d* or eq 5*).ti,ab.
8	(qol* or hql* or hqol* or h qol* or hrqol* or hr qol*).ti,ab.
9	(health utility* or utility score* or disutilit* or utility value*).ti,ab.
1	(hui or hui1 or hui2 or hui3).ti,ab.
1	(health* year* equivalent* or hye or hyes).ti,ab.
1	discrete choice*.ti,ab.
1	rosser.ti,ab.
1	(willingness to pay or time tradeoff or time trade off or tto or standard gamble*).ti,ab.
1	(sf36* or sf 36* or short form 36* or shortform 36* or shortform36*).ti,ab.
1	(sf20 or sf 20 or short form 20 or shortform 20 or shortform20).ti,ab.
1	(sf12* or sf 12* or short form 12* or shortform 12* or shortform12*).ti,ab.
1	(sf8* or sf 8* or short form 8* or shortform 8* or shortform8*).ti,ab.
1	(sf6* or sf 6* or short form 6* or shortform 6* or shortform6*).ti,ab.
2	or/1-19

### Embase search terms

1	quality adjusted life year/
2	"quality of life index"/
3	short form 12/ or short form 20/ or short form 36/ or short form 8/
4	sickness impact profile/
5	(quality adj2 (wellbeing or well being)).ti,ab.
6	sickness impact profile.ti,ab.
7	disability adjusted life.ti,ab.
8	(qal* or qtime* or qwb* or daly*).ti,ab.
9	(euroqol* or eq5d* or eq 5*).ti,ab.
1	(qol* or hql* or hqol* or h qol* or hrqol* or hr qol*).ti,ab.
1	(health utility* or utility score* or disutilit* or utility value*).ti,ab.

1	(hui or hui1 or hui2 or hui3).ti,ab.
1	(health* year* equivalent* or hye or hyes).ti,ab.
1	discrete choice*.ti,ab.
1	rosser.ti,ab.
1	(willingness to pay or time tradeoff or time trade off or tto or standard gamble*).ti,ab.
1	(sf36* or sf 36* or short form 36* or shortform 36* or shortform36*).ti,ab.
1	(sf20 or sf 20 or short form 20 or shortform 20 or shortform20).ti,ab.
1	(sf12* or sf 12* or short form 12* or shortform 12* or shortform12*).ti,ab.
2	(sf8* or sf 8* or short form 8* or shortform 8* or shortform8*).ti,ab.
2	(sf6* or sf 6* or short form 6* or shortform 6* or shortform6*).ti,ab.
2	or/1-21

## A.3 Searches by specific questions

### A.3.1 Omega 3

**What is the clinical and cost effectiveness of omega 3 fatty acids supplementation in all patients with myocardial infarction?**

Search constructed by combining the columns in the following table using the AND Boolean operator

Population	Intervention / exposure	Comparison	Study filter used	Date parameters
Myocardial infarction	Omega 3		SRs RCTs Observational	2006 – 25 March 2013

#### Omega 3 search terms

##### Medline search terms

1	fish oils/
2	cod liver oil/
3	plant oils/
4	flax/
5	brassica rapa/
6	perilla/
7	linseed oil/
8	alpha-linolenic acid/
9	docosahexaenoic acids/
1	eicosapentanoic acid/

1	triglycerides/
1	fatty acids, omega-3/
1	fatty acids, unsaturated/
1	(a-linolenic acid* or ala or alpha-linolenic acid* or linolenate or linolenic acid*).ti,ab.
1	(eicosapentaenoic acid* or epa or timnodonic acid* or eicosapentaenoate or icosapentanoate).ti,ab.
1	(docosahexaenoic acid* or dha or docosahexaenoate).ti,ab.
1	(docosapentaenoic acid* or dpa or docosapentaenoate).ti,ab.
1	((n-3 or n3) adj fatty acid*).ti,ab.
1	(omega-3 or omega3).ti,ab.
2	(omacor or maxepa).ti,ab.
2	(pufa or poluyunsaturated fa*).ti,ab.
2	((plant or algal or cod liver) adj oil*).ti,ab.
2	(flaxseed or linseed or rapeseed or canola or perilla or flax or linum).ti,ab.
2	((marine or fish) adj2 (lipid* or oil* or triglyceride*)).ti,ab.
2	or/1-24

#### Embase search terms

1	fish oil/
2	cod liver oil/
3	vegetable oil/
4	flax/ or linseed oil/
5	rapeseed oil/
6	perilla oil/
7	linolenic acid/
8	docosahexaenoic acid/
9	icosapentaenoic acid/
1	docosapentaenoic acid/
1	triacylglycerol/
1	omega 3 fatty acid/
1	polyunsaturated fatty acid/

1	(a-linolenic acid* or ala or alpha-linolenic acid* or linolenate or linolenic acid*).ti,ab.
1	(eicosapentaenoic acid* or epa or timnodonic acid* or eicosapentaenoate or icosapentanoate).ti,ab.
1	(docosahexaenoic acid* or dha or docosahexaenoate).ti,ab.
1	(docosapentaenoic acid* or dpa or docosapentaenoate).ti,ab.
1	((n-3 or n3) adj fatty acid*).ti,ab.
1	(omega-3 or omega3).ti,ab.
2	(omacor or maxepa).ti,ab.
2	(pufa or poluyunsaturated fa*).ti,ab.
2	((plant or algal or cod liver) adj oil*).ti,ab.
2	(flaxseed or linseed or rapeseed or canola or perilla or flax or linum).ti,ab.
2	((marine or fish) adj2 (lipid* or oil* or triglyceride*)).ti,ab.
2	or/1-24

#### Cochrane search terms

#	MeSH descriptor Fish Oils explode all trees
#	MeSH descriptor Dietary Fats, Unsaturated, this term only
#	MeSH descriptor Triglycerides, this term only
#	MeSH descriptor Plant Oils, this term only
#	MeSH descriptor Flax, this term only
#	MeSH descriptor Brassica rapa, this term only
#	MeSH descriptor Perilla, this term only
#	MeSH descriptor Linseed Oil, this term only
#	(a-Linolenic acid* or ala or alpha-linolenic acid* or linolenate or linolenic acid*).ti,ab
#	(eicosapentaenoic acid* or epa or timnodonic acid* or eicosapentaenoate or icosapentanoate):ti,ab
#	(docosahexaenoic acid* or dha or docosahexaenoate):ti,ab
#	(docosapentaenoic acid* or dpa or docosapentaenoate):ti,ab

#	((n-3 or n3) NEXT (fatty acid*)):ti,ab
#	(omega-3 or omega3):ti,ab
#	(omacor or maxepa):ti,ab
#	(pufa or poluyunsaturated fa*):ti,ab
#	((plant or algal or cod liver) NEXT oil*):ti,ab
#	(flaxseed or linseed or rapeseed or canola or perilla or flax or linum):ti,ab
#	((marine or fish) NEAR/2 (lipid* or oil* or triglyceride*)):ti,ab
#	(#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 OR #17 OR #18 OR #19)

#### AMED search terms

1	fish oils/
2	plant oils/
3	fatty acids/
4	triglycerides/
5	(a-linolenic acid* or ala or alpha-linolenic acid* or linolenate or linolenic acid*).ti,ab.
6	(eicosapentaenoic acid* or epa or timnodonic acid* or eicosapentaenoate or icosapentanoate).ti,ab.
7	(docosahexaenoic acid* or dha or docosahexaenoate).ti,ab.
8	(docosapentaenoic acid* or dpa or docosapentaenoate).ti,ab.
9	((n-3 or n3) adj fatty acid*).ti,ab.
1	(omega-3 or omega3).ti,ab.
1	(omacor or maxepa).ti,ab.
1	(pufa or poluyunsaturated fa*).ti,ab.
1	((plant or algal or cod liver) adj oil*).ti,ab.
1	(flaxseed or linseed or rapeseed or canola or perilla or flax or linum).ti,ab.
1	((marine or fish) adj2 (lipid* or oil* or triglyceride*)).ti,ab.
1	or/1-15

--	--

### A.3.2 Fish diet

**What is the clinical and cost effectiveness of an oily fish diet in all patients with myocardial infarction?**

Search constructed by combining the columns in the following table using the AND Boolean operator

Population	Intervention / exposure	Comparison	Study filter used	Date parameters
Myocardial infarction	Fish		SRs RCTs Observational	2006 – 25 March 2013

#### Fish search terms

##### Medline search terms

1	exp fishes/
2	exp seafood/
3	exp crustacea/
4	diet, mediterranean/
5	fish*.ti,ab.
6	crab*.ti,ab.
7	(mediterranean adj2 diet*).ti,ab.
8	or/1-7

##### Embase search terms

1	exp fish/
2	exp crustacea/
3	seafood/
4	shellfish/
5	mediterranean diet/
6	fish*.ti,ab.
7	crab*.ti,ab.
8	(mediterranean adj2 diet*).ti,ab.
9	or/1-8

##### Cochrane search terms

#	MeSH descriptor: [Fishes] explode all trees
#	MeSH descriptor: [Seafood] explode all trees
#	MeSH descriptor: [Crustacea] explode all trees
#	MeSH descriptor: [Diet, Mediterranean] this term only
#	fish*:ti,ab
#	crab*:ti,ab

#	(mediterranean near/2 diet*):ti,ab
#	#1 or #2 or #3 or #4 or #5 or #6 or #7

#### AMED search terms

1	fish*.ti,ab.
2	crab*.ti,ab.
3	(mediterranean adj2 diet*).ti,ab.
4	diet mediterranean/
5	fishes/
6	or/1-5

### A.3.3 Cardiac rehabilitation: interventions

Searches for the following question were run as two searches:

**Which interventions designed to increase engagement in and/or adherence to cardiac rehabilitation programs are effective and cost effective in people who have had an MI?**

Search constructed by combining the columns in the following table using the AND Boolean operator

Population	Intervention / exposure	Comparison	Study filter used	Date parameters
Myocardial infarction	Cardiac rehabilitation adherence		SRs RCTs Observational	2006 – 25 March 2013

#### Cardiac rehabilitation adherence search terms

##### Medline search terms

1	rehabilitation centers/ or exp rehabilitation/ or rehabilitation nursing/
2	exercise therapy/
3	"Recovery of Function"/
4	rehabilitat*.ti,ab.
5	((exercise* or fitness) adj3 (therap* or training or program* or treatment or intervent*).ti,ab.
6	managed care programs/
7	((multifactor* or multifacet* or managed care) adj program*).ti,ab.
8	patient education as topic/
9	health education/
1	((patient* or health) adj2 educat*).ti,ab.
1	counseling/
1	counsel*.ti,ab.
1	exp psychotherapy/
1	(psychotherap* or psychosocial*).ti,ab.
1	(psycholog* adj2 intervent*).ti,ab.

1	(behavi* adj3 (modify or modificat* or therap* or change)).ti,ab.
1	(Cognitive adj2 therap*).ti,ab.
1	cbt.ti,ab.
1	((lifestyle or life-style) adj3 (intervent* or program* or treatment*)).ti,ab.
2	self care/
2	(self adj3 (manage* or care or motivat*)).ti,ab.
2	or/1-21
2	health services accessibility/
2	patient compliance/
2	"referral and consultation"/
2	patient satisfaction/
2	patient participation/
2	motivation/
2	(enrollment or enrolment or enrolling or enrolling).ti,ab.
3	participat*.ti,ab.
3	motivat*.ti,ab.
3	uptake.ti,ab.
3	referral.ti,ab.
3	(complan* or adheren* or non-complan* or noncomplan* or non adheren * or nonadheren*).ti,ab.
3	(attend* or non-attend*).ti,ab.
3	barrier*.ti,ab.
3	(engaging or engagement).ti,ab.
3	or/23-37
3	22 and 38

**Embase search terms**

1	exp *rehabilitation/ or *rehabilitation care/ or *rehabilitation center/
2	*rehabilitation medicine/ or rehabilitation nursing/
3	*kinesiotherapy/ or exercise recovery/ or movement therapy/
4	*convalescence/
5	rehabilitat*.ti,ab.
6	((exercise* or fitness) adj3 (therap* or training or program* or treatment or intervent*)).ti,ab.
7	((multifactor* or multifacet* or managed care) adj program*).ti,ab.
8	*health education/ or *patient education/
9	((patient* or health) adj2 educat*).ti,ab.
1	*counseling/ or *patient counseling/ or patient guidance/
1	counsel*.ti,ab.
1	exp *psychotherapy/
1	(psychotherap* or psychosocial*).ti,ab.
1	(psycholog* adj2 intervent*).ti,ab.
1	(behavi* adj3 (modify or modificat* or therap* or change)).ti,ab.
1	(cognitive adj2 therap*).ti,ab.
1	cbt.ti,ab.
1	((lifestyle or life-style) adj3 (intervent* or program* or treatment*)).ti,ab.
1	*self care/
2	(self adj3 (manage* or care or motivat*)).ti,ab.
2	or/1-20
2	exp *telehealth/ or *health care delivery/
2	exp *patient attitude/
2	*patient referral/
2	*motivation/
2	(enrollment or enrolment or enrolling or enrolling).ti,ab.
2	participat*.ti,ab.
2	motivat*.ti,ab.
2	uptake.ti,ab.

3	referral.ti,ab.
3	(compliant* or adheren* or non-compliant* or noncompliant* or non adheren * or nonadheren*).ti,ab.
3	(attend* or non-attend*).ti,ab.
3	barrier*.ti,ab.
3	(engaging or engagement).ti,ab.
3	or/22-34
3	21 and 35

### Cochrane search terms

#	MeSH descriptor Rehabilitation Centers, this term only
#	MeSH descriptor Rehabilitation explode all trees
#	MeSH descriptor Rehabilitation Nursing, this term only
#	MeSH descriptor Exercise Therapy, this term only
#	MeSH descriptor Recovery of Function, this term only
#	rehabilitat*:ti,ab
#	((exercise* or fitness) NEAR/3 (therap* or training or program* or treatment or intervent*)):ti,ab
#	MeSH descriptor Managed Care Programs, this term only
#	((multifactor* or multifacet* or managed care) NEXT program*):ti,ab
#	MeSH descriptor Patient Education as Topic, this term only
#	MeSH descriptor Health Education, this term only
#	((patient* or health) NEAR/2 educat*):ti,ab
#	MeSH descriptor Counseling, this term only
#	counsel*:ti,ab
#	MeSH descriptor Psychotherapy explode all trees

#	(psychotherap* or psychosocial*):ti,ab
#	(psycholog* NEAR/2 intervent*):ti,ab
#	(behavi* NEAR/3 (modify or modificat* or therap* or change)):ti,ab
#	(cognitive NEAR/2 therap*):ti,ab
#	cbt:ti,ab
#	((lifestyle or life-style) NEAR/3 (intervent* or program* or treatment*)):ti,ab
#	MeSH descriptor Self Care, this term only
#	(self NEAR/3 (manage* or care or motivat*)):ti,ab
#	(#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 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23)
#	MeSH descriptor Health Services Accessibility, this term only
#	MeSH descriptor Patient Compliance, this term only
#	MeSH descriptor Referral and Consultation, this term only
#	MeSH descriptor Patient Satisfaction explode all trees
#	MeSH descriptor Patient Participation, this term only
#	MeSH descriptor Motivation, this term only
#	(enrollment or enrolment or enrolling or enrolling):ti,ab
#	participat*:ti,ab
#	motivat*:ti,ab

#	uptake:ti,ab
#	referral:ti,ab
#	(complian* or adheren* or non-complian* or noncomplian* or non adheren * or nonadheren*):ti,ab
#	(attend* or non-attend*):ti,ab
#	barrier*:ti,ab
#	(engaging or engagement):ti,ab
#	(#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)
#	(#24 AND #40)

#### CINAHL search terms

S	(MH "Rehabilitation+") OR (MH "Rehabilitation Centers") OR (MH "Home Rehabilitation+") OR (MH "Rehabilitation Nursing") OR (MH "Therapeutic Exercise") OR (MH "Managed Care Programs")
S	rehabilitat*
S	((exercise* or fitness) n3 (therap* or training or program* or treatment or intervent*))
S	((multifactor* or multifacet* or managed care) n1 program*)
S	(MH "Patient Education") OR (MH "Patient Discharge Education") OR (MH "Health Education") OR (MH "Counseling") OR (MH "Psychotherapy+") OR (MH "Self Care")
S	((patient* or health) n2 educat*)
S	counsel* OR psychotherap* OR psychosocial*
S	psycholog* n2 intervent* OR cognitive n2 therap* OR cbt
S	(behavi* n3 (modify or modificat* or therap* or change))
S	((lifestyle or life-style) n3 (intervent* or program* or treatment*))
S	(self n3 (manage* or care or motivat*))

S	S1 or S2 or S3 or S4 or S5 or S6 or S7 or S8 or S9 or S10 or S11
S	(MH "Health Services Accessibility") OR (MH "Telehealth+") OR (MH "Patient Compliance") OR (MH "Referral and Consultation+") OR (MH "Patient Satisfaction") OR (MH "Consumer Participation") OR (MH "Motivational Interviewing") OR (MH "Motivation")
S	enrollment OR enrolment OR enrolling OR enrolling
S	participat* OR motivat* OR uptake OR referral
S	(complan* or adheren* or non-complan* or noncomplan* or non adheren * or nonadheren*)
S	attend* OR non-attend* OR barrier*
S	engaging OR engagement
S	S13 or S14 or S15 or S16 or S17 or S18
S	S12 and S19

Search constructed by combining the columns in the following table using the AND Boolean operator

Population	Intervention / exposure	Comparison	Study filter used	Date parameters
Cardiac rehabilitation	Adherence		SRs RCTs Observational	2006 – 25 March 2013

#### Medline search terms

1	exp heart diseases/rh [rehabilitation]
2	((cardiac or heart) adj2 rehab*).ti,ab.
3	1 or 2
4	health services accessibility/
5	patient compliance/
6	"referral and consultation"/
7	patient satisfaction/
8	patient participation/
9	motivation/
1	(enrollment or enrolment or enrolling or enrolling).ti,ab.
1	participat*.ti,ab.
1	motivat*.ti,ab.

1	uptake.ti,ab.
1	referral.ti,ab.
1	(complan* or adheren* or non-complan* or noncomplan* or non adheren* or nonadheren*).ti,ab.
1	(attend* or non-attend*).ti,ab.
1	barrier*.ti,ab.
1	(engaging or engagement).ti,ab.
1	or/4-18
2	3 and 19

#### Embase search terms

1	heart rehabilitation/
2	((cardiac or heart) adj2 rehab*).ti,ab.
3	exp *heart disease/rh [rehabilitation]
4	or/1-3
5	exp *telehealth/ or *health care delivery/
6	exp *patient attitude/
7	*patient referral/
8	*motivation/
9	(enrollment or enrolment or enrolling or enrolling).ti,ab.
1	participat*.ti,ab.
1	motivat*.ti,ab.
1	uptake.ti,ab.
1	referral.ti,ab.
1	(complan* or adheren* or non-complan* or noncomplan* or non adheren* or nonadheren*).ti,ab.
1	(attend* or non-attend*).ti,ab.
1	barrier*.ti,ab.
1	(engaging or engagement).ti,ab.
1	or/5-17
1	4 and 18

#### CINAHL search terms

S	(MH "Rehabilitation, Cardiac+") OR (MH "Heart Diseases+/RH")
S	((cardiac or heart) n2 rehab*)
S	S1 or S2
S	(MH "Health Services Accessibility") OR (MH "Telehealth+") OR (MH "Patient Compliance") OR (MH "Referral and Consultation+") OR (MH "Patient Satisfaction") OR (MH "Consumer Participation") OR (MH "Motivational Interviewing") OR (MH "Motivation")
S	enrollment OR enrolment OR enrolling OR enrolling
S	participat* OR motivat* OR uptake OR referral
S	(complan* or adheren* or non-complan* or noncomplan* or non adheren * or nonadheren*)
S	attend* OR non-attend* OR barrier*
S	engaging OR engagement
S	S4 or S5 or S6 or S7 or S8 or S9
S	S3 and S10

#### A.3.4 Cardiac rehabilitation: barriers

Searches for the following question were run as two searches:

##### **Which factors are associated with patients' uptake and adherence to cardiac rehabilitation programme (CRP) after an MI?**

Search constructed by combining the columns in the following table using the AND Boolean operator

Population	Intervention / exposure	Comparison	Study filter used	Date parameters
Myocardial infarction	Cardiac rehabilitation adherence		Qualitative	2006 – 25 March 2013

##### **Cardiac rehabilitation adherence search terms**

See cardiac rehabilitation: interventions question for cardiac rehabilitation adherence terms for Medline, Embase and CINAHL.

##### **PsychInfo search terms**

1	exp rehabilitation/ or exp rehabilitation centers/
2	exercise/ or movement therapy/
3	rehabilitat*.ti,ab.
4	((exercise* or fitness) adj3 (therap* or training or program* or treatment or intervent*).ti,ab.
5	((multifactor* or multifacet* or managed care) adj program*).ti,ab.
6	health education/ or client education/

7	((patient* or health) adj2 educat*).ti,ab.
8	counseling/ or psychotherapeutic counseling/ or rehabilitation counseling/
9	counsel*.ti,ab.
1	exp psychotherapy/
1	(psychotherap* or psychosocial*).ti,ab.
1	(psycholog* adj2 intervent*).ti,ab.
1	(behavi* adj3 (modify or modificat* or therap* or change)).ti,ab.
1	(cognitive adj2 therap*).ti,ab.
1	exp cognitive behavior therapy/ or cognitive therapy/
1	cbt.ti,ab.
1	((lifestyle or life-style) adj3 (intervent* or program* or treatment*)).ti,ab.
1	(self adj3 (manage* or care or motivat*)).ti,ab.
1	self care skills/
2	or/1-19
2	exp compliance/
2	client participation/ or treatment barriers/
2	client satisfaction/
2	motivation/ or incentives/
2	readiness to change/
2	(enrollment or enrolment or enrolling or enrolling).ti,ab.
2	participat*.ti,ab.
2	motivat*.ti,ab.
2	uptake.ti,ab.
3	referral.ti,ab.
3	(complan* or adheren* or non-complan* or noncomplan* or non adheren * or nonadheren*).ti,ab.
3	(attend* or non-attend*).ti,ab.
3	barrier*.ti,ab.

3	(engaging or engagement).ti,ab.
3	or/21-34
3	20 and 35

Search constructed by combining the columns in the following table using the AND Boolean operator

Population	Intervention / exposure	Comparison	Study filter used	Date parameters
Cardiac rehabilitation	Adherence		Qualitative	2006 – 25 March 2013

See cardiac rehabilitation: interventions question for terms for Medline, Embase and CINAHL.

#### PsychInfo search terms

1	((cardiac or heart) adj2 rehab*).ti,ab.
2	exp compliance/
3	client participation/ or treatment barriers/
4	client satisfaction/
5	motivation/ or incentives/
6	readiness to change/
7	(enrollment or enrolment or enrolling or enrolling).ti,ab.
8	participat*.ti,ab.
9	motivat*.ti,ab.
1	uptake.ti,ab.
1	referral.ti,ab.
1	(complian* or adheren* or non-complian* or noncomplian* or non adheren * or nonadheren*).ti,ab.
1	(attend* or non-attend*).ti,ab.
1	barrier*.ti,ab.
1	(engaging or engagement).ti,ab.
1	or/2-15
1	1 and 16

#### A.3.5 ACEi

Searches for the following two questions were run as one search:

**What is the clinical and cost effectiveness of adding ACE inhibitors versus placebo to improve outcome in people after an MI and is there an optimal duration?**

**What is the clinical and cost effectiveness of adding ACE inhibitors versus ARBs or in combination versus ACE inhibitors to improve outcomes in people after an MI?**

Search constructed by combining the columns in the following table using the AND Boolean operator

Population	Intervention / exposure	Comparison	Study filter used	Date parameters
Myocardial infarction	ACEi/ARB		SRs RCTs	2006 – 25 March 2013

### ACEi/ARB search terms

#### Medline search terms

1	exp angiotensin-converting enzyme inhibitors/
2	((ace or acei or ((angiotensin adj converting adj2 enzyme*) or ace or kininase)) adj2 (inhibit* or antagonist*)):ti,ab.
3	(captopril or ecopace or kaplon or capoten or co-zidocapt or capto-co or capozide or cilazapril or vascace or enalapril or ednyt or innovace or innozide or fosinopril or imidapril or tanatril or lisinopril or zestril or carace or zestoretic or moexipril or perdix or perindopril or coversyl or quinapril or quinil or accupro or accuretic or ramipril or tritace or triapin ortrandolapril or gopten or tarka):ti,ab.
4	exp angiotensin ii type 1 receptor blockers/ or angiotensin ii type 2 receptor blockers/
5	((angiotensin adj3 (receptor* adj2 (antagonist* or blocker*))) or arb or arbs):ti,ab.
6	(candesartan or amias or eprosartan or teveten or irbesartan or aprovel or coaprovel or losartan or cozaar or cozaar-comp or olmesartan or olmetec or sevikar or telmisartan or micardis or valsartan or diovan or co-diovan):ti,ab.
7	or/1-6

#### Embase search terms

1	exp *dipeptidyl carboxypeptidase inhibitor/
2	((ace or acei or ((angiotensin adj converting adj2 enzyme*) or ace or kininase)) adj2 (inhibit* or antagonist*)):ti,ab.
3	(captopril or ecopace or kaplon or capoten or co-zidocapt or capto-co or capozide or cilazapril or vascace or enalapril or ednyt or innovace or innozide or fosinopril or imidapril or tanatril or lisinopril or zestril or carace or zestoretic or moexipril or perdix or perindopril or coversyl or quinapril or quinil or accupro or accuretic or ramipril or tritace or triapin ortrandolapril or gopten or tarka):ti,ab.
4	exp *angiotensin receptor antagonist/
5	((angiotensin adj3 (receptor* adj2 (antagonist* or blocker*))) or arb or arbs):ti,ab.
6	(candesartan or amias or eprosartan or teveten or irbesartan or aprovel or coaprovel or losartan or cozaar or cozaar-comp or olmesartan or olmetec or sevikar or telmisartan or micardis or valsartan or diovan or co-diovan):ti,ab.
7	or/1-6

#### Cochrane search terms

#	MeSH descriptor Angiotensin-Converting Enzyme Inhibitors explode all trees
#	((ace or acei or ((angiotensin adj converting NEAR/2 enzyme*) or ace or kininase)) NEAR/2 (inhibit* or antagonist*)):ti,ab
#	(captopril or ecopace or kaplon or capoten or co-zidocapt or capto-co or capozide or cilazapril or vascace or enalapril or ednyt or innovace or innozide or fosinopril or imidapril or tanatril or lisinopril or zestril or carace or zestoretic or moexipril or perdix or perindopril or coversyl or quinapril or quinil or accupro or accuretic or ramipril or tritace or triapin ortrandolapril or gopten or tarka):ti,ab

#	MeSH descriptor Angiotensin Receptor Antagonists explode all trees
#	((angiotensin NEAR/3 (receptor* NEAR/2 (antagonist* or blocker*))) or arb or arbs):ti,ab
#	(candesartan or amias or eprosartan or teveten or irbesartan or aprovel or coaprovel or losartan or cozaar or cozaar-comp or olmesartan or olmetec or sevikar or telmisartan or micardis or valsartan or diovan or co-diovan):ti,ab
#	(#1 OR #2 OR #3 OR #4 OR #5 OR #6)

### A.3.6 ACEi initiation

#### Is there an optimal time for ACE inhibitors to be initiated in people who have had a MI?

Search constructed by combining the columns in the following table using the AND Boolean operator

Population	Intervention / exposure	Comparison	Study filter used	Date parameters
Myocardial infarction	ACEi AND timing of initiation		SRs RCTs	No date restriction. Search run to 25 March 2013

See ACEi question for ACEi search terms.

#### Timing of initiation search terms

##### Medline search terms

1	time factors/
2	((time or timing or early or earlier or late or later) adj2 (initiat* or start* or treat* or therap* or administ*)):ti,ab.
3	or/1-2

##### Embase search terms

1	*time/
2	therapy delay/
3	((time or timing or early or earlier or late or later) adj2 (initiat* or start* or treat* or therap* or administ*)):ti,ab.
4	or/1-3

##### Cochrane search terms

#	MeSH descriptor: [Time Factors] explode all trees
#	((time or timing or early or earlier or late or later) near/2 (initiat* or start* or treat* or therap* or administ*)):ti,ab
#	(#1 OR #2)

### A.3.7 ACEi titration

#### Is early dose titration of ACE inhibitors in hospital more clinically and cost effective than dose titration over an extended period of time in people who have had a MI?

Search constructed by combining the columns in the following table using the AND Boolean operator

Population	Intervention / exposure	Comparison	Study filter used	Date parameters
ACEi	Titration		SRs RCTs	No date restriction. Search run to 25 March 2013

See ACEi question for ACEi search terms.

### **Titration search terms**

#### **Medline search terms**

1	titrimetry/
2	(titrat* or titrimetr* or uptitrat* or up-titrat*).ti,ab.
3	or/1-2

#### **Embase search terms**

1	titrimetry/
2	(titrat* or titrimetr* or uptitrat* or up-titrat*).ti,ab.
3	or/1-2

#### **Cochrane search terms**

#	MeSH descriptor: [Titrimetry] explode all trees
#	(titrat* or titrimetr* or uptitrat* or up-titrat*).ti,ab
#	#1 or #2

## **A.3.8 Clopidogrel**

### **What is the optimal duration that clopidogrel should be continued in patients after MI?**

Search constructed by combining the columns in the following table using the AND Boolean operator

Population	Intervention / exposure	Comparison	Study filter used	Date parameters
Myocardial infarction	Clopidogrel		SRs RCTs	2006 – 25 March 2013

### **Clopidogrel search terms**

#### **Medline search terms**

1	(clopidogrel or plavix).ti,ab.
---	--------------------------------

#### **Embase search terms**

1	clopidogrel/
2	(clopidogrel or plavix).ti,ab.
3	or/1-2

#### **Cochrane search terms**

#	(clopidogrel or plavix):ti,ab
---	-------------------------------

### A.3.9 Antiplatelets

**In people with a proven MI in the past who were not initiated on dual antiplatelet therapy (clopidogrel, prasugrel or ticagrelor in combination with aspirin), should this be initiated?**

Search constructed by combining the columns in the following table using the AND Boolean operator

Population	Intervention / exposure	Comparison	Study filter used	Date parameters
Myocardial infarction	Dual antiplatelet therapy		SRs RCTs Observational	No date restriction. Search run to 25 March 2013

#### Dual antiplatelet therapy search terms

##### Medline search terms

1	aspirin/
2	(aspirin or acetylsalicylic acid).ti,ab.
3	or/1-2
4	(clopidogrel or plavix).ti,ab.
5	(ticagrelor or brilique).ti,ab.
6	(prasugrel or efient or effient or prasita).ti,ab.
7	platelet aggregation inhibitors/
8	or/4-7
9	3 and 8

##### Embase search terms

1	acetylsalicylic acid plus clopidogrel/
2	(aspirin or acetylsalicylic acid).ti,ab.
3	acetylsalicylic acid/
4	or/2-3
5	prasugrel/
6	clopidogrel/
7	ticagrelor/
8	(clopidogrel or plavix).ti,ab.
9	(ticagrelor or brilique).ti,ab.
1	(prasugrel or efient or effient or prasita).ti,ab.
1	or/5-10
1	4 and 11
1	1 or 12

##### Cochrane search terms

#	MeSH descriptor Aspirin, this term only
#	(aspirin or aacetylsalicylic acid):ti,ab
#	(#1 OR #2)

#	(clopidogrel or plavix):ti,ab
#	(ticagrelor or brilique):ti,ab
#	(prasugrel or efient or effient or prasita):ti,ab
#	MeSH descriptor Platelet Aggregation Inhibitors, this term only
#	(#4 OR #5 OR #6 OR #7)
#	(#3 AND #8)

### A.3.10 Anticoagulants

**What is the most effective and cost effective combination of antiplatelet and anticoagulant therapies for people with MI and an indication for anticoagulation?**

Search constructed by combining the columns in the following table using the AND Boolean operator

Population	Intervention / exposure	Comparison	Study filter used	Date parameters
Myocardial infarction	Anticoagulants ± antiplatelets		SRs RCTs	No date restriction. Search run to 25 March 2013

#### **Anticoagulants ± antiplatelets search terms**

##### **Medline search terms**

1	aspirin/
2	aspirin.ti,ab.
3	platelet aggregation inhibitors/
4	(clopidogrel or plavix).ti,ab.
5	(ticagrelor or brilique).ti,ab.
6	(prasugrel or efient or effient or prasita).ti,ab.
7	(antiplatelet* adj2 (dual or therap* or treat*)).ti,ab.
8	or/1-7
9	warfarin/
1	warfarin.ti,ab.
1	anticoagulants/
1	(rivaroxaban or xarelto).ti,ab.
1	(dabigatran or pradaxa).ti,ab.
1	apixaban.ti,ab.
1	or/9-14

1	(9 or 10) and (12 or 13 or 14)
1	12 and (9 or 10 or 13 or 14)
1	13 and (9 or 10 or 12 or 14)
1	14 and (9 or 10 or 12 or 13)
2	(8 and 15) or 16 or 17 or 18 or 19

#### Embase search terms

1	acetylsalicylic acid/
2	clopidogrel/
3	acetylsalicylic acid plus clopidogrel/
4	ticagrelor/
5	prasugrel/
6	antithrombotic agent/
7	aspirin.ti,ab.
8	(clopidogrel or plavix).ti,ab.
9	(ticagrelor or brilique).ti,ab.
1	(prasugrel or efient or effient or prasita).ti,ab.
1	(antiplatelet* adj2 (dual or therap* or treat*)).ti,ab.
1	or/1-11
1	warfarin/
1	warfarin.ti,ab.
1	rivaroxaban/
1	(rivaroxaban or xarelto).ti,ab.
1	dabigatran/ or dabigatran etexilate/
1	(dabigatran or pradaxa).ti,ab.
1	apixaban/
2	apixaban.ti,ab.
2	or/13-20
2	(13 or 14) and (15 or 16 or 17 or 18 or 19 or 20)
2	(15 or 16) and (13 or 14 or 17 or 18 or 19 or 20)
2	(17 or 18) and (13 or 14 or 15 or 16 or 19 or 20)

2	(19 or 20) and (13 or 14 or 15 or 16 or 17 or 18)
2	(12 and 21) or 22 or 23 or 24 or 25

### Cochrane search terms

#	MeSH descriptor Aspirin, this term only
#	MeSH descriptor Platelet Aggregation Inhibitors, this term only
#	aspirin:ti,ab
#	(clopidogrel or plavix):ti,ab
#	(ticagrelor or brilique):ti,ab
#	(prasugrel or efient or effient or prasita):ti,ab
#	(antiplatelet* NEAR/2 (dual or therap* or treat*)):ti,ab
#	(#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7)
#	MeSH descriptor Anticoagulants, this term only
#	warfarin:ti,ab
#	MeSH descriptor Warfarin, this term only
#	(rivaroxaban or xarelto):ti,ab
#	(dabigatran or pradaxa):ti,ab
#	apixaban:ti,ab
#	(#9 OR #10 OR #11 OR #12 OR #13 OR #14)
#	(#8 AND #15)
#	((#10 OR #11) AND (#12 OR #13 OR #14))
#	(#12 AND (#10 OR #11 OR #13 OR #14))

#	(#13 AND (#10 OR #11 OR #12 OR #14))
#	(#14 AND (#10 OR #11 OR #12 OR #13))
#	(#16 OR #17 OR #18 OR #19 OR #20)

### A.3.11 Beta blockers

Searches for the following two questions were run as one search:

**What is the clinical and cost effectiveness of adding a beta blocker versus placebo to improve outcome in people after a MI i) with and ii) without left ventricular dysfunction and is there an optimal duration?**

**Is there an optimal time for beta-blockers to be initiated in people who have had a MI?**

Search constructed by combining the columns in the following table using the AND Boolean operator

Population	Intervention / exposure	Comparison	Study filter used	Date parameters
Myocardial infarction	Beta blockers		SRs RCTs Observational	2006 – 25 March 2013

#### Beta blockers search terms

##### Medline search terms

1	exp adrenergic beta-antagonists/
2	(propranolol or angilol or angilol or inderal-la or half-inalderal or inderal or bedranol or prograne or slo-pro or acebutolol or sectral or atenolol or tenormin or bisoprolol or cardicor or emcor or carvedilol or eucardic or celiprolol or celectol or co-tenidone or tenoret or tenoretic or esmolol or brevibloc or labetalol or trandate or metoprolol or betaloc or lopresor or nadolol or corgard or nebivolol or nebilet or hypoloc or oxprenolol or trasicor or slow-trasicor or pindolol or visken or sotalol or beta-cardone or sotacor or timolol or betim).ti,ab.
3	(beta adj3 block*).ti,ab.
4	(b adj3 block*).ti,ab.
5	(beta adj2 antagonist*).ti,ab.
6	or/1-5

##### Embase search terms

1	exp *beta adrenergic receptor blocking agent/
2	(propranolol or angilol or angilol or inderal-la or half-inalderal or inderal or bedranol or prograne or slo-pro or acebutolol or sectral or atenolol or tenormin or bisoprolol or cardicor or emcor or carvedilol or eucardic or celiprolol or celectol or co-tenidone or tenoret or tenoretic or esmolol or brevibloc or labetalol or trandate or metoprolol or betaloc or lopresor or nadolol or corgard or nebivolol or nebilet or hypoloc or oxprenolol or trasicor or slow-trasicor or pindolol or visken or sotalol or beta-cardone or sotacor or timolol or betim).ti,ab.

3	(beta adj3 block*).ti,ab.
4	(b adj3 block*).ti,ab.
5	(beta adj2 antagonist*).ti,ab.
6	or/1-5

#### Cochrane search terms

#	MeSH descriptor Adrenergic beta-Antagonists explode all trees
#	(propranolol or angilol or angilol or inderal-la or half-inalderal or inderal or bedranol or prograne or slo-pro or acebutolol or sectral or atenolol or tenormin or bisoprolol or cardicor or emcor or carvedilol or eucardic or celiprolol or celectol or co-tenidone or tenoret or tenoretic or esmolol or brevbloc or labetalol or trandate or metoprolol or betaloc or lopesor or nadolol or corgard or nebivolol or nebilet or hypoloc or oxprenolol or trasicor or slow-trasicor or pindolol or visken or sotalol or beta-cardone or sotacor or timolol or betim):ti,ab
#	(beta NEAR/3 block*):ti,ab
#	(b NEAR/3 block*):ti,ab
#	(beta NEAR/2 antagonist*):ti,ab
#	(#1 OR #2 OR #3 OR #4 OR #5)

## A.4 Economics searches

### A.4.1 Economics search

Economic searches were conducted in Medline, Embase, HEED and CRD for NHS EED and HTA.

Population	Intervention / exposure	Comparison	Study filter used	Date parameters
Myocardial Infarction			Health economic	Medline and Embase 2011 – 25 March 2013 HEED and CRD (NHS EED and HTA) 2006 – 25 March 2013

#### CRD search terms

#	MeSH DESCRIPTOR acute coronary syndrome IN NHSEED,HTA
#	MeSH DESCRIPTOR myocardial infarction EXPLODE ALL TREES IN NHSEED,HTA
#	MeSH DESCRIPTOR coronary thrombosis IN NHSEED,HTA
#	MeSH DESCRIPTOR heart arrest IN NHSEED,HTA
#	("acute coronary" adj2 syndrome*) IN NHSEED, HTA
#	((myocardial or heart) adj infarct*) IN NHSEED, HTA

#	(heart adj (attack* or event*)) IN NHSEED, HTA
#	((heart or cardiac) adj arrest*) IN NHSEED, HTA
#	(coronary adj2 thrombosis) IN NHSEED, HTA
#	(stemi or st-segment or "st segment" or st-elevation or "st elevation") OR ("non-ST-segment elevation") OR (non-stemi or nstemi or nonstemi) OR ("q wave myocardial infarction") OR (nste-acs) IN NHSEED, HTA
#	(subendocardial adj3 infarct*) IN NHSEED, HTA
#	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11

#### HEED search terms

1	ax=acute coronary syndrome or acute coronary syndromes
2	ax=myocardial infarction or myocardial infarct or myorcardial infarcts
3	ax=coronary thrombosis
4	ax=heart infarction or heart infarct or heart infarcts
5	ax=heart attack or heart attacks
6	ax=heart arrest or heart arrests
7	ax=cardiac arrest or cardiac arrests
8	ax=heart event or heart events
9	ax=stemi or 'st segment' or 'st elevation'
1	ax=non-st-segment elevation
1	ax=non-stemi or nstemi or nonstemi
1	ax=q wave myocardial infarction
1	ax=nste-acs
1	ax=subendocardial and infarct*
1	cs=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

#### A.4.2 Quality of life search

Quality of life searches were conducted in Medline and Embase

Population	Intervention / exposure	Comparison	Study filter used	Date parameters
Myocardial Infarction			Quality of life	2006 – 25 March 2013