4-year surveillance 2016 – Stable angina: management (2011) NICE guideline CG126

Appendix A: decision matrix

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
Diagnosis			
No questions on diagnosis contained within this guideline as not in scope, however rec 1.1 makes reference to other clinical guidelines for diagnosis. (1.1.1)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	**Diagnostic tests** *Comments received via expert feedback:* Two topic experts identified a total of five studies regarding diagnostic testing for suspected coronary disease however recognised that diagnosis is beyond the scope of this guideline. One topic expert highlighted an ongoing debate about the role of exercise testing however no further details or supporting evidence provided for this comment.	No new evidence was identified that would affect recommendations. The scope of this guideline does not include diagnosis. However, recommendation 1.1 cross-refers to other clinical guidelines for diagnosis. Intelligence supplied by topic experts may be more relevant to the diagnostic guidelines for chest pain and will be added to the topic issue log. **Surveillance decision** This review question should not be updated.
Information and support for people with stable angina			
126 – 01 What are the information needs of people with stable angina regarding their condition and its management? (1.2.1–1.2.5, 1.2.7, 1.4.2)			
Evidence Update (2012)	None identified relevant to this question.	None identified relevant to this question.	New evidence is consistent with guideline

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
Depression screening A prospective cohort study[1] investigated the accuracy and prognostic value of depression screening in 1024 patients with stable coronary heart disease. A positive result from the depression screen was associated with greater risk of subsequent cardiovascular events versus a negative result. However, when further adjustments were made for behaviours such as smoking, inactivity and non-adherence to medication, the effect was no longer statistically significant, although the authors stated such behaviours may tend to be more prevalent among people with depression.			recommendations. The 2-year Evidence Update found a prospective cohort study[1] investigating the value of depression screening in patients with stable coronary heart disease. The results of this study highlight the prevalence of depression among patients with stable coronary heart disease and its potential association with future adverse events. This is consistent with the current guideline recommendation to explore and address issues of depression in people with stable angina. No new evidence was found by the 4-year surveillance review to change this conclusion or other recommendations within this question. **Surveillance decision** This review question should not be updated.
126 – 02 What is the clinical/cost effectiveness of cardiac rehabilitation programmes for patients with stable angina? (1.2.6)			
Evidence Update (2012) None identified relevant to this question.	**Exercise programme** An RCT[2] to determine the effects of an 8-week exercise training programme (n=32)	**Exercise programme** *Comments received via expert feedback:* One topic expert highlighted the potential	New evidence is consistent with guideline recommendations.

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
	compared to controls (n=32) on brachial flow-mediated dilation (FMD) in patients with stable coronary artery disease (CAD). After 8 weeks, patients who received exercise training had significant improvements in FMD and exercise capacity compared with controls. However, this study does not report any outcomes relating to angina frequency or improvements. **Internet-based programme** An RCT[3] examined the effectiveness of a 6-week web-based cardiac rehabilitation programme (n=48) compared to GP treatment as usual (n=46) for people with angina at 6-week and 6-month follow ups. A significant increase in daily steps walked at the 6-week follow-up was found in the exercise group compared to the control group. Significant intervention effects were observed at the 6-week follow-up in duration of sedentary activity, duration of moderate activity, weight, self-efficacy, emotional quality of life score, and angina frequency. Significant benefits in angina frequency and social quality of life score were also observed at the 6-	role of exercise in management of stable angina and suggests there is inadequate information on this in the guideline.	The 4-year evidence review found two RCTs[2,3] that show potential benefits of exercise programmes on cardiac outcomes. However, only one RCT[3] reports any beneficial effect on angina frequency following a cardiac rehabilitation programme. New evidence is consistent with the current guideline recommendation to assess the need for lifestyle advice about exercise and offer interventions as necessary to people with stable angina. **Surveillance decision** This review question should not be updated.

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
	month follow-up.		
General principles for treating people with stable angina			
126 – 03 What is the clinical /cost effectiveness of short-acting drugs for the management of anginal symptoms? (1.3.3, 1.3.4)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be updated.
126 – 04 What is the clinical effectiveness of aspirin to improve long term outcomes in people with stable angina? (1.3.5)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be updated.
126 – 05 What is the clinical /cost effectiveness of ACE inhibitors /ARBs for the management of angina? (1.3.6)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
			updated.
126 – 06 What is the clinical/cost effectiveness of angina specific interventions to modify lifestyle/CVD risk factors to reduce symptoms, morbidity and mortality and improve quality of life in angina patients? (1.3.9)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be updated.
126 – 07 What is the clinical /cost effectiveness of fish oils for reducing symptoms, morbidity, mortality and improving quality of life in stable angina patients? (1.3.9)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be updated.
126 – 08 What is the clinical /cost effectiveness of Vitamin E for reducing symptoms, morbidity, mortality and improving quality of life in stable angina patients? (1.3.9)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be updated.

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
Anti-anginal drug treatment			
126 – 09 What is the comparative clinical /cost effectiveness of standard antianginal drugs (BBs/CCBs) for the management of angina? (1.4.7, 1.4.8, 1.4.10)			
Evidence Update (2012) Beta blockers A systematic review and meta-analysis[5] investigated the impact of beta blockers on cardiovascular mortality in patients with stable angina. A total of 89 RCTs (n=21,674) were included. After pooling data from all trials, no significant difference in cardiovascular death was found with beta blockers compared to any type of control. Further meta-analyses also found no difference in mortality versus placebo only or versus other antianginals. Although the results suggest beta blockers do not have a significantly positive or negative impact on mortality compared to placebo, this study has two main limitations. Firstly, the mean follow-up time of 19 weeks is relatively short for an outcome of mortality. Secondly, one trial dominated the analysis accounting for almost half the included sample and consisted only of beta blocker to calcium channel blocker comparisons.	Beta blockers A systematic review and meta-analysis[6] of 26 RCTs (n= 6108) assessed the effects of beta blockers in patients with stable angina. Beta blocker treatment significantly decreased all-cause mortality and incidence of unstable angina when compared with no treatment but had no statistical difference when compared with calcium-channel blocker. Nitrate consumption significantly reduced with beta blockers compared to calcium-channel blockers but not when compared to placebo. Type of intervention made no significant difference to angina frequency.	None identified relevant to this question.	New evidence is unlikely to impact on guideline recommendations. The 2-year Evidence Update found one meta-analysis[5] comparing beta blockers with placebo or other antianginal drugs. The analysis found no significant difference in cardiovascular death or mortality between beta blockers and comparators. However, this study has two main limitations. Firstly, the mean follow-up time of 19 weeks is relatively short for an outcome of mortality. Secondly, one trial dominated the analysis accounting for almost half the included sample and consisted only of beta blocker to calcium channel blocker comparisons. The 4-year evidence review found one meta-analysis[6] comparing beta blockers with placebo or calcium channel blocker. The analysis found beta blockers to be no more effective than other antianginal drugs for the management of stable angina. A Centre for Reviews and Dissemination commentary on this study notes the low quality of many studies included and concludes that the results

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
			should be treated with caution and may not be reliable. Although this new evidence is inconsistent with the guideline recommendation, the studies have major limitations. This is unlikely to change the current guideline recommendation 1.4.1 to offer either a beta blocker or a calcium channel blocker as first-line treatment for stable angina with the option to switch between antianginal drugs. **Surveillance decision** This review question should not be updated.
126 – 10 What is the comparative clinical/cost effectiveness of BB vs. BB+CCB for the management of angina? (1.4.1–1.4.6, 1.4.9, 1.4.10, 1.4.13, 1.4.14)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be updated.
126 – 11 What is the comparative clinical/cost effectiveness of CCB vs. BB+CCB for the management of angina? (1.4.1–1.4.6, 1.4.9, 1.4.10, 1.4.13, 1.4.14)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
			updated.
126 – 12 What is the comparative clinical / cost effectiveness of adding CCB to basic (or standard) anti-anginal treatment for the management of angina? (1.4.1–1.4.6, 1.4.9, 1.4.10, 1.4.13, 1.4.14)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be updated.
126 – 13 What is the clinical and cost effectiveness of adding long-acting nitrates to BB and/or CCBs? (1.4.1–1.4.6, 1.4.11, 1.4.12)			
Evidence Update (2012) Nitrates A systematic review and meta-analysis[7] studied the effect of nitrates on stable angina. Trials of nitrates (alone or in combination with other anti-anginal drugs) versus placebo, and trials comparing different doses and regimens of nitrates, were included. Comparisons of nitrates with other anti-anginals were excluded. A total of 51 RCTs (n=3595) were included. Pooled analyses evaluating the chronic effect of nitrates (that is, following administration over a number of weeks or months) showed a significant reduction in the mean number of angina attacks versus placebo. The effect of nitrates	Nitrates An RCT[8] compared the effectiveness of adding long-acting nitrate pentaerithrityl tetranitrate (PETN) to beta blockers in patients with stable angina. Compared to placebo (n= 327), PETN (n= 328) provided no additional benefit to total exercise duration at 12-week follow up. However, PETN is no longer available for use in the UK.	None identified relevant to this question.	New evidence is consistent with guideline recommendations. The 2-year Evidence Update found one meta-analysis[7] comparing the effect of nitrates (alone or added to antianginal drugs) with placebo. This analysis found a significant reduction in angina attacks with the use of nitrates compared to placebo. However, side effects from nitrates may limit their use. The 4-year evidence review found one RCT[8] comparing the effectiveness of adding PETN to beta blockers with placebo. This trial found no significant difference between nitrates and placebo in exercise duration for patients with

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
showed a significant increase in exercise duration compared to placebo. The data suggest that nitrates can improve exercise duration and angina, but because of potential limitations such as side effects, their role is unlikely to change from second-line treatment following initial therapy with beta blockers and calcium channel blockers.			stable angina. However, PETN is no longer available for use in the UK and the results of this trial cannot be extrapolated to other long-acting nitrates. This evidence is consistent with the current guideline recommendation to use nitrates as a third-line treatment following initial therapy with beta blockers and calcium channel blockers. However, this recommendation may need to be updated in the future if there are any changes to the recommendation for ivabradine. **Surveillance decision** This review question should not be updated.
126 – 14 What is the clinical /cost effectiveness of ivabradine for the management of stable angina? (1.4.1–1.4.6, 1.4.11, 1.4.12)			
Evidence Update (2012) None identified relevant to this question.	**Ivabradine vs placebo on heart rate** An RCT[9] from the ASSOCIATE trial assessed the effects of ivabradine in patients with stable angina receiving beta blockers according to baseline heart rate. Patients were randomised to treatment with ivabradine (5 to 7.5mg bid) or placebo for 4 months, in addition to atenolol 50mg. The effect of treatment on exercise tolerance test parameters was	**Ivabradine vs placebo** *Comments received via expert feedback:* One topic expert highlighted the need to consider the safety concerns regarding ivabradine following the SIGNIFY trial and questions whether this evidence is sufficient to remove ivabradine from the guideline. One topic expert commented that there is	New evidence identified that may change current recommendations. The 4-year evidence review found one RCT[9] comparing the effectiveness of ivabradine with placebo. This study indicates a reduction in heart rate for ivabradine compared to placebo. The RCT also indicates an improvement in exercise capacity when ivabradine is

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
	analysed in two groups according to baseline heart rate: > 65 bpm (n=418) versus < 65 bpm (n=436). Ivabradine significantly reduced resting heart rate in both groups. Ivabradine significantly reduced heart rate at all stages of exercise. Significant improvements in exercise capacity (total exercise duration, time to limiting angina, angina onset, and 1-mm ST segment depression, were recorded in both heart rate groups.	no benefit of ivabradine as indicated by the SIGNIFY trial. *Intelligence from stakeholder comments:* One stakeholder identified safety concerns with ivabradine following the SIGNIFY trial. *Studies highlighted via expert feedback:* The SIGNIFY trial[10] compared ivabradine added to standard background therapy to placebo in 19,102 patients who had both stable coronary artery disease without clinical heart failure and a heart rate of 70 beats per minute or more. The primary end point was a composite of death from cardiovascular causes or nonfatal myocardial infarction. At 3 months, the ivabradine group had a lower heart rate than the placebo group. After a median follow-up of 27.8 months, there was no significant difference between the ivabradine group and the placebo group in the incidence of the primary end point, nor were there significant differences in the incidences of death from cardiovascular causes and nonfatal myocardial infarction. Ivabradine was associated with a significant increase in the incidence of the primary end point	used in addition to a beta blocker compared to placebo in addition to a beta blocker. New intelligence from the 4-year review found one RCT[10] comparing ivabradine added to first-line treatment with placebo. This RCT found ivabradine reduced heart rate however did not improve cardiovascular outcomes compared to placebo. Ivabradine was associated with an increase in death from cardiovascular causes or nonfatal myocardial infarction in patients with activity-limiting angina. The incidence of bradycardia was higher with ivabradine than with placebo. Topic experts highlighted these potential risks of ivabradine as indicated in this study. New intelligence has identified two drug safety updates (June 2014 & December 2014) warning of the cardiac side-effects of ivabradine based on the SIGNIFY trial. **Surveillance decision** This review question should not be updated. A footnote to the recommendations is to be added with reference to the drug safety updates.

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
		among patients with activity-limiting angina but not among those without activity-limiting angina. The incidence of bradycardia was significantly higher with ivabradine than with placebo. The addition of ivabradine to standard therapy did not improve outcomes.	
126 – 15 What is the clinical /cost effectiveness of nicorandil for the management of stable angina? (1.4.1–1.4.6, 1.4.11, 1.4.12)			
Evidence Update (2012) None identified relevant to this question.	**Nicorandil after PCI** An RCT[11] compared nicorandil (n= 50) to placebo (n= 50) in people with diabetes and stable angina following revascularisation with PCI. At 6-month follow up, the nicorandil group showed significantly higher left ventricle ejection fraction and a trend toward lower incidence of major adverse cardiac events compared to the placebo group.	*Intelligence from stakeholder comments:* A drug safety update from the Medicines and Healthcare products Regulatory Agency on use of nicorandil as treatment for stable angina identified a rare-very rare risk of ulcers which may progress to perforation, haemorrhage, fistula, or abscess. The advice in the drug safety update is to use nicorandil only in patients whose symptoms are inadequately controlled by first-line antianginal therapies.	New evidence is unlikely to impact on guideline recommendations. The 4-year evidence review found one RCT[11] comparing the effect of nicorandil on people with diabetes and stable angina undergoing revascularisation with PCI. When compared to placebo, nicorandil indicated a trend towards lower major adverse cardiac events. However this is a small study (n=100) where the intervention is in conjunction with revascularisation. This trial may not fully indicate the effects of nicorandil as a third-line treatment for stable angina as it examines the cardio-protective effect during PCI. New evidence is unlikely to change current guideline recommendation which is to consider nicorandil as third-line

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
			treatment for stable angina. New intelligence has identified a drug safety update (January 2016) warning of the risk of ulcer complications with nicorandil. **Surveillance decision** This review question should not be updated. A footnote to the recommendations is to be added with reference to the drug safety update.
126 – 16 What is the clinical/cost effectiveness of ranolazine for the management of stable angina? (1.4.1–1.4.6, 1.4.11, 1.4.12)			
Evidence Update (2012) None identified relevant to this question.	**Ranolazine + BB or CCB** A post-hoc analysis[12] of the CARISA trial to assess the benefit of ranolazine in angina patients (n= 258) treated with maximally-tolerated doses of beta blocker or calcium channel blocker. Found a significant change from baseline in total exercise duration after 12 weeks compared to placebo. The number of angina attacks per week compared to baseline was significantly reduced compared to placebo. The effects of ranolazine 750mg and 1000mg were similar and the beneficial effects of ranolazine in this subgroup of maximally-treated patients were consistent with	**Ranolazine as 3rd line drug** *Comments received via expert feedback:* One topic expert highlighted the need to consider evidence on the potential beneficial effects of ranolazine and suggests it should be moved higher in the list of third-line drugs. *Studies highlighted via expert feedback:* An RCT[13] examined the efficacy of ranolazine versus placebo on weekly angina frequency and sublingual nitroglycerin use in people with type 2 diabetes mellitus, coronary artery disease (CAD) and chronic stable angina who remain symptomatic despite treatment with up to two antianginal agents. After a	New evidence is consistent with guideline recommendations. The 4-year evidence review found one post-hoc analysis[12] assessing the effect of ranolazine in patients on maximum doses of first-line treatment for stable angina. Compared to placebo, ranolazine was associated with an improvement in exercise duration and angina attacks. New intelligence from the 4-year review found one RCT[13] comparing ranolazine to placebo in patients already receiving first-line treatment for stable angina. Compared to placebo, ranolazine was associated with significantly lower

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
	those not on maximally-tolerated doses of the background therapy. The CARISA trial informed the recommendation in CG126 and this analysis supports the placing of ranolazine in the guideline.	single-blind, 4-week placebo run-in, patients were randomized to 8 weeks of double-blind ranolazine (target dose 1000mg) or placebo. Angina episodes and nitroglycerin use were recorded with daily entry into a novel electronic diary. Primary outcome was the average weekly number of angina episodes over the last 6 weeks of the study. Weekly angina frequency was significantly lower with ranolazine versus placebo, as was the weekly sublingual nitroglycerin use. There was no difference in the incidence of serious adverse events between groups. *Intelligence from stakeholder comments:* A cost-effectiveness analysis[14] of ranolazine added to standard antianginal therapy compared with standard antianginal therapy alone in patients with stable coronary disease. Using an economic model from a UK health system perspective, the analysis found ranolazine increased QALYs and was cost effective compared to standard therapy alone. The analysis was limited with a relatively short time horizon duration of 1-year and used the ERICA trial from 2006 as its primary source of data which was included during the development of CG126.	frequency of angina attacks. New intelligence identified one economic analysis[14] comparing ranolazine added to standard therapy with standard therapy alone. The analysis found ranolazine to be cost-effective and increase QALYs. However, the analysis was limited with a relatively short time horizon duration of 1-year and used the ERICA trial from 2006 as its primary source of data which was included during the development of CG126. This evidence is consistent with the current guideline recommendation to use ranolazine as a third-line treatment following initial therapy with antianginal treatments for stable angina. However, this recommendation may need to be updated in the future if there are any changes to the recommendation for ivabradine. **Surveillance decision** This review question should not be updated.

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
Investigation and revascularisation			
126 – 17 What is the clinical and cost effectiveness of medical interventions versus CABG in people with stable angina? (1.3.1, 1.3.2, 1.5.1, 1.5.2, 1.5.11–1.5.14)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be updated.
126 – 18 What is the clinical and cost effectiveness of medical interventions versus PCI in people with stable angina? (1.3.1, 1.3.2, 1.5.1, 1.5.2, 1.5.11–1.5.14)			
Evidence Update (2012) None identified relevant to this question.	**Medical vs PCI** A meta-analysis[15] of 12 RCTs comparing PCI to optimal medical therapy (OMT) in patients with stable coronary artery disease (n= 7182). For freedom from angina, there was a significant improved outcome with PCI, as compared with the OMT group evident at all of the follow-up time points (<1 year, 1-5 years, >5 years). However, PCI was associated with no significant improvement in mortality, cardiac death, nonfatal myocardial infarction, or repeat revascularisation compared with OMT, with consistent	**Medical vs PCI** *Comments received via expert feedback:* Two topic experts highlighted studies showing the safety and efficacy of revascularisation techniques compared with each other and with medical treatment. One topic expert commented that the cost of drug-eluting stents has reduced however did not provide any further details or supporting evidence. *Studies highlighted via expert feedback:* A meta-analysis[17] of 5 RCTs compared	New evidence is consistent with guideline recommendations. The 4-year evidence review found two meta-analyses[15,16] that compared PCI to optimal medical therapy. Both studies found no significant differences between the interventions for all-cause mortality, cardiac mortality or myocardial infarction. One meta-analysis[15] found a significant improvement from angina following PCI, however, the other meta-analysis[16] found no difference between PCI and optimal medical therapy groups.

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
	results over all follow-up time points. A meta-analysis[16] of 10 RCTs compared PCI and medical therapy for patients with stable angina (n=6752). No differences between PCI and medical therapy found for all-cause mortality, cardiovascular mortality, myocardial infarction, or angina relief at the end of follow-up. These findings support existing guidelines that medical therapy be considered the most appropriate clinical management for patients with stable angina.	the effect of PCI and medical therapy (MT) with MT alone exclusively in patients with stable CAD and objectively documented myocardial ischemia on clinical outcomes (n=4064). Found that in patients with stable CAD and objectively documented myocardial ischemia, PCI with MT was not associated with a reduction in death, nonfatal myocardial infarction, unplanned revascularisation, or angina compared with MT alone. *Intelligence from stakeholder comments:* A follow-up analysis[18] of the COURAGE trial reported the rate of survival in patients who received optimal medical therapy alone or optimal medical therapy plus PCI. The analysis found no significant difference in the rate of survival between the interventions over a follow-up period of 15 years. **PCI guided by fractional flow reserve (FFR)** *Comments received via expert feedback:* One topic expert suggests a review of evidence for PCI guided by FFR however recognises that this may not justify a guideline update.	New intelligence from 4-year surveillance found one meta-analysis[17] comparing PCI with medical therapy. This study found no difference between the interventions in rates of death, myocardial infarction, unplanned revascularisation or angina. New intelligence identified a follow-up analysis[18] of the COURAGE trial which found no significant difference in rates of survival between optimal medical therapy alone and optimal medical therapy plus PCI. Further intelligence identified one RCT[19] comparing fractional flow reserve-guided PCI with medical therapy. This study found FFR-guided PCI reduced the rate of urgent revascularisations, however no differences found in the rates of death or myocardial infarction between the interventions. Medical therapy provided more favourable outcomes for patients without ischemia. NICE is currently developing medical technology guidance on HeartFlow FFRct for the estimation of fractional flow reserve from coronary CT angiography. This technology may impact on recommendations in the future and will be

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
		Studies highlighted via expert feedback: An RCT[19] with 1220 patients with stable coronary artery disease, to assess the fractional flow reserve (FFR) in all stenoses that were visible on angiography. Patients who had at least one stenosis with an FFR of 0.80 or less were randomly assigned to undergo FFR-guided PCI plus medical therapy or to receive medical therapy alone. Patients in whom all stenoses had an FFR of more than 0.80 received medical therapy alone and were included in a registry. The primary end point was a composite of death from any cause, nonfatal myocardial infarction, or urgent revascularisation within 2 years. Results found the rate of the primary end point was significantly lower in the PCI group than in the medical therapy group. This reduction was driven by a lower rate of urgent revascularisation in the PCI group, with no significant between-group differences in the rates of death and myocardial infarction. Urgent revascularisations that were triggered by myocardial infarction or ischemic changes on electrocardiography were less frequent in the PCI group. The rate of death or myocardial infarction from 8 days to 2	considered at the next review for CG126. New evidence is consistent with the current guideline recommendation to consider medical treatment as first-line in management of stable angina and PCI to be considered if symptoms are not controlled with optimal medical treatment. **Surveillance decision** This review question should not be updated.

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
		years was lower in the PCI group than in the medical therapy group.	
126 – 19 What is the clinical and cost effectiveness of medical interventions versus PCI or CABG in people with stable angina? (1.3.1, 1.3.2, 1.5.1, 1.5.2, 1.5.11–1.5.14)			
Evidence Update (2012) **Revascularisation versus medical therapy in diabetes** The Bypass Angioplasty Revascularisation Investigation 2 Diabetes (BARI 2D) RCT was considered when CG126 was developed. Two recent studies performed additional analyses of evidence from this trial. BARI 2D recruited patients with stable coronary artery disease and type 2 diabetes (n=2368) from 49 sites who were randomised to a strategy of prompt coronary revascularisation (with either PCI or CABG) and optimal medical treatment ('REV'), or optimal medical treatment alone with the option of subsequent revascularisation if needed ('MED'). An analysis[20] of the BARI 2D trial data examined main outcomes of worsening, freedom from angina, new angina and subsequent coronary revascularisations.	**Medical vs PCI vs CABG** A post-hoc analysis[22] of the MASS II RCT with a follow up of 10 years evaluated left ventricle ejection fraction (LVEF) in patients with stable coronary artery disease treated by CABG, PCI or medical therapy. Of the 611 patients assessed for LVEF prior to randomisation, 350 were reassessed at follow up (108 patients from MT, 111 from CABG, and 131 from PCI). There was no significant difference in LVEF at the beginning or at the end of follow-up between the medical treatment and revascularisation groups. A meta-analysis[23] compared medical treatment to revascularisation (PCI or CABG) among patients with stable coronary artery disease (100 trials with 93,553 patients included). CABG was associated with a survival benefit compared with medical treatment. New generation drug eluting stents (everolimus	**Medical vs PCI vs CABG** *Studies highlighted via expert feedback:* Meta-analysis[25] of RCTs comparing treatment options for coronary artery disease (CAD) specifically in women. The comparisons were PCI versus coronary artery bypass surgery (CABG) versus optimal medical therapy in stable or unstable angina. The endpoints assessed were clinical outcomes, modifiers of effectiveness by demographic and clinical factors, and safety outcomes. For women with stable angina randomised to revascularisation (PCI or CABG) or medical therapy, three studies showed a reduction in the composite outcome of death/MI/repeat revascularisation at 5 years for revascularisation with either PCI or CABG. For stable and unstable angina trials comparing PCI with CABG, two studies suggested a benefit of PCI in mortality at 30 days however this was not statistically significant. At 1 year and	New evidence is consistent with guideline recommendations. The 2-year Evidence Update found two additional analyses[20,21] of the BARI 2D RCT which compared revascularisation (PCI or CABG) with optimal medical treatment in patients with stable coronary artery disease and type 2 diabetes. The evidence suggests that prompt revascularisation in patients with type 2 diabetes offers greater benefit in treating angina versus optimal medical therapy, particularly for CABG. Age did not affect outcomes of death, major cardiovascular events and revascularisation. However the effects of either medical treatment or revascularisation may be more limited in an older population. The 4-year evidence review found one post-hoc analysis[22], one meta-analysis[23] and one RCT[24] comparing medical treatment with revascularisation in patients with stable coronary artery

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
At 5-year follow up, there was no significant difference between the REV and MED strategies for worsening angina or freedom from angina. However, REV was more effective than MED in terms of lower cumulative rates of new angina and subsequent revascularisations. At 3-year follow up, REV was significantly more effective than MED for all the main outcomes, with lower rates of worsening angina, new angina and subsequent revascularisations, and a higher rate of angina-free status. For worsening angina, the difference between REV and MED was not significant at 2 or 4 years, but for the other main outcomes the significant benefit of REV was sustained over most of the 5 years of follow-up. The evidence suggests that prompt revascularisation in patients with type 2 diabetes offers greater benefit in treating angina versus optimal medical therapy, particularly for CABG, and particularly during the first few years. Data from the BARI 2D trial were also analysed in a study[21] to investigate the impact of age on the effectiveness of	and zotarolimus) but not balloon angioplasty or other stent types were associated with improved survival compared with medical treatment. CABG reduced the risks of myocardial infarction and subsequent revascularisation compared with medical treatment. New generation drug eluting stents reduced the risk of revascularisation compared with medical treatment. **Medical vs PCI vs CABG for patients aged 65 or more** An RCT[24] from the MASS II trial compared rates of overall mortality, acute myocardial infarction and new revascularisations during 10 year follow up in patients (n= 611) with coronary artery disease. Patients separated according to age with 200 patients aged 65 or more randomised to medical therapy (n= 68), PCI (n= 68) and CABG (n= 64). At 10 years, there was no significant difference in overall survival between the treatment groups. There was a significant reduction of coronary events with CABG compared to PCI or medical treatment. The incidence of revascularisation was significantly lower	beyond, although suggestive of a benefit of CABG for the composite outcomes of death/MI/stroke for women, this finding was not statistically significant and represented wide confidence intervals. Found that the few trials reporting sex-specific data on revascularisation compared with optimal medical therapy for stable angina showed a greater benefit with revascularisation for women, while the men in the study fared equally well with either treatment. In contrast, previous meta-analyses that combined results for men and women found similar outcomes for either treatment. *Comments received via expert feedback:* One topic expert is concerned that patients, especially those aged more than 70 years, with ischaemic heart disease and >90% probability of having angina will not be given the option of early intervention according to the guideline and instead be treated with drug therapy.	disease. The post-hoc analysis found no difference in left ventricle ejection fraction between patients with stable coronary artery disease treated with CABG, PCI or medical treatment. The meta-analysis found significant benefits of CABG for survival, reduced myocardial infarction and subsequent revascularisation compared to medical treatment. New generation drug-eluting stents were associated with improved survival and reduced revascularisation compared to medical treatment. The RCT compared revascularisation (PCI or CABG) with medical treatment specifically in older patients. The trial found no significant difference in overall survival between the CABG, PCI and medical treatment groups. A significant reduction of coronary events and incidents of revascularisation was found for CABG compared to PCI or medical treatment. New intelligence from 4-year surveillance found one meta-analysis[25] comparing revascularisation (PCI or CABG) with medical treatment specifically in women

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
revascularisation strategies and hyperglycaemia treatments. Patients were categorised into 3 age groups: younger than 60 years (n=939), 60–69 years (n=915), or 70 years and older (n=514). The effect of age on the REV and MED strategies and on type of hyperglycaemia treatment (insulin or insulin-sensitising) were then assessed against clinical outcomes (death from all causes, major cardiovascular events [a composite of death, MI and stroke], cardiac death, and subsequent revascularisation), angina outcomes, and health status outcomes (as measured by 4 instruments: the Duke Activity Status Index [DASI]; the RAND Medical Outcome Study Energy/Fatigue Scale; the RAND Health Distress score; and Self-Rated Health score). For each outcome the interaction of the randomised treatment and age group was calculated. Over 5 years of follow-up, the relative effect of the REV versus MED strategy was not influenced by age for outcomes of death, major cardiovascular events, cardiac death, subsequent revascularisation, angina, or health status. However, a longitudinal mixed	with CABG compared to PCI or medical treatment. PCI was associated with a higher incidence of myocardial infarction in older patients compared to younger patients.		with coronary artery disease. Revascularisation was associated with a reduction in outcomes of death, myocardial infarction or repeat revascularisation compared to medical treatment. The new evidence is consistent with guideline recommendations to consider revascularisation for people with stable angina whose symptoms are not controlled with optimal medical treatment. The evidence is consistent with current recommendations noting that CABG may be beneficial in a subgroup of patients with diabetes, or who are older, or have more complex disease. **Surveillance decision** This review question should not be updated.

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
model indicated greater relief of angina with REV versus MED over the follow-up period for all age groups. There was no effect of age on the type of hyperglycaemia treatment for any of the clinical outcomes or health status outcomes. In terms of health status, older patients seemed to receive a smaller benefit of shorter duration from either REV or MED than younger patients. The data suggest that in people with type 2 diabetes, the relative efficacy of the REV and MED strategies on outcomes of death, major cardiovascular events and revascularisation were unaffected by age, but within each age group REV was more effective than MED for angina relief. The evidence also suggests that in elderly patients, benefits of either approach may be more limited and of a shorter duration than among younger patients. Age does not appear to affect the relative efficacy of hyperglycaemia treatments in stable coronary artery disease.			
126 – 20 In adults with stable angina, what is the clinical/cost effectiveness of revascularisation techniques to alleviate angina symptoms and to improve long term outcomes? (1.5.3–1.5.10)			
Evidence Update (2012) PCI vs CABG	**PCI vs CABG** A meta-regression[28] of RCTs (n= 12,844)	**PCI vs CABG** *Comments received via expert feedback:*	New evidence is consistent with guideline

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
A prospectively designed substudy[26] of the SYNTAX trial examined the effect of PCI with drug-eluting stents versus CABG on health-related quality of life (HRQoL) in 1800 patients with previously untreated three-vessel or left main coronary artery disease. Outcomes of death, MI, stroke or repeat revascularisation from the SYNTAX trial were previously reported and considered when CG126 was developed. The primary endpoint of score on the angina-frequency subscale increased by more than 20 points from baseline at 6 and 12 months in both groups (greater than the minimum clinically important difference of 8 to 10 points stated by the authors), but the scores were slightly higher after CABG than PCI at both 6 months and 12 months. The proportion of patients free from angina after PCI or CABG significantly increased at 12 month follow up compared to baseline. In terms of general health status, there were no significant differences between groups at 6 or 12 months, but at 1 month there was a significant benefit with PCI.	to test whether an interaction existed between baseline clinical features (age, gender, diabetes mellitus, previous myocardial infarction and ejection fraction) and choice of revascularisation (PCI or CABG), focusing on death, myocardial infarction, repeat revascularisation and stroke for patients with stable angina. Compared to CABG, PCI significantly reduced the risk of stroke, both at 30 days and at 12-month follow up. This reduction in stroke was significantly higher in females. For repeat revascularisation, PCI performed worse than CABG, both in the overall population and in patients with multivessel disease. Women and those with diabetes mellitus were at significant increased risk of subsequent revascularisation after PCI. An RCT[29] compared CABG (n= 935) and PCI using drug-eluting stents (n= 945) on health status in patients with multivessel coronary artery disease and diabetes mellitus. Health status was assessed using the Seattle Angina Questionnaire at baseline, at 1, 6, and 12 months, and annually thereafter. For patients with diabetes and multivessel CAD, CABG	Two topic experts identified studies that indicate a mortality benefit of revascularisation with CABG compared to PCI. *Studies highlighted via expert feedback:* A 5-year follow-up[30] of the SYNTAX trial, which compared coronary artery bypass graft surgery (CABG) with percutaneous coronary intervention (PCI) for the treatment of patients with left main coronary disease or three-vessel disease, to confirm findings at 1 and 3 years. Patients were randomly assigned to CABG (n=897) or PCI (n=903). CABG should remain the standard of care for patients with complex lesions (high or intermediate SYNTAX scores). For patients with less complex disease (low SYNTAX scores) or left main coronary disease (low or intermediate SYNTAX scores), PCI is an acceptable alternative. All patients with complex multivessel coronary artery disease should be reviewed and discussed by both a cardiac surgeon and interventional cardiologist to reach consensus on optimum treatment. A meta-analysis[31] of RCTs to determine	recommendations. The 2-year Evidence Update found one prospectively designed substudy[26] of the SYNTAX trial comparing the effect of PCI to CABG. The evidence suggests that both PCI and CABG are effective treatments for angina, which is consistent with advice in CG126. The minor benefit seen with CABG in this study is unlikely to affect current recommendations. The difference in recovery time between the two treatments is consistent with the need to inform patients of practical aspects of the two procedures as already stated in the guideline. A further RCT[27] identified by the 2-year Evidence Update compared PCI with drug-eluting stents versus CABG in patients with unprotected left main stenosis with or without additional multivessel coronary artery disease. The results are similar to those for the unprotected left main subgroup of the SYNTAX trial and suggest that PCI and CABG are both effective but repeat revascularisation rate may be lower after CABG, which is consistent with current

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
An RCT[27] also investigated PCI with drug-eluting stents versus CABG in 201 patients with unprotected left main stenosis with or without additional multivessel coronary artery disease. Participants needed to have symptoms of or documented myocardial ischaemia (the exact number with stable angina was not reported, but the rate of previous MI >48 hours before enrolment of below 20% in each arm suggested a population of likely relevance to stable angina). Patients were randomised to PCI with sirolimus-eluting stents (n=100) or CABG (n=101), although 3 patients randomised to PCI subsequently had CABG. The study objective was to determine whether PCI with sirolimus-eluting stents was not inferior to CABG with regard to the primary endpoint of freedom from major adverse cardiac events, including all-cause death, MI and target vessel revascularisation within 12 months. This endpoint was reached in 19.0% of patients after PCI and 13.9% after CABG. The difference was mainly accounted for by the greater need for repeat revascularisation after PCI compared with CABG. Combined rates of death and MI	surgery provided significantly greater benefit at 2-year follow up on angina frequency, physical limitations and quality of life than PCI using drug-eluting stents. The magnitude of benefit was small, without consistent differences beyond 2 years.	the comparative effects of CABG vs PCI on long-term mortality and morbidity found a significant reduction in total mortality with CABG compared with PCI. There were also significant reductions in myocardial infarction and repeat revascularisation with CABG. There was a trend toward excess strokes with CABG, but this was not statistically significant. For reduction in total mortality, there was no heterogeneity between trials that were limited to and not limited to patients with diabetes or whether stents were drug eluting or not.	recommendations in CG126. The 4-year evidence review found one meta-regression[28] and one RCT[29] comparing the effects of PCI to CABG in patients with stable angina. The meta-regression found that CABG was associated with significant reductions in repeat revascularisations, especially in sub-groups of women and those with diabetes. The RCT found that CABG provided significantly greater benefit at 2-year follow up on angina frequency, physical limitations and quality of life than PCI in patients with diabetes and multivessel coronary artery disease. This data is consistent with current guideline recommendations to consider CABG over PCI for these sub-groups of patients. New intelligence from 4-year surveillance found one RCT[30] analysis comparing CABG to PCI for treatment of left main or three-vessel coronary disease. The analysis found CABG to be superior to PCI for treatment of complex coronary disease, however, PCI found to be an

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
were similar with both PCI and CABG. At a further follow-up of 36.5 months, the results for the combined endpoint and its subcomponents were similar to those at 12 months. The number of patients free from angina was similar after both PCI and CABG.			acceptable alternative. A further meta-analysis[31] found by 4-year intelligence compared CABG to PCI on long-term outcomes. CABG associated with a significant reduction in mortality, myocardial infarction and repeat revascularisation compared to PCI. These data are consistent with current guideline recommendations to consider either revascularisation (CABG or PCI) options following a discussion with the patient regarding the risks and benefits of each procedure. This should take into account the potential survival benefit of CABG over PCI for people with diabetes, older age or more complex coronary disease. **Surveillance decision** This review question should not be updated.
126 – 21 In adults with stable angina what is the incremental value/effectiveness of exercise electrocardiography for prognostic risk stratification in prediction of adverse cardiac outcomes? (1.5.1, 1.5.2, 1.5.11–1.5.14)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	*Comments received via expert feedback:* One topic expert identified evidence regarding the role of diagnostic tests for the investigation of chest pain however recognised that diagnosis is beyond the	New evidence is unlikely to impact on guideline recommendations. New intelligence from 4-year surveillance found one RCT[32] comparing anatomical

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
		scope of this guideline. *Studies highlighted via expert feedback:* An RCT[32] assigned 10,003 symptomatic patients to a strategy of initial anatomical testing with the use of coronary computed tomographic angiography (CTA) or to functional testing (exercise electrocardiography, nuclear stress testing, or stress echocardiography). The composite primary end point was death, myocardial infarction, hospitalisation for unstable angina, or major procedural complication. Secondary end points included invasive cardiac catheterisation that did not show obstructive CAD and radiation exposure. In symptomatic patients with suspected CAD who required non-invasive testing, a strategy of initial CTA, as compared with functional testing, did not improve clinical outcomes over a median follow-up of 2 years.	and functional testing to determine differences in clinical outcomes over a 2-year follow up. The study found no improvement in clinical outcomes between the anatomical and functional testing. The impact of this study is limited for this guideline as it relates primarily to diagnosis which is beyond the scope. The population within the study also falls outside the scope of the guideline as it only includes people without a diagnosis, only suspected, coronary artery disease. **Surveillance decision** This review question should not be updated.
126 – 22 In adults with stable angina what is the incremental value/effectiveness of exercise echocardiography for prognostic risk stratification in prediction of adverse cardiac outcomes? (1.5.1, 1.5.2, 1.5.11–1.5.14)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
			updated.
126 – 23 In adults with stable angina what is the incremental value/effectiveness of Myocardial Perfusion Imaging for prognostic risk stratification in prediction of adverse cardiac outcomes? (1.5.1, 1.5.2, 1.5.11–1.5.14)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be updated.
126 – 24 In adults with stable angina what is the incremental value/effectiveness of "exercise tests and ambulatory ECG" for prognostic risk stratification in prediction of adverse cardiac outcomes? (1.5.1, 1.5.2, 1.5.11–1.5.14)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be updated.
Pain interventions			
126 – 25 What is the clinical/cost effectiveness of TENS in people with stable angina? (1.6.1)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be updated.

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
126 – 26 What is the clinical/cost effectiveness of EECP in people with stable angina? (1.6.1)			
Evidence Update (2012) Enhanced external counterpulsation (EECP) A Cochrane review[33] investigated the effects of EECP in chronic stable angina or refractory stable angina. One RCT (n=139) was found examining hour-long sessions of EECP once or twice daily for 35 hours over 4 to 7 weeks versus sham treatment. The authors of the Cochrane review deemed the trial to be of poor methodological quality (for example, exclusion of those with severe symptoms of angina), with incomplete reporting of the primary outcome, limited follow-up of secondary outcomes, and flawed statistical analysis. They therefore concluded that the evidence for EECP for stable angina was inconclusive. The RCT was originally reported on in 1999 and information about it was available during the development of CG126 when the 'do not do' recommendation (1.6.1) was made. No subsequently published studies were found by the Cochrane review and thus the results are consistent with the current	None identified relevant to this question.	None identified relevant to this question.	New evidence is consistent with guideline recommendations. The 2-year Evidence Update found one Cochrane review[33] consisting of one RCT investigating the effects of EECP for stable angina. The Cochrane review concluded that the trial was of poor quality with flawed statistical analysis resulting in inconclusive evidence for EECP for stable angina. This is consistent with the current guideline 'do not do' recommendation to not offer EECP for people with stable angina. No new evidence was found by the 4-year surveillance review to change this conclusion. **Surveillance decision** This review question should not be updated.

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
guideline.			
126 – 27 What is the clinical/cost effectiveness of Acupuncture in people with stable angina? (1.6.1)			
Evidence Update (2012) None identified relevant to this question.	**Acupuncture vs conventional drugs** A meta-analysis[34] of 16 RCTs compared acupuncture combined with conventional drugs (ACCD) to conventional drugs alone for angina pectoris. ACCD was superior to conventional drugs alone in reducing the incidence of acute myocardial infarction, relief of angina symptoms and improvement of electrocardiography. Acupuncture alone was superior to conventional drugs for angina symptoms and ECG improvement. ACCD was superior to conventional drugs in shortening the time to onset of angina relief, however, the time to onset was significantly longer for acupuncture alone than for conventional treatment alone. However, the included trials were evaluated as having high or moderate risk of bias and poor quality of evidence. A meta-analysis[35] of 8 RCTs compared acupuncture therapy (n= 372) with conventional drugs (n= 268) in people with stable angina. Acupuncture	None identified relevant to this question.	**Acupuncture vs conventional drugs** New evidence is unlikely to impact on guideline recommendations. The 4-year evidence review found two meta-analyses[34,35] comparing acupuncture with conventional drugs for stable angina. Both studies found acupuncture improved angina symptoms however increased the time to relief from angina. The two meta-analyses highlight serious limitations in the included RCTs with risks of bias, poor quality evidence and limited statistical power. In light of the limitations, the new evidence is unlikely to impact on current guideline 'do not do' recommendation for use of acupuncture for people with stable angina. **Surveillance decision** This review question should not be updated.

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
	significantly increased the relief of angina symptoms and improved electrocardiography compared to conventional drugs. No significant difference found in reduction of nitroglycerin between the two groups. The time to onset of angina relief was longer for acupuncture therapy than for traditional medicines. Authors highlight the need for more clinical trials to assess the role of acupuncture for stable angina.		
Stable angina that has not responded to treatment			
126 – 28 What is the clinical/cost effectiveness of self management of pain in people with stable angina? (1.7.1)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be updated.
Cardiac syndrome X			
126 – 29 What is the clinical /cost effectiveness of using standard anti-angina drug therapy (short-acting nitrates, BB, CCB, long-acting nitrates, ACE/ARBs, nicorandil, Ivabradine, Ranolazine,) and /or drugs for secondary prevention in people with syndrome X? (1.8.1–1.8.3)			
Evidence Update (2012) None identified relevant to this question.	**Statin + CCB** An RCT[38] compared effects of combination therapy of statin and CCB with statin alone and CCB alone in	None identified relevant to this question.	New evidence is unlikely to impact on guideline recommendations. The 4-year evidence review found one RCT[38] combining statin and CCB

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
	patients with cardiac syndrome X (n=68). At 90-day follow up, the coronary flow reserve was significantly improved in the three groups. The time to 1 mm ST segment depression increased significantly in the fluvastatin-treated group, the diltiazem-treated group and the fluvastatin+diltiazem-treated group. Combination treatment with statin and CCB is more effective on endothelial function and exercise tolerance than monotherapy in patients with cardiac syndrome X. **Statin treatment for secondary prevention** One relevant study[39] was identified evaluating the use of statins for stable angina patients requiring PCI. Recommendations for the use of statins have been cross-referred in the guideline from CG181 Cardiovascular disease: risk assessment and reduction, including lipid modification (July 2014).		treatment to monotherapy for people with cardiac syndrome X. The study found statin and CCB combination treatment to be more effective than monotherapy in patients with cardiac syndrome X. This is however a small trial (n=68) and does not consider cardiovascular events as end points. Considering the limitations of the new evidence, it is unlikely to change drug treatment recommendations for cardiac syndrome X. **Surveillance decision** This review question should not be updated.
126 – 30 What is the clinical/cost effectiveness and safety of cardiac rehabilitation programmes for people with syndrome X? (No recommendation made in the guideline)			
Evidence Update (2012) None identified relevant to this question.	**Cardiac rehabilitation** An RCT[40] assessed the impact of Phase III cardiac rehabilitation and relaxation on	None identified relevant to this question.	New evidence is unlikely to impact on guideline recommendations.

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
	the quality of life (QOL) in patients with cardiac syndrome X. The population consisted of 40 eligible women randomly assigned to progressive muscle relaxation (PMR) (n= 11), phase III cardiac rehabilitation (CR) (n= 11), PMR with phase III CR for 8 weeks at home (n= 11) or control group (n= 7). After phase III CR, relaxation, and combination of CR and relaxation, patients demonstrated significantly improved QOL. The results of post-test multiple comparisons showed that there were statistically significant differences between control and all intervention groups. There was also statistically significant difference between relaxation and combination of phase III CR and relaxation groups.		The 4-year evidence review found one RCT[40] assessing the effect of a Phase III cardiac rehabilitation programme on the quality of life in patients with cardiac syndrome X. The study found significantly improved quality of life in the rehabilitation group. This trial is limited in the number of included participants for each intervention group (total n=40). There is therefore currently a lack of robust, clinically meaningful evidence for the effectiveness of cardiac rehabilitation programmes for cardiac syndrome X. This is consistent with the absence of recommendations in CG126 for cardiac rehabilitation programmes. **Surveillance decision** This review question should not be updated.
126 – 31 In adults with Cardiac Syndrome X (i.e. those with chest pain and normal coronary arteries) what is the incremental value/effectiveness of functional tests for prognostic risk stratification in prediction of adverse cardiac outcomes? (No recommendation made in the guideline)			
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. **Surveillance decision** This review question should not be

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
			updated.
Risk scores			
126 – 32 In adults with stable angina which tables, equations, engines, models or scoring systems are most reliable/effective for prognostic-risk stratification in prediction of adverse cardiac outcomes? (No recommendation made in the guideline)			
<u>Evidence Update (2012)</u> Prognostic value of biomarkers A meta-analysis[41] evaluated the relationship between natriuretic peptides and prognosis in prospective studies of people with stable coronary disease followed up for all-cause mortality and coronary or cardiovascular events. A total of 19 studies (n=25,138) were identified, of which 12 were prospective cohorts and 7 used observational data from randomised trials. Length of follow-up varied between 1 and 9.2 years. A meta-analysis was performed on 14 of the 19 studies (n=18,841) that were suitable for data pooling. The reported estimates of relative risk (RR) of cardiovascular events associated with natriuretic peptides were taken from each study and converted to a standard scale of effect to allow comparison of the highest third with the lowest third of the natriuretic peptide distribution. Using a	Prognostic value of biomarkers An RCT[42] measured plasma levels of 4 cardiovascular biomarkers, midregional pro-atrial natriuretic peptide (MR-proANP), midregional pro-adrenomedullin (MR-proADM), C-terminal pro-endothelin-1 (CT-proET-1), and copeptin, in 3717 patients with stable coronary artery disease and preserved left ventricular ejection fraction who were randomised to trandolapril or placebo as part of the Prevention of Events With Angiotensin Converting Enzyme (PEACE) trial. Elevated levels of MR-proANP, MR-proADM, and CT-proET-1 were independently associated with the risk of cardiovascular death or heart failure. A meta-analysis[43] of 9 prospective cohort studies assessed the association between N-terminal prohormone B-type natriuretic peptide (NT-proBNP) value and long-term prognosis in patients with	None identified relevant to this question.	New evidence is unlikely to impact on guideline recommendations. The 2-year Evidence Update found one meta-analysis[41] that evaluated the relationship between natriuretic peptides and prognosis of people with stable coronary disease. The analysis found a pooled relative risk of 3.28 for cardiovascular events associated with natriuretic peptides. The 4-year evidence review found one RCT and one meta-analysis[42,43] investigating the prognostic value of biomarkers in patients with stable coronary artery disease. The RCT found elevated levels of MR-proANP, MR-proADM, and CT-proET-1 were independently associated with the risk of cardiovascular death or heart failure. The meta-analysis found that a poor prognosis for mortality or cardiovascular

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
random effects model, the comparison resulted in a pooled RR of 3.28, although the authors reported some heterogeneity between studies. A sub-analysis of the 5 studies (n=5180) that provided adjustment for confounders (age, sex, renal and left ventricular function) reduced the pooled RR to 2.42.	stable coronary artery disease. End points included all-cause mortality, cardiovascular mortality and cardiovascular events. In a comparison of individuals in the top quartile with those in the bottom quartile of baseline values of NT-proBNP, the combined adjusted hazard ratio (HR) was 2.74. The combined HRs for the second and third quartiles compared with the first quartile were 1.33 and 1.85, respectively. In a subanalysis grouped by the median value, per 1 standard deviation increase or per 1000 pg/mL increase of NT-proBNP, the overall effect also showed that poor prognosis was significantly increased with the elevation of NT-proBNP.		events was significantly increased with the elevation of NT-proBNP. The evidence found by the review comprised early-phase studies of limited quality. The Evidence Update concluded that there was a lack of robust, clinically meaningful evidence for the use of natriuretic peptides in prognosis of stable coronary disease. The new evidence from the 4-year review is unlikely to impact on current guideline recommendations due to these limitations. This is consistent with the absence of recommendations from CG126 for the use of biomarkers in prognosis of stable angina. **Surveillance decision** This review question should not be updated.
Areas not currently covered in the guideline			
NQ – 01 Clopidogrel			
Evidence Update (2012) None identified relevant to this question.	An RCT[4] of 1001 patients with stable coronary artery disease compared the effect of aspirin to clopidogrel. Primary outcomes consisted of death, myocardial infarction, ischemic stroke and unstable	Intelligence gathered from NICE Medicines and Prescribing Programme team (MPP) indicates clopidogrel is used in some local NHS services for patients with stable angina. Two local services	New evidence is unlikely to impact on guideline recommendations. Current recommendation (1.3.5) for secondary prevention of cardiovascular disease considers aspirin for people with

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
	angina. At 2-year follow-up, no overall significant differences in outcomes were found between the interventions. In post-hoc analysis, there were no significant differences in outcomes for patients with aspirin resistance treated with clopidogrel compared to continued aspirin treatment.	(Greater Manchester and Barnsley) provided their treatment guidelines for stable angina which includes the use of clopidogrel. However, this use is mostly restricted to people who cannot tolerate aspirin. *Comments received via Medicines Associates:* Three Associates identify use of clopidogrel for stable angina patients either at risk of gastrointestinal bleeding or who are unable to take aspirin.	stable angina. Clopidogrel as a secondary prevention drug had not been included in the development of the guideline due to being unlicensed at the time. MPP advise that clopidogrel remains unlicensed for stable angina. However, intelligence gathered from Medicines Associates indicates that it may be used in practice as off-license and with people who can't take aspirin. The 4-year evidence review found one RCT[4] comparing clopidogrel to aspirin. This trial found no benefit of clopidogrel compared to aspirin for stable coronary artery disease or for people with aspirin resistance. Currently, there is a lack of consistent evidence on the effects of clopidogrel in people with stable angina to justify an update of recommendations. Clopidogrel could be an alternative to aspirin if the evidence was sufficient. The next update of CG126 should consider any new evidence on clopidogrel as identified by the 6-year review. **Surveillance decision**

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
			This recommendation should not be updated.
NQ – 02 Spinal cord stimulation			
Evidence Update (2012) None identified relevant to this question.	Two relevant studies[36,37] identified evaluating the safety and efficacy of spinal cord stimulation for refractory angina. Recommendations in this area are contained in the technology appraisal TA159: Spinal cord stimulation for chronic pain of neuropathic or ischaemic origin (October 2008). This information will be passed onto the TA team for consideration when the topic undergoes the review proposal process.	None identified relevant to this question.	There is no clinical question for this intervention in CG126 however the stable angina pathway notes that spinal cord stimulation is not recommended as a treatment. Recommendations in this area are contained in the technology appraisal TA159: Spinal cord stimulation for chronic pain of neuropathic or ischaemic origin (October 2008). New evidence will be passed onto the NICE Technology Appraisal team for consideration when the topic undergoes the review proposal process. **Surveillance decision** This recommendation should not be updated.
Research recommendations			
Information and support for people with stable angina			
RR – 01 What is the clinical and cost effectiveness of a self-management plan for people with stable angina?			
Evidence Update (2012)	None identified relevant to this question.	None identified relevant to this question.	No new evidence was identified that

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
None identified relevant to this question.			would affect recommendations. **Surveillance decision** This research recommendation will be considered again at the next surveillance point.
RR – 02 Is an 8-week, comprehensive, multidisciplinary, cardiac rehabilitation service more clinically and cost effective for managing stable angina than current clinical practice?			
Evidence Update (2012) None identified relevant to this question.	**8-week cardiac rehabilitation** An RCT[44] assigned 42 refractory angina patients to either an 8-week Phase III cardiac rehabilitation program or symptom diary control. Outcomes measured before and after intervention and at 8-week follow-up. Cardiac rehabilitation patients had significantly improved physical ability compared with controls in exercise tests. No differences found between groups for angina frequency or severity. Cardiac rehabilitation participants showed improved Health Anxiety Questionnaire reassurance and York Beliefs anginal threat perception scores.	None identified relevant to this question.	New evidence is unlikely to impact on guideline recommendations. The 4-year evidence review found one RCT[44] comparing a Phase III cardiac rehabilitation programme with symptom diary control in patients with refractory angina. This trial found cardiac rehabilitation significantly improved physical ability and York Beliefs anginal threat perception compared with controls. However, no difference found in angina frequency and severity between the cardiac rehabilitation and control groups. This trial has limitations with a low participant number (n=42) and short follow up duration of 8 weeks. New evidence to answer the research recommendation is limited and is unlikely to impact on recommendations until

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
			further trials are conducted. **Surveillance decision** This research recommendation will be considered again at the next surveillance point.
	Anti-anginal drug treatment		
RR – 03	**What is the clinical and cost effectiveness of adding a newer anti-anginal drug (nicorandil, ivabradine or ranolazine) to a calcium channel blocker for treating stable angina?**		
<u>Evidence Update (2012)</u> None identified relevant to this question.	**Ranolazine + BB or CCB** A post-hoc analysis[12] of the CARISA trial to assess the benefit of ranolazine in angina patients (n= 258) treated with maximally-tolerated doses of beta blocker or calcium channel blocker. Found a significant change from baseline in total exercise duration after 12 weeks compared to placebo. The number of angina attacks per week compared to baseline was significantly reduced compared to placebo. The effects of ranolazine 750mg and 1000mg were similar and the beneficial effects of ranolazine in this subgroup of maximally-treated patients were consistent with those not on maximally-tolerated doses of the background therapy. The CARISA trial informed the recommendation in CG126 and this analysis supports the	**Ranolazine as 3rd line drug** *Studies highlighted via expert feedback:* An RCT[13] examined the efficacy of ranolazine versus placebo on weekly angina frequency and sublingual nitroglycerin use in subjects with type 2 diabetes mellitus, coronary artery disease (CAD) and chronic stable angina who remain symptomatic despite treatment with up to two antianginal agents. After a single-blind, 4-week placebo run-in, patients were randomized to 8 weeks of double-blind ranolazine (target dose 1000mg) or placebo. Angina episodes and nitroglycerin use were recorded with daily entry into a novel electronic diary. Primary outcome was the average weekly number of angina episodes over the last 6 weeks of the study. Weekly angina frequency was significantly lower with	New evidence is consistent with guideline recommendations. The 4-year evidence review found one post-hoc analysis[12] assessing the effect of ranolazine in patients on maximum doses of first-line treatment, including calcium channel blocker, for stable angina. Compared to placebo, ranolazine was associated with an improvement in exercise duration and angina attacks. New intelligence from the 4-year review found one RCT[13] comparing ranolazine to placebo in patients already receiving first-line treatment, including calcium channel blocker, for stable angina. Compared to placebo, ranolazine was associated with significantly lower frequency of angina attacks.

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
	placing of ranolazine in the guideline.	ranolazine versus placebo, as was the weekly sublingual nitroglycerin use. There was no difference in the incidence of serious adverse events between groups.	This evidence is consistent with the current guideline recommendation to use ranolazine as a third-line treatment following initial therapy with antianginal treatments for stable angina. **Surveillance decision** This research recommendation will be considered again at the next surveillance point.
	Investigation and revascularisation		
RR – 04	**Do people with stable angina and evidence of reversible ischaemia on non-invasive functional testing who are on optimal drug treatment benefit from routine coronary angiography with a view to revascularisation?**		
Evidence Update (2012) None identified relevant to this question.	None identified relevant to this question.	**PCI guided by fractional flow reserve (FFR)** *Comments received via expert feedback:* One topic expert suggests a review of evidence for PCI guided by FFR however recognises that this may not justify a guideline update. *Studies highlighted via expert feedback:* An RCT[19] with 1220 patients with stable coronary artery disease, to assess the fractional flow reserve (FFR) in all stenoses that were visible on angiography. Patients who had at least one stenosis with an FFR of 0.80 or less were randomly assigned to undergo FFR-	New evidence is consistent with guideline recommendations. New intelligence from the 4-year review identified one RCT[19] comparing fractional flow reserve-guided PCI with medical therapy. This study found FFR-guided PCI reduced the rate of urgent revascularisations, however no differences found in the rates of death or myocardial infarction between the interventions. Medical therapy provided more favourable outcomes for patients without ischemia. NICE is currently developing medical technology guidance on HeartFlow FFRct

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
		guided PCI plus medical therapy or to receive medical therapy alone. Patients in whom all stenoses had an FFR of more than 0.80 received medical therapy alone and were included in a registry. The primary end point was a composite of death from any cause, nonfatal myocardial infarction, or urgent revascularisation within 2 years. Results found the rate of the primary end point was significantly lower in the PCI group than in the medical therapy group. This reduction was driven by a lower rate of urgent revascularisation in the PCI group, with no significant between-group differences in the rates of death and myocardial infarction. Urgent revascularisations that were triggered by myocardial infarction or ischemic changes on electrocardiography were less frequent in the PCI group. The rate of death or myocardial infarction from 8 days to 2 years was lower in the PCI group than in the medical therapy group.	for the estimation of fractional flow reserve from coronary CT angiography. This technology may impact on recommendations in the future and will be considered at the next review for CG126. New evidence is consistent with the current guideline recommendation to consider medical treatment as first-line in management of stable angina and PCI to be considered if symptoms are not controlled with optimal medical treatment. **Surveillance decision** This research recommendation will be considered again at the next surveillance point.
RR – 05 In people with stable angina and multi-vessel disease (including left main stem [LMS] disease) whose symptoms are controlled with optimal drug treatment, would an initial treatment strategy of revascularisation be clinically and cost effective compared with continued drug treatment?			
Evidence Update (2012)	**PCI vs CABG**	**PCI vs CABG**	New evidence is consistent with guideline

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
PCI vs CABG A prospectively designed substudy[26] of the SYNTAX trial examined the effect of PCI with drug-eluting stents versus CABG on health-related quality of life (HRQoL) in 1800 patients with previously untreated three-vessel or left main coronary artery disease. Outcomes of death, MI, stroke or repeat revascularisation from the SYNTAX trial were previously reported and considered when CG126 was developed. The primary endpoint of score on the angina-frequency subscale increased by more than 20 points from baseline at 6 and 12 months in both groups (greater than the minimum clinically important difference of 8 to 10 points stated by the authors), but the scores were slightly higher after CABG than PCI at both 6 months and 12 months. The proportion of patients free from angina after PCI or CABG significantly increased at 12 month follow up compared to baseline. In terms of general health status, there were no significant differences between groups at 6 or 12 months, but at 1 month there was a significant benefit with PCI.	A meta-regression[28] of RCTs (n= 12,844) to test whether an interaction existed between baseline clinical features (age, gender, diabetes mellitus, previous myocardial infarction and ejection fraction) and choice of revascularisation (PCI or CABG), focusing on death, myocardial infarction, repeat revascularisation and stroke for patients with stable angina. Compared to CABG, PCI significantly reduced the risk of stroke, both at 30 days and at 12-month follow up. This reduction in stroke was significantly higher in females. For repeat revascularisation, PCI performed worse than CABG, both in the overall population and in patients with multivessel disease. Women and those with diabetes mellitus were at significant increased risk of subsequent revascularisation after PCI. An RCT[29] compared CABG (n= 935) and PCI using drug-eluting stents (n= 945) on health status in patients with multivessel coronary artery disease and diabetes mellitus. Health status was assessed using the Seattle Angina Questionnaire at baseline, at 1, 6, and 12 months, and annually thereafter. For patients with	*Comments received via expert feedback:* Two topic experts identified studies that indicate a mortality benefit of revascularisation with CABG compared to PCI. *Studies highlighted via expert feedback:* A 5-year follow-up[30] of the SYNTAX trial, which compared coronary artery bypass graft surgery (CABG) with percutaneous coronary intervention (PCI) for the treatment of patients with left main coronary disease or three-vessel disease, to confirm findings at 1 and 3 years. Patients were randomly assigned to CABG (n=897) or PCI (n=903). CABG should remain the standard of care for patients with complex lesions (high or intermediate SYNTAX scores). For patients with less complex disease (low SYNTAX scores) or left main coronary disease (low or intermediate SYNTAX scores), PCI is an acceptable alternative. All patients with complex multivessel coronary artery disease should be reviewed and discussed by both a cardiac surgeon and interventional cardiologist to reach consensus on optimum treatment.	recommendations. The 2-year Evidence Update found one prospectively designed substudy[26] of the SYNTAX trial comparing the effect of PCI to CABG. The evidence suggests that both PCI and CABG are effective treatments for angina, which is consistent with advice in CG126. The minor benefit seen with CABG in this study is unlikely to affect current recommendations. The difference in recovery time between the two treatments is consistent with the need to inform patients of practical aspects of the two procedures as already stated in the guideline. A further RCT[27] identified by the 2-year Evidence Update compared PCI with drug-eluting stents versus CABG in patients with unprotected left main stenosis with or without additional multivessel coronary artery disease. The results are similar to those for the unprotected left main subgroup of the SYNTAX trial and suggest that PCI and CABG are both effective but repeat revascularisation rate may be lower after CABG, which is consistent with current

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
An RCT[27] also investigated PCI with drug-eluting stents versus CABG in 201 patients with unprotected left main stenosis with or without additional multivessel coronary artery disease. Participants needed to have symptoms of or documented myocardial ischaemia (the exact number with stable angina was not reported, but the rate of previous MI >48 hours before enrolment of below 20% in each arm suggested a population of likely relevance to stable angina). Patients were randomised to PCI with sirolimus-eluting stents (n=100) or CABG (n=101), although 3 patients randomised to PCI subsequently had CABG. The study objective was to determine whether PCI with sirolimus-eluting stents was not inferior to CABG with regard to the primary endpoint of freedom from major adverse cardiac events, including all-cause death, MI and target vessel revascularisation within 12 months. This endpoint was reached in 19.0% of patients after PCI and 13.9% after CABG. The difference was mainly accounted for by the greater need for repeat revascularisation after PCI compared with	diabetes and multivessel CAD, CABG surgery provided significantly greater benefit at 2-year follow up on angina frequency, physical limitations and quality of life than PCI using drug-eluting stents. The magnitude of benefit was small, without consistent differences beyond 2 years.		recommendations in CG126. The 4-year evidence review found one meta-regression[28] and one RCT[29] comparing the effects of PCI to CABG in patients with stable angina. The meta-regression found that CABG was associated with significant reductions in repeat revascularisations, especially in sub-groups of women and those with diabetes. The RCT found that CABG provided significantly greater benefit at 2-year follow up on angina frequency, physical limitations and quality of life than PCI in patients with diabetes and multivessel coronary artery disease. This data is consistent with current guideline recommendations to consider CABG over PCI for these sub-groups of patients. New intelligence from 4-year surveillance found one RCT[30] analysis comparing CABG to PCI for treatment of left main or three-vessel coronary disease. The analysis found CABG to be superior to PCI for treatment of complex coronary disease, however, PCI found to be an

Summary of evidence from previous surveillance	Summary of new evidence from 4-year surveillance (2015)	Summary of new intelligence from 4-year surveillance (2015)	Impact
CABG. Combined rates of death and MI were similar with both PCI and CABG. At a further follow-up of 36.5 months, the results for the combined endpoint and its subcomponents were similar to those at 12 months. The number of patients free from angina was similar after both PCI and CABG.			acceptable alternative. These data are consistent with current guideline recommendations to consider either revascularisation (CABG or PCI) options following a discussion with the patient regarding the risks and benefits of each procedure. This should take into account the potential survival benefit of CABG over PCI for people with diabetes, older age or more complex coronary disease. Although it should be noted that the new evidence does not compare revascularisation with continued drug treatment. For this reason, the evidence here may not fully address the research question. **Surveillance decision** This research recommendation will be considered again at the next surveillance point.

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