NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

HEALTH AND SOCIAL CARE DIRECTORATE

QUALITY STANDARD CONSULTATION

SUMMARY REPORT

1 Quality standard title

Acute coronary syndromes (including myocardial infarction)

Date of Quality Standards Advisory Committee post-consultation meeting:
10 June 2014.

2 Introduction

The draft quality standard for acute coronary syndromes (including myocardial infarction) was made available on the NICE website for a 4-week public consultation period between 11 April and 13 May 2014. Registered stakeholders were notified by email and invited to submit consultation comments on the draft quality standard. General feedback on the quality standard and comments on individual quality statements were accepted.

Comments were received from 13 organisations, which included service providers, national organisations, professional bodies and others.

This report provides the Quality Standards Advisory Committee with a high-level summary of the consultation comments, prepared by the NICE quality standards team. It provides a basis for discussion by the Committee as part of the final meeting where the Committee will consider consultation comments. Where appropriate the quality standard will be refined with input from the Committee.

Consultation comments that may result in changes to the quality standard have been highlighted within this report. Comments suggesting changes that are outside of the process have not been included in this summary. The types of comments typically not included are those relating to source guidance recommendations and suggestions for non-accredited source guidance, requests to broaden statements out of scope, thresholds, targets, large volumes of supporting information, general comments on the role and purpose of quality standards and requests to change NICE templates. However, the Committee should read this summary alongside the full set of consultation comments, which are provided in appendix 1.

3 Questions for consultation

Stakeholders were invited to respond to the following general questions:

1. Does this draft quality standard accurately reflect the key areas for quality improvement?

2. If the systems and structures were available, do you think it would be possible to collect the data for the proposed quality measures?

Stakeholders were also invited to respond to the following statement specific questions:

3. For draft quality statement 4: Is 24 hours an acceptable time frame for coronary angiography (with follow-on percutaneous coronary intervention (PCI) if indicated) for adults with NSTEMI or unstable angina who are clinically unstable or at high ischaemic risk?

4 General comments

The following is a summary of general (non-statement-specific) comments on the quality standard.

- Quality standard was welcomed and supported.
- All 5 statements were felt to be areas for quality improvement.

- Suggested changes to the wording in the introduction with an additional sentence on post-cardiac arrest management.
- Highlighted that some of the wording in the document may not be appropriate e.g. term fibrinolysis used instead of fibrinolytic therapy (statement 5).
- Concerns were raised that there were no cardiac surgeons on the committee.

Consultation comments on data collection

- Stakeholders agreed it is possible to collect the data for the proposed measures.
- Suggestion that commissioners could ensure this by requesting service providers provide the data as part of service contracts.

5 Summary of consultation feedback by draft statement

5.1 Draft statement 1

Adults with a suspected acute coronary syndrome have a diagnosis of myocardial infarction made according to the universal definition of myocardial infarction.

Consultation comments

Stakeholders made the following comments in relation to draft statement 1:

- Suggested new wording for the statement ‘All adults with a suspected acute coronary syndrome are assessed for the presence or absence of acute myocardial infarction using the criteria in the universal definition of myocardial infarction’.
- Highlighted the structure measure wording was repetitive.
- Concern with the patient audience descriptor and the use of the term ‘signs and symptoms’.

5.2 Draft statement 2

Adults with NSTEMI or unstable angina are assessed for their risk of future adverse cardiovascular events using an established risk scoring system that predicts 6-month mortality to guide clinical management.

Consultation comments

Stakeholders made the following comments in relation to draft statement 2:

- Concern with the patient audience descriptor and the use of the phrase ‘chest pain that keeps coming back’, in many people inaccurate.

5.3 Draft statement 3

Adults with NSTEMI or unstable angina who have an intermediate or higher risk of future adverse cardiovascular events are offered coronary angiography (with follow-on percutaneous coronary intervention (PCI) if indicated) within 96 hours of first admission to hospital.

Consultation comments

Stakeholders made the following comments in relation to draft statement 3:

- Stakeholders suggested they would like to see the timeframe reduced to 72 hours in line with European guidelines as the longer timeframe would be surprising and at odds with best practice in the cardiology community.
- Stakeholders commented that there was no mention of the role of coronary artery bypass grafting (CABG) as a treatment option.
- Concern with the wording of the patient audience descriptor as it does not explain clearly that PCI is a form of treatment and not a test.

5.4 Draft statement 4

Adults with NSTEMI or unstable angina who are clinically unstable or at high ischaemic risk are offered coronary angiography (with follow-on percutaneous coronary intervention (PCI) if indicated) as soon as possible after first admission to hospital.

Consultation comments

Stakeholders made the following comments in relation to draft statement 4:

- Stakeholders commented that there was no mentioned of the role of coronary artery bypass grafting (CABG) as a treatment option.

- A definition of ‘high ischaemic risk’ was felt to be useful and avoid the risk of different interpretations.

Consultation question 3

Stakeholders made the following comments in relation to consultation question 3:

- Stakeholders agreed with the timeframe of 24 hours and that this was in line with other guidance.
- Concern was raised that this timeframe was too long for some patients who were unstable where angiography and PCI/CABG is required immediately.
- Stakeholders noted that this was based on expert opinion.
- Several issues were identified:
  - May be a challenge for patients admitted to non-angiography or non-PCI centres and argues for anyone with suspected ACS to be admitted to a PCI centre.
  - Identification of clinical instability or high ischaemic risk is not always evident at the time of admission or the symptoms may develop during admission.
  - Difficult to account for informed choice.
- Stakeholders highlighted it would be important to identify the cause of the delay for patients who did not meet the timescale in order to identify improvements.

5.5 Draft statement 5

Adults with acute STEMI who present within 12 hours of onset of symptoms are offered primary percutaneous coronary intervention (PCI) within 120 minutes of the time when fibrinolysis could have been given.

Consultation comments

Stakeholders made the following comments in relation to draft statement 5:

- Inclusion of a statement on time to PPCI was felt to be important.
- Statement as written is confusing with the two timeframes and the wording is open to interpretation.

- Stakeholders highlighted the intent of the guideline recommendation was to indicate to commissioners the length of time it was medically acceptable to travel in order to obtain the benefits of PPCI.
- Suggested changes to the statement include:
  - PPCI should be offered to all patients with STEMI, provided this can be undertaken within 12 hours of symptom onset. In patients for whom PPCI would be delayed, for whatever reason beyond this time, thrombolysis should be considered instead.
  - Two statements:
    - one to reflect the fact that a whole pathway service is capable of delivering PPCI to every STEMI patient within 120 minutes
    - second to reflect the need for EVERY individual patient to have the shortest time to reperfusion (door-to-balloon time and call-to-balloon time) with ambulance and PPCI centres reporting their relevant times e.g. ambulance services reporting call-to-arrival on scene times.

6 Suggestions for additional statements

The following is a summary of stakeholder suggestions for additional statements.

- Discussion with patients about their risk assessment and informed decision making.
- Importance of a multidisciplinary team approach to determine the best method of revascularisation for stable patients with unstable angina and NSTEMI.
- Post-resuscitation care based on Resuscitation Council Guideline on Resuscitation (NICE-accredited) which was suggested as a development source.

Appendix 1: Quality standard consultation comments table

ID	Stakeholder	Statement No	Comments[1]
1	BCIS	General	BCIS support this QS. No suggested changes
2	British Heart Foundation	General	We believe it is important to support professional clinical judgement in the field, with appropriate discussion and informed choice on behalf of the patient. Given these considerations it is likely to be difficult to monitor impact accurately.
3	Department of Health	General	I wish to confirm that the Department of Health has no substantive comments to make, regarding this consultation.
4	Digital Assessment service, NHS choices	General	The quality standard is welcome. We have no comments on its content following consultation with the Digital Assessment Service.
5	Merck Sharp and Dohme	General	MSD appreciates the opportunity to comment on the draft quality standard for acute coronary syndromes. We can confirm that we have no comments.
6	Resuscitation Council (UK)	General	We welcome the prominence given to the importance of prompt and appropriate assessment of people resuscitated from cardiac arrest in the introduction, but attention to quality standards for management of this exceptionally high-risk group of patients is conspicuously absent from the remainder of the document. Furthermore the introduction emphasises the priority for this specific group when the arrest is due to STEMI but not for the larger group of people with STEMI who have not had a cardiac arrest, and not for the group of people who suffer cardiac arrest for which an ACS may be the cause but who do not have evidence of STEMI. The draft wording also uses 'revascularisation' when it should refer to 'reperfusion' (please see suggested rewording below). The introduction could be improved by making a statement about STEMI independently: 'The highest priority in managing STEMI is to restore an adequate coronary blood flow as quickly as possible using either drug treatment and/or percutaneous intervention to achieve reperfusion. This applies also to those people resuscitated from cardiac arrest due to STEMI. The time taken to re-establish coronary blood flow is very important because once a coronary artery is blocked, heart muscle starts to be lost.' A separate statement could refer to post-cardiac-arrest management: 'After resuscitation from any cardiac arrest the priority is to reduce the risk of further cardiac arrest. Where there is any likelihood that cardiac arrest was due to an acute coronary syndrome prompt investigation of the coronary arteries followed by reperfusion or revascularisation if

[1]PLEASE NOTE: Comments received in the course of consultations carried out by NICE are published in the interests of openness and transparency, and to promote understanding of how quality standards are developed. The comments are published as a record of the submissions that NICE has received, and are not endorsed by NICE, its staff or its advisory committees.

ID	Stakeholder	Statement No	Comments[1]
			required is an important part of early post-resuscitation care.' We recommend also adding the sentence: 'Where appropriate, investigation with a view to urgent reperfusion therapy should not be delayed in patients who have regained a spontaneous circulation but have not yet regained consciousness.'
7	Resuscitation Council (UK)	General	The pathogenesis of ACS is not well-described by the statement: 'all are due to a sudden reduction of blood flow to the heart, usually caused by a blood clot within a coronary artery'. In fact the reduction in blood flow is usually caused by rupture of an atheromatous plaque in a coronary artery, which may then be complicated by blood clot formation at the site of this event, but may not be. It is the development (or not) and behaviour of such clot that determines the type and severity of the ensuing ACS.
8	Resuscitation Council (UK)	General	This is potentially misleading where it states 'The most common symptom of acute coronary syndromes is severe chest pain that can last for several hours'. In reality the most common symptom is pain that is often in the chest but may radiate to or be located only in the abdomen, jaw, back or one or both arms. The pain is often but by no means always severe, and may last several hours but very often is of shorter duration. Inaccurate statements of this nature reduce the credibility of the document.
9	Resuscitation Council (UK)	General	Referring to NSTEMI and unstable angina the document states 'The type of treatment is determined by the patients' risk of future cardiovascular events (heart attack and stroke, repeat treatment or death)'. This could be interpreted as a generalisation, relating equally to all people with non-STEMI ACS, whereas the reality is that the type of treatment appropriate for any individual is determined by the patient's personal risk of future cardiovascular events.
10	Resuscitation Council (UK)	General	There is misuse throughout the document of the term 'fibrinolysis' instead of 'fibrinolytic therapy'. This tends to encourage the common misconception that the two terms are synonymous. Fibrinolytic therapy does not always achieve effective fibrinolysis, which is why primary PCI is the preferred treatment for STEMI if it can be delivered with appropriate promptness. Correct use of these terms may promote clarity of thought among healthcare professionals; NICE should avoid promoting confusion and imprecision.
11	Resuscitation Council (UK)	General	There is poor use of English and incorrect grammar in places throughout the document.
12	Resuscitation Council (UK)	General	As NICE bases its quality standards on guidance that has NICE accreditation it is disappointing that the current (2010) Resuscitation Council (UK) Guidelines on Resuscitation were not included in the evidence base for development of this quality standard.
13	Royal College of Nursing	General	The Royal College of Nursing was invited to comment on the Acute Coronary Syndromes (including myocardial infarction) quality standard. The document was circulated to RCN staff and nurses working with Cardiac & Myocardial Infarction patients for their views.
14	Royal College of Paediatrics and Child Health	General	No comments to make

ID	Stakeholder	Statement No	Comments[1]
15	The Royal College of Surgeons of Edinburgh	General	The College was surprised to note that there were no cardiac surgeons amongst the 24 listed members on the Advisory Committee, despite the fact that CABG plays a significant role in the treatment of these patients.
16	British Heart Foundation	Question 1	The BHF supports all five quality statements as both sensible and tractable in that the statements are key areas for improvement and the improvements will be measurable.
17	British Heart Foundation	Question 1	We would wish to see reference to proper discussion with patients about their risk assessment and informed decision making promoted as a general aspect of quality.
18	British Heart Foundation	Question 1	Does this draft quality standard accurately reflect the key areas for quality improvement? We support all five statements in the quality standard. They address the key areas for improvement and give scope for improvements to be measured.
19	DISN (Diabetes Inpatient Specialist Nurse) UK Group	Question 1	We do not have the expertise to answer specific question in regards to suggested time scale, however, feel that these draft standards would constitute good quality care for patients with diabetes and ACS.
20	Medtronic Limited	Question 1	Medtronic supports this Draft Quality Standard and considers the 4 Quality Statements will contribute to improvements in deaths from cardiovascular disease, length of hospital stay, adverse effects of interventions and incidence of further heart attacks if the Quality Standards are implemented, there is broad scale adoption and measurements are in place to monitor progress
21	Resuscitation Council (UK)	Question 1	Mostly but not totally. Having focused in the introduction on those who have suffered cardiac arrest:- a group that is at very high risk of recurrent cardiac arrest and death - the draft document then fails to define a quality standard for the management of this group, in whom we believe that there is currently considerable variation/inconsistency of access to high-quality post-resuscitation care, Defining good practice in this group in this quality standard could lead to a substantial improvement in clinical outcomes and in equality of access to appropriate investigation and treatment. Could this be the basis of a “Statement 6’?
22	Royal College of Nursing	Question 1	Members agreed that the draft standard does accurately reflect the key areas for quality improvement
23	British Heart Foundation	Question 2	If the systems and structures were available, do you think it would be possible to collect the data for the proposed quality measures? We think it would be possible to collect the data for the proposed quality measures that will allow the quality of care to be accurately measured.
24	Medtronic Limited	Question 2	Medtronic considers it is possible to collect data for the proposed quality measures with good systems and process in place and would like to stress the importance of education and peer support for adoption of new systems. The Stroke community has been successful in measuring and monitoring the implementation of the National Clinical Guideline for Stroke via SSNAP and previously SINAP.
25	Resuscitation Council (UK)	Question 2	Yes.
26	Royal College of Nursing	Question 2	Members commented that the data for the proposed quality measures should be collected

ID	Stakeholder	Statement No	Comments[1]
27	The Royal College of Surgeons of Edinburgh	Question 2	Although much of the data for the proposed quality measures are probably already availible, there needs to be dedicated personnel to collect this. Commissioners can ensure this by requesting service providers to provide this data as part of service contracts.
28	Resuscitation Council (UK)	Quality statement 1	Poor wording: 'Adults with a suspected acute coronary syndrome have a diagnosis of myocardial infarction made according to the universal definition of myocardial infarction.' We suggest something like: In adults with a suspected acute coronary syndrome a diagnosis of myocardial infarction is made only according to the universal definition of myocardial infarction.' or 'All adults with a suspected acute coronary syndrome are assessed for the presence or absence of acute myocardial infarction using the criteria in the universal definition of myocardial infarction.' This latter wording would require a change in the audit standard.
29	Resuscitation Council (UK)	Quality statement 1	The document has very cumbersome wording that is used repeatedly and does not say precisely what is intended: 'Evidence of local arrangements to ensure that adults with a suspected acute coronary syndrome only have a diagnosis of myocardial infarction made according to the universal definition of myocardial infarction.' What you mean to say is something like 'Evidence of local arrangements to ensure that whenever a diagnosis of myocardial infarction is made in an adult with a suspected ACS that diagnosis is based on the universal definition of myocardial infarction.'
30	Resuscitation Council (UK)	Quality statement 1	The universal definition of myocardial infarction is not based on signs and symptoms. The public must be given accurate information. NICE should not encourage otherwise.
31	Resuscitation Council (UK)	Quality statement 2	'…chest pain that keeps coming back' is a very poor – and in many people inaccurate - way of describing unstable angina to a patient or other member of the public.
32	NHS England	Quality Statement 3	The 96 hour time window comes from CG94 and therefore I can understand why it is part of this statement. However, an important trial (TIMACS) was published after the time window for consideration of the evidence for CG94, which suggested that earlier angiography was safe and beneficial (particularly for high risk groups. Also, international guidelines from the European Society of Cardiology recommends angiography within 72 hours, and patient representatives on the CG94 Guideline Development Group were strongly in favour of angiography being undertaken as soon as possible (provided it's safe) because they wished to shorten their hospital stays. Shorter stays obviously have some beneficial economic impact for the NHS. In short, I would prefer to see the time window be "less than 72 hours" and not less than 96 hours. Recommending the latter would obviously be compatible with CG94 but it is now 4 years since that guideline was published (2010), and it considered evidence only up to about 5 years ago, so is now out of date. Such a long time interval as 72 hours would be considered surprising and at odds with best practice by the cardiological community, and I think would not reflect patients' aspirations that their care should be delivered quicker. I think is not challenging enough to the provision of a quality service, one which current providers could certainly provide if encouraged to do so.
33	Resuscitation Council (UK)	Quality statement 3	'…(with widening of narrowed artery if needed)' fails to explain clearly to the public that PCI is a form of treatment, not a test.

ID	Stakeholder	Statement No	Comments[1]
34	The British Cardiovascular Society	Quality statement 3	For all other patients with NSTEMI, 96 hours from admission to angiography is too long. European Society of Cardiology guidance recommends 72 hours and the NICE standard should be seeking to reduce this time, not increase it. Given the logistic difficulties of running weekend service, 72 hours is a reasonable standard with a view to shortening this further if service provision is available.
35	The Royal College of Surgeons of Edinburgh	Quality statements 3 and 4	The College notes that there is no mention of the role of coronary artery bypass grafting (CABG) in the treatment of patients with ACS. In patients with STEMI, surgery is mainly limited to the treatment of complications, such as papillary muscle rupture and post infarct VSDs, and these patients are mainly treated by Primary PCI along the lines of Statement 5. CABG, however, still plays a significant role in patients with NSTEMI. Contemporary UK registry data suggests that up to 20% of NSTEMI patients requiring revascularisation are treated surgically. Furthermore, the Society of Cardiothoracic Surgeons (SCTS) database shows that there has been a 13% increase the number of patients requiring urgent (defined as patients admitted with ACS and requiring surgery in the same admission) isolated CABG between 2003 and 2012. This totalled to more than 6,500 patients in 2012, which accounted for approximately 39% of all patients undergoing isolated CABG. A significant proportion of patients, therefore, with ACS are treated with urgent CABG and this represents a significant portion of the workload for surgical units. This should be recognised within Statements 3 and 4. It is suggested that these should be amended as follows (proposed changes indicated in bold text): Statement 3 “Adults with NSTEMI or unstable angina who have an intermediate or higher risk of future adverse cardiovascular events are offered coronary angiography (with follow-on appropriate percutaneous coronary intervention (PCI) or urgent coronary artery bypass grafting (CABG) if indicated). PCI should be within 96 hours and CABG should be within 5 days, if clinically appropriate, of first admission to hospital” Statement 4 “Adults with NSTEMI or unstable angina who are clinically unstable or at high ischaemic risk are offered coronary angiography (with follow-on appropriate percutaneous coronary intervention (PCI) or urgent coronary artery bypass grafting (CABG) if indicated). PCI should be as soon as possible after first admission to hospital. Patients who are more appropriately treated by CABG should be stabilised, such as the insertion of an intra-aortic balloon pump (IABP) as soon as possible and CABG performed within five days if clinically indicated.” The role of CABG was acknowledged within the original NICE Guidance for Unstable Angina and NSTEMI (NICE Clinical Guideline 94 – 1.5.4 and 1.5.5). Further mention was made regarding the importance of a multidisciplinary team (MDT) approach to determine the best method of revascularisation for stable patients. These points should be

ID	Stakeholder	Statement No	Comments[1]
			reflected within the quality statements.
36	British Heart Foundation	Quality statement 4	The denominator is defined as patients who are clinically unstable or are high ischaemic risk. This is likely to be interpreted by individual clinicians differently in different clinical settings. In consequence comparisons between units may be difficult.
37	British Heart Foundation	Quality statement 4	We therefore recommend amending the statement to give firmer guidance on assessing high ischaemic risk and defining the phrase 'clinically unstable'.
38	NHS England	Quality statement 4	This statement reflects a recommendation in CG94 but I don't know how this would be measured so I wonder as to its value as part of a quality standard? The term 'as soon as possible', whilst clinically appropriate and understandable, is too vague for measurement. For people with ongoing ischaemia or high clinic risk a time frame of less than 24 hours is reasonable and desirable.
39	Resuscitation Council (UK)	Quality statement 4	It would be helpful to include a definition of what is meant by 'high ischaemic risk', to avoid the danger of varying subjective interpretation.
40	British Heart Foundation	Question 3	Question 3: For draft quality statement 4, is 24 hours an acceptable time frame for coronary angiography (with follow-on percutaneous coronary intervention (PCI) if indicated) for adults with NSTEMI or unstable angina who are clinically unstable or at high ischaemic risk? In principle, we agree that 24 hours is an acceptable time frame for coronary angiography in circumstances listed in quality statement 4. However, we note the evidence base for this is weak, and the statement is based largely on expert opinion.
41	Medtronic Limited	Question 3	Medtronic considers this proposal to be in line with ESC Guidelines for the Management of Acute Coronary Syndromes published in 2011 and suggests that measurements are put in place to monitor implementation to this proposed Quality Standard
42	Resuscitation Council (UK)	Question 3	This is more difficult. Patients with NSTEMI or unstable angina may not always have evidence of clinical instability or high ischaemic risk at the time of admission. These features may develop during an admission after a period of apparent stability. Depending on the severity of instability or perceived ischaemic risk the need for coronary angiography may be an emergency or may be acceptable within a maximum of 24 hours from the time of onset and identification of the instability/high risk.
43	Royal College of Nursing	Question 3	It was felt that 24 hours is an acceptable time frame for angiography for NSTEMI patients at high risk. Our only comment would be that it would be necessary to identify the cause of the delay if this timeframe was not met particularly in reference to patients who are admitted to a hospital that does not perform angiography. The delay may be caused by the medical staff not referring the patient, by lack of beds in the tertiary centre or it may be due to the patient getting to the tertiary centre within 24 hours but the angiogram not being performed within this time frame. It would be important to identify where the standard was not met in order to make improvements.
44	The British Cardiovascular Society	Question 3	For unstable patients with NSTEMI (patients with ongoing ischaemic symptoms despite medical therapy and dynamic ECG changes) 24 hours is too long to wait for angiography and PCI/CABG. This is required immediately, day or night,

ID	Stakeholder	Statement No	Comments[1]
			with a <2 hour standard. For high risk (e.g. patients with ischaemic symptoms that have settled on medical therapy, an elevated troponin level and ischaemic abnormalities on an ECG that have normalised) 24 hours is a reasonable standard for angiography and PCI/CABG.
45	The Royal College of Surgeons of Edinburgh	Question 3	'As soon as possible', defined as within 24 hours in Statement 4, is acceptable. Published evidence does not seem to support very early or immediate intervention, as with STEMI patients in this group of NSTEMI patients, and is in keeping with recommendations of the American Heart Association (AHA). 24 Hours may of course still provide a significant challenge to patients admitted to non-angiography or non-PCI centres and argues for the fact that patients with suspected ACS should be admitted to 'Heart Attack Centres' capable of performing 24/7 PCI.
46	The Royal College of Surgeons of Edinburgh	Question 3	The Royal College of Surgeons of Edinburgh College have considered the above Quality Standard and would like to make the following comments, primarily in relation to Sections 3 and 4. In patients who are suspected of having ACS and who are admitted to a centre without angiographic capabilities, following confirmation of the diagnosis of NSTEMI and risk stratification along the lines of statement 1 and 2, it would be challenging for patients who are classified as clinically unstable or at high ischaemic risk to be able to be transferred to a PCI centre and offered angiography and follow-on PCI within 24 hours. This is due to built in delays regarding transfers for NSTEMI patients. These patients might be better treated as though they were STEMI patients. That is they should be admitted to a 'Heart Attack Centre' capable of performing 24/7 angiography and PCI. It may be difficult to identify these patients at the time of call, before diagnosis and risk stratification, and it may be that to provide a safe-umbrella that the ultimate quality statement should state that all patients with suspected ACS should ideally be primarily admitted to a 'Heart Attack Centre', where NSTEMI patients who are clinically unstable and at high ischaemic risk have the best change of angiography and follow-on PCI as soon as possible. This is already the direction of travel but a strong quality standard statement may help to expedite this.
47	NHS England	Quality statement 5	I fully support the need to have a quality statement emphasising the importance of rapid coronary reperfusion therapy for STEMI. However, this statement may introduce confusion. The purpose of the recommendation in CG167 (2013) was to indicate to commissioners the length of time it was medically acceptable to travel in order to obtain the benefits of primary PCI (PPCI), rather than be offered the more immediate (because administered by ambulance crews), but inferior, treatment of intravenous thrombolysis. In other words, the longest distance (time) that would be acceptable to travel and yet still get the benefits of PPCI. In reality 95% of those currently having reperfusion treatment in England & Wales have PPCI so the vast majority of the population already has the superior treatment. The issue Statement 5 may be aimed at addressing is the need to ensure that all parts of the STEMI patient pathway works as efficiently and speedily as possible, so as to minimise delay to PPCI. Every minute of delay affects outcomes (mortality, later heart failure etc.) so a quality statement reflecting the importance of time to treatment (PPCI) for every individual is very important. However, the statement as currently written implies that as long as PPCI

ID	Stakeholder	Statement No	Comments[1]
			is undertaken within 120 minutes all is well, which is far from the case. For instance, if a STEMI patient lives 100 yards from a PPCI centre it would be a major breach of duty to take 120 minutes to undertake PPCI, whereas someone who lives 50 miles from a PPCI centre will obviously require a longer travel time; it is simply that as long as this travel time (together with the additional time in hospital before PPCI is undertaken) is less than 120 minutes, then transfer to a PPCI centre and not on-site thrombolysis is recommended. The quality statement should focus every part of the system on shortening the time to reperfusion as much as it is possible and safe to do. As such I would much prefer to see PPCI centres and the ambulance service report their contributions to the 'timeliness' issue; • ambulance services reporting call-to-arrival on scene times (already reported indirectly as part of the 6 minute response time) • ambulance services reporting departure-from-scene to hospital arrival time • and PPCI hospitals (or the very few that provide thrombolysis) report door-to-balloon (or door-to needle) times. The two most commonly used times for quality assurance are 'call-to-balloon' (CTB, which I appreciate you have listed as a measure) and door-to-balloon (DTB) and these are reported currently through the BCIS database and MINAP. The Quality Standard should capture the importance of speed to reperfusion, and allow Specialised Commissioners to see how the Ambulance Service and its PPCI Centres are performing, perhaps thereafter offering additional reimbursement if a high percentage of cases meet the QS. It may be that two QSs should be considered; one to reflect the fact that a whole pathway service is capable of delivering PPCI to every STEMI patient within 120 minutes, and a second to reflect the need for EVERY individual patient to have the shortest time to reperfusion (DTB and CTB times).
48	Resuscitation Council (UK)	Quality statement 5	There is potential for confusion between this statement ('within 120 minutes of the time when fibrinolysis could have been given') and the subsequent explanatory text (within 150 minutes of the call for medical help). The wording in the statement is open to variable, subjective interpretation. Later in the text there is reference to 'time to fibrinolysis' being within 30 minutes of the call for help. That might be the acceptable time for administration of fibrinolytic therapy, but if fibrinolysis occurs it would take place sometime after therapy had been given.
49	The British Cardiovascular Society	Quality statement 5	We would further comment that the PPCI standard is confusing in the way it is written in relation to the use of thrombolysis. It either implies that beyond 120mins there is no value in undertaking PPCI which is incorrect, or that the patients should all receive thrombolysis instead, which is also incorrect. It would be clearer to state that PPCI should be offered to all patients with STEMI, provided this can be undertaken within 12 hours of symptom onset. In patients for whom PPCI would be delayed, for whatever reason beyond this time, thrombolysis should be considered instead.

Stakeholders who submitted comments at consultation

- BCIS
- British Heart Foundation
- Department of Health
- Digital Assessment Service, NHS Choices
- DISN (Diabetes Inpatient Specialist Nurse) UK Group
- NHS England
- Medtronic Limited
- Merck Sharp and Dohme
- Resuscitation Council (UK)
- Royal College of Nursing
- Royal College of Paediatrics and Child Health
- Royal College of Surgeons of Edinburgh
- The British Cardiovascular Society