

**NATIONAL INSTITUTE FOR HEALTH AND
CARE EXCELLENCE**

HEALTH AND SOCIAL CARE DIRECTORATE

QUALITY STANDARD CONSULTATION

SUMMARY REPORT

1 Quality standard title

Acute heart failure

Date of Quality Standards Advisory Committee post-consultation meeting:

2 September 2015

2 Introduction

The draft quality standard for acute heart failure was made available on the NICE website for a 4-week public consultation period between 16 June and 14 July 2015. 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 14 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, requests to include 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 appendices 1 and 2.

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?
3. For each quality statement what do you think could be done to support improvement and help overcome barriers?

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

4. For draft quality statement 1: What is the specific quality improvement area for this statement? Is it the dedicated specialist heart failure team's early input OR their ongoing input? Please detail your answer.

If you do think that ongoing input is most important for quality improvement, please can you define concisely what specific ongoing input is involved from the heart failure team and its frequency?

4 General comments

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

- General support for the draft quality standard reflecting the key quality improvement areas of acute heart failure and covering the care pathway from natriuretic peptide guided identification to follow up after discharge. This will contribute to improving patient outcomes.
- A useful quality standard that will help to streamline services for those with acute heart failure. Providers will need to ensure that echocardiograms are available and that community support manages demand. Communication between acute heart failure services and general practice will be of importance.
- Support for this draft quality standard to help empower heart failure patients. It will also align a key ambition in the NHS Five Year Forward View in helping patients to make informed choices of treatment, managing long-term conditions and staying healthy.
- Support to produce and publish these measures in future national audit reports at aggregate and provider level to implement best practice care pathways.

Consultation comments on data collection

- If systems and structures are available data collection would be possible to collect for the proposed purposes.
- Concerns raised on both individual hospitals' resources and the specialist team's role and responsibility to be able to collect accurate data for the proposed quality measures due to financial pressures and time.
- Data collection was supported as being quite straightforward for those who contribute to the National Heart Failure Audit and have systems in place for identifying prospective heart failure patients. Problems can however occur when audit data is retrospectively collected.
- Coding for primary heart failure diagnosis was reported as often inaccurate therefore these statements do not apply to these patients and may affect data collection.

- Suggestion raised that as the majority of the data is collected by the National Heart Failure Audit is it possible to link the two datasets?

5 Summary of consultation feedback by draft statement

5.1 Draft statement 1

Adults admitted to hospital with suspected acute heart failure have early and ongoing input from a dedicated specialist heart failure team.

Consultation comments

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

- Support for access to specialist input as being associated with better outcomes in terms of treatment and mortality.
- Support for implementing a specialist team on a cardiology ward however concern was also raised that variable hospital resources and pressures could lead to patients being admitted to non-specialist wards and potentially moved in response to bed availability.
- Support for implementing local measures as being vital to ensure:
 - the specialist heart failure multidisciplinary team are made aware of outlying acute heart failure patients
 - transferral priority to these patients to the appropriate cardiology setting.
- Suggestion to specify a timeframe of patients being seen within 24 hours of admission.
- Support for this statement as the 2013 National Heart Failure Audit reports that only approximately 60% of patients on general medical or other wards received specialist input compared to 98% on cardiology wards.
- Support for this statement as the 2012 National Heart Failure Audit reports that 80% of patients were seen by a heart failure specialist in some capacity on the first admission and readmission with 20% receiving no specialist input. It was also

reported that men were more likely than women to have heart failure specialist input.

- This statement's achievement is based on continued monitoring of specialist input at first admission and readmission as per the National Heart Failure Audit.
- As acute heart failure patients are most commonly admitted through A&E departments, this statement should ensure appropriate pathways are implemented to facilitate input of a dedicated specialist heart failure team as early as possible. Particularly important due to non-standardised hospital referral practice and treatment variation of acute heart failure and its outcomes.
- The specialist heart failure multidisciplinary team should provide accessible contact opportunities (supported by relevant patient groups) responding to questions and liaising effectively with community services. Information provision should be to an agreed standard addressing language and cultural differences.

Consultation question 4

Stakeholders made the following comments in relation to consultation question 4:

a) What is the specific quality improvement area for this statement? Is it the dedicated specialist heart failure team's early input OR their ongoing input? Please detail your answer.

Early or ongoing input

- Early and ongoing input were supported as both being important especially for those patients who are not on a cardiology ward.
- However this it is not a 'one fits for all' approach as not all the patients with acute heart failure require the same intensity and frequency of specialist input. Many may not need specialist input until after discharge by community specialist heart failure nurses. However, conversely there will be a cohort of patients who will require ongoing and daily specialist input during admission.

Early input:

- Reported as the **most** important intervention to ensure:

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- the correct diagnosis is made as early as possible
- appropriate investigations and treatment occur in the admission setting
- prompt improvement in symptoms
- the correct management plan is outlined to reduce hospital length of stay
- life preserving interventions are prescribed for some heart failure types as early as possible to potentially reduce mortality
- improvement in the quality of care.

Ongoing input:

- a secondary aim to early input which is variable to individual intensity and frequency.
- provided by the heart failure team by either an in-reach service with frequent and ongoing review of care i.e. twice weekly or taking over care if appropriate.
- ideally implemented through a structured, personalised care plan which can lead to improving outcomes.
- the British Cardiovascular Society report states that access to a multidisciplinary cardiology team reduces one year mortality. This could imply that ongoing input is required but it is the individual provider's responsibility to implement resources in the most productive approach.
- helps patients to self-manage their condition and recover as well as support appropriate treatment (such as medicines adherence) and overall care.
- ensures optimal heart failure medication during hospital stay and appropriate follow up.
- The management plan for the majority of patients will have to include ongoing input such as :
 - measuring renal function appropriate to the individual
 - monitoring weight and fluid balance
 - intervention with timing planned when appropriate
 - switching to oral diuretics aligned to specific clinical parameters
 - ensure optimisation of heart failure medication during hospital stay and appropriate follow up.

Consultation comments on data collection

- No comments.

5.2 *Draft statement 2*

Adults with acute heart failure have a follow-up clinical assessment by a member of the community specialist heart failure team within 2 weeks of hospital discharge.

Consultation comments

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

- Support for this statement as being a vital component of acute heart failure care with evidence suggesting patients are vulnerable in the early stage following hospital discharge. This is the period where most readmissions usually occur as a result of inadequate treatment.
- Inclusion of both community and hospital specialist heart failure team members as performing the follow-up assessment as follow-up should be by the most appropriate heart failure team tailored to the individual's needs. It may be more appropriate to be seen in a cardiology setting for example if the patient is awaiting surgical intervention or assessment.
- Statement was particularly welcomed due to the adjustment period between hospital discharge and home.
- Concern raised on the heart failure specialist team's responsibility to deliver this statement.
- Service providers and commissioners need to be able to assess **all** patients within 2 weeks as there is no reliable method of identifying the patients who do not require within 2 weeks for risk of readmission. This statement therefore should not have a delivery target less than 100%.
- This team needs to be sufficiently resourced particularly in smaller centres needing cover for staff annual leave.
- In many centres heart failure nurse specialists are exclusively based in secondary care with community outreach by phone calls to patients, home visits and liaison with practice nurse and GPs. In order to maintain quality of patient care, primary

- care provision of nurse specialists should be in partnership with the secondary care services (heart failure clinics and new patient assessment in acute wards).
- Concern raised on the national lack of patient education and self-management tools from point of discharge to a potential follow-up assessment by a community specialist heart failure team.
 - To achieve a 2 week follow-up assessment a timely and accurate discharge notification (which is preferably electronically transmitted) will be needed to the responsible community services for review.
 - Support for this statement as the 2013 National Heart Failure Audit reported that 56% of discharged patients were referred for a follow-up appointment with the heart failure multidisciplinary team and only 34% of this cohort had their appointment planned for within two weeks of leaving hospital.
 - Delivering effective follow-up assessment requires a joined-up heart failure service. It is therefore important that Clinical Commissioning Groups ensure that they commission heart failure services that combine secondary and primary care and recognise the role of heart failure specialists. This need was identified as a key improvement area in the management of heart failure patients by the NHS Improvement Body.
 - For improving outcomes at hospital discharge, pathways should emphasise the need for appropriate discharge, ensuring optimal care which will positively help reduce future hospital readmissions, enhance medicine optimisation and improve outcomes for 2 week follow-up clinical assessments. The discharge decision should not be based on reducing length of stay as importantly patients who receive specialist input are reported as having longer lengths of stay than those with no specialist input.

Consultation comments on data collection

- This statement needs to be carefully measured and requires robust communication systems and IT data collection in both secondary and primary care settings.

5.3 *Draft statement 3*

Adults admitted with new suspected acute heart failure have a single measurement of natriuretic peptide.

Consultation comments

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

- Support for this statement to significantly improve new acute heart failure care who represent approximately more than 35% of all the patients admitted with acute heart failure and appropriate further investigations.
- Support for measuring natriuretic peptides for reducing unnecessary treatment.
- Suggestion that this statement emphasises that a value above the cut point does not confirm the diagnosis of heart failure; that the likelihood of heart failure increases with increasing BNP; and that the interpretation of the natriuretic peptide must be undertaken in conjunction with clinical assessment in order to triage and manage patients who are admitted with suspected heart failure.
- Support for this appropriate measurement however it is vital healthcare providers carefully consider designed schemes to limit and monitor any inappropriate tests in patients with acute decompensation of chronic heart failure or those with suspected acute heart failure. There is a need to prevent inappropriate testing and create a monitoring system that measures this and prohibits it.
- Clarification needed for this statement that this is only for patients without a previous Myocardial infarction (MI) or a previous diagnosis of chronic heart failure.
- General support for BNP testing on admission to capture a lot of patients; a significant proportion of whom won't have left ventricular systolic dysfunction (LVSD) but still are on the acute heart failure pathway with echocardiography. Clinical input was reported however as challenging for the heart failure teams.
- Statements 3 and 4 will not only improve hospital length of stay through early diagnosis and treatment but may potentially reduce mortality long-term and reduce readmission rates. Support that this statement works in parallel with quality statement 4. Together they are a major step forward to improve quality of patient care for those with suspected acute heart failure through provision of accurate and

reliable diagnosis and the aetiology of heart failure (where present) in a timely manner.

- On diagnosis, standard defined patient care pathways within local hospitals will be needed.

Consultation comments on data collection

- No comments.

5.3 *Draft statement 4*

Adults presenting with new suspected acute heart failure and raised natriuretic peptide levels have a transthoracic doppler 2D echocardiogram undertaken within 48 hours of admission.

Consultation comments

- Stakeholders made the following comments in relation to draft statement 4:
- General support for BNP testing on admission to capture a lot of patients; a significant proportion of whom won't have left ventricular systolic dysfunction (LVSD) but still are on the acute heart failure pathway with echocardiography. Clinical input was reported however as challenging for the heart failure teams.
- Statements 3 and 4 will not only improve hospital length of stay through early diagnosis and treatment but may potentially reduce mortality long term and reduce readmission rates. This statement works in parallel with quality statement 3. Together they are a major step forward to improve quality of patient care for those with suspected acute heart failure through provision of accurate and reliable diagnosis and the aetiology of heart failure (where present) in a timely manner.
- Support for appropriate measures with two additional suggested on echocardiography rate for:
 - patients known to have established chronic heart failure being admitted with acute decompensation

- patients with no raised natriuretic peptide levels who have an echocardiography to rule out heart failure.

These 2 measures highlight potential resource misuse and if linked to the statements will act as an effective deterrent and highlight where resources have been inappropriately utilised.

- Having an echocardiogram in a heart failure condition (particularly of an inherited nature) can be a specialist procedure requiring additional training. The resulting investigation must be reviewed by the lead cardiologist in the specialist heart failure multidisciplinary team as mentioned in statement 1.
- On diagnosis, standard defined patient care pathways within local hospitals will be needed.

Consultation comments on data collection

- No comments.

5.3 *Draft statement 5*

Adults admitted with acute heart failure who are already taking beta-blockers do not stop this treatment unless they have a heart rate less than 50 beats per minute, second or third degree atrioventricular block, or shock.

Consultation comments

- Stakeholders made the following comments in relation to draft statement 5:
- Support for this statement as being very important. If implemented it will reduce inappropriate treatment as some practitioners routinely discontinue beta-blockers in patients presenting with acute heart failure and often these beta-blockers do not get re-started again.
- Concern raised on an incorrect process measure which requires correction. If the patient has a heart rate less than 50 beats per minute or if they have second or

third degree atrioventricular block or they were in shock, then they must have their beta blockers stopped.

- Need for patient care pathways that extend outside the hospital was highlighted.

Consultation comments on data collection

- No comments

5.4 *Draft statement 6*

Adults with acute heart failure due to left ventricular systolic dysfunction are started or restarted on beta-blocker treatment during their hospital admission once their condition has been stabilised.

Consultation comments

- Stakeholders made the following comments in relation to draft statement 6:
- Support for this statement as being extremely important as this treatment can positively lead to a 35% mortality risk reduction in heart failure patients due to LSVD. It is essential to ensure a significant reduction in mortality and readmission rate for this patient group. Also the potential of arrhythmia is reduced.
- Support for the measures being correct and appropriate measures.
- Need for patient care pathways that extend outside the hospital was highlighted.

Consultation comments on data collection

- No comments

5.5 *Draft statement 7*

Adults admitted to hospital with acute heart failure and reduced left ventricular ejection fraction are offered an aldosterone antagonist and an angiotensin-converting enzyme (ACE) inhibitor or angiotensin receptor blocker [ARB] if there are intolerable side effects.

Consultation comments

- Stakeholders made the following comments in relation to draft statement 7:

- Support for this statement as being extremely important to ensure that acute heart failure patients with LVSD are all treated with aldosterone antagonists and an angiotensin converting enzyme inhibitor (or angiotensin receptor blocker if an angiotensin converting enzyme inhibitor has intolerable side effects).
- The three measures were agreed by one stakeholder.
- Error reported in process measure B. The ACEI is a primary treatment agent for this type of heart failure. ARB is only to be used if ACEI are not tolerated.
- Support for these drug treatments as reducing morbidity. In particular, aldosterone antagonists and angiotensin converting enzyme inhibitors were supported as reducing patients' mortality to 27-33% and at 21-23% respectively.
- For appropriate pharmacotherapy, patient care pathways that extend outside the hospital are needed.
- It is important that this statement identifies new treatment developments for heart failure to ensure that patients can access these medicines at the appropriate time. Suggestion to add 'and other appropriate licenced medicines' wording to statement.

Consultation comments on data collection

- No comments.

6 Suggestions for additional statements

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

- No comments.

Appendix 1: Quality standard consultation comments table – registered stakeholders

ID	Stakeholder	Statement number	Comments ¹
1	The Pumping Marvellous Foundation	General	Role of families and carers section- Our concern with the statement is where the education and support is for the carer. The document assumes that the carer is capable and has the clinical information to make an informed decision. The statement also makes no comment of the support that the carer themselves requires.
2	Roche Diagnostics	General	This draft quality standard covers the key areas for quality improvement for patients with acute heart failure accurately. Covering the care pathway from natriuretic peptide guided identification, diagnosis with Doppler echocardiography, specialist input for cases with diagnosed heart failure and follow up after discharge. With the national HF audit data set, collection of the individual measures is largely covered. To support adoption of a best practice care pathways, we would encourage producing and publishing the respective measures in future national audit reports at aggregate and provider level.
3	Royal College of Physicians (RCP)	General	Confirmation that the RCP wishes to endorse the response submitted by the BSH, RCP would be happy to consider supporting the final product.
4	NHS England	General	I wish to confirm that NHS England has no substantive comments to make regarding this consultation.
5	Medtronic Limited	General	Medtronic supports all 7 Quality Statements in the Draft Quality Standard for Acute Heart Failure and Management in Adults
6	Royal College of General Practitioners	General	A useful QS that will help to streamline services for those with acute heart failure. Providers will need to ensure that echocardiograms are available and that community support manages demand. Communication between acute heart failure services and general practice will be of importance

¹PLEASE 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 number	Comments ¹
Questions			
7	City Hospitals Sunderland – Inpatient Heart Failure Service	Question 1	It is thought that the draft standards do reflect the key areas of improvement.
8	British Heart Foundation	Question 1	We believe the draft quality standard accurately reflects the key areas for quality improvement. In relation to statements 1 and 2 on organisation of care, the Heart Failure Audit 2013 shows that nearly a quarter of patients (22%) did not see any heart failure specialist, and a third of patients (34%) received no input from the heart failure multi-disciplinary team on their first admission; and just over half (56%) were referred for follow up with the heart failure MDT, with only a third (34%) being followed up within 2 weeks.[1]
9	Novartis Pharmaceuticals UK Ltd	Question 1	<p>Acute heart failure represents a significant burden for patients and the wider health system in general. It is responsible for over 67,000 hospital admissions in England and Wales per year, and it represents the leading cause of hospital admission in people 65 years or older in the UK.1 It is therefore important to ensure that this Quality Standard accurately reflects all the key areas for quality improvement during not only a patient’s time in hospital, but also following their discharge, thereby contributing to improving health outcomes for patients.</p> <p>The draft Quality Standard accurately reflects the key areas for quality improvement for acute heart failure. We would suggest Quality Statements 1 and 2 are important.</p> <p>The Quality Standard could be improved by reflecting the need to empower patients and carers to enable them to better manage their condition. Heart failure is a progressive condition associated with significant mortality2, and it is important that both patients and their carers feel well-informed about the condition.</p> <p>One of the most positive actions a heart failure patient can make in regards to improving their outcomes is identifying how they can manage their symptoms and keep their condition under control.3 Evidence indicates that better understanding of care instructions is associated with improved patient outcomes and reduced readmission rates.4 Patients who do not adhere to recommended clinical guidelines in terms of managing their symptoms and wider lifestyle risk factors are more likely to have decreased time to readmission.5</p> <p>Utilising the Quality Standard to help empower heart failure patients would also align with a key ambition set out in</p>

ID	Stakeholder	Statement number	Comments ¹
			the NHS Five Year Forward View, that of helping patients to make informed choices of treatment, managing long-term conditions and staying healthy. ⁶
10	British Society for Heart Failure (BSH)	Question 2	It may be difficult for individual hospitals to collect accurate data for the proposed quality measures due to time and financial pressures. We would want to protect the specialist clinical team to be able to perform their clinical duties for patients with heart failure (rather than spend a significant period of time collecting this data). The majority of the data is collected by the National heart failure audit. Is there a way the two data collections could be linked?
11	City Hospitals Sunderland – Inpatient Heart Failure Service	Question 2	Data collection should be relatively straight forward for those who contribute to the national heart failure audit and have systems in place for locating prospective heart failure patients. Problems may occur when audit data is collected retrospectively. It is also necessary to be aware that Primary diagnosis coding for heart failure patients is often inaccurate therefore the standards do not apply to these patients and may affect the data collection.
12	British Heart Foundation	Question 2	We believe that if the systems and structures were available it would be possible to collect the data for the proposed purposes.
13	British Heart Foundation	Question 3	<p>We think the following could be done to support improvement and help overcome barriers:</p> <ul style="list-style-type: none"> • in relation to statements 1 and 2 on organisation of care, ensuring that patients with heart failure that are treated on wards other than a cardiology ward have specialist input during their admission and access to multi-professional follow up post discharge. The Heart Failure Audit for 2013 shows that only around 60% of patients on general medical or other wards received specialist input, compared to nearly all of those (98%) on cardiology wards. Half of patients were treated on general medical or other wards.[2] This is recommended in the British Cardiovascular Society report From Coronary Care Unit to Acute Cardiac Care Unit – the evolving role of specialist cardiac care’;[3] • in relation to statement 2 on two week follow-up assessment, timely and accurate notification of discharge, ideally electronically transmitted, to the community services that will have responsibility for carrying out the review; • in relation to statements 3 and 4 on diagnosis, standard defined patient care pathways within the local hospital; • in relation to statements 5, 6 and 7 on appropriate pharmacotherapy, patient care pathways that extend outside the hospital.

ID	Stakeholder	Statement number	Comments ¹
14	Novartis Pharmaceuticals UK Ltd	Question 3	<p>Quality Statement 1: Adults admitted to hospital with suspected acute heart failure have early and ongoing input from a dedicated specialist heart failure team.</p> <p>Access to specialist input is associated with better outcomes in terms of treatment and mortality in heart failure patients.⁷ It is important that this specialist input is delivered as soon as possible when a patient is admitted to hospital, as the efficacy of rapid access specialist heart failure clinics demonstrates.⁸</p> <p>Considering that people with acute heart failure are most commonly admitted to hospital through A&E departments⁹, the Quality Standard should set out the need to ensure appropriate pathways are being put in place to facilitate the input of a dedicated specialist heart failure team as early as possible for patients. This is particularly important considering that referral practice is not standardised across hospitals and that the treatment acute heart failure patients receive, and the success of that treatment, varies depending on the unit they are admitted to.⁹ The National Heart Failure Audit 2012-13 found that 80% of patients were seen by a heart failure specialist in some capacity on the first admission and readmission, indicating that a fifth receive no specialist input; it also identified that men were more likely to have input from a heart failure specialist than women.¹⁰</p> <p>Continued monitoring of specialist input at first admission and readmission, as per the National Heart Failure Audit, will provide a helpful means to overcome barriers to achieving the Quality Statement.</p>
15	Novartis Pharmaceuticals UK Ltd	Question 3	<p>Quality Statement 2: Adults with acute heart failure have a follow-up clinical assessment by a member of the community specialist heart failure team within 2 weeks of hospital discharge.</p> <p>The most recent National Heart Failure Audit revealed that 56% of patients were referred for a follow-up appointment with the heart failure multidisciplinary team on discharge, and that of this cohort, only a third (34%) had their appointment planned for within two weeks of leaving hospital.¹⁰</p> <p>Delivering effective follow-up assessment requires a joined-up heart failure service. It is therefore important that Clinical Commissioning Groups ensure they are commissioning heart failure services that join-up secondary and primary care and recognise the role of heart failure specialists. This need was identified as a key improvement area</p>

ID	Stakeholder	Statement number	Comments ¹
			<p>in the management of heart failure patients by the NHS Improvement body.¹¹</p> <p>In order to improve outcomes for patients discharged from a hospital setting, pathways should also emphasise the need for appropriate discharge, and ensure that decisions are not taken on the basis of reducing length of stay. This is especially pertinent considering that patients who receive specialist input – a key marker of high quality heart failure care – are shown to have longer lengths of stay than those receiving no specialist input into their management.¹⁰ The decision therefore of when to discharge a patient should always be based on ensuring optimisation of care. Such an approach will help reduce future hospital readmissions, enhance medicine optimisation and improve outcomes for 2-week follow-up clinical assessments.</p>
16	Novartis Pharmaceuticals UK Ltd	Question 3	<p>Quality Statement 7: Adults admitted to hospital with acute heart failure and reduced left ventricular ejection fraction are offered an aldosterone antagonist and an angiotensin-converting enzyme (ACE) inhibitor or angiotensin receptor blocker [ARB] if there are intolerable side effects.</p> <p>In relation to Quality Statement 7, it is important that the Statement notes developments in new treatments for heart failure to ensure patients can access these medicines at the appropriate time.</p> <p>NICE have started a technology appraisal for sacubitril/valsartan for the treatment of chronic heart failure (ID822). Sacubitril/valsartan has also been granted Promising Innovative Medicine (PIM) status, which is the first step for the Early Access to Medicines Scheme (EAMS). Results from the 8,442 patient PARADIGM-HF study showed that versus the ACEi enalapril, sacubitril/valsartan (both in combination with beta blockers and aldosterone antagonists):</p> <ul style="list-style-type: none"> · reduced the risk of death from cardiovascular causes by 20% · reduced heart failure hospitalisations by 21% · reduced the risk of all-cause mortality by 16%¹² <p>We would therefore suggest that the following wording is added to the Quality Statement to ensure patients are able to access treatment: “and other appropriate licenced medicines”.</p>
17	Sheffield Teaching Hospitals NHS Foundation Trust	Question 4	<p>The most important intervention that would improve the quality of care provided is the provision of EARLY input from the Heart Failure Specialist Team member in the first 48 hours of admission with possible acute heart failure. Ideally this should be done once the patient has either been identified as presenting with acute decompensation of chronic heart failure, or as a denovo acute heart failure patient. The latter would have had a single measurement of</p>

ID	Stakeholder	Statement number	Comments ¹
			<p>NTproBNP and has had an echocardiogram. This early input will ensure that the correct diagnosis is made as early as possible and that the correct management plan is drawn up to reduce hospital length of stay, improve the patient's symptoms quickly and possibly reduce the mortality by prescribing the life preserving interventions in some of the types of heart failure as early as possible. Examples of the latter are recognising catastrophic valvular problems such as aortic stenosis or mitral regurgitation early and implementing appropriate interventions; or the prescribing of ACEI/BB/AA in patients with left ventricular systolic dysfunction (HFREF).</p>
18	Sheffield Teaching Hospitals NHS Foundation Trust	Question 4	<p>The provision of ongoing input is also important but less important than the early input in many cases for the following reasons: The management plan in the majority of the patients will have to include the plan of ongoing care needed such as measurement of the renal function parameters at frequencies appropriate to each individual case, the need to monitor weight and fluid balance, the need to intervene with pacing planned appropriately in the small group of patients who may require that, the plan to switch to oral diuretics could also be set against certain clinical parameters. In addition, not all the patients with acute heart failure require the same intensity level and frequency of specialist input. The determination of the intensity level and frequency of input from the specialist team is usually evident from the first visit if the diagnosis is made on firm clinical, ECG and echocardiographic grounds. Many of the patients may not need specialist input until after discharge when the input of the community specialist heart failure nurses will be needed. However, on the other extreme there will be a cohort of patients who will require ongoing and daily specialist input during the admission. Thus it is not a one fit for all policy. This is why I believe that the first characteristic of this standard is the most important one (EARLY) input from the specialist team, while (an) ongoing input rather than (the) ongoing input should be the secondary aim which by definition would be of variable individualised intensity and frequency. In addition, while some of the patients with heart failure should be exclusively cared for in a cardiology ward; many can be effectively cared for in the general ward if there was ongoing input from the specialist team and a clear plan of management, as these patients have frequent co-morbidities that would make their care in the cardiology ward less appropriate than if they were cared for in a general ward with support from the heart failure specialist team</p>
19	Royal College of Physicians of Edinburgh	Question 4	<p>A. The most important intervention that would improve the quality of care provided is early input from the Heart Failure Specialist Team in the first 48 hours of admission with possible acute heart failure. Ideally this should be done once the patient has either been identified as presenting with acute decompensation of chronic heart failure or as a denovo acute heart failure patient. The latter would have had a single measurement of NTproBNP and an echocardiogram. This early input will ensure that the correct diagnosis is made as early as possible and that the</p>

ID	Stakeholder	Statement number	Comments ¹
			<p>correct management plan is drawn up to reduce hospital length of stay, improve the patient’s symptoms quickly and possibly reduce the mortality by prescribing life-preserving interventions in some of the types of heart failure as early as possible. Examples of the latter are recognising catastrophic valvular problems such as aortic stenosis or mitral regurgitation early and implementing appropriate interventions; or the prescribing of Angiotensin Converting Enzyme Inhibitors (ACEI)/ Beta Blockers (BB)/ Aldosterone Antagonists (AA) in patients with left ventricular systolic dysfunction (Heart Failure: Reduced Ejection Fraction (HFREF)). Less acute patients may well benefit from specialty review which can be as an outpatient after discharge.</p> <p>B. The provision of ongoing input is also important, but less so than the provision of early input in many cases. The management plan for the majority of the patients will include items such as measurement of the renal function parameters at frequencies appropriate to each individual case; the need to monitor weight and fluid balance; the need to intervene with pacing planned appropriately in the small group of patients who may require that; and a plan to switch to oral diuretics, set against certain clinical parameters.</p> <p>In addition, not all the patients with acute heart failure require the same intensity and frequency of specialist input. The determination of the required input from the specialist team is usually evident from the first visit if the diagnosis is made on firm clinical, ECG and echocardiographic grounds.</p> <p>Many centres are currently able to support the delivery of this standard, however some, for example some Districts General Hospitals, may require additional resourcing to meet requirements within the first 48 hours</p>
20	City Hospitals Sunderland – Inpatient Heart Failure Service	Question 4	Both early and ongoing input is equally as important especially for those patients who are not on a cardiology ward. Early input is necessary to facilitate accurate diagnosis, appropriate investigations and treatment in the admission setting. Ongoing input is important to ensure optimisation of heart failure medication during their stay and appropriate follow up.
21	British Society for Heart Failure (BSH)	Question 4	The specific quality improvement area should be both early and ongoing input. For ongoing input, the heart failure team should provide this by either (1) an in-reach service with frequent and ongoing review of care e.g. twice weekly or (2) taking over care if appropriate.
22	British Heart Foundation	Question 4	The British Cardiovascular Society report suggests that access to a multidisciplinary cardiology team reduces one year mortality[4], implying that on-going input is required: however it should be down to the individual provider to

ID	Stakeholder	Statement number	Comments ¹
			deploy resources in the most productive way.
23	Novartis Pharmaceuticals UK Ltd	Question 4	<p>Whilst both early and ongoing input from a specialist heart failure team should be considered important elements of a heart failure service, clinical input on an ongoing basis ideally through a structured, personalised care plan, can provide an important means of improving outcomes for heart failure patients.</p> <p>Ongoing specialist input should help patients to better manage their condition and recovery process, as well as support appropriate treatment and care. A key element of this input should be around supporting adherence to medication. Evidence demonstrates improved survival for heart failure patients who were being managed by specialist cardiology practitioners compared to GP care alone.¹³</p>
Statement 1			
24	West Hampshire CCG	1	We would like to see this standard specify a timeframe within which patients should be seen of within 24 hours of admission
25	Cardiomyopathy UK	1	We support the proposal for patient to be cared for by a specialist team on a cardiology ward. However, due to varying levels of resource and pressures within hospitals it is likely that patients will be admitted to non-specialist wards and even moved in response to bed availability. It is vital that measures are in place locally to ensure that the specialist heart failure multi-disciplinary team are made aware of outlying acute heart failure patients and priority is given to transferring them to the appropriate cardiology environment as soon as possible.
Statement 2			
26	The Pumping Marvellous Foundation	2	Our concern arises around the lack of patient education and self-management tools from the moment of discharge to a potential follow up by a community specialist heart failure team bearing in mind this is not available in some areas.
	British Society for Heart	2	We would encourage the follow up assessment to be performed by a member of any specialist heart failure team

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27	Failure (BSH)		(community or hospital) i.e. not just the community team as stated.
28	Sheffield Teaching Hospitals NHS Foundation Trust	2	This is a vital component of the care of patients with acute heart failure as there is clear evidence of vulnerability of these patients in the early stage following discharge from the hospital. This is the period where most re-admissions occur usually because of either inadequate diuretic dose or because of inadequate therapy that needed uptitration in the early stage following discharge. Both could be provided as interventions by the member of the specialist heart failure team who sees the patient in the first two weeks and ensures that the patient remains stable, and plans further follow up plans either by a member of the same team or by other community services including the primary care physicians (GP's). This standard needs to be measured carefully and this requires robust systems of communication and IT data collection in both the secondary and primary care settings. The responsibility of delivering this standard falls upon the heart failure specialist team who need to be resourced sufficiently by their provider and commissioners to be able to deliver this task to ALL the patients within 2 weeks, since there is no reliable method of identifying the patients who can afford not to be reviewed within 2 weeks for fear of re-admission. Thus this standard should not have a delivery target less than 100%.
29	City Hospitals Sunderland – Inpatient Heart Failure Service	2	Follow up within 2 weeks should not be restricted to the community team. Follow up should be with the most appropriate member of the heart failure team depending on the patients individual needs. It may be more appropriate to be seen in a cardiology setting for example if the patient is awaiting surgical intervention or assessment for such. NICE Acute Heart Failure Guidelines (CG187) – states ‘follow up should be undertaken by a member of the specialist heart failure team within 2 weeks of discharge’.
30	Cardiomyopathy UK	2	The provision of a clinical assessment within the first two weeks of discharge is supported and welcomed. The clinical assessment is likely to be influenced by the patients understanding of their heart failure condition, their level of anxiety, and their compliance with prescribed therapy. This, in turn, will be influenced by the level and quality of information and support the patient is provided. This is of particular relevance in the period of adjustment between hospital discharge and settling back to life at home. Linking back to quality statement 1, the specialist heart failure multi-disciplinary team should provide accessible contact opportunities, supported by relevant patient groups, for response to questions and liaise effectively with community services. Information provided should be to an agreed standard and respond to language and cultural differences.
			This is a vital component of the care of patients with acute heart failure as there is clear evidence of vulnerability of these patients in the early stage following discharge from the hospital. This is the period where most re-admissions

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31	Royal College of Physicians of Edinburgh	2	<p>occur usually because of either inadequate diuretic dose or because of inadequate therapy that needed uptitration in the early stage following discharge. Both could be provided as interventions by the member of the specialist heart failure team who sees the patient in the first two weeks and ensures that the patient remains stable, and plans further follow up plans either by a member of the same team or by other community services including primary care physicians (GPs). This standard needs to be measured carefully and this requires robust systems of communication and IT data collection in both the secondary and primary care settings.</p> <p>The responsibility of delivering this standard falls upon the heart failure specialist team who need to be resourced sufficiently by their provider and commissioners to be able to deliver this task to all patients within 2 weeks, since there is no reliable method of identifying the patients who can afford not to be reviewed within 2 weeks for fear of re-admission. Thus this standard should not have a delivery target less than 100%. Again, this would need to be addressed particularly in smaller centres with cover for staff annual leave etc.</p> <p>In many centres, heart failure nurse specialists are based exclusively in secondary care, with outreach into community by phone calls to patients, home visits and liaison with practice nurse and GPs. Any change to provide care by nurse specialists in primary care should be in partnership with the secondary care service (heart failure clinics and new patient assessment in acute wards) in order to maintain quality of patient care. Robust, clear and rapid communication between primary and secondary heart failure services is vital in this regard.</p>
Statement 3			
32	British Society for Heart Failure (BSH)	3	Point 3 emphasises that a value above the cut point does NOT make the diagnosis of heart failure; that the likelihood of heart failure increases with increasing BNP; and that the interpretation of the natriuretic peptide must be undertaken in conjunction with clinical assessment in order to triage and manage patients who are admitted with suspected heart failure.
33	Sheffield Teaching Hospitals NHS Foundation Trust	3	Implementing this standard would greatly improve the care of patients with new acute heart failure who represent probably no more than 35% of all the patients admitted with acute heart failure. These patients require further investigations with echocardiography and sometimes other imaging means if their BNP is >100 ng/l or NTproBNP is >300 ng/l. In addition, many patients suspected of acute heart failure would be spared un-necessary echocardiography and un-necessary therapy with diuretics and other agents if their natriuretic peptides were found to be below the thresholds cited above. The measurement of the standard are appropriately described. However, it

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			is vital that health providers consider carefully designed schemes to limit and police any in-appropriate use of these tests in patients with acute decompensation of chronic heart failure or indeed in any patient who did not have any suspicion of acute heart failure. Indeed the system should be geared towards protecting this test from being misused a routine blood test of everyone walking or being brought into the hospital, as this would be financially crippling and could overwhelm both the echocardiography department and the heart failure teams as many seriously ill patients who do not have acute heart failure may well have raised natriuretic peptides. In other words, we need to both guard against these eventualities and create a monitoring system that measures these abuses and prohibits them.
34	Royal College of Physicians of Edinburgh	3	Implementing this standard would greatly improve the care of patients with new acute heart failure who represent probably no more than 35% of all the patients admitted with acute heart failure. These patients require further investigations with echocardiography and sometimes other imaging means if their BNP is >100 ng/l or NTproBNP is >300 ng/l. In addition, many patients suspected of acute heart failure would be spared unnecessary echocardiography and unnecessary therapy with diuretics and other agents if their natriuretic peptides were found to be below the thresholds cited above. The measurement of the standard is appropriately described. However, it is vital that health providers consider carefully designed schemes to limit and monitor any inappropriate use of these tests in patients with acute decompensation of chronic heart failure or indeed in any patient who did not have any suspicion of acute heart failure.
35	City Hospitals Sunderland –Inpatient Heart Failure Service	3	Should this statement clarify for patients without a previous MI or a previous diagnosis of chronic heart failure?
36	West Hampshire CCG	3	We suspect that measuring BNP on admission will capture a lot of patients, a significant proportion of whom won't have LVSD but still go down the acute HF pathway with echo. Clinical input will be challenging for the HF teams.
Statement 4			
37	Sheffield Teaching Hospitals NHS Foundation Trust	4	This works in parallel with standard 3, as they form together a major step forward to improve the quality of care to patients with suspected acute heart failure through the provision of accurate and reliable diagnosis of the cause and possibly the aetiology of heart failure where present; in a timely fashion. These two standards will not only improve the figures of hospital length of stay through the early diagnosis and treatment of these patients but may well reduce mortality in the long run and possibly reduce re-hospitalisation rates. The measurements proposed are

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			appropriate but I would recommend two other parameters to be measured namely the rate of echocardiography in patients known to have established chronic heart failure being admitted with acute decompensation and those in whom natriuretic peptides were not raised and yet their admitting team insisted on doing the echo to rule out heart failure. These two aspects are potential mis-use of resources and constitute disrespect of both the evidence base and the current guidelines, I fear they will occur unless one guards against them by specific measurements linked to the standards as a deterrent.
38	Royal College of Physicians of Edinburgh	4	This works in parallel with standard 3, as they form together a major step forward to improve the quality of care to patients with suspected acute heart failure through the provision of accurate and reliable diagnosis of the cause of heart failure where present, in a timely fashion. These two standards will not only improve the figures of hospital length of stay through the early diagnosis and treatment of these patients but may well reduce mortality in the long run and possibly reduce re-hospitalisation rates. The measurements proposed are appropriate but two other parameters could also be measured: the rate of echocardiography in patients known to have established chronic heart failure being admitted with acute decompensation, and those in whom natriuretic peptides were not raised and yet their admitting team carried out an echo to rule out heart failure. The assessment of these parameters would highlight where resources had not been utilised appropriately.
39	West Hampshire CCG	4	We suspect that measuring BNP on admission will capture a lot of patients, a significant proportion of whom won't have LVSD but still go down the acute HF pathway with echo. Clinical input will be challenging for the HF teams.
40	Cardiomyopathy UK	4	This links to quality statement 1 in that an echocardiogram in a heart failure condition, particularly of an inherited nature, can be a specialist procedure requiring additional training. The resulting investigation must be reviewed by the lead cardiologist in the specialist heart failure multi-disciplinary team.
41	City Hospitals Sunderland – Inpatient Heart Failure Service	4	Agree
Statement 5			
42	Sheffield Teaching Hospitals NHS Foundation Trust	5	This is a very important standard which if implemented will protect the patients from the ill advised practice where some practitioners routinely discontinue beta blockers in patients presenting with acute heart failure, and frequently these beta blockers do not get re-started again. The measurement proposed in the document however is clearly wrongly stated!

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			<p>The document states: [Proportion of adults admitted with acute heart failure who are already taking beta- blockers who do not stop this treatment unless they have a heart rate less than 50 beats per minute, second or third degree atrioventricular block, or shock. Numerator – the number in the denominator who do not stop this treatment. Denominator – the number of hospital admissions of adults with acute heart failure who are already taking beta-blockers and have a heart rate less than 50 beats per minute, second or third degree atrioventricular block, or shock] The Denominator should state: [Denominator – the number of hospital admissions of adults with acute heart failure who are already taking beta-blockers and DO NOT have a heart rate less than 50 beats per minute, second or third degree atrioventricular block, or shock] Please note that if the patient has a heart rate less than 50 beats per minute or if they have second or third degree atrioventricular block or they were in shock, then THEY MUST have their beta blockers stopped. The error in the stated denominator should not have been allowed to reach the consultation stage.</p>
43	Royal College of Physicians of Edinburgh	5	This is a very important standard which if implemented will protect patients from the practice where some practitioners routinely discontinue beta blockers in patients presenting with acute heart failure, and frequently these beta blockers are not recommenced.
44	City Hospitals Sunderland – Inpatient Heart Failure Service	5	Agree
Statement 6			
45	Sheffield Teaching Hospitals NHS Foundation Trust	6	This is an extremely important standard. These agents are credited with 35% risk reduction of mortality in patients with heart failure due to left ventricular systolic dysfunction. Therefore ensuring that the patients with this condition presenting acutely are commenced on these agents after they are stabilised or are recommenced on these agents if they were stopped for one of the reasons stated in standard 5, are essential standard if we were to ensure that the mortality of this group of patients is significantly reduced, their re-admission rate is reduced and their chance of having arrhythmias is also reduced. I believe the two separate measurements proposed are both

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			appropriate and correct
46	Royal College of Physicians of Edinburgh	6	This is an extremely important standard and is fully supported.
47	City Hospitals Sunderland – Inpatient Heart Failure Service	6	Agree
Statement 7			
48	Sheffield Teaching Hospitals NHS Foundation Trust	7	<p>This is also an extremely important standard aiming to ensure that the group of acute heart failure patients with left ventricular systolic dysfunction are all treated with aldosterone antagonists and an angiotensin converting enzyme inhibitor (or angiotensin receptor blocker if an angiotensin converting enzyme inhibitor has intolerable side effects). I agree that there must be three measurements made, of the</p> <ul style="list-style-type: none"> a. percentage of patients with acute heart failure due to left ventricular systolic dysfunction on aldosterone antagonists (when both ACEI and ARB are not tolerated) b. percentage of patients with acute heart failure due to left ventricular systolic dysfunction on aldosterone antagonists and an angiotensin converting enzyme inhibitor c. percentage of patients with acute heart failure due to left ventricular systolic dysfunction on aldosterone antagonists and an angiotensin receptor blocker if there were intolerable side effects of angiotensin converting enzyme inhibitors. <p>These agents are credited with reducing patients’ morbidity. Besides, both aldosterone antagonists and angiotensin converting enzyme inhibitors are credited with reducing patients’ mortality at 27-33% and at 21-23%, respectively. Please note that there is an error in measurement B as published in the document where the writer thought that angiotensin converting enzyme inhibitor is used if angiotensin receptor blocker is not tolerated. The latter is incorrect. ACEI is a primary treatment agent for this type of heart failure. ARB is only to be used if ACEI are not tolerated. The reverse is not true (this should not have been allowed to reach the consultation stage).Therefore, the following is incorrect:</p> <p>[b] Proportion of new hospital admissions for adults with acute heart failure and reduced left ventricular ejection fraction when an ARB cannot be tolerated, that are treated with an aldosterone antagonist and an ACE inhibitor. Numerator – the number in the denominator treated with an aldosterone antagonist and an ACE inhibitor. Denominator – the number of new hospital admissions for adults with acute heart failure and reduced left</p>

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			<p>ventricular ejection fraction when an ARB cannot be tolerated.] The correct statement should be: [b) Proportion of new hospital admissions for adults with acute heart failure and reduced left ventricular ejection fraction that are treated with an aldosterone antagonist and an ACE inhibitor. Numerator – the number in the denominator treated with an aldosterone antagonist and an ACE inhibitor. Denominator – the number of new hospital admissions for adults with acute heart failure and reduced left ventricular ejection fraction, when ACE inhibitors are tolerated.] I hope it is clear that ACEI are to be used all the time unless THEY are not tolerated, while ARB are used exclusively when ACEI are not tolerated. The reverse is not true.</p>
49	Royal College of Physicians of Edinburgh	7	<p>This is also an extremely important standard. There is agreement that three measurements should be made: a. percentage of patients with acute heart failure due to left ventricular systolic dysfunction on aldosterone antagonists (when both ACEI and ARB are not tolerated) b. percentage of patients with acute heart failure due to left ventricular systolic dysfunction on aldosterone antagonists and an angiotensin converting enzyme inhibitor c. percentage of patients with acute heart failure due to left ventricular systolic dysfunction on aldosterone antagonists and an angiotensin receptor blocker if there were intolerable side effects of angiotensin converting enzyme inhibitors. Both aldosterone antagonists and angiotensin converting enzyme inhibitors are credited with reducing patients' mortality at 27-33% and at 21-23%, respectively.</p> <p>Please note that ACEI is a primary treatment agent for heart failure and ARB is only to be used if ACEI is not tolerated, but the reverse is not true.</p> <p>Therefore, the proportion of those offered treatment (AA+ACEI or ARB) of all those admitted with acute heart failure and reduced LVEF should be analysed.</p>
50	City Hospitals Sunderland – Inpatient Heart Failure Service	7	Agree

Registered stakeholders who submitted comments at consultation

- British Heart Foundation
- British Society for Heart Failure (BSH)
- Cardiomyopathy UK
- City Hospitals Sunderland- Inpatient Heart Failure Service
- NHS England
- Novartis Pharmaceuticals UK Ltd
- Medtronic Limited
- Roche Diagnostics
- Royal College of General Practitioners
- Royal College of Physicians
- Royal College of Physicians of Edinburgh
- Sheffield Teaching Foundation Trust
- The Pumping Marvellous Foundation
- West Hampshire CCG