Clinical Guidance for the Diagnosis and Management of Heart Failure Lincolnshire

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Lincolnshire Community Health Services

Clinical Guidance for the Diagnosis and Management of Heart Failure -
Lincolnshire V8 - 2015-17

Version Control Sheet

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<th>Version</th>
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<td>19</td>
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<td>Addition of sick day rules / frailty advice</td>
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**Aim for new guidelines to be approved through PACEF by Sept 18**
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Lincolnshire Community Health Services
Clinical guidance for the management of patients with confirmed Heart Failure in primary care in Lincolnshire
Guideline Statement

Background: This Clinical guidance provides pathways for ensuring robust diagnosis and treatment of heart failure using best available evidence at time of writing.

Statement: The guidance outlines a series of algorithms to support the management of patients with suspected heart failure and diagnosed heart failure.

Responsibilities Community Heart Failure Nurses working for LCHS are responsible for updating guidelines every 2 years in collaboration with ULHT, St Barnabas Hospice, PACEF and Medicines Management Committee.

Training The heart failure Complex Case Managers deliver education regarding the management of patients with chronic heart failure which is based on the guidance.

Dissemination: This guidance will be on the LCHS Trust website

Resource implication: The clinical guidance will be further reviewed Bi-annually and amended in light of the latest NICE guidance.
Summary of the purpose of the Guidance

The purpose of this document is to provide guidance and a pathway for the treatment of patients with heart failure. The guidance is separated into two parts; the first addresses best practice in the clinical management of heart failure itself and the second focuses on management of symptoms commonly experienced in advanced heart failure and is concerned with palliative and supportive care.

The guidance takes the form of a series of algorithms supporting the optimal pharmacological and non pharmacological management including appropriate referral pathways to specialist heart failure services.

Terms:
The term Specialist Heart Failure Multidisciplinary team (HFMDT) will be used throughout the guidelines. The MDT comprises of Cardiologists, Heart Failure Advanced Nurse or Clinical Practitioners (HFAP)

The term Advanced Heart Failure MDT is used; this is a monthly meeting comprising of members of the Specialist Heart Failure MDT and other healthcare professionals involved in the care of heart failure patients including St Barnabas Hospice, Macmillan Specialist Nurses and Discharge Community Link Nurses; Palliative Care.

The role of is a specialist nursing role incorporating complex case management, clinical assessment, diagnosis, non-medical prescribing and management of patients with chronic heart failure. The role meets the educational standards as set out by the British Heart Foundation.

Indications for the use of the Clinical Guidance

The algorithms should be used in conjunction with the associated national standards and NICE guidance in order to support the stabilisation of a patient’s heart condition through optimising treatment, providing support and where necessary palliative care.

Associated Policies/ Guidance

Department of Health (2000), Heart Failure, Chapter Six, National Services Framework for Coronary Heart disease


European Society of Cardiology (ESC) Guidelines for the diagnosis and treatment of acute and chronic heart failure (2016) available at www.escardio.org

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Diagnosing Heart Failure including use of Serum Natriuretic Peptides

- High levels – BNP > 400 pg/ml (116 pmol/litre) or NTproBNP >2000 pg/ml (236 pmol/litre)
- Raised levels – BNP 100–400 pg/ml (29–116 pmol/litre) or NTproBNP 400–2000 pg/ml (47–236 pmol/litre)
- Normal levels – BNP < 100 pg/ml (29 pmol/litre) or NTproBNP < 400 pg/ml (47 pmol/litre)

Be aware that:
- obesity or treatment with diuretics, angiotensin-converting enzyme (ACE) inhibitors, beta-blockers, angiotensin II receptor antagonists (ARBs) and aldosterone antagonists can reduce levels of serum natriuretic peptides
- high levels of serum natriuretic peptides can have a cause other than heart failure (for example, left ventricular hypertrophy, ischaemia, tachycardia, right ventricular overload, hypoxaemia [including pulmonary embolism], renal dysfunction [GFR < 60 ml/minute], sepsis, chronic obstructive pulmonary disease [COPD], diabetes, age > 70 years and cirrhosis of the liver).
Primary Care Informed of Confirmed Heart Failure Diagnosis
Add to Heart Failure Register
- Heart Failure Reduced Ejection Fraction / Left Ventricular Systolic Dysfunction
- Heart Failure Preserved Ejection Fraction / Diastolic Dysfunction
- Valvular Heart Failure

First Consultation
- Patient informed of diagnosis by Practitioner competent in Heart Failure
- Assess Clinical Status including NYHA Classification
- Consider Underlying Causes of HF for example:
  - Ischaemic heart disease
  - Hypertension
  - Valvular heart disease
  - Cardiomyopathy
  - Myocarditis
  - Arrhythmia
- Provide Heart Failure Information and support to enable self-management
- Agree Clinical Management and Monitoring Plan to Optimise Treatment

Stable Heart Failure
2/52 wk review by GP or Nurse Practitioner competent in Heart Failure in Primary Care
1. Continue education and advise on Heart Failure Self Management
2. Signpost to support groups / services
3. Assess Clinical Status
4. Continue optimising pharmacological treatment
5. Monitor renal and liver function and full blood count as clinically indicated or required to monitor therapeutic intervention
6. Flu and pneumovax vaccines
7. Arrange next review as indicated by clinical status and pharmacological optimisation requirement

Unstable Heart Failure
Consider referral to a member of the Specialist Heart Failure MDT
1. Assessment and management of decompensated patient.
2. Significant symptoms despite optimal management
3. Failure to Respond to Treatment
4. Specialist Heart Failure Palliative Care Need
5. Patients with heart failure age<65 years
6. Arrhythmia
7. Significant Valvular Dysfunction
8. Consideration for revascularisation
9. Congenital Heart Disease

Follow Up Reviews:
- As clinically indicated
- Within 2 weeks of any significant change in therapy or clinical condition
- 6 monthly routine renal function monitoring and as clinically indicated
- Annual full clinical review

New York Heart Association (NYHA) Class
I - No limitation of physical activity
II - Slight limitation
Ordinary activities cause symptoms
III - Marked limitation. Less than ordinary activity causes symptoms, but comfortable at rest.
IV – Symptoms at rest or minor exertion

Specialist Heart Failure MDT Contacts
Algorithm for Management of Heart Failure with Reduced Ejection Fraction (HFrEF)

Patient with symptomatic HFrEF

Therapy with ACE-1 and beta blocker (up-titrate to maximum tolerated evidence-based dose)

Still symptomatic and LVEF ≤35%

Yes

Add Mineralocorticoid antagonists (MRA) (up-titrate to maximum tolerated evidence-based dose)

Still symptomatic and LVEF ≤35%

No

If Left Ventricular Ejection Fraction (LVEF) ≤35% despite optimal medical therapy (OMT) or a history of symptomatic VT/VF,

consider Implantable Cardioverter Defibrillator (ICD)

Diuretics to relieve symptoms and signs of congestion

Stable patients on an ACE-1/ARB/ARNI/MRA should have their U&E’s checked by their primary care clinician no less than 6-monthly and more often if known to have poor renal function or suffering from conditions that may induce dehydration or change renal function i.e. D&V as part of their chronic disease management.

Notes* Switching of ACE-1/ARB to ARNI can only be initiated following cardiology specialty review.

When a patient is switched from an ACE-1 (or ARB) to an ARNI the Heart Failure Service at ULHT will organise for physical review that will include renal monitoring during the period of the switching process. If the patient is under the care of the Community Heart Failure Team they will organise the switching process for their patients.
Heart Failure with preserved Ejection Fraction (HFpEF) (Ejection Fraction >40%)

No evidence for disease modifying therapies in HF-pEF
Prescribe diuretics to relieve symptoms & signs of congestion and manage co-morbidities

Stable or Symptoms Improving

Unstable, Worsening Symptoms

GPs identify and treat co-morbidities
- Hypertension
- Renal dysfunction
- Diabetes
- Pulmonary disease
- Ischaemic heart disease

General Practice carry out 6 monthly review for all HF patients

Refer for Specialist Advice or Review
NHS e-referral or consultation (insert hyperlink)

The ESC recently termed heart failure with EF from 41-49% as heart failure with mid-range ejection fraction (HF-EREF). There are currently no evidence-based therapies for this group. These patients can therefore be treated as HFpEF pending clinical trials.

Valvular Heart Failure

No evidence for disease modifying therapies for Valvular Heart Failure
Prescribe diuretics to relieve symptoms & signs of congestion and manage co-morbidities

Stable or Symptoms Improving

Unstable, Worsening Symptoms

GPs identify and treat co-morbidities
- Hypertension*
- Renal dysfunction
- Diabetes
- Pulmonary disease
- Ischaemic heart disease

General Practice carry out 6 monthly review for all HF patients

Refer for Specialist Advice or Review
NHS e-referral or consultation (insert hyperlink)

*Caution with ACEI or ARB if known or suspected renal artery stenosis or symptomatic or severe aortic stenosis
Algorithm for the introduction of Angiotensin Converting Enzyme Inhibitors (ACEI) or Angiotensin Receptor Blocker (ARB), if intolerant of ACEI

Confirmed Left Ventricular systolic Dysfunction (LVSD)

Suitable for initiation of Angiotensin Converting Enzyme Inhibitor (ACEI) or Angiotensin Receptor Blocker (ARB), if intolerant of ACEI

**Step 1- Initiation of ACE inhibitor / Angiotensin Receptor Blocker**
- Stop potassium supplements/potassium sparing diuretics (hyperkalaemia risk) with the exception of low dose spironolactone or eplerenone (max. 25mg daily).
- If possible stop NSAID (increased risk of renal dysfunction)
- Discuss purpose/benefits and possible side effects of therapy (i.e. dizziness, light-headedness or cough).
- Start with low dose

Lincolnshire Joint Formulary
- First line ACEI – Lisinopril or Ramipril
- First line ARB – Losartan or candesartan

**Specialist advice required before starting ACE inhibitor if any of the following:**
- Creatinine > 200 umol/l
- Urea > 12mmols
- Sodium < 130mmol/l
- Systolic arterial pressure < 100mm Hg
- Diuretic dose > Furosemide 80mg/day or equivalent
- Known or suspected renal artery stenosis
- Symptomatic or severe aortic stenosis
- Hypertrophic Cardiomyopathy
- History of Angioedema esp. Afro-Caribbean origins

**Step 2- Review after 1-2 weeks**
- Check U&Es at 10-14 days
- Check for adverse effects:
  - Symptomatic hypotension
  - Renal dysfunction worsens by >30%
  - Potassium > 5.5mmol/l
  - Intolerable cough (NOT just dry cough)
- If intolerable cough, consider change to equivalent dose of ARB
- If tolerated, no adverse effects and U&Es satisfactory, increase dose (usually double but smaller increments if clinically indicated)
- Repeat Step 2 until at maximal tolerated dose.
- IF ADVERSE EFFECT SEE **BOX**

**Step 3- Maintenance Monitor 6 monthly**
- Check U&Es
- Check for adverse effects:
  - Symptomatic hypotension
  - Renal dysfunction (e.g. rise in Creatinine to > 200 umol/l.
  - Hyperkalaemia (rise in potassium to > 5.5 mmol/l)
  - Intolerable cough (NOT just dry cough)

**ADVERSE EFFECTS**
- Intolerable Cough – try equivalent dose of ARB
- Symptomatic hypotension – review clinical status including sitting and standing BP and diuretic regimes: Consider reducing diuretic if not fluid overloaded If no other identifiable cause reduce dose / stop if on lowest dose
- Hyperkalaemia / Renal Function Concerns
  - Review clinical status and concomitant therapies to identify any other cause and address as required e.g. urinary tract infection, consider stopping or reducing ACEI/ARB until stabilised then retry initiation/titration
  - If no other precipitant identified reduce ACEI or ARB dose (or stop if on lowest dose) and recheck 10-14 days

**IF TRULY ACEI / ARB INTOLERANT or of Afro-Caribbean Origin**
- Consider Nitrate and Hydralazine Combination

NB: CHOICE OF ACE INHIBITOR OR ANGIOTENSIN RECEPTOR BLOCKER SHOULD TAKE INTO ACCOUNT LINCOLNSHIRE JOINT FORMULARY RECOMMENDATIONS
Algorithm for use of Beta blockers in Heart Failure

Confirmed Left Ventricular Systolic Dysfunction (LVSD)

Suitable for initiation of beta blocker?

Review medical history and identify if any current contra-indications

Step 1- Assess whether suitable for treatment
- Monitor for signs of sodium and water retention e.g. oedema, lungs crackles, rise JVP or congestion on CXR.
- Monitor heart rate and blood pressure, i.e. heart rate >60bpm & no heart block on recent ECG and systolic blood pressure > 100mmHg

Step 2- Asses where treatment should be initiated
Identify the most appropriate environment for the patient for beta block initiation. The options may include:
- Initiation in primary care at GP surgery
- Initiation in primary care at home
- Primary care beta blocker mass initiation clinics

Step 3- Initiation of Beta blocker
Start with lowest recommended dose
Educate the patient re: purpose, benefits and signs of worsening heart failure, e.g. patients should be taught how to weigh themselves correctly
If taking other rate reducing medication, consider reduction in dose

Step 4- Review and Dose increase
- Review clinical status and consider if any adverse effects, and advise / manage where possible
- If heart rate >50bpm and blood pressure and systolic blood pressure > 100mmHg and no adverse effects consider increasing dose towards target dose as indicated in BNF
- Up titration of dose following dose schedule (every 2-4 weeks according to individual drug dosing advice)
- Aim for target dose or the highest tolerated dose – caution is advised in the elderly
- Check U&Es and creatinine 1-2 weeks after initiation and 1-2 weeks after final dose titration

Adverse effects
- Marked fatigue- reassure patient of likely improvement in symptoms. Review- 2 weeks
- Worsening heart failure- Consider adding or increasing dose of loop diuretic
- Symptomatic hypotension- Consider reduction in dose of nitrates, calcium channel blockers or other vasodilators. Consider reducing diuretic if no congestion.
- If heart rate <50 bpm, obtain ECG. If taking other rate reducing medication, consider reduction in dose and consider halving or stopping (if on lowest dose) beta blocker.
- If adverse effect on higher doses - consider reducing dose and review in 2 weeks.
- Beta blockers should not be stopped suddenly unless absolutely necessary

Consider Contacting a member of the Heart Failure MDT for Advice if any concerns about suitability, initiation, adverse effects or titration

LINCOLNSHIRE JOINT FORMULARY
1. BISOPROLOL
2. CARVEDILOL
Nebivolol is not currently on the formulary Please see BNF for recommended doses. Dose depending on patients condition and clinical judgement, e.g. in frail, elderly standard up titration may not be possible or may take longer.

Which Betablocker?

Bisoprolol – Stable chronic moderate to severe heart failure (NYHA II-IV) with reduced ventricular function in addition to standard therapy. More cardioselective than carvedilol, therefore may be choice when co-morbid respiratory disease. Once daily dose, hepatic and renal excretion.

Carvedilol Indications- Stable mild to moderate chronic heart failure (NYHA I-III) in addition to standard therapy, additional antioxidant effect. Twice daily dose, mainly hepatic excretion, lipophilic - can be useful if having vivid dreams problematic on other betablockers

Nebivolol- May be considered in light of the seniors trial in patient over the age of 70 and Left Ventricular Ejection Fraction < 35%, most cardioselective and may be useful in those with peripheral vascular disease

If sinus rhythm HR>75 and betablocker contra-indicated or not tolerated – seek specialist advice for rate control.

Confirmed Left Ventricular Systolic Dysfunction (LVSD)
Management of Hypertension

Refer to Guideline for Initiation and Titration of ACEI/ARB

Algorithm for the use of Hydralazine and Nitrate Combination in Heart Failure

Confirmed Left Ventricular Systolic Dysfunction (LVSD) AND INTOLERANT TO ACEI and ARB

Consider:
- Hydralazine 25-50mg bd or tds
  - And
- Isosorbide Mononitrate 10-20mg bd

Start low and increase gradually to a maximum daily dose of hydralazine 300mg and ISMN 40mg

NB. ISMN MR may be used as an alternative as availability of standard release mononitrates has been inconsistent

Algorithm for the use of Loop Diuretics for Confirmed Heart Failure

Confirmed Heart Failure

Step 1- Assess for signs and symptoms of water and sodium Retention
- Increased peripheral oedema- Raised JVP?
- Symptoms of breathlessness – PND and orthopnoea?

Lincolnshire Joint Formulary Recommends: Losartan or Candesartan
Choice of Diuretic:
Lincolnshire Joint Formulary recommends:
First line Furosemide
Second line Bumetanide

Bumetanide has greater bioavailability and should be substituted if furosemide not effective or not tolerated

NB: Diuretics should administered in combination with ACE inhibitors ARBs and B- blockers if tolerated
Algorithm for the use of Aldosterone Antagonists and Mineralocorticoid Receptor Antagonists in Heart Failure

Confirmed Left Ventricular Systolic Dysfunction (LVSD)

Severe Heart Failure with EF ≤35% - Spironolactone
Post Acute Myocardial Infarction and LVEF ≤40% - Eplerenone
Mild Heart Failure and EF ≤30% or EF ≤35% and QRS Duration >130 msec – Eplerenone

Lincolnshire Joint Formulary Recommends 1. Spironolactone 2. Eplerenone

Step 1 - Assess whether suitable for treatment
- Current or previous symptomatic heart failure (NYHA II-IV)
- Already on optimal pharmacological treatment
- No evidence of hypovolaemia
- Inform patient of purpose, benefits & possible side effects of spironolactone

AA/MRA contraindicated
- Serum potassium > 5mmol/l
- Serum Creatinine > 220
- Avoid if eGFR / EPI < 30
- Caution if mild to moderate renal impairment
- Caution if using in the frail and elderly if they are taking ACE inhibitors

Step 2 - Check U&Es and review use of potassium supplements and potassium sparing diuretics
- Potassium must be < 5mmol/l to continue
- Consider stopping potassium supplements and potassium sparing diuretics
- Continue ACE inhibitor, loop diuretics, Digoxin and Beta blocker if also prescribed.

Step 3 – Spironolactone or Eplerenone initiation
- Commence at 25mg od

Step 4 – Monitoring
- Repeat U&E at 1, 4, 8 & 12 weeks and every 3 months thereafter.

If intolerant of spironolactone due to breast enlargement or tenderness – replace with eplerenone and review

Adverse Effects
- Potassium > 5.5mmol/l
  - Consider other factors eg urinary tract infection and manage as appropriate
  - Reduce dose to 25mg on alternate days or 12.5mg daily
  - Repeat bloods 5-7 days later
- Potassium > 6mmol/l on 25mg alternate days or 12.5mg - stop and review renal function again in 5-7 days
- Gastro-intestinal disturbance
  - Stop and if has diarrhoea repeat U&Es at earliest convenience
- Breast enlargement or tenderness
  - Stop spironolactone and replace with eplerenone

If clinically unstable

Refer to or seek advice from Specialist Heart Failure MDT member
Algorithm for the use of Combination Loop / Thiazide Diuretics
(Specialist Initiation and Monitoring)

Oedema despite high dose loop diuretic therapy with diagnosis of confirmed heart failure of cardiac origin.

Refer to Heart Failure MDT member Suitable for initiation of Thiazides?

Step 1- Assess whether suitable for treatment
Indicated in refractory heart failure where there is an inadequate response to a loop diuretic alone.

Patient not responding to a loop diuretic who presents one or more of the following signs/symptoms;
- Increase in weight > 2kg
- Evidence of leg oedema and / or abdominal distension
- Basal crepitations
- Gallop rhythm
- Raised Jugular Venous Pressure
- Increased dyspnoea

Thiazide contraindicated
- Weight loss > 3kg in 24 hours
- Blood pressure systolic < 90mmHg
- Serum urea or creatinine rising compared to previous results
- Serum potassium < 3.5mmol
- Serum sodium < 125mmol
- Patients unwilling or able to self medicate
- Renal failure with anuria
- Pregnancy with breast feeding
- Liver Failure
- Porphyria

Bendroflumethiazide should be considered the first line thiazide in patients requiring combined diuretic therapy, but when this proves ineffective eg.CKD stage 4 -5
Metolazone should be considered. In primary care it should only be considered by the Community Heart Failure team to prevent an admission to hospital or for palliation.

- If eGFR is > 30 mL/minute consider Bendroflumethiazide - Starting dose 2.5mg - maximum 5mg OD
- If eGFR is < than 30 mL/minute consider Metolazone - Starting dose 2.5mg – maximum 5mg OD

Variations to the above doses may be considered by the Community Heart Failure team based on clinical experience and close patient monitoring.

Step 2 – Consider Regime and Monitoring
- Minimum interval between doses is 24 hours
- Minimum interval between increased doses is one day
- Educate the patient re: purpose, benefits and signs of worsening heart failure e.g. patients should be taught how to weight themselves correctly
- Advised to stop taking thiazide diuretic if weight loss > 3kg in 24 hours
- Consider discussion at MDT Meeting and prepare to present relevant assessments

Frequency of renal blood monitoring:
- Once per week thiazide – 2 weekly
- Twice per week thiazide – weekly
- Three times per week thiazide – twice weekly

If patient on thiazide for longer than three months & renal function stable, use clinical judgement in relation to frequency of monitoring as agreed with cardiologists

Refer to Advanced Heart Failure MDT Meeting for discussion and management plan

Nb.Sanofi-Aventis discontinued the manufacturing of Metolazone in 2012. However it is now available as an unlicensed special order item in the UK.
Algorithm for the use of Ivabradine in Heart Failure (Specialist Initiation)

Confirmed Left Ventricular Systolic Dysfunction (LVSD)
NYHA Class II-IV Ejection Fraction ≤35%

↓

SINUS RHYTHM

HR ≥ 75 on optimal betablocker and ACE Inhibitor therapy
or
High pulse rate and intolerant / contra-indication to betablocker
And
Stable heart failure for 4 weeks

Commence Ivabradine 5mg b.d.

Review 2 weeks
If:
Resting Heart Rate > 60bpm - Increase to 7.5mg b.d.
Resting Heart Rate <50bpm – Decrease to 2.5mg b.d.

Lincolnshire Joint Formulary has approved use of Ivabradine under specialist initiation

Management of Arrhythmias

Bradycardia and atrio-ventricular block in patients with heart failure with reduced ejection fraction and heart failure with preserved ejection fraction – refer for specialist cardiology review and see ESC heart failure guidelines

Atrial Fibrillation

Atrial fibrillation is the most common arrhythmia seen in heart failure and management should include classification, identification and correction / management of any underlying causes / precipitating factors.
Management to be informed by current NICE or ESC Guidelines Atrial Fibrillation and assessment carried out for thrombo-embolism prophylaxis
Consideration of Anticoagulation for People with Heart Failure

Evidence suggests an increased thrombo-embolic risk associated with heart failure and left ventricular systolic dysfunction compared to the general population (ventricular or deep venous thrombus associated with ventricular dysfunction, arrhythmia, low cardiac output, peripheral oedema and immobility)

Atrial Fibrillation should be classified and managed according to NICE/ ESC Guidance

Assessment for thrombo-embolism prophylaxis should be undertaken using CHA2DS2-VASc Score :

Cardiac Failure or LVEF \( \leq \) 40 (Score 1)
Hypertension (Score 1)
Age \( \geq 75 \) years (Score 2)
Diabetes (Score 1)
Stroke (Score 2)
Vascular Disease (Score 1)
Age 65-74yrs (Score 1)
Sex (female) (Score 1)

CHA2DS2-VASc Score 0 = Recommend no antithrombotic
CHA2DS2-VASc Score 1 = Recommend antithrombotic therapy with oral anticoagulation or antiplatelet (preferably oral anticoagulation)
CHA2DS2-VASc Score 2 = Recommend oral anticoagulation

Where anticoagulation is indicated the HAS-BLED score is advised to assess risk of bleeding:

Hypertension (systolic blood pressure > 160mmHg) (Score 1)
Abnormal Renal and Liver Function (Score 1 point each)
Stroke (Score 1)
Bleeding Tendency or Predisposition (Score 1)
Labile international normalized ratio if on warfarin (Score 1)
Elderly (age >65yrs) (Score 1)
Drugs (e.g. concomitant aspirin, NSAID) or alcohol (Score 1 point each)

HAS-BLED score \( \geq 3 \) suggests caution is warranted when prescribing oral anticoagulant and close monitoring is recommended.
Algorithm for the use of cardiac synchronisation (CRT) therapy &/or internal cardioverter defibrillators (ICD), or both (CRT-D) Based on NICE technology appraisal guidance 314 (2014)

Table 1 Treatment options with ICD or CRT for people with heart failure who have left ventricular dysfunction with an LVEF of 35% or less (according to NYHA class, QRS duration and presence of LBBB)

<table>
<thead>
<tr>
<th>QRS interval</th>
<th>NYHA class</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;120 milliseconds</td>
<td>ICD if there is a high risk of sudden cardiac death</td>
<td>ICD</td>
<td>ICD</td>
<td>ICD</td>
<td>CRT-P</td>
</tr>
<tr>
<td>120–149 milliseconds</td>
<td>without LBBB</td>
<td>ICD</td>
<td>ICD</td>
<td>CRT-D</td>
<td>CRT-P</td>
</tr>
<tr>
<td>120–149 milliseconds</td>
<td>with LBBB</td>
<td>CRT-D</td>
<td>CRT-P or CRT-D</td>
<td>CRT-P</td>
<td></td>
</tr>
<tr>
<td>≥150 milliseconds</td>
<td>with or without LBBB</td>
<td>CRT-D</td>
<td>CRT-D</td>
<td>CRT-P or CRT-D</td>
<td>CRT-P</td>
</tr>
</tbody>
</table>

LBBB, left bundle branch block; NYHA, New York Heart Association

If meets criteria refer to cardiology for implantation at tertiary centre

N.B. Examples of where ICD indicated in primary prevention- A familial cardiac condition with a high risk of sudden death including long QT syndrome, hypertrophic cardiomyopathy, Brugada syndrome or arrhythmogenic right ventricular dysplasia, or have undergone surgical repair of congenital heart disease.
Algorithm for Non Pharmacological Management for ‘Confirmed’ Heart Failure

**Diagnosis**
- Prognosis-explore potential disease progression to include long term condition and symptom control
- Ensure patient/carer has received the Information Booklet, i.e. Living with Heart Failure

**Clinical Assessment**
- **Explain Anatomy & Physiology**
- **Discuss Causes**
  - Record Height, weight, BMI, BP & HR, respiration rate, Oedema
  - Chest auscultation if competent to do so
  - Identify NYHA Classification
  - Paroxysmal Nocturnal Dyspnoea, Breathlessness, Cough, Sputum, Orthopnoea
  - Fatigue including energy conversation and advise on pacing activities, exercise and sexual activity.
  - Nausea
  - Early recognition of worsening symptoms
  - When and where to seek help

**Self Management**
- **Explain general symptom management including**
  - Paroxysmal Nocturnal Dyspnoea, Breathlessness, Cough, Sputum, Orthopnoea
  - Fatigue including energy conversation and advise on pacing activities, exercise and sexual activity.
  - Nausea
  - Early recognition of worsening symptoms
  - When and where to seek help

- **Explain self management of fluids**
  - Educate on the signs & symptoms or peripheral & central oedema
  - Advise no more than 1 ½ - 2 litres/day, depending on clinical signs & symptoms
  - Consider increased dose of diuretics
  - Educate on daily weights including who to contact for advice if rapid consistent weight loss or gain within a week.

- **Diet- Discuss a balanced nutritional intake and explain rationale for the increased risk of malnutrition and cardiac cachexia**

  - **Salt**
    - Educate on reducing salt intake
    - Caution on the use of “Low Salt” and raise awareness on the salt in processed food.

  - **Alcohol**
    - Educate on reducing alcohol intake
    - Negotiate intake with individual if appropriate

  - **Smoking – Advise on benefits of stopping**

  - **Medication – discuss reasons for medications and concordance issues is needed**
    - Advise on avoiding aggravating medication, e.g. NSAIDs and rate increasing calcium channel blockers
    - Advise on immunisation

- **Psychological Needs**
  - Assess for symptoms of depression- as per NICE guidance (2009)
  - Assess for symptoms of anxiety
  - Advise on support groups- British Heart Foundation, Cardiomyopathy Association

- **Carers Needs**
  - Encourage carer involvement including joint attendance at appointments
  - Check their understanding of condition & care

- **Home & social situation**
  - Assess environment and peer support mechanisms.

- **Following initial assessment, frequency of review of Non pharmacological management is indicated by clinical need. Minimum review is annual**

**Psychological/Social Needs**
- **Next Review**
- **Consider referral for Cardiac/lifestyle rehabilitation. This may include exercise**
- **Provide patient / carer with contact numbers for both in office hours and out of hours**
- **Consider referral to dietician for patients with cachexia / obesity**
- **Consider referral to smoking cessation programme**
- **If symptoms of depression noted, advise patient to refer self to GP or refer to the local Mental Health team**
- **Advise on relaxation techniques**
- **Draw patient’s attention to the contact details in the information booklet**
- **Consider referral to Social Services including OT assessment**
- **Consider benefits advice including attendance disability badge etc.**
Sick Day Rules and Managing Heart Failure in Frail Older Patients

The following documents are included in this guidance to assist clinicians in managing medicines for heart failure patients who are on multiple medications for a range of co-morbid conditions. These patients may have little reserve to cope with acute illness and are at higher risk of admission to hospital if medication is not reviewed during these episodes.

The development of a Sick Day Rules card for Heart Failure patients aims to reduce this risk, particularly in respect of overdiuresis and acute kidney injury.

![Medicines to stop on days when sick](image)

<table>
<thead>
<tr>
<th>Advice on taking medication when sick</th>
</tr>
</thead>
<tbody>
<tr>
<td>When you are unwell with any of the following:</td>
</tr>
<tr>
<td>• Vomiting or diarrhoea (unless just minor)</td>
</tr>
<tr>
<td>• Fevers, sweats and shaking</td>
</tr>
<tr>
<td>Then STOP taking the medicines listed overleaf</td>
</tr>
<tr>
<td>Restart when you are well (after 24 - 48 hours of eating and drinking normally)</td>
</tr>
<tr>
<td>If you are in any doubt, or your symptoms are not resolving, contact your pharmacist, GP or nurse.</td>
</tr>
</tbody>
</table>

Lincolnshire Prescribing and Clinical Effectiveness April 2017 Recommend the STOPP-START Toolkit from Cumbria as a tried and tested aid to reviewing polypharmacy in frail older people.

Please provide Self-Monitoring and Management Prompt Card to support patients to know when to seek help.
Advanced Heart Failure Management including management of symptoms commonly experienced in advanced heart failure

Indication for the development of this clinical guidance

Heart Failure is very difficult to palliative effectively and there are many disease specific barriers to palliation.

Many previously published guidelines for heart failure focus on active interventional aspects of management rather than palliation of the disease.

Patients with advanced heart failure have a poorer prognosis than that of many cancers. However it is recognised that patients with advanced heart failure do not have the same awareness, knowledge and access to palliative care services that patients with other terminal illnesses have and;

- Tend to be less involved in decision-making regarding treatment or non-treatment
- Do not perceive themselves as “dying”
- Experience frustrations with progressive loss (social and physical), complex medical regimes, social isolation and exclusion, poorly co-ordinated services and little palliation of symptoms

Common Symptoms and Problems Experienced by Heart Failure Patients

- Breathlessness
- Cough
- Fatigue
- Peripheral oedema
- Nausea and Vomiting
- Sleep Disturbance
- Pain
- Anorexia and weight loss
- Agitation and Delirium
- Increasing Dependence on others
- Psychological Concerns: Depression and Anxiety
- Constipation
- Itch
- Carer crisis

These guidelines aim to provide advice on the above. It is important to remember that many symptoms can be iatrogenic in nature; some of these are listed also.
Guidance as to when a Heart Failure Patient becomes “Palliative”

1. You would not be surprised if this patient were to die in the next 6-12 months based on your intuition which integrates co-morbidity, social and other factors.

2. Choice/ Need—patient makes a choice to have only comfort care and no curative therapy or is believed to need supportive/ palliative care

Use Prognostic Indicator Tool such as Gold Standards Framework (below) or **SPICT**

**General**
- Multiple co-morbidities
- Weight loss greater than 10% over 6 months
- General physical decline
- Serum albumin <25g/l
- Reduced performance status
- Dependence in most activities of daily living

**At least 2 of the Indicators specific to Heart Failure**
- New York Association Class III or IV despite optimal tolerated therapy
- Repeated episodes of symptomatic heart failure (this may be seen in terms of repeated hospital admissions or intensive community management) often with shorter periods of stability in between episodes.
- Difficult physical or psychological symptoms despite optimum tolerated therapy
- Deteriorating renal function Chronic Kidney Disease stage 4 or 5
- Failure to respond within 2-3 days to changes in diuretic or vasodilating drugs

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**End of life care — Details of care provision**

<table>
<thead>
<tr>
<th>PROACTIVE</th>
<th>PROGRESS 1-3 MONTHS</th>
<th>PROGRESS 4-6 MONTHS</th>
<th>PROGRESS 7-12 MONTHS</th>
<th>AFTER DEATH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider supportive care based on clinician needs using the “End of Life” Tool</td>
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</tr>
<tr>
<td>Early Advance Care Planning (ACP)</td>
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<td>Early Advance Care Planning (ACP)</td>
</tr>
<tr>
<td>ACP especially in the context where capacity may be compromised by deteriorating health</td>
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</tr>
<tr>
<td>Use Prognostic Indicator Tool such as Gold Standards Framework (GSM) or SPICE (below) for specific disease</td>
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</tr>
<tr>
<td>Arrange care of support if appropriate (e.g. psychological)</td>
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</tr>
<tr>
<td>Complete palliative care (SPICE) template where available</td>
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</tr>
</tbody>
</table>

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The following will be provided at this appropriate time:
- Information letter for patient and family
- Inpatient care coordination
- Outpatient care coordination
- Specialist psychosocial support
- Anxiety and depression services
- Spiritual support
- Palliative care support
- Support for relatives
- Support for other family members

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Issues for consideration when assessing patient's needs

Diagnosis and prognosis should be discussed using the principles established as good practice for “Breaking Bad News” which can also be found in the Palliative Adult Network Guidelines.

Exploration of expectations is vital as some people with heart failure and their families have little comprehension of the severity of this illness.

Prognosis is particularly difficult to estimate in heart failure and underlying causes of deterioration in condition/ symptoms such as infection should be treated before considering prognosis in light of indicators.

Preferred Priorities of Care

Preferred Priorities of Care should be discussed and documented using EPaCCS template on clinical system.

The complexity of chronic heart failure necessitates an individualised approach to the risks and benefits of various medical therapies and should be led by a member of the Specialist Heart Failure MDT (NICE, 2010).

This multidisciplinary process should always include the patient. Medicines management should be an ongoing process ensuring optimal medical management suitable to stage of disease, e.g. withdrawal of statin therapy in last weeks of life.

Discussion of resuscitation status should be undertaken with the patient and their family/carers and documented in patient’s records.

When a patient, in conjunction with their healthcare professional has made a decision not to be resuscitated the East Midlands Do Not Attempt Resuscitation documentation should be completed and the original kept in the patient’s home.

Where a decision regarding resuscitation status is required to be made on the patient’s behalf by a senior clinician the local organisation’s Allow Natural Death Policy should be consulted.

Resuscitation is an important issue for people with heart failure as their risk of sudden cardiac death (SCD) is 50% higher than in the general population. SCD is also more prevalent in class I & II heart failure patients. The East Midlands Strategic Health Authority have produced a booklet to help people consider their options.

Following the issue of NICE guideline (TA314) there are now increasing numbers of people who will be fitted with an implantable cardioverter defibrillators (ICD). If someone has an ICD, there will need to be an open and honest discussion about when and how the defibrillator should be deactivated. Please see the Guidance included within this document for further advice (P44 & 48).

Patients should be asked if they have an Advance Decision to Refuse Treatment (ADRT) or have considered having one, please click the link.

Most people are able to make decisions regarding their care, however if the clinician is unsure of the persons capacity to make a decision or if it has already been decided please see local organisational guidance.

Click here for Information for patients to consider their choices should they lose their ability to make decisions in the future.

Provision of supportive printed information should be given where available.

Carer Support

Consideration needs to be given to carer support and assessment and referrals to appropriate agencies should be made.
Management of Suspected Acute Confusion / Delirium

Onset typically hours to days and clinical features, from which underlying cause may be elicited

Common Clinical Features
- Restlessness, anxiety, sleep disturbance, irritability, emotional lability, anger, sadness, euphoria
- Disorientation
- Memory Impairment
- Disorganised thought processes, altered perception, illusions hallucinations, delusions
- Incoherent speech
- Attention span reduced, easily distracted
- Motor abnormalities such as tremor, altered tone and reflexes

Non-Pharmacological Management
- Listen to patient and try to explore their fears and anxieties. Psychological distress can manifest itself in hallucinations and nightmares
- Remain calm and avoid confronting the patient
- Try to keep patient in as normal and familiar a routine and place as is possible.
- Explore perceptions and validate those that are accurate
- Explain clearly what is happening and why to patient and carer(s)
- Try to provide an action plan for what can be done
- Explain management plan and repeat information to assist retention by patient and family
- If medication is required ensure the length of treatment course is discussed and stress that delirium is not mental illness but a state in which periods of lucidity can be expected.
- Do not use restraints and allow to mobilise if safe to

Treat Underlying Causes
- Infection
- Hypoxia
- Urinary retention
- Faecal Impaction
- Hyponatraemia
- Hypo/hyperglycaemia
- Renal Impairment
- Hepatic Impairment/congestion
- Drug toxicity-beta blockers, digoxin, anti-cholinergics
- Drug withdrawal-opioids, alcohol, benzodiazepines, SSRIs, nicotine
- Unrelieved pain

Pharmacological Management
- Benzodiazepines should not be used alone as they can worsen delirium (unless associated with alcohol withdrawal)
Consider:
1. Haloperidol either PO,SC (low dose in elderly but can be increased if poor response)
2. Haloperidol + Benzodiazepine e.g. diazepam or midazolam
3. If severe Midazolam and levomepromazine combined may be necessary to provide sedation in palliative context
4. Consider use of a syringe driver

If No Improvement after exclusion of underlying causes or it is inappropriate to treat:
Consider whether this is Terminal Restlessness, which is a feature of dying.
If dying is diagnosed follow Priorities of Care

Refer to Dementia Prompt Cards
Management of Breathlessness

**Assessment**

**Clinical Assessment of fluid overload/pulmonary oedema**

Consider other causes during assessment as below

- Assess when they feel breathlessness is a problem
- How much of the day, including investigating its affect on sleep
- Assess effect on functional abilities and activity
- What makes it better or worse

**Identify and Treat Underlying Causes**

- Consider Heart Failure Status and other causes:
  - Pulmonary Oedema/Pleural effusions
  - Cardiac Ischaemia
  - New onset Atrial Fibrillation
- Anaemia- common in people with kidney impairment as blood cells are damaged and can’t carry as much oxygen
- Infections or respiratory disease
- Pulmonary Embolism
- Pneumothorax
- Obstruction of Bronchus or Vena Cava
- Concomitant Problems e.g. COPD, renal impairment
- Medication e.g. betablockers
- Poor symptom control- e.g. breathlessness, pain, leg swelling
- Psychological and spiritual issues – e.g. frustration, stress and low mood, anxiety / concerns about what the future holds.
- Is disease management optimal? Advanced Heart Failure MDT
- If blood oxygen saturation impaired consider Spirometry/referral for

**Non pharmacological Management**

- Consider teaching breathing techniques –refer to physiotherapist or occupational therapist
- Use a fan to improve airflow around face
- Pace activities and plan recovery time
- Consider referral to Cardiac rehabilitation (low intensity) or pulmonary rehabilitation where available.
- Consider Anxiety Management
- Consider referral to Day Hospice e.g for assessment Breathlessness programme
- Consider use of complementary therapies
- Consider Electric Profiling Bed if Orthopnoea/PND

**Pharmacological Management**

- Diuretics for fluid overload
- Saline nebuliser prn
- Low dose opiates, e.g. codeine phosphate 30mg 4 hourly, low dose oramorph (2.5-5mg PRN) or MST
- GTN Spray if ischaemic underlying cause *
- Consider laxatives if commenced on opiates
- Lorazepam 0.5-1mg chewed or sublingually prn
- Oxygen – see British Thoracic Society guidelines

**Short of breath on exertion (SOBOE)**

Consider
- Lorazepam 0.5mg prn
- GTN Spray *
- Nebuliser
- Oxygen
- Diuretics

**Short of breath anxiety related or at rest (SOBAR)**

Consider
- Oxygen
- Opiate
- Nebuliser
- Lorazepam 0.5mg PRN or Diazepam 2-5mg BD

**Terminal SOB**

Consider
- Opiate
- Midazolam
- levomepromazine

* GTN Spray contraindicated in Severe Aortic Stenosis
Management of constipation

Assessment
- If Community based
- Assess using SystmOne Lincs Adult bowel health assessment Adults template
- Establish dietary and fluid intake
- Record stool chart
- Review medication list
- Explore attitudes and current functional capacity e.g. has mobility recently reduced?

Non-Pharmacologist Management
- Encourage adequate diet and fluid intake (within any fluid restriction)
- Consider the use of prune juice
- Stay as active as possible
- Provide information on best position to sit in to pass stool
- Encourage to sit on the toilet 20 minutes after meals to take advantage of the gastro colic reflex
- Consider referral to the Community Nursing Team or Specialist Continence Clinical Nurse Specialist

Pharmacological Management
- Consider use of macrogols e.g. movicol
- Consider stool softener e.g. lactulose, sodium docusate
- Consider stimulant, e.g. senna, glycerine, suppositories, microlax enema, bisacodyl suppository
- Consider combination agent e.g. co-danthramer, this is the first choice laxative when an opioid is prescribed
- Consider sodium docusate enema
- Consider referral to the Community Nursing Team for assessment or Specialist Continence Clinical Nurse Specialist

Identify and treat causative factors
- Immobility
- Inadequate dietary intake
- Dehydration from diuretics or not drinking enough
- Immobility
- Medications such as opioids or iron supplements
- Bowel obstruction

If opioid-induced constipation regular laxatives should be taken. For further information see: http://book.pallcare.info/
Management of Cough

Assessment
Clinical assessment: pulmonary oedema/infection
- Frequency
- Sputum
- Aggravating factors
- Relieving Factors

Identify and Treat Underlying Causes
Diuretics for pulmonary oedema
Antibiotics if Chest Infections
Concomitant Problems e.g. Respiratory Conditions
Medication e.g. ACE Inhibitors

Is disease management optimal?

Non-Pharmacological management
- Consider teaching breathing techniques—refer to physiotherapist or occupational therapist
- Use a fan to improve airflow around face

Pharmacological Management
- Optimise Heart Failure Management whilst trying to minimise side effects of drugs including diuretics
- Simple linctus or codeine linctus 30mg prn for a dry cough
- Low dose Oramorph, e.g. 2mg prn. Consider prophylactic laxatives if commenced on opiate
- Saline nebuliser for thick secretions
- Consider whether related to ACE I or other therapy
- Consider mucolytics/glycopyrronium in difficulty expectorating
**Management of Fatigue**

**Assessment of symptoms and possible causes**

- Low cardiac output is a key cause in heart failure
- Assess when they feel fatigued, how much of the day, including investigating sleep patterns both at night and day
- Assess functional abilities and activity patterns e.g. if able to wash and dress, how long it takes, how they feel afterwards etc.
- Consider if due to Cardio-Respiratory deconditioning
- Consider other causes such as Anaemia/Hypo/Hyperthyroidism

**Non-Pharmacological management of Fatigue**

- Encourage the patient to:
  - Eat small regular meals
  - Exercise regularly (even a very small amount)
  - Plan activities, but plan to do what they can definitely achieve, nothing what they completed and what they had to stop before finishing
  - Plan to rest after each activity and after meals for a short time
  - Keep a diary and note when the best and worst parts of the day are, then use the best times to undertake activities
  - Plan to do less on days when you will be tired, e.g. plan less on the day of a hospital appointment and the day after as energy will be needed to get there and to recover afterwards
- Consider referral to cardiopulmonary Rehabilitation, Physiotherapy activity programme or palliative rehabilitation
- Make adaptations to home to aid energy conservation
- Review Home Care package
- Consider Referral to local Support Group / Neighbourhood Team

**Pharmacological Management:**

- Consider referral to the Heart Failure MDT for a review of medications/whether device therapies would be indicated
- Optimisation of Heart Failure Therapies
- Or reduction in Heart Failure Therapies due to the effects of symptomatic hypotension / hypovolaemia / hyponatraemia
Management of Itching / Pruritis

Assessment
Where is the itching?
When does it itch?
What makes it worse?
How long does it last?
Impact on life, functional abilities and sleep?
What is the condition of the skin like?

General Management
- Wear Cotton Clothing
- Discourage scratching
- Avoid Hot Baths
- Avoid Soap and Bubble Bath
- Avoid Overheating
- Avoid Sweating
- Loose bedding
- Consider use of fan to aid cooling

Treatment Underlying Causes

Dry Skin
- Avoid soap
- Use emulsifying ointment or baby soap
- Consider using Cetraben or Diprobase creams as soap substitutes.
- Apply emollients esp. after washing (note sometimes using greasier preparation such as Epaderm at night and something less greasy e.g. Cetraben in the day works well)
- Note bath emollients are wasteful and costly

Wet Skin (incontinence, sweating)
- Use barrier cream
- Consider the use of appropriate fitting incontinence wear, and only when indicated the assessment for a catheter or sheath drainage.
- Protect skin from stool leakage (absorbent pads and barrier cream/ manage constipation or diarrhoea effectively)
- NOTE Co-danthramer can cause unpleasant rash on buttocks or thighs.
- Consider treatable causes of sweating – e.g. infection, hormonal, drug-induced. Cancer related.
- Consider using paracetamol for fever

Renal and Liver Impairment
- Consider capsaicin cream (effective on 70% of localised pruritis) – NB. Not on Lincolnshire Joint Formulary
- General measures + antihistamine trial
- Ondansetron 4mg bd orally (unlicensed use)
- Consider levomepromazine 3—6mg orally if resistant
- Consider dexamethasone if severe

Opioid Induced
- General Measures + try alternative opioid

See: http://book.pallcare.info/ For more guidance or seek local specialist advice (Hospice or Heart Failure MDT)
Special Issues for Consideration when Managing Pain in Heart Failure

- **Types of Pain**
  - Adequate pain assessment is vital
  - Attempt to define the origin(s) of the patient’s pain
  - Major types of pain are: musculo-skeletal, somatic, neuropathic, spasmodic, pain of a psychical nature (also referred to as spiritual pain).

- **Not all pains are opiate responsive**
  - Somatic pain is usually very responsive to opiates
  - Some musculo-skeletal and neuropathic pains may respond partially to opiates but may require the addition of adjuvant analgesics
  - See Palliative Adult Network Guidelines; http://book.pallcareinfo

- **Remember the Analgesics Ladder**
  - Problems associated with opiate toxicity can be avoided by following the steps outlined in the ladder.
  - Always Start Low with opiate Doses and Go Slow when increasing

- **Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)**
  - NSAIDs ARE NOT RECOMMENDED FOR USE IN HEART FAILURE
  - In RARE circumstances the risk of increased oedema and/or worsening renal function associated with the use of NSAIDs can be outweighed by the benefit to the patient in terms of pain relief

- **Trans-dermal Analgesics**
  - Buprenorphine and Fentanyl Patches are being increasingly used in the management of non-malignant chronic pain. They are designed to be used for **stable opiate sensitive pain and should not be used for acute pain relief or where titration of analgesia is required**.
  - Their use in the terminal, end of life situation is problematic for many reasons and their substitution/replacement with an alternative form of opiate should be considered. The use of a syringe driver should be considered in these situations

- **Routes of Administration**
  - In the presence of extensive peripheral and visceral oedema, the absorption of oral medication may be erratic, unpredictable.
  - Consider other routes of administration sub-lingual, trans-dermal (avoid placing patches on oedematous areas), sub-cutaneous.
Management of Nausea and Vomiting

Assessment

- Consider causative factors and correct where possible
  - Drugs e.g. morphine or antimuscarinics
  - Renal or liver dysfunction
  - Gastric stasis caused by enlarged liver, constipation or gastric outflow obstruction
  - Gut Oedema
  - Constipation
  - Anxiety
  - Pain
  - Infection
  - Cough

Non-Pharmacological Management

- Consider psychological and spiritual care to treat anxiety
- Consider relaxation therapy, refer to physiotherapist/Occupational Therapist
- Consider Complementary therapy, suggest self referral to private provider or hospice

Pharmacological Management

Avoid cyclizine (increase heart rate and decreases cardiac output)

Review medication and identify risk/ benefit of any drugs believed to cause nausea or vomiting and discontinue therapy if appropriate.

- For chemical causes e.g. morphine, renal failure
  - Consider Haloperidol
- If nausea is constant or there is renal impairment/failure
  - Consider Haloperidol at night
  - Levomepromazine which has a sedative effect but may cause postural hypotension. Use in low doses (3-6mg) and cautiously with elderly people
- In palliative circumstances where nausea is related to meals or if the patient is vomiting undigested food, a short course of Metoclopramide 10mg tds or Domperidone 10mg tds may be considered following review of risks / benefits NB:Use in people with long QT interval / on drugs that lengthen QT interval or impaired liver function should be avoided
Management of Peripheral Oedema

Assessment

Assess Tissue Viability
- Colour
- Texture
- Temperature
- Skin assessment
- Cellulitis

Record daily weights if able to

Assess oedema including whether:
- Bilateral
- Height up leg
- Abdominal distension
- Sacral oedema
- Scrotal
- Pitting
- Sub-conjunctival/orbital

Identify and treat if appropriate any alternative underlying causes such as:
- Renal failure
- Low albumin
- Dependant oedema
- Infection
- Deep vein thrombosis
- Liver dysfunction
- Lymphoedema

Non-Pharmacological Management

- Rest
- Restrict fluid intake
- Sit with feet up and legs well supported when possible
- Review home support and arrange additional care as required
- Offer pressure relieving equipment
- Consider electric profiling bed
- Skin care

Pharmacological Management

Optimise Heart Failure Therapies
- Heart Failure reduced Ejection Fraction
- Heart Failure preserved Ejection Fraction
- Valvular Heart Failure

Optimise diuretic therapy (see guideline diuretics in heart failure) – First line is loop diuretic (Frusemide or Bumetanide)
- If HFrEF consider the addition of an MRA / aldosterone antagonist (Spironolactone / Eplerenone)
- Resistant oedema may require the addition of a thiazide diuretic periodically and referral for specialist advice should be sought as careful monitoring of clinical status, renal and liver function is required in this group of patients
- Consider Intravenous Diuretic therapy in hospital or hospice

Lincolnshire Joint Formulary Recommends:

Loop Diuretic – 1. Furosemide 2. Bumetanide
AA/MRA – 1. Spironolactone 2. Eplerenone – use within license
Management of Poor Appetite and Weight Loss/ Cachexia

Assessment
- If Community based use SystmOne Malnutrition Universal screening Tool and LCHS guidelines for management
- Establish daily dietary and fluid intake
- Establish likes and dislikes
- Explore expectations
- Consider environmental factors
- Are there any problems with eating, swallowing?

Non-Pharmacological Management
- As desired diet
- Advise small meals often
- Consider a small amount of alcohol before meals
- Suggest high calorie, high protein, no added salt diet- see local guidelines for details
- Encourage good oral hygiene
- Consider alternative flavouring for foods
- Explore family expectations of food intake
- Refer to dietician

Identify and treat causative factors
- Drug toxicity e.g. Digoxin
- Renal or liver dysfunction
- Oedema
- Constipation
- Anxiety
- Dry or sore mouth
- Ill fitting dentures or no teeth
- Unable to prepare food
- Overdiuresis

Pharmacological Management
Avoid appetite stimulants – (Dexamethasone progestogens, amphetamines)
- Consider whether related to medication
- Consider discontinuing statins if no longer indicated
- Using local organisational guidelines for nutritional support when required to consider the following:
  1. Fortification of food
  2. Nutritional supplement sip feeds
  3. Referral to dietitian
Psychological Concerns

Assessment

Assess mood for signs of

- Anxiety
- Depression- as per NICE guideline (2009)
- Consider using the PHQ-9 to assess: http://www.patient.co.uk/doctor/patient-health-questionnaire-phq-9

Consider using the Distress Thermometer to assess:

GuidetoDistressThermometer.pdf

Discuss expectations

- Identify hopes and fears
- Explore beliefs and wishes

Identify and Treat Underlying Causes of Anxiety and Depression

Consider:
Poor symptom control- e.g. breathlessness, pain, leg swelling

Referal to the specialist Heart Failure MDT if uncontrolled symptoms of Heart Failure

Psychological and spiritual issues- e.g. frustration, stress, and low mood, anxiety/ concerns about what the future holds.

Sleep disturbance and insomnia

Fatigue

Poor Appetite

Non-pharmacological Advice

Use the wider MDT to address issues using therapies, where available such as:

- Relaxation
- Cardiac Rehabilitation/low impact exercise
- Counselling
- Imaging techniques
- Complementary therapies
- Spiritual support
- Chaplaincy support
- Day Hospice Therapy
- Support groups
- Carer support
- Cognitive Behavioural therapy
- Psychology
- Mental health referral/ crisis team if stating suicidal intent

Pharmacological Management

Avoid tricyclic antidepressants as cardio-toxic

AVOID St John’s Wort

- Antidepressant, e.g. sertraline is first-line treatment
- Anxiety depression, e.g. citalopram
- Nausea and Poor appetite consider antidepressant e.g. mirtazepine
- Night sedation, e.g. Zopiclone, lorazepam, lormetazepam, lorazepam, Trazodone
- Panic Attacks lorazepam sub lingual or chewed (short acting)
- Anxiety, e.g. diazepam is first-line treatment (longer acting) (buspirone is second line treatment)

Management of Sleep Disturbance and Insomnia

Non-pharmacological management of insomnia

- For general advice

- Exercise therapy

- CBT aimed at reducing anxiety and sleep disturbance

- Electroacupuncture

- Meditation

- Have a regular bedtime routine

- Avoid caffeine and alcohol before bedtime

- Avoid using electronic devices before going to sleep

- Avoid naps during the day

- Avoid using the bed for activities other than sleeping

Pharmacological management of insomnia

- Antidepressant e.g. mirtazepine

- Benzodiazepines e.g. zopiclone, lorazepam

- Sedative hypnotics e.g. temazepam, chloral hydrate

- Melatonin

- Non-benzodiazepine hypnotics e.g. zolpidem, zopiclone, zaleplon
Management of Stomatitis / Sore Mouth

Also see Palliative Mouthcare Policy
Medicines Management in Advanced Heart Failure

- **Assessment**
  - Undertake assessment in good light and note the colour, moisture, texture of the mucosa.
  - Note any plaques, lesions, discoloration or injury seen.
  - Note if dentures or dental prosthesis worn
  - Ask when last reviewed by dentist
  - Review medication
  - Review dietary and fluid intake

- **Non-Pharmacological Management**
  - Teach good mouth and lip care regime
  - Rinse with water regularly
  - Try sucking ice cubes, lollies or ice chips
  - Try chewing gum
  - Rinse mouth with pineapple juice
  - Promote a healthy diet

- **General Pharmacological Management**
  - Use paraffin gel on lips if not using oxygen
  - If using Oxygen consider humidifying it
  - Consider use of antibacterial mouth wash
  - Oral balance products/artificial saliva
  - Consider dietary supplements/fortification of food if nutritional intake is poor

- **Specific Pharmacological Management**
  - **Thrush**
    - Consider nystatin suspension or lozenges
    - If persistent, oral fluconazole may be used—see BNF for prescribing information
  - **Herpes Simplex**
    - Consider acyclovir preparations
  - **Mouth Ulceration**
    - Consider Difflam Mouthwash or Orabase gel

**Review Medications** at each visit, look at packs and prescription if possible.

- Discuss with patients any problems or concerns they have.
- Ensure patient understands why they have been prescribed medication, explaining in words they understand, otherwise prescribed faster than usual and could fill their packs.
**Guidance on Management of Anaemia**

**Suspected Anaemia- Assess renal function and haematinics**
Investigate to establish underlying cause and treat in line with NICE Guidance

**European Society of Cardiology Guidance on Managing Iron Deficiency (ID) in Heart Failure 2016**

Making sure that the causes of absolute ID (e.g. gastric ulcer, colon cancer) have also been investigated and treated by other means when possible, ID should be treated in HF patients. In the 2016 ESC guidelines [9], only the IV route is considered for iron administration in iron‐deficient HF patients (Level of evidence: Class IIa‐a). In practice, oral iron may be prescribed for absolute ID for at least three months with assessment of iron replenishment after one month; in case of inefficacy or intolerance, oral therapy should be quitted and IV iron therapy should be initiated. In case of functional ID, only the IV route should be considered, since oral iron is ineffective in this clinical condition. Iron parameters should also be checked one month after IV iron administration. Meanwhile, pharmacological and device therapies known to improve outcomes in HF should be optimised in all cases, since optimisation may also exert favourable effects on iron metabolism.

More data are required before the routine use of IV iron for all HF patients with ID can be recommended. One limiting factor is that the treatments recommended for HF have evolved since the publication of many of the studies included in the meta‐analyses, including the use of mineralocorticoid receptor antagonists or cardiac implantable devices, particularly cardiac resynchronisation therapy. Although IV iron replenishment therapy has revealed favourable results in HF patients, data regarding the comparison of the oral and IV routes for iron administration are scarce. In addition, further evidence is warranted regarding the effect of iron repletion in those with preserved ejection fraction HF. Long‐term follow‐up studies are also necessary to evaluate the safety of IV iron therapy in HF patients.
Management of Gout

Gout is common in heart failure due to the use of diuretics.

The use of NSAID’s or Corticosteroids is to be avoided in the management of acute gout in heart failure due to the risks of fluid retention/casing decompensating heart failure.

The preferred drug treatment is Colchicine with a view to commencing low dose Allopurinol once the acute attack has been treated.

Please use this advice in the context of the Lincolnshire Joint Formulary Approved Algorithm for management of Gout.

Management of Chronic Gout 2017 – British Society for Rheumatology

CAUTION: AVOID NON-STEROIDAL ANTI-INFLAMMATORY DRUGS AND CORTICO-STEROIDS IN CONTEXT OF HEART FAILURE
Pathway for Decision Making and Advance Care Planning for Patients with Chronic Heart Failure

Use agreed assessment tools (GSF/Prognostic Indicators/Holistic Assessment Tools)  
To objectively assess the patient’s condition

If the indicators suggest that the patient is in Advanced Heart Failure you may wish to seek advice from a member of the local Heart Failure MDT

Discuss the current plan of Care at the MDT Meetings – Neighbourhood Team / Gold Standards Framework / Heart Failure Specialist

Document Goals of Care in the Patient Held Record/Patients electronic record – EPaCCS template after discussion with the patient

Communicate Goals of Care with GP/Community Nursing Team/Other Physicians involved in the patients care i.e Renal Team/Respiratory Physicians/General Medicine

Provide patient information regarding resuscitation status/Advance Care Planning/ADRT for the patient to discuss with family/significant others

If the patient’s wishes to complete an ADRT/Advance Care Plan/Do Not Resuscitate Order provide assistance to complete if required

Refer onwards to other agencies as indicated (Hospice Services/Specialist Palliative Care) as agreed with the wider MDT and the patient

Once ADRT/Advance Care Plan/Do Not Resuscitate Order (DNAR) completed: originals to remain in the home, inform all healthcare professionals of the plan/DNAR (GP/Community Nursing Service/Out of Hours/Hospice/Consultant)

Review the plan with the patient/carers and wider MDT at regular intervals – for example when the patient’s condition changes
Iatrogenic Problems

<table>
<thead>
<tr>
<th>Iatrogenic Problems</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overdiuresis</td>
<td>Hypokalaemia, Hypotension, Falls, Nausea, Loss of appetite, Confusion</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Digoxin Toxicity</td>
<td>Nausea, Loss of appetite, Diarrhoea, Abdominal Pain, Confusion, Bradycardia/ Heart Block, Hypotension, Loss of awareness of impending hypoglycaemia</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Opiates</td>
<td>Confusion, Constipation, Dry Mouth, Nausea, Muscle Spasm (Myoclonus)</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Steroids</td>
<td>Can precipitate deterioration in heart failure, renal function and blood glucose control.</td>
</tr>
</tbody>
</table>

Drugs to Avoid in Heart Failure

- Cyclizine
- NSAIDS
- Steroids
- Calcium Channel Blockers
- Glitazones
- Amphetamines
- Progestogens
- Tricyclic Antidepressants
- St Johns Wort
- Domperidone
- Metoclopramide

Pathway for Deactivation of Implantable Cardioverter Defibrillators (ICD's) at End of Life
### Indications for consideration of deactivation of ICD:

- Patient preference in advanced disease
- In the event that the patient has completed an Advanced Decision to Refuse Treatment
- Approaching end of life when ICD activation would be inappropriate
- Following withdrawal of anti-arrhythmic drug therapy as per medicines review at end of life
- While an active DNAR order is in force

See CIEDs_Guidance PDF for further information and decision making flow charts

### Process prior to deactivation:

- Open discussion with the patient, next of kin/carer or patient advocate as part of advance care planning
- Multidisciplinary review including cardiologist where appropriate

You may wish to use the Arrhythmia Alliance leaflet for patient information:


### Points of discussion may include:

- Resuscitation status and possible completion of an Advance Care Plan/ADRT/DNAR
- Withdrawal will not result in immediate death but the safety not provided by the device will no longer apply
- Deactivation is achieved using an external programmer and is not painful
- Multi-organ failure associated with electrolyte disturbance may be pro-arrhythmic and result in device discharge
- Inappropriate shocks are uncomfortable and inconsistent with symptomatic care
- Some ICDs incorporate both defibrillation and pacing modalities and it may be appropriate to selectively disable the defibrillation element as untreated bradycardias may exacerbate patient symptoms.

### Procedure for deactivation:

- The patient should complete the [locally agreed deactivation consent form](appendix 1)
- Liaise with local senior cardiac physiologist based within the local acute hospital to arrange a mutually convenient time and appropriate place identified for deactivation
- Deactivation of ICD by cardiac physiologist

---

**Community Heart Failure Specialist Nurse Service**
Community Heart Failure Specialist Nurse Referral Criteria:

- **Objective evidence of significant cardiac dysfunction** – confirmed left ventricular systolic or diastolic dysfunction or at least moderate impairment of aortic or mitral valve function.

  AND EITHER

- **Recent hospital admission for deteriorating heart failure**
- **Newly diagnosed heart failure with high risk of readmission**
- **Unstable clinical condition in community setting**, as indicated by need for recent increase in diuretic dosage, with high risk of admission

NB: Objective evidence e.g. echocardiogram, angiogram, Myocardial Resonance Imaging

**Service Offered**

- Initial full assessment, from which a decision will be made as to whether case management is appropriate, with referral on to other services as indicated.
- Patients accepted onto caseload will be supported until heart failure symptoms are considered to be stable.
- Patients will be reviewed within 2 weeks if there is any significant change in symptoms / condition or medication relating to heart failure in line with NICE Guidance (2010)
- A review of appropriateness for case management will be undertaken at least 3 monthly
- The Heart Failure Specialist Team is part of a wider integrated community team which works with partners from other organisations to provide each patient with a suitable package of care to meet their health and social needs. This includes palliative care providers and social services.
- Care will be delivered as close to home as possible, with most patients receiving care in their own home (whether that be a private house, residential or nursing home), supplemented by telephone, clinic and hospital reviews as indicated.

**Criteria for Discharge from Service**

- Symptoms stable and able to self manage or be monitored by case manager / other support
- Patients, who are stable but require further optimisation of established therapies will be referred back to GP practice with a management plan to support this.
- GP Practice will be notified when patients are discharged and routine monitoring will continue via the coronary heart disease, heart failure and/or palliative and supportive care register recall systems.

All patients will be provided with a clear ongoing management plan that details of how to monitor their condition and how to seek advice /review when symptoms deteriorate / condition changes significantly.

**Exceptions**

- Patients unwilling to have nurse-led support
- Other immediately life threatening illness
- < 8 weeks post Acute Myocardial Infarction except via cardiologist or cardiac rehabilitation specialist nurse referral
- Patients not registered with NHS Lincolnshire GP
- Underlying aetiology of heart failure non-cardiac e.g cor pulmonale
Referral received by Heart Failure Team

Review notes, diagnostic information and history of current presentation

Stable symptoms and no significant changes to management > 8 weeks
Discharge / Open Review

Assess Patient

Requires Heart Failure Complex Case Management

Provide information to patient and arrange to review / follow up as condition indicates (see below)

Referrer completes form and emails or tasks via systm one.

Provide appropriate advice to referrer if not accepting new referral.

If discharged, provide details of patient’s management plan

Does not meet criteria for heart failure complex case management

Stable symptoms and no significant changes to management < 3 months
Review in 4 weeks

Unstable Symptoms not responding to specialist management or palliative care needs
Discuss at Multi-Disciplinary Team Meeting
Ensure GP is informed and patient is on palliative and supportive care register

Unstable symptoms
Change in condition
Change in treatment
Review in 2 weeks

Stable symptoms and no significant changes to management

ALL Patients accepted for Heart Failure Complex Case Management
- Receive Heart Failure booklet and other information as required (eg BHF information booklets)
- Have at least full clinical review
- Have a management / follow up plan which has been developed in partnership with the specialist case manager
- Have case review at least every 3 months while on caseload
- Know how to contact the nurse for review should condition change before next planned review
- Be provided with clear information on who is responsible for care after discharged from community heart failure nurse service
### Appendix One: Community Heart Failure Complex Case Manager Referral Form

<table>
<thead>
<tr>
<th>Patient’s Name:</th>
<th>D.O.B.:</th>
<th>NHS No:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>Past Medical History:</td>
<td></td>
</tr>
<tr>
<td>Post Code:</td>
<td>Tel No:</td>
<td></td>
</tr>
<tr>
<td>Next Of Kin / contact details:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consultant:</td>
<td>Cardiac Dysfunction / Underlying Aetiology</td>
<td></td>
</tr>
<tr>
<td>Registered GP:</td>
<td>LVSD</td>
<td></td>
</tr>
<tr>
<td>Practice:</td>
<td>Heart Failure Preserved Ejection Fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Significant Valve Disease</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RVSD of cardiac origin</td>
<td></td>
</tr>
</tbody>
</table>

**Aetiology:** (eg. Ischaemic Heart Disease)

Please give details of reason for referral / presenting symptoms:

---

**NB: Essential Criteria:** Objective Evidence of Cardiac Dysfunction and Symptoms of Worsening Heart Failure of cardiac origin.

**Please attach/ fax copies of most recent echocardiogram and ECG**

If originals not available please provide details below.

(Please note that an echocardiogram / angiogram is essential for an accurate diagnosis of chronic heart failure, referrals cannot be accepted without objective evidence to support diagnosis)

---

**Other relevant information**

---

**Name of Referrer:**

**Designation:**

**Signature:**

**Date Completed:**

**Date Fax:**

---

**Email referrals to:**

For GPs on Systm One who have echocardiography report and other referral information on patient record, please obtain consent to share record from patient and make referral via systm one.
Appendix Two Request for Deactivation on Implantable Cardioverter Defibrillator

REQUEST FOR DE ACTIVATION OF IMPLANTABLE CARDIOVERTER DEFIBRILLATOR

Patient Name ---------------------------------
Address---------------------------------------
-------------------------------------------------
-------------------------------------------------
Date of Birth---------------------------------
GP details------------------------------------

Date/Time of request------------------------------------
Address patient is currently located at ---------------------------------
Date/Time of request------------------------------------
Address patient is currently located at ---------------------------------

Reason for request------------------------------------
Reason for request------------------------------------

Signature of authorising Consultant/ Physician-------------------------------------------

I understand the reasons for deactivating my ICD and that the decision to deactivate can be reviewed if necessary. I agree to the deactivation of my ICD.

Signature of patient/patient carer/relative--------------------------------------

Date and time device deactivated------------------------------------
A note of any treatments that remain active for symptom relief?

Signature of health care professional deactivating the device

ANY OTHER COMMENTS

---------------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------------
<table>
<thead>
<tr>
<th>Organisation</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Heart Association</td>
<td><a href="http://www.heart.org/HEARTORG/">http://www.heart.org/HEARTORG/</a></td>
</tr>
<tr>
<td>British Cardiovascular Society</td>
<td><a href="http://www.bcs.com/pages/default.asp#">http://www.bcs.com/pages/default.asp#</a></td>
</tr>
<tr>
<td>British Heart Foundation</td>
<td><a href="http://www.bhf.org.uk">www.bhf.org.uk</a></td>
</tr>
<tr>
<td></td>
<td>Tel: 0845 70 80 70</td>
</tr>
<tr>
<td>Cardiomyopathy Association</td>
<td><a href="http://www.cardiomyopathy.org">www.cardiomyopathy.org</a></td>
</tr>
<tr>
<td>European Society for Cardiology</td>
<td><a href="http://www.escardio.org">www.escardio.org</a></td>
</tr>
<tr>
<td>National heart and lung library</td>
<td><a href="http://www.nhlbi.nih.gov">www.nhlbi.nih.gov</a></td>
</tr>
<tr>
<td>Palliativedrugs.com</td>
<td><a href="http://www.palliativedrugs.com">www.palliativedrugs.com</a></td>
</tr>
<tr>
<td>Royal College Psychiatrists</td>
<td><a href="http://www.rcpsych.ac.uk">www.rcpsych.ac.uk</a></td>
</tr>
<tr>
<td>Patient Information Sites</td>
<td><a href="http://www.CHFpatients.com">www.CHFpatients.com</a></td>
</tr>
<tr>
<td></td>
<td><a href="http://www.patient.co.uk">www.patient.co.uk</a></td>
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<tr>
<td></td>
<td><a href="http://www.heartfailurematters.org">www.heartfailurematters.org</a></td>
</tr>
<tr>
<td></td>
<td><a href="http://www.arrhythmiaalliance.org.uk">www.arrhythmiaalliance.org.uk</a></td>
</tr>
<tr>
<td>Advance Decision to Refuse Treatment</td>
<td><a href="http://www.adrtnhs.co.uk">www.adrtnhs.co.uk</a></td>
</tr>
</tbody>
</table>

**Advance Care Planning:**

http://www.nhs.uk/Planners/end-of-life-care/Pages/advance-statement.aspx


**Information about lasting power of attorney:**

https://www.gov.uk/power-of-attorney/overview

The East Midlands Palliative Care Network have adopted the Palliative Adult Network Guidelines (PANG), 2011, providing a wealth of symptom management advice these can be accessed via: http://book.pallcare.info/
References


Arrhythmia Alliance (2010) Implantable Cardioverter Defibrillators (ICD’S) in Dying Patients


Blue, L. and Millerick, Y. Heart Failure Liaison Service, NHS Greater Glasgow (2006) Heart Failure/Palliative Care Audit Report, Unpublished


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Department of Health (2008) End of life Care strategy London DOH


European Society of Cardiology The Task Force for the Diagnosis and Treatment of Acute and Chronic Heart Failure 2012 of the European Society of Cardiology Developed in collaboration with the Heart Failure Association (HFA)of the ESC (2012) ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure 2012 European Heart Journal. Vol. 33 pp.1787-1847


North and East Yorkshire and Norther Lincolnshire Cardiac and Stroke Network (2011) Managing Symptoms in Patients with Heart Failure up to and Including the End of Life available at: http://www.yorksandhumberhearts.nhs.uk


Palliative Care Pocketbook 3 The abridged Mid-Trent Cancer Services Network Palliative Care Guidelines available at: www.mtcn.nhs.uk

Palliative Care in End Stage Heart Failure Pocketbook (2010) Heart Failure Steering Group Nottinghamshire

Prognostic Indicator Guidance Gold Standards Framework, Available at: www.goldstandardsframework.nhs.uk


Tsuyuki, R.T.,McKelvie, et. al. (2001) Acute Precipitants of Congestive Heart Failure Exacerbations Archives of Internal Medicine


Audit/ Monitoring of policy Implementation

<table>
<thead>
<tr>
<th>Minimum requirement to be monitored</th>
<th>Process for monitoring e.g. audit</th>
<th>Responsible individuals/group/committee</th>
<th>Frequency of monitoring/audit</th>
<th>Responsible individuals/group/committee (multidisciplinary) for review of results</th>
<th>Responsible individuals/group/committee for development of action plan</th>
<th>Responsible individuals/group/committee for monitoring of action plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every 2 years</td>
<td>Team Review</td>
<td>Heart Failure Nurse Team</td>
<td>Bi-annually</td>
<td>PACEF / Medicines Management Committee</td>
<td>Heart Failure Nurse Team with PACEF and MMC</td>
<td>Heart Failure Nurse Team and MMC</td>
</tr>
</tbody>
</table>

The implementation of the policy will be audited by the service managers through the Audit Tool attached at Appendix E of the “Guidance on Policy Development” available on the trust website.

Audit is also undertaken via the Gold Standards Framework which will provide information regarding heart failure patients on this register.

**Implementation Strategy**

The which Medicines Management Committee will ensure that the guideline is available, after approval on the LCHST website for dissemination and further supported by a submission via team brief.

In addition, individual teams will also be advised by their team leaders in respect of the guideline availability.

Training will be offered through the Trust's Chronic Heart Failure Study Days, Palliative Care Education Forum and on request where resources allow.

**Equality Analysis**

**Introduction**

The general equality duty that is set out in the Equality Act 2010 requires public authorities, in the exercise of their functions, to have due regard to the need to:

- Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act.
- Advance equality of opportunity between people who share a protected characteristic and those who do not.
• Foster good relations between people who share a protected characteristic and those who do not.

The general equality duty does not specify how public authorities should analyse the effect of their existing and new policies and practices on equality, but doing so is an important part of complying with the general equality duty. It is up to each organisation to choose the most effective approach for them. This standard template is designed to help LCHS staff members to comply with the general duty.

Name of Policy/Procedure/Function*
Clinical Guidance for the Diagnosis and Management of Heart Failure Lincolnshire 2018
Equality Analysis Carried out by: Jane Scrafton
Date: 16/11/17
Equality & Human rights Lead:
Date:
Director/General Manager:
Date:

*In this template the term policy/service is used as shorthand for what needs to be analysed. Policy/service needs to be understood broadly to embrace the full range of policies, practices, activities and decisions: essentially everything we do, whether it is formally written down or whether it is informal custom and practice. This includes existing policies and any new policies under development.
## Section 1 – to be completed for all policies

### A. Briefly give an outline of the key objectives of the policy; what its intended outcome is and who the intended beneficiaries are expected to be

To provide guidance to clinicians managing the care of patients with heart failure who are on Lincolnshire GP’s lists.

To improve standards of evidence based care thereby improving patient care and experiences.

### B. Does the policy have an impact on patients, carers or staff, or the wider community that we have links with? Please give details

Impacts on all health professionals in wider community who care for people with heart failure. Provides advice on supporting patients and carers. Other organizations such as St Barnabas Hospice and United Lincolnshire Hospitals NHS Trust have been involved in development of this policy and it can be used to support all healthcare staff.

### C. Is there any evidence that the policy/service relates to an area with known inequalities? Please give details

No

### D. Will/Does the implementation of the policy/service result in different impacts for protected characteristics?

<table>
<thead>
<tr>
<th>Protected Characteristic</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disability</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Gender Reassignment</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Marriage/Civil Partnership</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Maternity/Pregnancy</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Religion or Belief</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Carers</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

If you have answered ‘Yes’ to any of the questions then you are required to carry out a full Equality Analysis which should be approved by the Equality and Human Rights Lead – please go to section 2

The above named policy has been considered and does not require a full equality analysis

**Equality Analysis Carried out by:** Jane Scrathon

**Date:** 16/11/2017
Section 2 – Not Required

Equality analysis

<table>
<thead>
<tr>
<th>Title:</th>
<th>Relevant line in:</th>
</tr>
</thead>
</table>

What are the intended outcomes of this work? Include outline of objectives and function aims

Who will be affected? e.g. staff, patients, service users etc

Evidence The Government’s commitment to transparency requires public bodies to be open about the information on which they base their decisions and the results. You must understand your responsibilities under the transparency agenda before completing this section of the assessment.

What evidence have you considered? List the main sources of data, research and other sources of evidence (including full references) reviewed to determine impact on each equality group (protected characteristic). This can include national research, surveys, reports, research interviews, focus groups, pilot activity evaluations etc. If there are gaps in evidence, state what you will do to close them in the Action Plan on the last page of this template.

Disability Consider and detail (including the source of any evidence) on attitudinal, physical and social barriers.

Sex Consider and detail (including the source of any evidence) on men and women (potential to link to carers below).

Race Consider and detail (including the source of any evidence) on difference ethnic groups, nationalities, Roma gypsies, Irish travellers, language barriers.

Age Consider and detail (including the source of any evidence) across age ranges on old and younger people. This can include safeguarding, consent and child welfare.

Gender reassignment (including transgender) Consider and detail (including the source of any evidence) on transgender and transsexual people. This can include issues such as privacy of data and harassment.

Sexual orientation Consider and detail (including the source of any evidence) on heterosexual people as well as lesbian, gay and bi-sexual people.

Religion or belief Consider and detail (including the source of any evidence) on people with different religions, beliefs or no belief.

Pregnancy and maternity Consider and detail (including the source of any evidence) on working arrangements, part-time working, infant caring responsibilities.

Carers Consider and detail (including the source of any evidence) on part-time working, shift-patterns, general caring responsibilities.
**Other identified groups** Consider and detail and include the source of any evidence on different socio-economic groups, area inequality, income, resident status (migrants) and other groups experiencing disadvantage and barriers to access.

**Engagement and involvement**

Was this work subject to the requirements of the Equality Act and the NHS Act 2006 (Duty to involve) ? (Y/N)

How have you engaged stakeholders in gathering evidence or testing the evidence available?

How have you engaged stakeholders in testing the policy or programme proposals?

For each engagement activity, please state who was involved, how and when they were engaged, and the key outputs:

**Summary of Analysis** Considering the evidence and engagement activity you listed above, please summarise the impact of your work. Consider whether the evidence shows potential for differential impact, if so state whether adverse or positive and for which groups. How you will mitigate any negative impacts. How you will include certain protected groups in services or expand their participation in public life.

Now consider and detail below how the proposals impact on elimination of discrimination, harassment and victimisation, advance the equality of opportunity and promote good relations between groups.

**Eliminate discrimination, harassment and victimisation** Where there is evidence, address each protected characteristic (age, disability, gender, gender reassignment, pregnancy and maternity, race, religion or belief, sexual orientation).

**Advance equality of opportunity** Where there is evidence, address each protected characteristic (age, disability, gender, gender reassignment, pregnancy and maternity, race, religion or belief, sexual orientation).

**Promote good relations between groups** Where there is evidence, address each protected characteristic (age, disability, gender, gender reassignment, pregnancy and maternity, race, religion or belief, sexual orientation).

**What is the overall impact?** Consider whether there are different levels of access experienced, needs or experiences, whether there are barriers to engagement, are there regional variations and what is the combined impact?

**Addressing the impact on equalities** Please give an outline of what broad action you or any other bodies are taking to address any inequalities identified through the evidence.
**Action planning for improvement** Please give an outline of the key actions based on any gaps, challenges and opportunities you have identified. Actions to improve the policy/programmes need to be summarised (An action plan template is appended for specific action planning). Include here any general action to address specific equality issues and data gaps that need to be addressed through consultation or further research.

Please give an outline of your next steps based on the challenges and opportunities you have identified. Include here any or all of the following, based on your assessment

- **For the record**
  - Name of person who carried out this assessment:
  - Date assessment completed:
  - Name of responsible Director/ General Manager:
  - Date assessment was signed: