

# Heart failure optimisation

The pillars at work across the acute setting – the heart failure system redesign framework.

Solution-based framework for addressing heart failure readmission rates across the various components of acute care.

**Action:**  
Use this framework as a guide when prioritising heart failure readmission interventions to ensure heart failure optimisation.

DATA TO DRIVE QUALITY IMPROVEMENT

|  | Heart failure specialty input   | Education  | Transitions  | AIM of this component in reducing heart failure readmissions  |
|--|---|--|--|---|
| <b>Acute assessment</b>  | <p><b>Pre-admission pack – to confirm HF diagnosis</b></p> <ul style="list-style-type: none"> <li>✓ Physical assessment (JVP, chest auscultation, peripheral oedema)</li> <li>✓ Electrocardiogram</li> <li>✓ Pathology (e.g. FBE, UEC; BNP reserved for selected patients with problems in diagnosis)</li> <li>✓ Chest X-ray</li> <li>✓ ECHO (to determine a working diagnosis).</li> </ul> <p><b>Done urgently if there is:</b></p> <ol style="list-style-type: none"> <li>1. Acute shortness of breath without definite cause – exclude HF</li> <li>2. Severe HF – 1st presentation without rapid response to therapy</li> <li>3. Severe HF with hypotension</li> </ol> <p>Results to guide clinical stratification to determine:</p> <ul style="list-style-type: none"> <li>✓ early cardiology consult / HF specialty input</li> <li>✓ initial interventions to manage symptoms</li> <li>✓ transition decisions</li> </ul> | <p><b>Patient/carer understands:</b></p> <ul style="list-style-type: none"> <li>✓ Initial findings</li> <li>✓ Next steps and follow-up plan – inpatient admission or discharge from the ED to GP or HF HIP program</li> </ul>  | <ul style="list-style-type: none"> <li>✓ Clinical handover for patients being admitted to: <ul style="list-style-type: none"> <li>— inpatient admitting unit</li> <li>— HF HIP programs – for patients with confirmed heart failure needing inpatient review and follow-up</li> </ul> </li> <li>✓ Clinical handover for patients being discharged from ED <ul style="list-style-type: none"> <li>— GP</li> <li>— community support services (e.g. Aged Care Assessment Services, Royal District Nursing Service)</li> <li>— consider actions outlined in discharge planning component, below</li> </ul> </li> </ul>  | <ul style="list-style-type: none"> <li>• Timely access to diagnostic tools such as echo and comprehensive pathology to aid in early diagnosis</li> <li>• Educate staff – nurses, junior and senior emergency department (ED) staff in heart failure (HF) diagnostics and early management strategies</li> <li>• Provide clear discharge pathways from ED, such as rapid echo service, clinic review within 7 days, use of HF HIP for diuresing patients</li> <li>• Ensure that the patient/carer understands their diagnosis (and follow-up plan if discharged)</li> <li>• If discharged, provide GP with useful information to guide ongoing management</li> </ul>   |
| <b>Inpatient (Admitting units)</b><br>– General medicine<br>– Cardiology<br>– Heart failure<br>– Other | <p><b>Multidisciplinary HF specialty team* offer a HF service consult (within 24-48hrs)</b></p> <ul style="list-style-type: none"> <li>✓ <i>Diagnosis</i> – further investigations if needed to confirm diagnosis</li> <li>✓ <i>Assessment and risk stratification</i> – clinical and comorbid complexities and psychosocial issues to determine readmission risk</li> <li>✓ <i>Treatment</i> – according to clinical guidelines and tailored according to risk (informed by pre-admission pack findings)</li> <li>✓ <i>Education</i> – diagnosis and treatment options, care pathways and self-management goals</li> <li>✓ <i>Post-discharge support/referrals</i> – includes HF exercise programs, HF HIP programs, consider early palliative care referral</li> </ul>  | <p><b>Patient/carer understands:</b></p> <ul style="list-style-type: none"> <li>✓ Diagnosis and treatment options</li> <li>✓ Care pathways</li> <li>✓ Self-management goals and their importance in preventing readmissions</li> <li>✓ Their HF point of contact for advice post-discharge (often the HF nurse)</li> </ul>   | <ul style="list-style-type: none"> <li>✓ Clinical handover between units and specialties</li> </ul>  | <ul style="list-style-type: none"> <li>• Ensure specialist HF input has been accessed</li> <li>• Where possible, colocate HF patients within the hospital to aid in better day-to-day care and facilitate consistent patient education</li> <li>• Refer early to a HF nurse to initiate education of patient and family</li> <li>• Ensure clarity about inpatient goals, to achieve a successful discharge (e.g. achieving euvolemic weight, renal function, treatment of anaemia and managing comorbidities)</li> <li>• Provide confirmation of diagnosis where necessary</li> <li>• Ensure medical therapies are evidence based and that a plan for further optimisation is communicated to transition care teams</li> <li>• Complete diagnostic investigations or procedures that are not readily obtained in the community</li> <li>• Assess by allied health (e.g. by a social worker, Aged Care Assessment Services, an occupational therapist, a physiotherapist, a dietician)</li> <li>• Review and optimise medications by a pharmacist</li> <li>• Educate about the importance of self-management and prevention of readmissions</li> </ul> |
| <b>Discharge planning</b><br>Commences at the time of admission  | <ul style="list-style-type: none"> <li>✓ Managing unit and specialist identified for outpatient follow-up and review</li> <li>✓ Strategies are in place to reduce unplanned readmissions to ED, such as rapid access to specialist advice and expertise</li> <li>✓ HF nurse available for phone calls/email during business hours</li> </ul>  | <p><b>Patient/carer understands:</b></p> <ul style="list-style-type: none"> <li>✓ HF action plan (euvolemic/dry weight, fluid, salt)</li> <li>✓ Medications</li> <li>✓ Recognition of worsening symptoms and their management – patient action plan</li> <li>✓ The importance of attending all follow up appointments made for them (GP, clinics, community, bloods, echo)</li> </ul> <p>Where possible ALL appointments are to be made before the patient leaves hospital. Avoid sending out appointments later or expecting the patient to organise it themselves.</p> | <p><b>Patient</b></p> <ul style="list-style-type: none"> <li>✓ HF action plan finalised</li> <li>✓ Medication consultation</li> <li>✓ GP follow-up booked</li> <li>✓ Home-based visit (or phone call) by HF nurse arranged <b>within 2-3 days</b> postdischarge</li> <li>✓ Discharge summary provided</li> </ul> <p><b>Health Service</b></p> <ul style="list-style-type: none"> <li>✓ Discharge summary complete, and provided to the GP and patient</li> <li>✓ Succinct <b>action-based</b> HF care plan included in summary (e.g. GP to increase drug A to x mg in the next 2 weeks if renal function stable)</li> <li>✓ MDT follow-up arranged <b>within 7 days</b> for clinic review</li> </ul> | <ul style="list-style-type: none"> <li>• Set discharge goals early</li> <li>• Identify which health professionals are necessary for MDT care and make the appropriate referrals</li> <li>• Ensure that everyone knows the discharge pathways (e.g. HF clinic, echo appointments, HF nurse specialist for home review, palliative care)</li> <li>• Improve communication so that patient, carers and community-based care teams have the necessary information required to be involved effectively in patient care – for example, ensure that the team members: <ul style="list-style-type: none"> <li>— are informed of inpatient results and the ongoing plan</li> <li>— are aware of who is involved with the care of the patient in the community, their expected role and how to contact each other to ensure ongoing collaborative care</li> <li>— have a copy of the individualised HF action plan that encourages maintenance behaviours and guides appropriate GP and HF team review</li> </ul> </li> <li>• Ensure that the patient and carer know what is going to happen and have agreed to it</li> </ul>                                   |
| <b>Sub-acute</b><br>– Medical<br>– Psychosocial  | <ul style="list-style-type: none"> <li>✓ Monitoring and review to achieve HF optimisation</li> <li>✓ Revise plan as patient requirements change</li> <li>✓ Provide timely medical review and specialist input as required, particularly where there is an exacerbation of symptoms</li> </ul>   | <p><b>Patient follow up</b></p> <ul style="list-style-type: none"> <li>✓ Patient self-management reviewed</li> <li>✓ Support areas are identified and addressed, and relevant services are engaged</li> <li>✓ Ensure the plan is working and meeting patient needs</li> <li>✓ Regular review with their GP</li> </ul>  | <p><b>MDT support</b></p> <ul style="list-style-type: none"> <li>✓ Outpatient – HF clinic, cardiology, general medicine</li> <li>✓ Home-based transitional support (HIP, HF nurse, transitional coach, telemedicine)</li> <li>✓ Community health services</li> <li>✓ Other – HF exercise program, timely referral to palliative care</li> <li>✓ Refer to local government aged care and support services to provide assistance with activities of daily living</li> <li>✓ Regular GP review</li> </ul>   | <p><b>Reinforcing the above:</b></p> <ul style="list-style-type: none"> <li>• having a diuretic action plan that has been developed in collaboration with the patient's cardiologist</li> <li>• providing access to a phone-advice HF nurse</li> <li>• ensure a rapid pathway to obtain HF expertise and advice</li> <li>• encouraging behaviours that will contribute to maintenance of health and wellbeing</li> <li>• having processes (and the appropriate skill mix) in place to ensure early identification of decompensated HF suitable for management in the community</li> <li>• having a plan that includes who and how to manage early deterioration (including how to access a HF specialty team, if required)</li> <li>• having regular follow-up and review with the cardiologist and/or HF nurse as appropriate, with first contact made within 7 days postdischarge</li> </ul>  |

BNP = brain natriuretic peptide;  
 ED = emergency department;  
 FBE = full blood examination;  
 GP = general practitioner;  
 HF = heart failure;  
 JVP = jugular venous pressure;  
 MDT = multidisciplinary team;  
 HIP = health improvement program;  
 UEC = urea, electrolytes, creatinine

\* HF cardiologist, general physician, HF nurse/nurse practitioner, dietician, pharmacist, physiotherapist