

# Chronic heart failure

## Organisational models

This document provides decision-makers with options to improve care in different service delivery settings. Building on *Chronic heart failure: Clinical priorities* (2017) which described *what* to improve, the focus here is on *how* to improve care. Together these documents are informed by: research evidence about best clinical care and the effectiveness of different delivery models; empirical evidence about current service delivery levels; experiential evidence from clinicians and patients.

### IMPROVING KEY PRIORITY AREAS



#### Diagnostic testing

- Monitor wait times for echocardiography
- Review availability of echocardiography results and equipment
- Consider public/private models of service delivery
- Credential other clinicians to conduct echocardiography if a sonographer is not available
- Review mechanisms for specialist interpretation and reporting of echocardiography



#### Exacerbation management

- Implement clinical decision support to tailor medication prescription
- Discuss resuscitation plan
- Record target ranges for oxygen prescription on medication chart
- Implement heart failure pathways to optimise fluid management
- Before discharge, arrange GP or Aboriginal Medical Service review (within 3 – 5 days) and specialist appointments as per local policy



#### Ongoing care

- Use case management approach to coordinate multidisciplinary care for:
- home medicines review
  - vaccination
  - advance care directive
  - coordinated discharge with a written action plan
  - self-management including fluid and salt restriction if relevant
  - adjusting medication to achieve target doses
  - shared decision making with patient and carers



#### Last year of life

- Use clinical decision support tools to move from a therapeutic to supportive care approach
- Implement a model that delivers patient and family centred goals
- Provide collaborative palliative and GP care as symptom burden increases
- Consider joint heart failure nurse and palliative care home visits

### IMPROVING THE OVERALL PATIENT JOURNEY

- Do not delay treatment if awaiting echocardiography
- Include integrated rehabilitation with exercise to facilitate early return to normal activity
- Incorporate the general practitioner (GP) as an integral part of the patient's care journey
- Consider early referral to palliative care
- Consider use of brain natriuretic peptide (BNP) or NT proBNP when echocardiography is not available
- Discuss deactivation of implantable cardiac defibrillator with the patient, family and cardiologist prior to implantation, and during the patient journey
- Improve access to results of all investigations in eMR
- Support quality improvement by establishing routine audit and feedback processes
- Measure and act upon patient reported experience and outcome measures (PROMIS-29 and Kansas City Cardiomyopathy Questionnaire (KCCQ)).

## OPTIONS FOR ORGANISATIONAL CONFIGURATIONS

A coordinated multidisciplinary team-based approach delivers core components of care. The options below outline different organisational models which sites can use to tailor their clinical services to align with local requirements.

### Option 1: Heart failure nurse-coordinated care model

This model is centred around a heart failure nurse who streamlines care and strengthens transition of care from hospital to community. This model is suitable for adoption in metropolitan and regional facilities.

	Emergency department	Early admission	Late admission	Transition to discharge	Community
Case finding	●	●	●	●	●
Refer to heart failure nurse		●	●	●	●
Coordinate tailored care	●	●	●	●	●
Refer to multidisciplinary team (MDT)		●	●	●	●
Discuss advance care directive		●	●	●	●
Discuss resuscitation plan		●	●	●	●
Psychological support and counselling	●	●	●	●	●
Enrol in heart failure program				●	●
Follow-up with specialists					●
Patient reported outcome and experience measures				●	●
Communication with GP				●	●
Refer to palliative care service	●	●	●	●	●

### Option 2: Nurse-led models including clinics and home visits

These models focus on partnering with primary and tertiary services. They provide support for self-management (such as medication, daily weight, fluid management), early post-discharge care (within 1 - 2 weeks) and ongoing management in the community. The evidence shows that using these approaches reduces hospital readmission and improves quality of life. These models are suitable for adoption in all facilities across NSW.

	Clinic visit	Admit to ward	Community
Promote awareness of clinic, location, referral criteria, hours and objectives to GPs and health providers	●	●	●
Enrol in heart failure program	●	●	●
Medication review	●	●	●
Support for self-management	●	●	●
Patient reported outcome and experience measures			●
Communication with GP	●		●
Refer to palliative care service	●	●	●

### Option 3: Virtual health model

Models of care that use virtual wards, hospital in the home (HITH) and remote telemonitoring can be combined with other models of care. They are suitable for adoption in all facilities. A large number of sites currently use virtual models to deliver care for people with CHF.

	Emergency department	Early admission	Late admission	Transition to discharge	Community
Telehealth	●	●	●	●	●
Remote monitoring (education for patients on what to expect, how to use the system and contact staff)				●	●
Telephone support				●	●
Support for self-management		●	●	●	●
Patient reported outcome and experience measures				●	●
Communication with GP				●	●
Refer to palliative care service	●	●	●	●	●