NSW Health

Leading Better Value Care

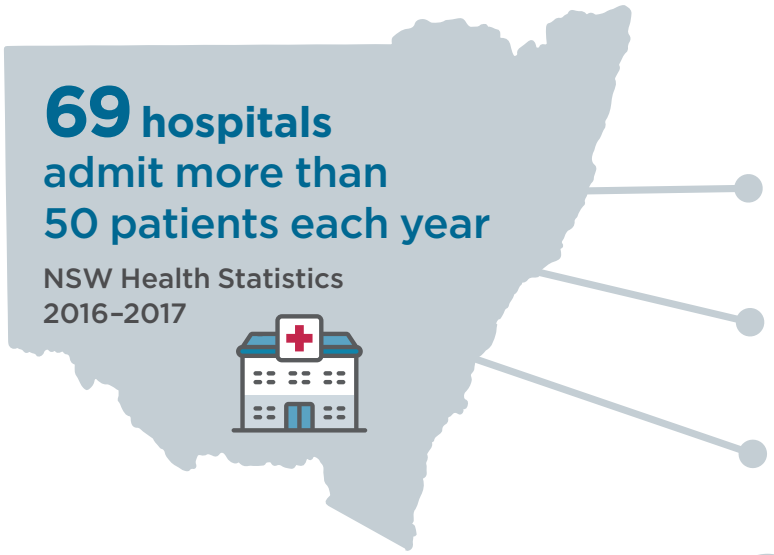
Chronic heart failure

Clinical priorities

Chronic heart failure (CHF) is a complex clinical syndrome secondary to an abnormality of cardiac structure or function which impairs the ability of the heart to pump blood to meet the needs of the body's organs. It is a severe, disabling condition which negatively impacts quality of life. A recent analysis of care provided across NSW hospitals highlighted four key areas for improvement.

Aims of the initiative

- Reduce readmissions and have care provided outside of hospital
- Increase their patients' confidence to manage their condition
- Provide options after hospital discharge and at end of life.



69 hospitals admit more than 50 patients each year

NSW Health Statistics 2016–2017

16,757 separations

121,206 bed days

7.2 days average length of stay

1 DIAGNOSTICS

Timely access to cardiology review, echocardiogram, chest X-ray and pathology is crucial for accurate and prompt diagnosis.

2 EXACERBATION MANAGEMENT

Prescription of evidence-based medicines and targeted oxygen therapy aim to improve severity of symptoms and patient outcomes.

3 OPTIMISING HEALTH THROUGH ONGOING CARE

a. Referral to multidisciplinary heart failure disease management programs decreases rates of rehospitalisation and mortality and improves self-management.

b. Standardised communication processes support the CHF patient's transfer of care to the community for ongoing multidisciplinary team management.

4 LAST YEAR OF LIFE

Palliative management alleviates end-stage symptoms, improves quality of life and decreases rehospitalisation.

NSW GOVERNMENT

AGENCY FOR CLINICAL INNOVATION

As part of the Leading Better Value Care (LBVC) CHF initiative, four key areas of care have been identified as a priority for both local and statewide improvement. These were identified following the review of current guidelines and evidence, the audit of more than 1000 CHF cases across NSW and the economic analysis of the potential impact of change.

Diagnostics

Patients will receive a timely cardiology review and access to appropriate investigations including transthoracic echocardiogram, chest X-ray and pathology.

- Cardiology review for high-risk patients or patients with new presentation of heart failure.
- Accurate diagnosis of type and severity of heart failure is crucial to identify and treat reversible causes and determine appropriate management strategy in accordance with guideline standard care.

Exacerbation management

Patients will receive evidence-based pharmacological treatment, fluid management and targeted oxygen therapy to improve severity of symptoms and facilitate better patient outcomes.

- Use of beta-blockers and angiotensin converting enzyme inhibitors (ACEI) or an angiotensin receptor blocker in patients with left ventricular systolic dysfunction.
- Oxygen therapy titrated to maintain oxygen saturation >94% and use of non-invasive ventilation (NIV) in hypoxemic and tachypnoeic patients where appropriate.
- Use of loop diuretics in patients with acute heart failure associated with pulmonary congestion.

Optimising health through ongoing care

a. Patients will receive timely referral to a multidisciplinary heart failure disease management program to improve self-management and decrease rates of rehospitalisation and mortality.
    - Use of telemonitoring or telephone support where face-to-face access is limited or not available.
    - Patients receive education that is timely, patient-centred, appropriate to their level of health literacy and culturally appropriate to improve self-management.
    - Regular exercise, such as that offered by a cardiac rehabilitation program, is recommended to improve physical functioning, improve quality of life and to decrease hospitalisation.

b. Standardised communication processes and tools will support the CHF patient's transfer of care to the community for ongoing management by a general practitioner and integrated care team.
    - While the LBVC initiative for CHF focuses predominantly on the acute inpatient care of the patient, it is acknowledged that seamless care transition beyond the hospital is a key priority area for improving outcomes for patients.

Last year of life

Patients with advanced heart failure are identified and receive appropriate palliative referral and management to alleviate end-stage symptoms, improve quality of life and decrease rehospitalisation.

- Close to 40% of patients diagnosed with heart failure will die within 12 months of their first hospitalisation with heart failure.
- Palliative care involvement should be sought early in the heart failure trajectory to reduce the suffering and distress associated with these symptoms.

Evidence

- National Heart Foundation of Australia and Cardiac Society of Australia and NZ. *Guidelines for the prevention, detection and management of heart failure in Australia 2018* [Internet]. Sydney: National Heart Foundation of Australia; 2018 [cited August 2018]. Available from: https://www.heartlungcirc.org/article/S1443-9506(18)31777-3/fulltext
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