





COLLABORATION





The NPS MedicineWise program on heart failure has been developed in collaboration with the National Heart Foundation of Australia





MEET THE PANEL



A/Prof Ralph Audehm



Melissa Chapman



Dale Richardson



Grace Castro



Prof Andrea Driscoll





DISCLOSURE

Associate Professor Ralph Audehm has received honoraria from:

Astra Zeneca; Aspen Pharmacare; Eli Lily; Novartis and Roche

Professor Andrea Driscoll has received honoraria from:

Novartis and Astra Zeneca – Advisory board member and given invited presentations for them.





FOCUS OF THE WEBINAR

- Develop an evidence-based treatment plan including pharmacological and non-pharmacological strategies to improve the care of people with heart failure
- Describe the roles of a GP, nurse practitioner and pharmacist as part of a multidisciplinary team to improve the quality of life for people with heart failure
- Identify when to refer people with heart failure to a cardiologist and support services to reduce heart failure hospitalisations

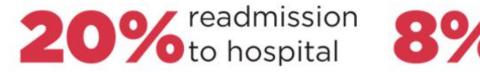






- ► Affects 480,000 Australians
- ▶ Over 60,000 new diagnoses every year
- ▶ Estimated to affect 750,000 Australians by 2030¹
- Associated with high rates of hospitalisation and mortality²

All-cause readmission and all-cause mortality 30 days after hospitalisation with heart failure²





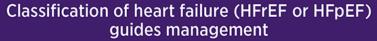
▶ Only 50% of people with heart failure are alive 5 years after diagnosis³

Chan YK, Tuttle C, Ball J, et al. Current and projected burden of heart failure in the Australian adult population: a substantive but still ill-defined major health issue. BMC Health Serv Res 2016;16:501. https://www.ncbi.nlm.nih.gov/pubmed/27654659. 2. Al- Omary et al Heart Lung Circ. 2018, 27-917-27
 Mamas MA, Sperrin M, Watson MC, et al. Do patients have worse outcomes in heart failure than in cancer? A primary care-based cohort study with 10-year follow-up in Scotland. Eur J Heart Fail 2017;19:1095-104. https://pubmed.ncbi.nlm.nih.gov/28470962/.





CLASSIFICATION GUIDES MANAGEMENT





Heart failure with **reduced** ejection fraction (HFrEF)

LVEF < 50%, symptoms ± signs of heart failure.²

Just under half of people with heart failure, 66% male.³ For men, generally evenly distributed across age groups; for women, increases with age. Generally fewer comorbidities compared to HFpEF.²

Management

Pharmacotherapy, non-pharmacological treatments, device therapy.

Medicines should be continued long-term even if LVEF improves, to decrease the risk of recurrence (unless a reversible cause has been identified and corrected).^{2,4,5}



Heart failure with **preserved** ejection fraction (HFpEF)

LVEF \geq 50%, symptoms \pm signs of heart failure and objective evidence of relevant structural heart disease and/or diastolic dysfunction without an alternative cause.²

Just over half of people with heart failure, 67% female.³ Generally older, with multiple comorbidities (typically obesity, diabetes, hypertension, atrial fibrillation).^{2,3}

Management

More difficult to treat than HFrEF. No medicine has been shown to improve survival.⁶

Management aims to reduce congestion and manage comorbidities.²

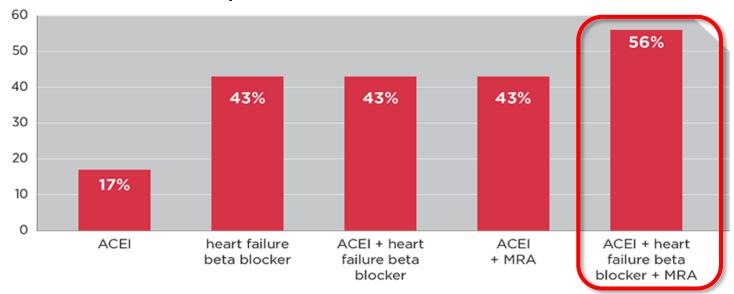
- 2. National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand: Guidelines for the prevention, detection, and management of heart failure in Australia 2018.
- 3. Chan YK et al BMC Health Serv Res 2016;16:501
- 4. Sindone AP et al MedicineToday 2019;20:22-27
- 5. Atherton JJ et al Medicine Today 2019;20:14-24
- 6. Australian Medicines Handbook. Heart Failure. Adelaide: AMH Pty Ltd 2020.





PHARMACOLOGICAL MANAGEMENT OF HFREF

Figure 1: Percentage reduction in all-cause mortality over 1–3 years for people with HFrEF on selected, initial heart failure medicines versus placebo⁷



A combination of all 3 recommended medicines for patients with HFrEF reduced deaths (from any cause) over 1–3 years by 56% compared to placebo



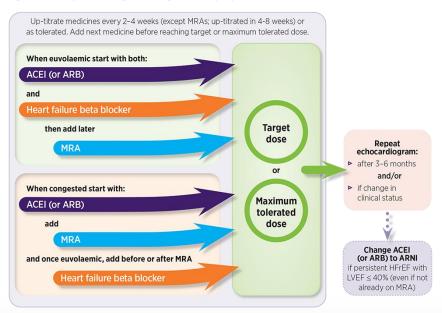


HFrEF:

ACEI + HEART FAILURE BETA BLOCKER + MRA

Start at low doses, up-titrate to target or maximum tolerated dose

Figure 2: Initial pharmacological management for people with HFrEF^{2,6,18}



HFrEF = heart failure with reduced ejection fraction ACEI = angiotensin-converting enzyme inhibitor ARB = angiotensin receptor blocker ARNI = angiotensin receptor neprilysin inhibitor MRA = mineralocorticoid receptor antagonist

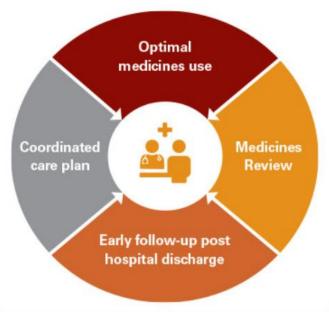
Start/titrate/stop loop diuretics (eg, furosemide) only to manage congestion





MULTIDISCIPLINARY APPROACH TO CARE

Figure 3: A coordinated care plan improves patient outcomes⁸



Referral to a multidisciplinary heart failure disease-management program is recommended in patients with heart failure associated with high-risk features to decrease mortality and rehospitalisation.⁹





^{8.} Vitry A et al. General practitioner management plans delaying time to next potentially preventable hospitalisation for patients with heart failure. Intern Med J. 2014; 44: 1117-23

^{9.} National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand: Guidelines for the prevention, detection, and management of heart failure in Australia 201

CASE 1

- ▶ Mr RA; 62 yo a keen golfer
- ▶ Past stemi 5 years ago; hypercholesterolaemia, HT
- Medication: Ramipril 5mg daily; aspirin 100mg daily; rosuvastatin 20mg daily; Meloxicam 15mg;
- ▶ Bloods 1 month ago FBE/U&E/LFTs/Lipids all good and at target; HbA1c 6.1% (prediabetes)
- You review him via a care plan





CASE 1 – 0/E

- ▶ BP 135/80; P87 regular; JVP 3cm; chest clear, SOA +; no ascites
- ▶ Weight 82 kgs; height 177; BMI 28
- ▶ Drinks 1 bottle wine per week, ex smoker (5 years)
- ▶ He has had no chest pain since his AMI.
- ▶ He has been more tired lately, he has noted it is harder to play the 18 holes of golf than it used to be but he thought he was just getting old
- ▶ There is no change on his ECG compared to one 2 years ago





CASE 1

- ➤ You check his notes and he did have an echo 5 years ago it showed an old anterior infarct with hypokinesis of the wall and an EF of 45%
- ➤ You start frusemide 40mg, and organise an echo. He feels much better after the addition of frusemide
- You refer him to cardiology OPD which will be in 3 months time
- ▶ He is euvolaemic JVP ?2 cm, no SOA, he is sleeping flatter!





CASE 1

- ▶ Even though he feels better he is not "stable"
- ▶ 34 % of people with NYHA 1-2 will be dead in 3 years!
- Should initiate a HF beta blocker as euvolaemic now
- ▶ Review in 2 weeks swap the frusemide with Aldactone, rpt U&Es before next appt
- Review 2 weeks BP 128/70 p72 up-titrate heart failure beta blocker or ACE inhibitor
- Then maybe monthly until his cardiology appt



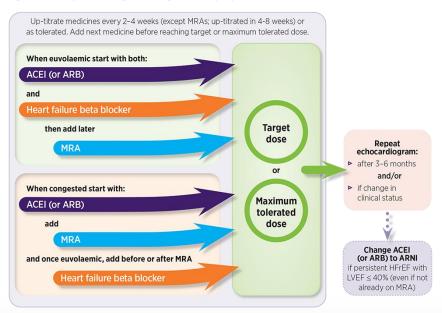


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BENEFITS OF HOME MEDICATION REVIEWS (HMR)

- ▶ Collaborative approach to medicines reduces risk of hospital admission
- Clinical trials have demonstrated benefit of HMRs in reducing medicine and medical misadventure time after time
- An Australian study of veterans with heart failure found that pharmacist-led home medicines review delayed the time to next hospitalisation¹⁰
- HMRs support numerous patient outcomes
 - Quality use of medicine
 - Minimise adverse medicine events
 - Patient education, leading to better adherence





^{10.} Australian Government Department of Veteran's Affairs. Veteran's Mates 2004-2010- Veterans' medicines advice and therapeutic educational services program. Adelaide: University of South Australia - Quality Use of Medicines and Pharmacy Research Centre, 2020.

WHAT CAN PHARMACISTS DO FOR PATIENTS WITH HEART FAILURE?

- ▶ Identify medicines that may exacerbate/precipitate heart failure
 - NSAIDs, Diltiazem/Verapamil, TCAs, Corticosteroids¹¹
- ▶ Simplify medicine regimens for adherence improvement
 - Reminders, once daily formulations, timing of doses
- ▶ Correct common medicine issues or side effects
 - Dry cough (ACEI), nightmares (Beta blockers), administration with food
- Optimise co-morbidity therapy
 - Diabetes, Asthma/COPD, Depression, AF





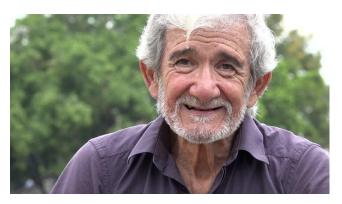
CASE STUDY

Meet Sam...

- ▶ 78 yrs old referred for HMR due to concerns over efficacy of medicine and polypharmacy
- Hx Hypertension, COPD/asthma, T2DM, osteoarthritis (knee) and hypercholesterolaemia

Medicines list:

- ▶ Metformin 1000mg XR nocte
- ▶ Linagliptin 5mg mane
- Rosuvastatin 10mg nocte
- Perindopril 5mg mane



- Metoprolol tartrate 50mg bd
- Cartia tablets100mg mane
- Seretide inhaler 250mcg/25mcg 2 puffs bd
- Salbutamol inhaler 100mcg 2 puffs prn up to 12 times daily
- Vitamin D tablets1000IU mane
- Paracetamol XR tablets 665mg 2 tds





CASE STUDY

- ▶ Been taking celecoxib without GP knowledge
- Explained he had been experiencing some worrying symptoms
 - Unable to sleep needs extra pillows to prop himself up due to breathing difficulties
 - Dry cough
 - Ankles swollen ever since celecoxib commenced
- Differential diagnosis
 - ACEI cough? Uncontrolled COPD/Asthma?





CASE STUDY

- ▶ Looking outside the box
 - Following up bits of information obtained
- ► HMR report to provide details from interview
 - Recommendations based on all information given
- Demonstrated collaboration likely reduced odds of hospitalisation





CASE 3

- ▶ Mrs A an 87 year old lady presented to ED with decreased exercise tolerance, increasing SOB and fatigue over one month. Also inc peripheral oedema
- ► Three weeks ago was treated by GP for a chest infection. Prescribed cephalexin which stopped 1/52
- ▶ Ceased frusemide as did not want to take too many tablets at once. Also mentioned she did not like taking her frusemide and had often missed doses.
- ▶ Echo: EF 42%, diastolic dysfunction and moderate MR





TITRATION OF MEDICATIONS

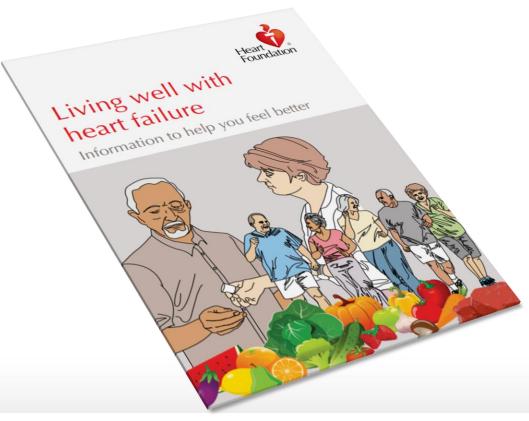
- ▶ Discharge medications:
 - Frusemide 40mg mane,
 - Nebivolol 1.25mg mane,
 - Rosuvastatin 10mg mane,
 - Ramipril 2.5mg mane
 - Pantoprazole 40mg mane
- ▶ What changes would be made?
 - Commenced MRA eg spironolactone
 - Up- titrate ACEi
 - Up-titrate BB once euvolaemic
 - Education about furosemide and management

- Victorian study showed1:
 - 64.6% prescribed an ACEI/ARB
 - 78.7% prescribed a BB
 - 45.3% prescribed a MRA
 - 41.5% prescribed triple therapy
- Approx one third of non-prescribing was due to prescriber inertia





PATIENT EDUCATION



- Consistent tailored information in an environment where the patient is most receptive
- Education to patient and carer
- Understand their level of health literacy
- Use 'teach back' to determine their level of understanding
- Consistent messaging
- Only cover 1-2 areas in one brief session, KISS principle
- Degree of cognitive impairment





SELF-MANAGEMENT STRATEGIES

- ▶ Self-management strategies have been shown to reduce the risk of all-cause rehospitalisations and mortality by 20%¹
- Weight monitoring
- Monitoring symptoms
- Medication adherence
- Exercise
- Lifestyle changes
- Preventive measures

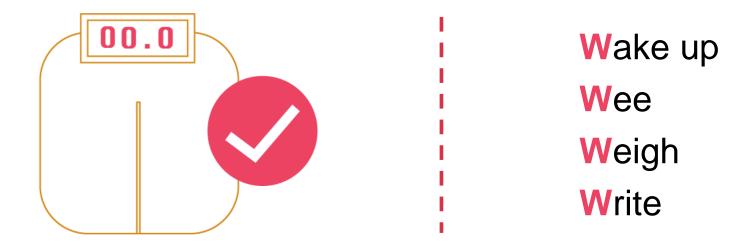
Tell me, I'll forget.
Show me,
I may remember.
But involve me and
I'll understand.

-Chinese proverb





WEIGHING AND FLUID BALANCE



- ► Explain Why weighing is important
 - Encourage Weighing every morning
 - ▶ Explain What to do





SELF MANAGEMENT AND EMPOWERMENT IN HEART FAILURE

Evaluations told us patients and carers wanted:

- Practical information
- Presented in simple, non-technical format
- Preferred graphic format
- ▶ Low health literacy audience
- Available and accessible to carers
- Patients felt comfortable being introduced by health professionals
 - In hospital, community nurse, cardiac rehab





SELF MANAGEMENT AND EMPOWERMENT IN HEART FAILURE

Heart Failure Video Series

- Currently available to all Australians in English
- Available on Heart Foundation and NPS MedicineWise websites and YouTube: hrt.how/heartfailure



















PATIENT CENTRED ACTION PLAN



Call your doctor or nurse if you have any of these symptoms:



Ankle, legs or stomach swelling.

Your shoes, socks or pants are getting very tight.



Weight goes up or down by 2kg in two days.



Bad cough, especially at night.

A new cough that won't go away.



Your breathing is getting harder. You can't walk as far as usual. You have to sit up to sleep.



Dizzy or feel like fainting.



Heart is racing and won't slow down (palpitations).

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When you have angina:

*If calling 000

does not work on

your mobile, try

Stop and rest immediately.

Take your anginine or nitrolingual spray.

If the pain does not go away after 5 minutes, take another dose of your angina medicine.

If the chest pain does not go away after another 5 minutes OR is severe OR gets worse quickly, call Triple Zero (000)* and ask for an ambulance. Don't hang up. Wait for advice from the operator.

Call Triple Zero (000)* and ask for an ambulance if:

You suddenly have severe shortness of breath, or you are experiencing new 'blackouts'.

Things to know:

Your weight on hospital discharge: ____kg
Weight at home (first morning after discharge): ____kg

Things to do every day:



Only drink___litres. That is about___cups.

Don't forget tea, coffee, soups and fruit all count.



Weigh yourself every day, first thing in the morning and write it down.

Has it changed by 2kg or more in two days?



Don't forget to take your medicines.



Eat a healthy, balanced diet.



Keep active. Try to walk every day at a comfortable pace.

Do what you can on days when you feel well.



Remember to do things that make you happy. What hobbies do you have? Fishing, gardening, dancing, reading? Or is it time to find something new to do?

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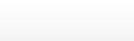
Your Follow-up Plan:

Clinics (Tick if needed and approximate time frame)

☐ Your GP_______ Austin Health Clinic______

Contact numbers: Heart failure nurse:

Austin Health Clinic______

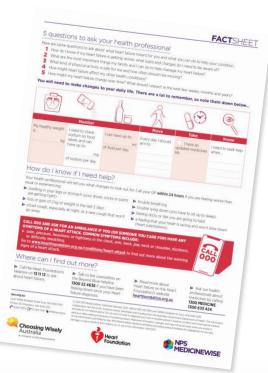






NPS MEDICINEWISE FACT SHEET





NPS.ORG.AU/HEART-FAILURE#RESOURCES





NPS MEDICINEWISE ACTION PLAN





NPS.ORG.AU/HEART-FAILURE#RESOURCES





MEET GRACE

- ▶ Working mother with 4 children
- Diagnosed with HFrEF after the birth of my second child –
 5 years ago
- Active in self- management to improve quality of life
- Cardiologist plays a crucial role in my management







NPS MEDICINEWISE WEBSITE HEALTH PROFESSIONAL & CONSUMER INFORMATION AND RESOURCES

$\textbf{Blood pressure (BP) - including orthostatic BP (postural drop)}. \\ \text{This Review 1-2 weeks after each medicine initiation / each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine initiation / each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine initiation / each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine initiation / each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine initiation / each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ \text{This Review 1-2 weeks after each medicine dose increase} \\ This Rev$			
ADVERSE EFFECTS	ACTIONS ^a		
	ACEI / ARB / ARNI	HEART FAILURE BETA BLOCKER	MRA
Asymptomatic hypotension ^{7,11}	Continue therapy	Continue therapy	Continue therapy
Symptomatic hypotension eg dizziness, light- headedness and/or confusion ^{1,2,11}	Assess volume status, consider reducing or stopping diuretic if there are no signs or symptoms of congestion Review other medicines that can reduce blood pressure (eg calcium channel blockers, nitrates, diuretics) If still symptomatic: a. temporarily decrease dose of either ACEI/ARB, ARNI or heart failure beta blocker b. review patient within 1 week and if still symptomatic continue dose reduction (or cease) and seek specialist advice		Continue therapy Only consider decreasing dos if, after implementing actions for ACEI/ARB/ARNI and/ or heart failure beta blocker to address symptomatic hypotension, the patient is stil symptomatic.
Severe symptomatic hypotension / cardiogenic shock eg cold and sweaty skin, dyspnoea, blue skin tone or weak and rapid pulse ¹¹¹¹²	Immediate referral to an er	mergency department	



Heart failure: taking an active





EDUCATIONAL VISITS

Educational visit

Heart failure: an active role for GPs and patients

Early diagnosis of heart failure and effective management in primary care prolongs lives, keeps people out of hospital, and improves quality of life.

REQUEST A VISIT

Start: 1 March 2021 | Cost: free







THANK YOU

Please fill out the feedback survey



