**PATHFINDER Study Follow-up Form**

**GP Visit: 1 week Post Discharge**

Please complete the sections in yellow and return this form to:
Fax: 61524998 or Email: fsh.ahfcts@health.wa.gov.au

See overleaf for Heart Failure Medication Titration Problem Solving guide.

Dial 0480111493 if you require further guidance with medication titration or enacting an action plan for this patient.

### A. Assessment

<table>
<thead>
<tr>
<th>Dry weight (at discharge)</th>
<th>Weight</th>
<th>HR bpm</th>
<th>BP mmHg</th>
<th>Symptom:</th>
<th>Dose after the current appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>kg</td>
<td>kg</td>
<td>______</td>
<td>______</td>
<td>□ NA □ Dyspnoea □ Dizziness □ Fatigue Other:</td>
<td>□ _____ mg □ OD □ BD □ Maximum-tolerated □ Cease medication</td>
</tr>
</tbody>
</table>

### B. Please titrate HF Medications

<table>
<thead>
<tr>
<th>Drug Class</th>
<th>Medication Name</th>
<th>Current dose</th>
<th>Target dose*</th>
<th>Guideline-recommended medication titration plan</th>
<th>Dose after the current appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACEI/ARB/ARNI*</td>
<td></td>
<td></td>
<td></td>
<td>Start at the low dose. Up-titrate by doubling the dose every 2 to 4 weeks.</td>
<td>□ _____ mg □ OD □ BD □ Maximum-tolerated □ Cease medication</td>
</tr>
<tr>
<td>Beta-blocker</td>
<td></td>
<td></td>
<td></td>
<td>Start at the low dose. Up-titrate by doubling the dose every 2 to 4 weeks.</td>
<td>□ _____ mg □ OD □ BD □ Maximum-tolerated □ Cease medication</td>
</tr>
<tr>
<td>MRA*</td>
<td></td>
<td></td>
<td></td>
<td>Commence with 25mg daily. Up-titrate in 4 to 8 weeks aiming for target dose for 50mg.</td>
<td>□ _____ mg □ OD □ BD □ Cease medication</td>
</tr>
<tr>
<td>Diuretics</td>
<td>Variable dose with no target</td>
<td>Adjust according to clinical assessment.</td>
<td></td>
<td>□ _____ mg □ OD □ BD □ Cease medication</td>
<td></td>
</tr>
</tbody>
</table>

*Target dose approved by PATHFINDER Cardiologist:

Name: ___________________________ Signature: ___________________________

- Kidney function test and electrolytes should be checked 1 week after commencing or titrating dose of ACEI/ARB/ARNI/MRA

### C. Further actions

Is any further action required for this patient at this time?

- No further action needed
- GP review within a week
- Refer to Emergency Department
- Refer to a Cardiologist
- Refer to Allied Health Professional (i.e. Chronic Disease Management Plan)
- Other: ___________________________

GP Name: ___________________________ Signature: ___________________________ Date: ___________________________
**Heart Failure Medication Titration Problem Solving Guide**

**Hypotension**
- **Asymptomatic hypotension** does not usually require any change in therapy (systolic BP 90–100 mmHg)
- **Symptomatic hypotension** (dizziness, light-headedness and/or confusion):
  I. Stop or reduce calcium - channel blockers and/or other vasodilators unless essential e.g. for angina
  II. Consider reducing diuretic dose if there are no signs or symptoms of congestion
  III. Temporarily reduce ACEI / ARB / ARNI or beta-blocker dose if above measures do not work
  IV. Review patient as clinically appropriate within one week and seek specialist advice if the above measures do not work

Severe symptomatic hypotension or shock requires immediate referral to an emergency department

**Worsening renal function**
- ACEI /ARB are generally well tolerated even in patients with renal impairment (eGFR less than 30mL/min). Use ARNI with caution in patients with eGFR less than 30mL/min.
- Heart failure patients are more vulnerable to acute renal failure following a destabilising event such as a dehydrating illness or over-diuresis or addition of nephrotic medications.
  NB. Advise patients experiencing such an event to seek urgent medical attention and to stop the ACEI / ARB / ARNI until clinically reviewed and blood chemistry is checked.
- Some rise in urea, creatinine and serum K+ is expected after commencing an ACEI / ARB / ARNI. Blood chemistry must be checked one week after commencing or titrating dose and monitored closely there after to ensure kidney function is not worsening.
- An eGFR decrease of up to 30% is acceptable provided it stabilises within 2 weeks. Check serum K+, creatinine and urea within 48 hours if required.
- If the eGFR declines more than 30%, the patient should be reviewed urgently for clinical assessment of volume status and review of nephrotoxic medications. Seek specialist advice regarding the safety of continuing therapy.

**Caution:** eGFR may over estimate renal function in low body weight individuals and does not reflect accurate renal function in individuals with fluctuating creatinine levels.

**Hyperkalaemia**
Careful serum K+ monitoring is required with ACEI / ARB / ARNI and MRA. Urgently check serum K+, creatinine and urea if patient is dehydrated or septic. If serum K+ rises to:
- I. 5.0–5.5 mmol/L, review and reduce K+ supplements or retaining agents (e.g. amiloride, spironolactone, eplerenone)
- II. 5.6–5.9 mmol/L, cease all K+ supplements or retaining agents
- III. 6 mmol/L or greater, immediately seek specialist advice

**Bradycardia**
- Where heart rate is less than 50 beats per minute, and the patient is on a beta-blocker, review the need for other drugs that slow heart rate (e.g. digoxin, amiodarone) in consultation with specialist; and arrange ECG to exclude heart block
- Consider reduction of beta-blocker where there is marked fatigue or symptomatic bradycardia

**Congestion or peripheral oedema**
Suggested actions when congestion or peripheral oedema is worsening:
- Increase the diuretic dose and then consider halving the dose of beta-blocker
- Liaise with the heart failure service and review the patient daily or weekly (as appropriate)
- Seek specialist advice if symptoms do not improve; and, if there is severe deterioration, refer patient to an emergency department immediately.

**Angioedema and cough**
I. Angioedema, although rare, can occur at any time when using ACEI / ARB / ARNI. Actions include:
- Stop ACEI / ARB / ARNI immediately
- Seek specialist advice where angioedema occurs with an ACEI before trialling ARB due to possible cross-sensitivity
- Avoid ARNI where angioedema is due to ACEI / ARB

II. Cough is common in patients with heart failure. Actions include:
- Exclude pulmonary oedema as a cause if cough is new or worsening
- Consider if cough is caused by ACEI or other drugs and only discontinue drug if cough is not tolerable
- Consider substituting ACEI with an ARB if the cough is troublesome or interferes with sleep


(Last accessed date: 04-Feb-2021)

The current Australian Heart Failure Management Guidelines are available at:
https://www.heartfailure.org/article/S1443-9506(18)31777-3/fulltext

Please return the form by fax to 61524888
D. Assessment

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<thead>
<tr>
<th>Dry weight (at discharge)</th>
<th>Weight</th>
<th>HR</th>
<th>BP</th>
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<th>Other</th>
</tr>
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<tbody>
<tr>
<td>70 kg</td>
<td>150 kg</td>
<td>60 bpm</td>
<td>120 mmHg</td>
<td>□ NA □ Dyspnoea □ Dizziness □ Fatigue</td>
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E. Please titrate HF Medications

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<th>Drug Class</th>
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*Target dose approved by PATHFINDER Cardiologist:

- Kidney function test and electrolytes to be checked 1 week after commencing or titrating dose of ACEI/ARB/ARNI/MRA

F. Further actions

- Is any further action required for this patient at this time?
  - No further action needed
  - GP Review within a week
  - Refer to Emergency department
  - Refer to a Cardiologist
  - Refer to Allied Health Professional (i.e. Chronic Disease Management Plan)
  - Other: ____________________________

GP Name: ________________________________________ Signature: ____________________________ Date: ____________________________
Heart Failure Medication Titration Problem Solving Guide

**Hypotension**

- **Asymptomatic hypotension** does not usually require any change in therapy (systolic BP 90–100 mmHg)
- **Symptomatic hypotension** (dizziness, light-headedness and/or confusion):
  1. Stop or reduce calcium - channel blockers and/or other vasodilators unless essential e.g. for angina
  2. Consider reducing diuretic dose if there are no signs or symptoms of congestion
  3. Temporarily reduce ACEI / ARB / ARNI or beta-blocker dose if above measures do not work
  4. Review patient as clinically appropriate within one week and seek specialist advice if the above measures do not work

Severe symptomatic hypotension or shock requires immediate referral to an emergency department

**Worsening renal function**

- ACEI / ARB are generally well tolerated even in patients with renal impairment (eGFR less than 30 mL/min). Use ARNI with caution in patients with eGFR less than 30 mL/min.
- Heart failure patients are more vulnerable to acute renal failure following a destabilising event such as a dehydrating illness or over-diuresis or addition of nephrotoxic medications.
  - NB. Advise patients experiencing such an event to seek urgent medical attention and to stop the ACEI / ARB / ARNI until clinically reviewed and blood chemistry is checked.
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**Caution:** eGFR may overestimate renal function in low body weight individuals and does not reflect accurate renal function in individuals with fluctuating creatinine levels.

**Hyperkalaemia**

Careful serum K+ monitoring is required with ACEI / ARB / ARNI and MRA. Urgently check serum K+, creatinine and urea if patient is dehydrated or septic. If serum K+ rises to:

1. 5.0–5.5 mmol/L, review and reduce K+ supplements or retaining agents (e.g. amiloride, spironolactone, eplerenone)
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**Bradycardia**

- Where heart rate is less than 50 beats per minute, and the patient is on a beta-blocker, review the need for other drugs that slow heart rate (e.g. digoxin, amiodarone) in consultation with specialist; and arrange ECG to exclude heart block
- Consider reduction of beta-blocker where there is marked fatigue or symptomatic bradycardia

**Congestion or peripheral oedema**

Suggested actions when congestion or peripheral oedema is worsening:

- Increase the diuretic dose and then consider halving the dose of beta-blocker
- Liaise with the heart failure service and review the patient daily or weekly (as appropriate)
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I. Angioedema, although rare, can occur at any time when using ACEI / ARB / ARNI. Actions include:
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Please return the form by fax to 61524888.
PATHFINDER Study Follow-up Form

GP Visit: 3 month Post Discharge

Please complete the sections in yellow and return this form to:
Fax: 61524888 or Email: fsh.ahfts@health.wa.gov.au

See overleaf for Heart Failure Medication Titration Problem Solving guide.

Dial 0480111493 if you require further guidance with medication titration or enacting an action plan for this patient.

G. Assessment

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<th>Drug Class</th>
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* Target dose and recommended dose approved by PATHFINDER Cardiologist:

Name: ................................. Signature: .................................

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I. Further actions

Is any further action required for this patient at this time?

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□ Other: ..................................................
# Heart Failure Medication Titration Problem Solving Guide

**NSAIDs or COX-2 inhibitors are contraindicated in patients with heart failure. Avoid negatively inotropic calcium channel blockers (verapamil, diltiazem) in patients with heart failure with reduced ejection fraction (HFrEF).**

## Hypotension

- **Asymptomatic hypotension** does not usually require any change in therapy (systolic BP 90–100 mmHg).
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Please return the form by fax to 61524888.

PATHFINDER study follow-up form GP visit week 1 ver 2 dated 11 Feb 2021