

Medication education and review

Aims of module

- To increase CR participants' medication knowledge by:
 - discussing the basic indications and benefits of commonly prescribed cardiac medications
 - identifying and discussing strategies to improve medication adherence.
- To ensure participants are receiving optimal medication.

Logic

Most CR participants will be prescribed new medications during inpatient admission, so it is essential that they understand why and how to take them. CR also provides the opportunity to review prescribed medications to ensure optimal cardio-protective medication prescription and dose.

Medication education and review Best Practice Statement 1

Educate CR participants about the basic indications and benefits of commonly prescribed medication therapy.

NHMRC level of evidence: Expert Opinion

Example content:

- Explain medication indications and the planned duration of therapy to CR participants.
- Describe how to take each medication, including (as required) nitrates, and follow a chest pain management action plan (see resources).
- Explain the benefits of taking the medication, using patient-relevant outcomes (e.g., beta blockers reduce the risk of repeat heart attack and death).
- Inform CR participants that individual medications have two types of names (brand name versus generic name) and general acceptability of generic medications.
- Encourage participants to carry and regularly update a list of their medications, and outline methods of documenting medications (e.g., on a card in a wallet, in a notes application on a mobile phone, or using the My Heart, My Life app).
- Emphasise the importance of consulting a general practitioner (GP) or cardiologist before stopping or changing medication.

Rationale: Poor patient education about medications is probably related to poor medication concordance.¹ While there is no robust evidence for the effect of consistent interventions, such as education, on increasing medication concordance and adherence, it is reasonable that patients should receive medication counselling to improve medication adherence.^{2,3}

Medication education and review Best Practice Statement 2

Encourage and support CR participants to adopt strategies that lead to medication adherence.

NHMRC level of evidence: Expert Opinion

Example content:

- Encourage CR participants to incorporate taking medication into a routine.
- Discuss common barriers to taking medications and strategies to overcoming them.
- Discuss common side effects of medications.
- Encourage participants to plan script refills.

Rationale: Medication adherence is often suboptimal for many reasons, including affordability, treatment complexity and lack of consumer understanding. In Europe, it has been shown that up to 9% of cardiovascular events are attributed to poor adherence. Optimal medication adherence has been associated with a 20% reduction in cardiovascular disease risk and a 35% reduction in all-cause mortality.⁴

A Cochrane systematic review demonstrated that medication adherence for chronic health problems is complex, but all evidence agrees that patients should be educated about strategies to improve medication adherence.^{2,3}

Medication education and review Best Practice Statement 3

CR staff (a pharmacist, if possible) should ensure CR participants receive optimal cardio-protective medications.

NHMRC level of evidence: Expert Opinion

Example content:

- Ensure optimal medication classes and doses are prescribed.
- If medications are found to be sub-optimal or the CR participant has concerns or is experiencing problems, options for management include:
 - liaison with the participant's cardiologist or GP
 - referral to a pharmacist within the program (if available) for review
 - referral to a community pharmacist for review (see the resources section below for more information)
- If participants have complex medication regimes (e.g., due to many comorbidities), refer them to a pharmacist for individualised consultations.

Rationale: Mortality from cardiovascular disease has decreased dramatically with the growing use of secondary preventive medical therapies such as antiplatelet therapy, beta-blockers, statins and angiotensin-converting enzyme (ACE) inhibitors.⁵ CR is the ideal time to review and optimise cardio-protective therapies, as per the latest National Heart Foundation of Australia/Cardiac Society of Australia and New Zealand (NHF/CSANZ) acute coronary syndromes (ACS)⁶ and heart failure guidelines,⁷ by working with a program pharmacist or through communication with the CR participant's cardiologist or GP

Resources

- National Heart Foundation chest pain management action plan
https://www.heartfoundation.org.au/images/uploads/main/Your_heart/Heart_Attack_Action_Plan.JPG
- Improving adherence in cardiovascular care; A toolkit for health professionals
https://www.adma.org.au/clearinghouse/doc_download/97-improving-adherence-in-cardiovascular-care-toolkit-pdf.html
- National Heart Foundation of Australia & Cardiac Society of Australia and New Zealand: Australian Clinical Guidelines for the Management of Acute Coronary Syndrome.
https://www.heartfoundation.org.au/images/uploads/publications/Clinical_Guidelines_for_the_Management_of_Acute_Coronary_Syndromes_2016.pdf
- National Heart Foundation of Australia & Cardiac Society of Australia and New Zealand: Guidelines for the Prevention, Detection, and management of Heart Failure in Australia 2018
[https://www.heartlungcirc.org/article/S1443-9506\(18\)31777-3/fulltext](https://www.heartlungcirc.org/article/S1443-9506(18)31777-3/fulltext)
- Community pharmacy resources via <http://www.6cpa.com.au>
 - Medication adherence programs
 - Medication management programs
 - Home medicines review
<http://6cpa.com.au/files/home-medicines-review-brochure/>
 - Meds check <http://6cpa.com.au/files/medscheck-a2-poster/>
- National Prescribing Service (NPS) Medicines Line: 1300 633 424
<https://www.nps.org.au/medicines-line>
- Medicines – Heart Foundation
<https://www.heartfoundation.org.au/your-heart/living-with-heart-disease/medicines>
- Heart Online
<http://www.heartonline.org.au/articles/medications/medication-adherence#barriers-to-medication-adherence>

Is there an app for that?

Medication tracker apps

- My Heart, My Life App on android and iOS
- Medicinewise App on android and iOS



References

1. Albert NM. Improving medication adherence in chronic cardiovascular disease. *Critical Care Nurse*. 2008;28(5):54–64.
2. Nieuwlaat R, Wilczynski N, Navarro T, Hobson N, Jeffery R, Keenanasseril A, et al. Interventions for enhancing medication adherence. *The Cochrane Library* (Internet). 2014 Nov 20 (cited 2018 May 4); Available from: <http://cochranelibrary-wiley.com/doi/10.1002/14651858.CD000011.pub4/full>
3. Van Wijk BL, Klungel OH, Heerdink ER, de Boer A. Effectiveness of interventions by community pharmacists to improve patient adherence to chronic medication: a systematic review. *Annals of Pharmacotherapy*. 2005;39(2):319–328.
4. Chowdhury R, Khan H, Heydon E, Shroufi A, Fahimi S, Moore C, et al. Adherence to cardiovascular therapy: a meta-analysis of prevalence and clinical consequences. *Eur Heart J*. 2013 Oct;34(38):2940–8.
5. Gaziano TA, Bifton A, Anand S, Abrahams-Gessel S, Murphy A. Growing epidemic of coronary heart disease in low-and middle-income countries. *Current Problems in Cardiology*. 2010;35(2):72–115.
6. Chew DP, Scott IA, Cullen L, French JK, Briffa TG, Tideman PA, et al. National Heart Foundation of Australia & Cardiac Society of Australia and New Zealand: Australian Clinical Guidelines for the Management of Acute Coronary Syndromes 2016. *Heart, Lung and Circulation*. 2016 Sep;25(9):895–951.
7. Atherton JJ, Sindone A, De Pasquale CG, Driscoll A, MacDonald PS, Hopper I, et al. 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. *Heart, Lung & Circulation*. 2018 Oct;27(10):1123–208.

Terms of use: This material has been produced by the National Heart Foundation of Australia (Heart Foundation) for the information of health professionals. The Heart Foundation does not accept any liability, including for any loss or damage, resulting from the reliance on the content, or its accuracy, currency or completeness. Please refer to the Heart Foundation website at www.heartfoundation.org.au for Terms of Use.

©2019 National Heart Foundation of Australia ABN 98 008 419 761



This guide was developed jointly by the Heart Foundation and Institute for Physical Activity and Nutrition (IPAN) at Deakin University as part of the Development of Standardised Curriculum for Cardiac Rehabilitation project, funded by Safer Care Victoria.

Funded by

This resource was developed in collaboration with

