

NBMPHN Regional Data to Inform your Quality Improvements

No Second Chances: Controlling Risk in Cardiovascular Disease

This Baker Heart and Diabetes Institute report contains some interesting and challenging data in particular about secondary prevention of cardiovascular disease for primary and specialist healthcare providers in the NBMPHN region

Opportunities to improve health outcomes for people who have already experienced a **cardiovascular event** – *how* is your practice improving care for patients in this cohort?

IN JUST 7 DAYS, ABOUT 10% OF PEOPLE WHO HAVE A STROKE WILL HAVE ANOTHER

HOWEVER, **ONLY 50%** OF AUSTRALIAN HEART PATIENTS RECEIVE GUIDELINE-BASED CARE AFTER A HEART ATTACK OR STROKE.

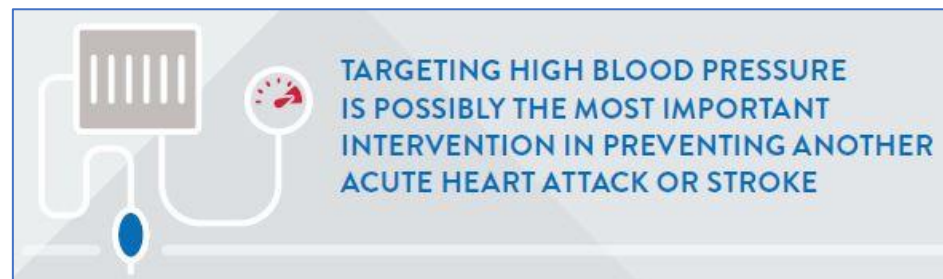
THERE ARE 1.1 MILLION HOSPITALISATIONS EVERY YEAR IN AUSTRALIA DUE TO CARDIOVASCULAR EVENTS – UP TO **HALF** OF WHICH ARE **READMISSIONS**.



IF YOU'VE HAD A HEART ATTACK, YOU ARE TWICE AS LIKELY TO DIE PREMATURELY COMPARED TO THE GENERAL POPULATION



AUSTRALIANS DIAGNOSED WITH HEART DISEASE ARE **5 TO 7 TIMES** MORE LIKELY TO SUFFER FUTURE HEART EVENTS THAN THOSE WITHOUT HEART DISEASE.



No Second Chances: Controlling Risk in Cardiovascular Disease

This Baker Heart and Diabetes Institute report released on 20th February 2019, contains some interesting and challenging data for primary and specialist healthcare providers in the NBMPHN region about secondary prevention of cardiovascular disease (CVD).

Background

The report highlights that **people in the secondary prevention group** – those who have already experienced a serious event such as a stroke or an acute heart attack – are at high risk from another cardiovascular event:

- Persons who have had a heart attack are **twice as likely** to **die prematurely** compared to the general population.
- Persons who have had two or more heart attacks are **three times more likely** to **die prematurely**.
- Within 12 months, about **10%** of heart attack survivors will have **another heart attack**.
- In just 7 days, about **10% of people** who have a **stroke** will **have another**.

The report emphasises that opportunities to significantly improve health outcomes and reduce health costs include **addressing modifiable risk factors**, **setting targets for medical therapy**, and **pursuing lifestyle modification** in the secondary prevention of cardiovascular disease.

What are secondary cardiovascular events?

Secondary cardiovascular events are defined as **acute cardiovascular incidents that occur in patients who have already had an event**, including a myocardial infarction or a stroke. Secondary prevention of cardiovascular disease is concerned with preventing the recurrence of cardiovascular events or complications of CVD in patients with diagnosed CVD – including:

- Repeated heart attack
- Heart failure
- Progressive / recurrent disease
- Secondary stroke
- Recurrent non-stroke event, and
- Recurrent PAD and amputation

Addressing modifiable risk factors

The No Second Chances report identifies **nine risk factors** that are associated with over 90% of cardiovascular events in both men and women. These risk factors include:

- Hypertension
- Diabetes
- Dyslipidaemia
- Abdominal obesity
- Smoking
- Insufficient fruit and vegetable consumption
- Alcohol consumption
- Psychosocial factors such as depression (either pre-existing or developed following a heart attack), and
- Lack of regular physical activity.

In particular, it is noted that the risk of a recurrent cardiovascular event dramatically increases as the number of risk factors accumulate.

Managing risk to prevent secondary cardiovascular events

Comprehensive risk assessment to set optimal health targets

The No Second Chances report discusses the importance of patients in the secondary prevention cohort having a **comprehensive risk factor assessment** and **being informed of optimal targets**. Such target levels for certain risk factors such as blood pressure may be more aggressive than the general population*.

It is recommended that patients who may be at risk of longer-term complications such as heart failure and heart arrhythmias be identified to facilitate commencement of preventative treatment strategies.

Guideline-based approaches – Lifestyle changes

Lifestyle modification strategies including smoking cessation, maintaining a healthy diet, limiting alcohol consumption, weight control and exercise and physical activity are recommended to significantly reduce the risk of secondary events in persons with CVD.

Guideline-based approaches – Cardiac rehabilitation and pharmacological therapy

Guideline based approaches* including referral to an exercise-based cardiac rehabilitation service are recommended for all patients with symptomatic coronary artery disease, and evidence-based pharmacological therapy, such as anti-platelet drugs, statins, beta-blockers and angiotensin-converting enzyme inhibitors or angiotensin II receptor blockers are recommended for all patients.

Recommendations

1. Each practice is encouraged to **explore its own practice data** using the **PenCS (CAT4) tool** for patients who have **already experienced a heart attack or stroke**, and **compare it against best practice guidelines***.
2. Each practice is encouraged to use the CAT4 tool to

identify patients within each of these sub-groups who may have **incomplete data** or who have data that is **out of range**.

3. **Follow up** as appropriate with these patients in the **secondary prevention** group, **in accordance with best practice guidelines**.
4. General Practitioners are encouraged to access and utilise the **Australian absolute CVD risk calculator**, <http://www.cvdcheck.org.au/> for patients with and without known CVD as part of either:
 - a **comprehensive health assessment** (MBS items 701-715) for those eligible, or
 - a **heart health assessment** (the new MBS item 699) for those not eligible for comprehensive assessments.

* <https://www.baker.edu.au/impact/advocacy/no-second-chances> – report pages 67 and 71

What does the data look like in your practice?

How to identify patients in the secondary prevention group in your practice

General Practitioners, Practice Nurses and/or other general practice staff can identify patients in the secondary prevention group using filters available within the Pen CS (CAT4) tool.

Steps:

1. Open your practice Clinical Audit Tool on your computer and select 'Daily View'.
2. Select the most recent monthly extract you wish to review under "View Extracts".
3. Click on 'View Filter'
4. Select the 'Conditions' filters tab.
5. Within the 'Cardiovascular' section, select 'MI' (a 'yes' selection rather than 'no').
6. Click 'Recalculate' to apply the filters chosen.
7. Repeat steps 4 and 5 separately, this time selecting 'Stroke' (a 'yes' selection rather than 'no').
8. **Note:** you may wish to apply other filters deemed relevant for your practice at Step 3 under the 'General' tab, such as selecting 'Active' patients only or those with their last visit within a specific period.

General Practitioners and/or Practice Nurses can explore the presence of and extent to which these risk factors are being appropriately managed for patients in this cohort by reviewing the relevant CAT4 report for each risk factor. For example, to review hypertension as a risk factor among this cohort, click the 'Measures', then 'BP' report tabs. It is then possible for practices to identify patients who have had a stroke or heart attack, whose BP status is 'No BP recorded' or 'BP > 140/90.'

Practices are encouraged to discuss any queries, such as requesting assistance with the CAT4 tool or additional guidance about the new heart health assessment MBS item, with their Practice Support team officer at NBMPHN.