

**OPTIMISING YOUR PRACTICE DATA TO IDENTIFY
PATIENTS AT RISK OF CARDIOVASCULAR DISEASE
AND ASSIST IN DRIVING PATIENT CARE**

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HNECC PHN ACKNOWLEDGES THE TRADITIONAL OWNERS & CUSTODIANS OF THE
LAND THAT WE LIVE & WORK ON AS THE FIRST PEOPLE OF THIS COUNTRY.

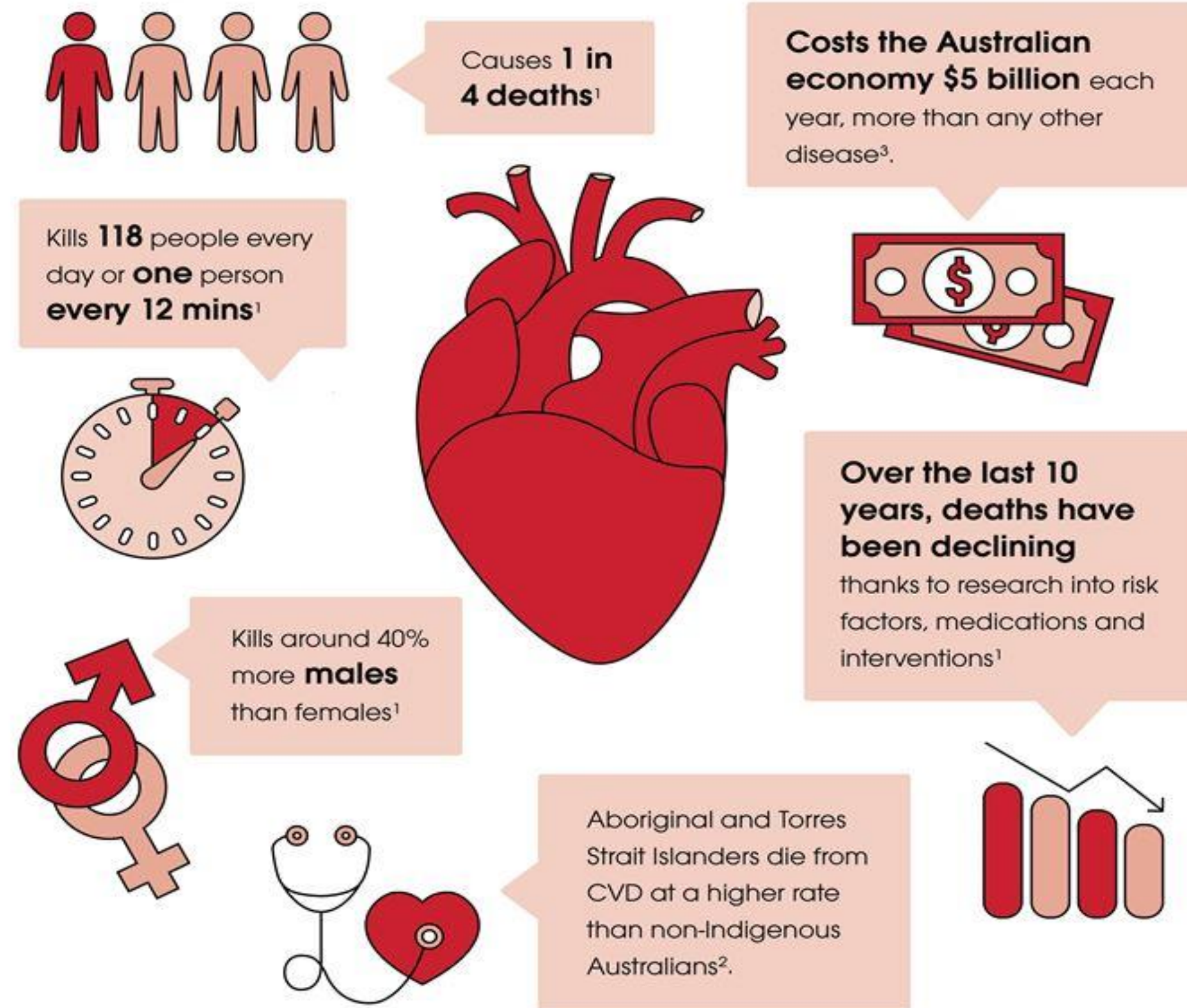
LEARNING OBJECTIVES

1. Importance of assessing Cardiovascular Risk
2. Identify the benefits of a Cardiovascular Dashboard Report
3. How to use Practice Data to drive patient care
4. Importance of clinical coding and data accuracy
5. How to use Heart Health as a Quality Improvement Activity to assist in improving patient care
6. Community of Practice



ASSESSING CARDIOVASCULAR RISK

Cardiovascular Disease (CVD)
affects more than 4 million Australians¹



- [CVD Check : Calculator](#)
- [Heart Health Check Toolkit \(heartfoundation.org.au\)](http://heartfoundation.org.au)
- [RACGP - Guidelines for the management of absolute cardiovascular disease risk](#)
- [Key Statistics: Heart Disease | The Heart Foundation](#)
- [Key Statistics: Cardiovascular Disease | The Heart Foundation](#)

Prevalence¹

- One in six Australians self-report as living with CVD, accounting for more than 4 million Australians.
- This represents 16.6% of the total Australian population living with CVD.
- Positively, the prevalence of CVD has been decreasing over time (declining approximately 80% since the 1980's), due to research into risk factors, medications and interventions.
- Regardless, CVD is still one of the most prevalent diseases in Australia.

Deaths²

- Cardiovascular disease (CVD) is a major cause of death in Australia, responsible for causing one in four (26%) of all deaths
- This means that on average, 118 Australians die from CVD each day, or one person every 12 minutes.
- Forty per cent more males die from CVD compared to females, while people in the lower socioeconomic groups, Aboriginal and Torres Strait Islander peoples and those living in regional and remote areas, generally have higher rates of death resulting from CVD than other Australians⁴.
- Deaths from cardiovascular disease have decreased over the last 10 years, when adjusting for population growth and age distribution.

Hospitalisations³

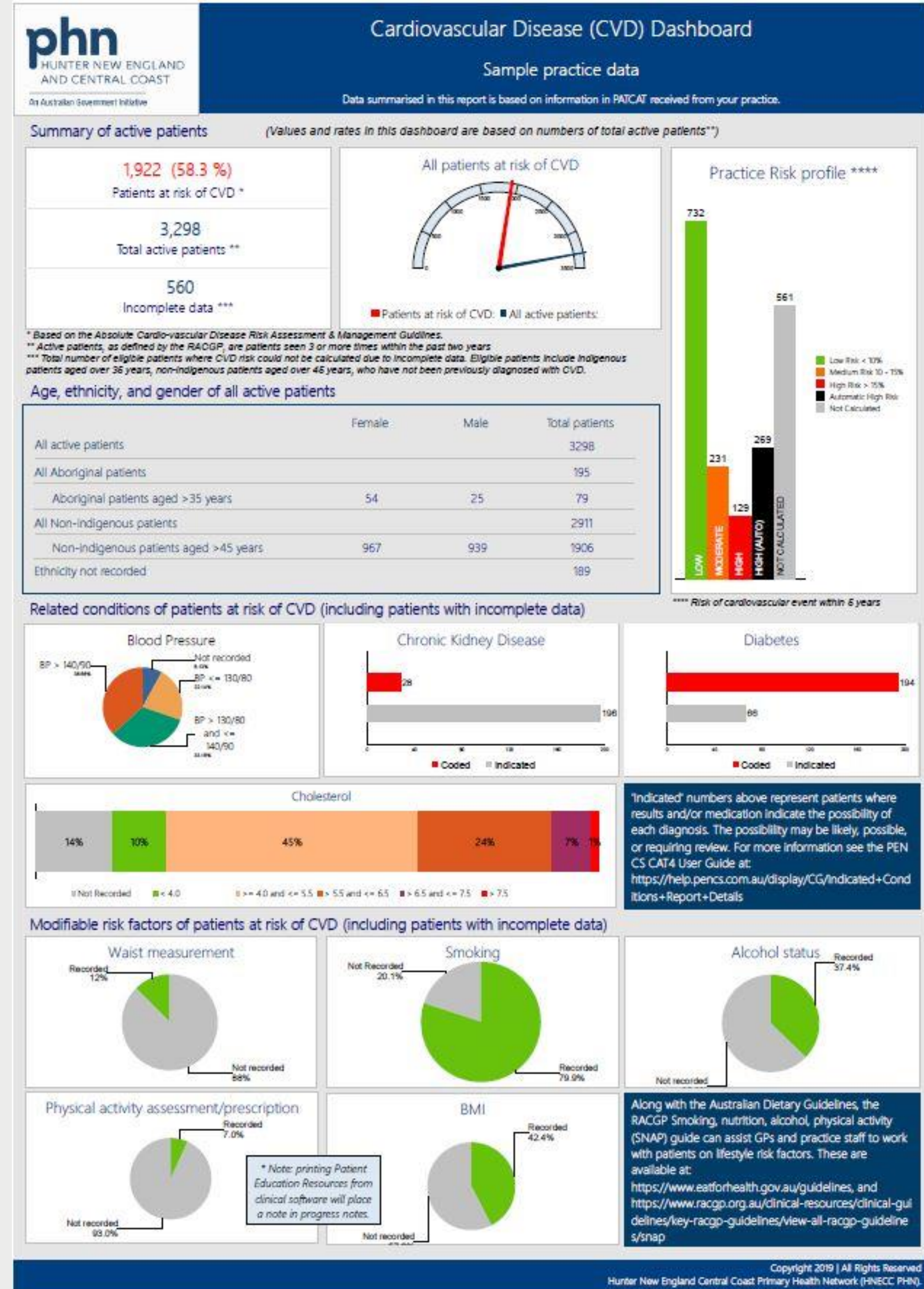
- Someone is hospitalised for CVD every minute, equating to a total of 1619 hospitalisations per day.
- More men are admitted for CVD each year than women.
- Approximately \$5 billion is spent on providing health care services to admitted patients with CVD each year, accounting for 11.1 percent of total admitted health expenditure – the largest share of health expenditure of any disease group⁵.

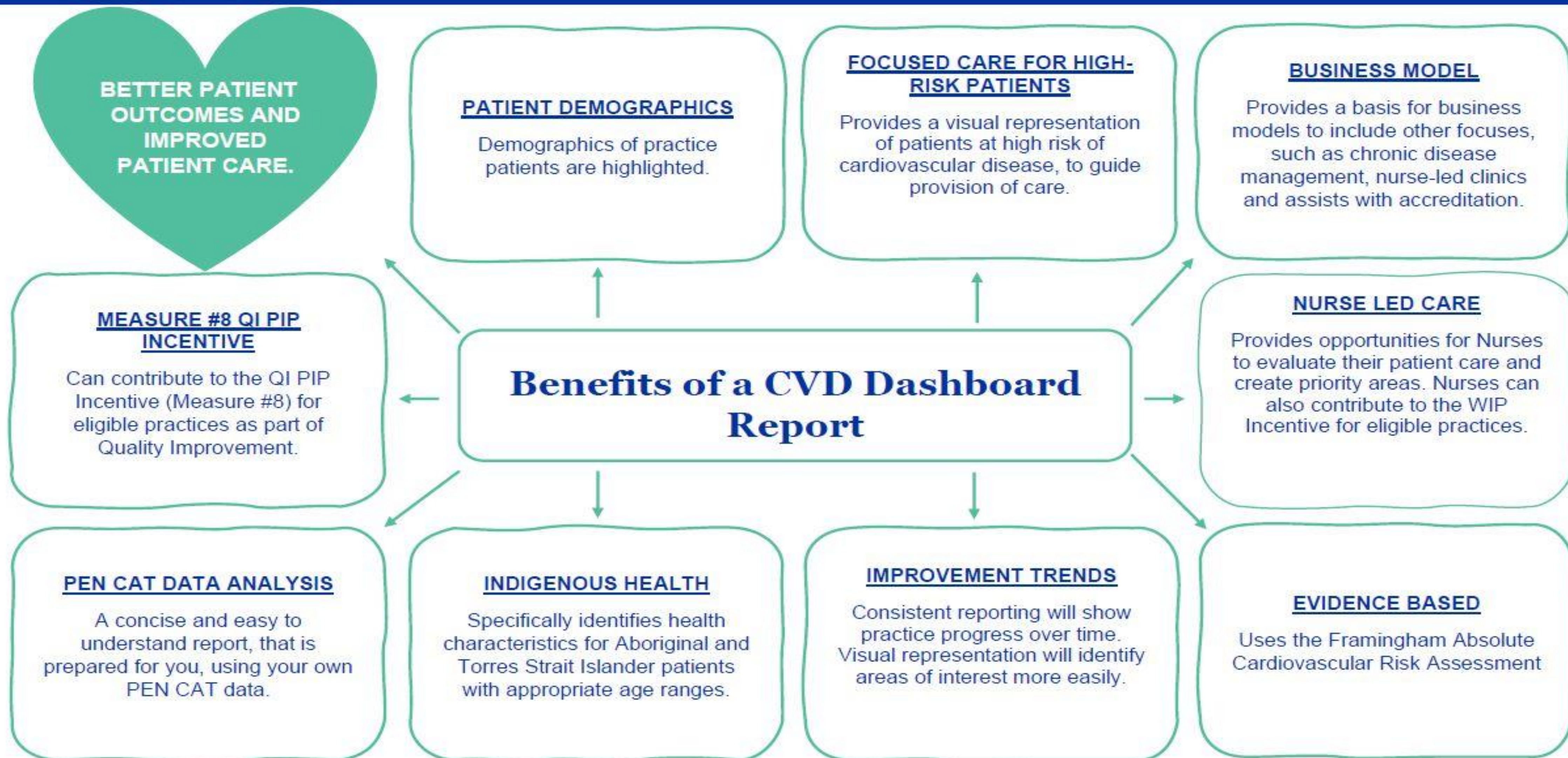
CARDIOVASCULAR DASHBOARD REPORT

- Sample Dashboard Report
- Generated using the Practices Pen CS deidentified data
- Gives a snapshot of the practice's active patients at risk of Cardiovascular Disease.
- Uses the Framingham Risk Equation (FRE) to determine a numerical probability of a Cardiovascular event occurring in the next 5 years
- Pen CS note that the CV Event Risk Graph(similar to the one presented in the report) is a guide derived from "National Vascular Disease Prevention Alliance. Guidelines for the management of absolute cardiovascular disease risk. 2012"
- Interpretation guide available

CV (Cardiovascular) Event Risk CAT calculated - CAT GUIDES - PenCS Help

<https://thephn.com.au/primarycaresupport/focus-areas/heart-health>





HOW TO USE PRACTICE DATA TO DRIVE PATIENT CARE

- Identifies target groups to focus on e.g. patients with co morbidities such as Diabetes or Chronic Kidney Disease, First Nation patients, patients between a certain age, gender etc.
- Can provide an identifiable list of patients to directly call in for a review
- Can assist in identifying patients eligible for the Heart Health Assessment within your practice
- Can create cross tabulation reports to look at treatment efficacy within your patients
- Can provide a breakdown on level of Cardiovascular Risk i.e., low, medium, high- this can assist in prioritising which patients to bring in first
- Nurses can play a large role in using the practice data to identify patients for the GP's and bringing these patients in for a review (which Nurses can also assist with)
- The data can look at potential missed opportunities/points of care, and it can also identify potential missing diagnoses for other co morbidities contributing to CV Risk such as Diabetes and Chronic Kidney Disease (relies on clinical coding and data accuracy).

CLINICAL CODING AND DATA ACCURACY

- For data to truly and effectively assist in driving accurate patient care- it requires the data to be correctly coded into the clinical software
- Requires confidence and knowledge on the clinical software (E.g., Best Practice and Medical Director)- often it isn't that the points of care are being missed, it just hasn't been inputted into the software in the correct spot to be picked up for reports and analysis
- Assistance with clinical coding can be found through either your PCIO at the PHN, the medical software companies, Pen CS support and varying other sources.

Tidying up the patient notes (known as data cleansing in the program software) and clinical coding are tools that can drive patient care and assist in improving patient outcomes.
This document illustrates the importance of these tools and how they can be used as accountability tools.
Data accuracy is a result of careful clinical coding, and therefore will be of higher value.

Identification

Clinical data can allow you to identify specific populations and key characteristics, even at the GP level. Factors include:

- Socioeconomic status
- Ethnicity status (i.e., Aboriginal and Torres Strait Islander)
- Modifiable risk factors
- Age groups
- At risk population

Characterisation of these groups can allow the practice to identify priority areas and develop appropriate business models.

For example, identification of smoking as a risk factor in a significant proportion of patients will guide training and resources use for staff.

Trends

Complete and accurate data will make trends more easily identifiable. This will contribute to appropriate allocation of staffing and resources.

- For example, an increase in patients with type 2 diabetes may indicate the need for additional PN hours or a staff member undertaking more specialised training.

Quality Assurance/Clinical Responsibility

Careful clinical coding will ensure data accuracy. The data can be used for quality assurance purposes and to assess care provided.

- This data can be used to monitor risk factors of patients including those that may not be visiting the practice regularly.
- For example, clinical coding can identify patients who may benefit from a review, as current risk factors are yet to meet recommended targets.

Opportunities and Points of Care

Clinical software can detect and suggest possible missing diagnoses and points of care based on Medicare billing, pathology results, and other clinical factors. The software can also assist in identifying patients that are due for a review.

- For example, a prescribed medication may indicate that a diagnosis box has yet to be ticked or coded differently. Ensuring this data matches will enable this patient to be included in any future searches for this condition.

Helpful Links:

- Pen Cat- Cat 4/Cat Plus: <https://help.pencs.com.au>
- Top Bar: <https://help.pencs.com.au>
- RACGP- Standards for General Practice: <https://www.racgp.org.au>
- Health Pathways: <https://hne.communityhealthpathways.org>
- My Health Record- Data Cleansing and Clinical Coding: <https://www.myhealthrecord.gov.au>
- PHN Website- Community of Practice: <https://www.thephn.com.au>

HOW TO USE HEART HEALTH AS A QUALITY IMPROVEMENT ACTIVITY TO ASSIST IN IMPROVING PATIENT CARE

Focus Area & Aim.... What are you trying to achieve? What is your goal?

Use **Specific, Measurable, Achievable, Relevant, Time-based, Agreed (S.M.A.R.T.A)** goals.

Identify and reduce Cardiovascular Risk in patients over a 12-month period by:

- Scheduling a regular time for CVD screening
- Cleaning practice data to identify patients yet to be assessed for CVD risk
- Assessing patient CVD modifiable risk factors
- Reviewing the treatment efficacy.

What are the ways that you can review and measure the activity?

The practice can use the Primary Health Network practice dashboard (or run a CAT 4 report in PEN CS) to observe the baseline data. This can be reviewed at monthly intervals and at the end of the PIP QI Quarter.

IDEAS.... What activities and changes can we make to help you reach your GOAL?

Develop ideas that you would like to test towards achieving your goal. Use the **S.M.A.R.T.A** approach when developing your ideas.

Idea 1.	<u>Use of Absolute Cardiovascular Risk Score (Screening)</u> To increase the use of the Absolute Cardiovascular risk score as part of a screening measure by % by <insert date>.
Idea 2.	<u>Indicated Diagnoses (Under data cleansing in software)</u> To identify and then reduce the number of indicated diagnoses by % by <insert date> through the Pen Cat data cleansing tool.
Idea 3.	<u>Modifiable Risk Factors (Clinical Coding)</u> To increase the recording of modifiable risk factors (i.e., smoking alcohol, physical activity, BMI) into the clinical software by % by <insert date>.
Idea 4.	<u>Reviewing treatment efficacy in high-risk patients</u> To identify all patients prescribed treatments for (insert condition here) in the last 12 months who are not yet meeting recommended risk factors targets.

Quality Improvement

Plan, Do, Study, Act (PDSA) Cycle

This PDSA/12 Month Quality Improvement Record is to be used as a guide and can be adjusted appropriately to suit your practice. The content provided is an example only, and information can vary depending on individual circumstances. If you would like assistance in how to tailor this to your practice, please contact your local PHN.

IDEA 1	Use of Absolute Cardiovascular Risk Score (Screening)
<p>PLAN <i>Who is going to undertake this activity?</i> <i>When are they going to do it?</i> <i>What resources/software will they need?</i></p>	<p>(Example Below)</p> <p>Who: (For example)</p> <ul style="list-style-type: none"> • Practice Staff: Identify list of eligible patients for all GPs with patients aged between (insert age range). • GPs to screen list. • Practice staff to make appointments. <p>When: (For example) Appointments scheduled in 4-hour blocks on the last Friday of every month.</p> <p>Where: Practice premises.</p> <p>Data to be collected: A CAT 4 extraction looking at the number of ACR scores recorded and the risk severity. The recipe for this extraction can be found on the PenCS website under QIM 8- Cardiovascular Risk.</p> <p>Data predictions: There will be (insert prediction here) percentage of having a cardiovascular event in the next 5 years.</p> <p>Resources needed:</p> <ul style="list-style-type: none"> • Practice staff to generate list of eligible patients • Software for generating list • Time in schedules available for appointments with GP and PN.
<p>DO (DID) <i>Was the plan executed?</i> <i>Were there any unexpected events or problems?</i> <i>Record data.</i></p>	<p>(Example Below)</p> <p>(insert number) of patients were screened for Cardiovascular Disease using the Absolute Cardiovascular Risk Assessment tool between (insert date) and (insert date).</p> <p>Deviations from plan:</p> <ul style="list-style-type: none"> • Pts unable to attend time slot designated • Urgent appointments for (insert reason) were recorded in (insert number) instances during the time designated. • Staff on leave during (insert date) delayed appointments for (insert month/time-period).
<p>STUDY <i>Review actions and reflect on outcome.</i> <i>Compare to predictions</i></p>	<p>(Example Below)</p> <p>According to the Dashboard report this was a (insert number) increase/decrease compared to the previous Dashboard Report.</p> <p>Training in using the clinical software to record the ACR will be useful to the GPs and Nurses to encourage screening.</p> <p>Clinical reminders can be used as a friendly prompt for clinical staff to conduct an ACR score.</p>
<p>ACT <i>What now?</i> <i>What will you take forward?</i> <i>What is the next step?</i></p>	<p>(Example Below)</p> <p>Continue to monitor and measure CVD Risk through CAT 4 extractions and the CVD Dashboard report available through the PHN. This will achieve continual improvement and ensure that there is no decrease in screening. The practice will also continue to identify the level of risk Cardiovascular risk and aim to reduce the level of risk through pharmacotherapy and lifestyle modifications.</p>

Family members: Mr. Alan Abbott

D.O.B.: 30/06/1945 Age: 75 yrs Birth Sex: Male

Phone: (h) 07 50505050 (m) 0427556232 (w) 07 50509999

Pension No.: 123456789 Comment: On warfarin

Aboriginal/Torres Strait Islander

Family & Social History

Current Alcohol Intake Non drinker

Days per week: Standard drinks per day:

Description:

Past Alcohol Intake

Nil Occasional Moderate Heavy

Year started: Year stopped:

Comment:

CAGE Questions Standard Drinks Audit-C

Family & Social History

Current Smoking History

Non smoker Ex smoker Smoker

Year started:

Past Smoking History

Quantity/day: Unknown <1 1-9 10-19 20-39 40+

Year started: Year stopped:

Patient would like cessation advice/support: Yes No

Brief advice to stop smoking given Prescribed cessation medication

Provided cessation behavioural support Referred to cessation support

Comment:

Last updated: 23/02/2006 Check box and Save if up to date

MedicalDirector Clinical 4.0a - [Mr David Anderson (66yrs 4mths)]

Mr David ANDERSON (66yrs 4mths) DOB: 04/01/1955 Gender: Male

61 Wallace Street, Bundaberg, Qld 4670

ALLERGIES & ADVERSE REACTIONS: SULFONYLUREAS (ENDOCRINE)

Cardiovascular Risk Calculator

Date: 05/2021 Time: 3:46:33 PM Gender: Male Age: 66 Height: 175 Patient ID: 20

Blood Glucose Blood Pressure CV Risk ECG INR Renal Function Respiratory Weight

Absolute CVD Risk Calculator **Relative CVD Risk Calculator**

Current Measurements

Blood Pressure (mmHg)

Systolic: 115 Diastolic: 85

Total Cholesterol: mmol/L

HDL Cholesterol: mmol/L

Smoking Status: Yes No

Diabetes: Yes No

ECG LVH: Yes No Unknown

Please note if its patient it does not require an absolute CVD risk assessment as they are already known to be at > 15% probability of CV disease within 5 years.

This is a calculator only. Click the Save button to save the risk percentage. Double-click a record within the table on right side to view individual measurements.

View guidelines and resources for: [Patient](#) [Practitioner](#)

Clear Recall

Print Reference Edit View Save Close

CVD Dashboard Report: Quality Improvement Activities

Idea One: Use of Absolute Cardiovascular Risk Score (Screening)

How to access the Cardiovascular Risk tool in Best Practice

How to access the Cardiovascular Risk tool in Medical Director

PEN CAT RECIPES

You can create lists of patients at risk of cardiovascular disease. Step-by-step guides can be found on the PenCS website under [QIM 8- Cardiovascular Risk](#).

CLINICAL GUIDELINES

The Absolute CVD risk clinical guidelines are endorsed by the RACGP and can be found on the National Heart Foundation website. They are known as the [Absolute CVD Risk Clinical Guidelines](#).

RISK CALCULATION

The Framingham Risk Equation is used to calculate cardiovascular risk. This is further explained on the PenCS website under [CV Event Risk CAT Calculated](#).

COMMUNITY OF PRACTICE

This community of practice provides the forum and opportunity for like minded health professionals to come together and support each other through resources, education events, and discussions all about Heart Health. This space is designed for you to ask questions, answer questions, brainstorm ideas, and learn from each other.

[To join the Community of Practice you can email myself at krolfe@thephn.com.au](mailto:krolfe@thephn.com.au)

[Primary Care Support - Primary Health Network \(thephn.com.au\)](http://thephn.com.au)



About Us



Quality Improvement Framework



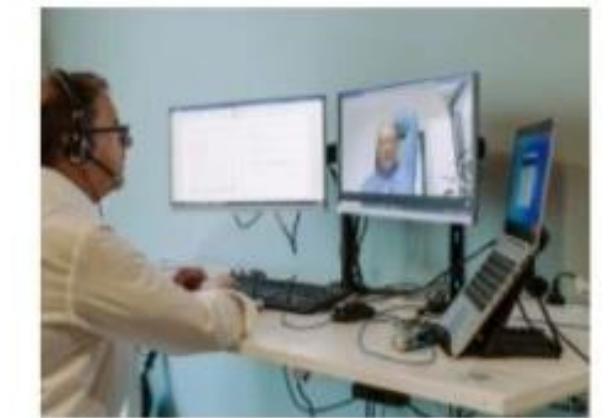
Accreditation



Cancer Screening



Diabetes



Digital Health



Heart Health



Immunisation



LUMOS Data Linkage Project



Mental Health



Practice Management and MBS



Questions?

THANKS FOR LISTENING

Kelsie Rolfe

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