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QUALITY IMPROVEMENT TOOLKIT FOR GENERAL PRACTICE

CONDITIONS

Diabetes
MODULE

Version 2

May 2021

Introduction

The Quality Improvement (QI) toolkit

This QI toolkit is made up of modules that are **designed to support your practice to make easy, measurable and sustainable improvements to provide best practice care for your patients.** The toolkit will help your practice complete QI activities using the Model For Improvement (MFI).

Throughout the modules you will be guided to explore your data to understand more about your patient population and the pathways of care being provided in your practice. Reflections from the module activities and the related data will inform improvement ideas for you to action using the MFI.

The MFI uses the Plan-Do-Study-Act (PDSA) cycle, a tried and tested approach to achieving successful change. It offers the following benefits:

- A simple approach that anyone can apply
- Reduced risk by starting small
- It can be used to help plan, develop and implement change that is highly effective.

The MFI helps you break down your change implementation into manageable pieces, which are then tested to ensure that the change results in measurable improvements. There is a diabetes and HbA1c example using the MFI at the end of this module.

If you would like additional support in relation to quality improvement in your practice please contact Brisbane South PHN on support@bsphn.org.au.

This icon indicates that the information relates to the ten Practice Incentive Program Quality Improvement (PIP QI) measures.

Due to constant developments in research and health guidelines, the information in this document will need to be updated regularly. Please contact Brisbane South PHN if you have any feedback regarding the content of this document.

Acknowledgements

We would like to acknowledge that some material contained in this toolkit has been extracted from organisations including the Institute for Healthcare Improvement; the Royal Australian College of General Practitioners (RACGP); the Australian Government Department of Health; Best Practice; MedicalDirector, CAT4 and Train IT. These organisations retain copyright over their original work and we have abided by licence terms. Referencing of material is provided throughout.

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Brisbane South PHN would like to acknowledge Associate Professor Anthony Russell (MBBS PhD FRACP), Director of the Department of Diabetes and Endocrinology at the Princess Alexandra Hospital, Brisbane and Co-Chair of the State-wide Digital Diabetes Network for his input and review of this toolkit.

Brisbane South PHN would also like to acknowledge the contribution of Diabetes Queensland in the production of this QI toolkit.

Brisbane South PHN, 2021

General practice is the ideal setting to address identified care gaps for the treatment of diabetes. General practice is ideal for primary and secondary prevention and is often the first point of contact for diagnosis, treatment coordination, access to medications, additional tests and referrals to other providers.

Toolkit aim - To identify who in your practice is at risk of or has diabetes and how these patients are being managed.

To achieve this, you will need to extract patient data and establish a valid patient list or register.

The following activities will help guide you through the process. There are additional activities to find any patients who may have been missed in the initial data extraction activity and to ensure they are then coded correctly. These activities will improve the accuracy of the register and maintain the system for the future.

Once you have an accurate register you will be able to easily identify how your patients are being managed for their disease and what needs to happen within the practice to optimise patient care.

How to use this toolkit

There are checklists included below that will guide you and your practice to:

- identify a sample group of patients by reviewing data measures from your practice population
- use this toolkit to guide you along the journey
- set yourselves timelines to achieve your goals
- consider potential internal or external factors that could impact the activity and factor these into your planning e.g. accreditation preparation, staff leave (planned or unplanned), global pandemic, influenza vaccination season
- review your progress regularly
- review your process and start again if you find your process is not working and you are not seeing improvements.

For more support

 support@bsphn.org.au

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CONTENTS

DIABETES

Around 1.7 million Australian's have diabetes and it is the fastest growing chronic condition in Australia.[1] Diabetes can affect the entire body, can have a significant impact on quality of life and can reduce life expectancy. While there is currently no cure, diabetes can be effectively managed. The three main types of diabetes are type 1, type 2 and gestational diabetes[2]. The potential complications are the same for type 1 and type 2 diabetes and include heart attack, stroke, kidney disease, limb amputation, depression, anxiety and blindness.

We know diabetes:

- is the leading cause of blindness in working age adults
- is a leading cause of kidney failure and dialysis
- increases the risk of heart attacks and stroke by up to four times
- is a major cause of limb amputations
- affects mental health as well as physical health. Depression, anxiety and distress occur in more than 30% of all people with diabetes.

Early diagnosis, optimal treatment and effective ongoing support and management reduces the risk of diabetes-related complications.[3]

Diabetes symptoms

Common symptoms include:

- being more thirsty than usual
- passing more urine
- feeling tired and lethargic
- always feeling hungry
- having cuts that heal slowly
- itching, skin infections
- blurred vision
- unexplained weight loss (type 1)
- gradually putting on weight (type 2)
- mood swings
- headaches
- feeling dizzy
- leg cramps.

Please note: It is important to note that many people with type 2 diabetes and gestational diabetes may often have no symptoms (particularly early in the disease).

[1] https://www.diabetesaustralia.com.au/diabetes-in-australia
[2] https://www.diabetesaustralia.com.au/what-is-diabetes
[3] https://www.diabetesaustralia.com.au/about-diabetes/diabetes-in-australia/

Activity 1 - Understanding your diabetes patient population

Activity 1.1 – Data collection from CAT4

The aim of this activity is to collect data to identify patients with diabetes and to assist with their management.

Complete the below table by collecting data from your CAT4 Data Extraction Tool.

Note - Instructions on how to extract the data is available from the CAT4 website**.** Conditions OR Indicated diabetes with no diagnosis OR ensure diabetic patients are coded with correct diagnosis

	Description	Total number of active patients as per RACGP criteria (3 visits in 2 years)	Total number of active patients
1.1a	Identify patient population (Active 3 visits in 2 years) See instructions in link below. Identify active patients with at least 3 visits in the last 2 years		
1.1b	Number of patients with Type 1 diabetes		
1.1c	Number of patients with Type 2 diabetes		
1.1d	Number of patients as undefined diabetes		
1.1e	Number of patients with indicated diabetes with no diagnosis		
1.1f	Number of active patients with diabetes who identify as Aboriginal or Torres Strait Islander (*select Type I and Type 2 under Diabetes in the conditions tab & indigenous under the ethnicity tab)*		

Please note: the RACGP defines active as 3 visits in 2 years. This search criteria does not capture those patients who may come in for screening every 2 years, or twice in 2 years e.g. flu vaccine, hence the option to look at all active patients.

Activity 1.2– Reviewing your practice diabetes profile

Complete the checklist below which reviews your practices diabetes patients 'at risk' and diagnosed.

Description	Status	Action to be taken
After completing **activity 1.1** are there any unexpected results with your practice's diabetes patients?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Please explain: (*e.g. higher number of patients with diabetes than expected).* How will this information be communicated to the practice team?
Is your practice diabetes profile similar to other practices in the Brisbane south region (*compare with information from your latest benchmark report*)?	☐ Yes: continue with activity. ☐ No: **see action to be taken.**	Outline the differences – is it patients with diabetes, is it diabetes risk factors. How will this information be communicated to the practice team?
After reviewing your practice's diabetes profile, are there any changes you would like to implement in the practice to help manage patients over the next 12 months?	☐ Yes, see **action to be taken** to help set your goals. ☐ No: you have completed this activity.	Refer to the MFI and the Thinking part at the end of this document. Refer to the Doing part - PDSA of the MFI to test and measure your ideas for success.

Activity 2 - Building your practice diabetes register

Coding is simply a process of using an agreed standardised descriptor, stored as a series of numbers or letters. You may have identified that there are multiple ways clinical staff may enter a patient's diagnosis in practice software. Some will type this information directly into the patient progress notes or enter this information as free text in the 'reason for encounter' or 'diagnosis field'. This process is called free texting or un-coded diagnosis. Free text is not easily searchable in any database by the clinical software or third-party software (e.g. extraction tools) and is therefore not the preferred process.

The recommended process is to use a diagnosis from the drop-down boxes provided in the clinical software. This is a coded diagnosis. If all clinical staff within the practice use the same codes to identify a diagnosis then it is easier to search for particular conditions. It also allows the practice software to create automatic prompts e.g. reminders and warnings.

It is important to ensure your coding is consistent and agreed upon by all clinical staff in the practice, and diagnostic criteria for diabetes are uniform.

Activity 2.1 – Determine terms of consistent coding

The aim of this activity is for the clinical team to agree on consistent diabetes coding to be used within the practice.

Description	Status	Action to be taken
Are relevant practice team members aware of the importance of quality data including using consistent coding (avoiding free text)?	☐ Yes: continue with activity. ☐ No, **see action to be taken.**	Organise a practice team meeting to discuss how to develop a clinical coding policy for your practice.
Have you agreed on accepted terminology of diabetes codes from the drop-down lists in your practice software?	☐ Yes: continue with activity. ☐ No, **see action to be taken.**	Source list of clinical codes already available in current clinical software. Develop and agree on clinical codes for diabetes to be used within practice.
Have your agreed clinical codes been included in your practice policy?	☐ Yes: continue with activity. ☐ No, **see action to be taken.**	Record agreed clinical codes in practice policy manual.
Are practice team members aware of how to enter diagnosis in clinical software using agreed diabetes terminology?	☐ Yes: continue with activity. ☐ No, **see action to be taken.**	Refer to instructions from Best Practice or MedicalDirector.

Description	Status	Action to be taken
After reviewing your practice's clinical coding guidelines, are there any changes you would like to implement in the practice to help manage patients over the next 12 months?	☐ Yes, **see action to be taken to help set your goals**. ☐ No, you have completed this activity.	Refer to the MFI and the Thinking part at the end of this document. Refer to the Doing part - PDSA of the MFI to test and measure your ideas for success.

Activity 2.2 – Cleaning up un-coded conditions in your practice software

The aim of this activity is to identify and clean up any un-coded diabetes conditions in your practice software.

Cleaning up un-coded items makes it easier to perform database searches and manage third-party clinical audit tools.

Identify

Follow the instructions for Best Practice or MedicalDirector to identify the number of un-coded diabetes conditions.

Date data collected	Number of un-coded diabetes conditions

What is a reasonable timeframe to complete this activity: _____

Who will be completing this activity: _____

Results

After you have actioned any un-coded diabetes diagnosis, perform another database search in your practice software and record the number of un-coded conditions to track your results.

Date data collected	Number of un-coded diabetes conditions

Activity 2.3 – Ensure all patients are coded with correct diagnosis

The aim of this activity is to ensure all patients diagnosed with a non-specific diagnosis of diabetes are coded correctly in your practice software.

Description	Status	Action to be taken
After completing **activity 1.1d** note how many active patients are recorded as undefined diabetic.	Number: _____	

Description	Status	Action to be taken
Is there an explanation as to this result?	☐ Yes: continue with activity. ☐ No: **see action to be taken.**	Provide information (*e.g. GPs unsure where to enter diagnosis, coding issue, information inconclusive, etc.).* How will this information be communicated to the practice team?
Have you distributed lists to individual GPs for review and update of their diagnosis?	☐ Yes: continue with activity. ☐ No: **see action to be taken.**	Ensure you follow up in a week's time to receive the reviewed reports back from the GP. Refer to instructions.
After reviewing your patients marked as undefined diabetic, are there any changes you would like to implement in the practice to help manage patients over the next 12 months?	☐ Yes, **see action to be taken to help set your goals**. ☐ No: you have completed this activity.	Refer to the MFI and the Thinking part at the end of this document. Refer to the Doing part - PDSA of the MFI to test and measure your ideas for success.

Activity 2.4 – Confirming the right patients are on the register

As diabetes diagnoses are central to the patient register, the aim of this activity is to look at patients with indicated diabetes with no diagnosis reported.

This activity will require you to access the indicated diabetes with no diagnosis report which displays the likelihood of diabetes based on HbA1c, anti-diabetic medication and/or FBG (fasting blood glucose) being recorded in the patient record without a diagnosis.

Description	Status	Action to be taken
After completing **activity 1.1e** note how many active patients have indicated diabetes with no diagnosis.	Number: _____	

Description	Status	Action to be taken
Is there an explanation as to this result?	☐ Yes: continue with activity. ☐ No: **see action to be taken.**	Provide information (*e.g. GPs unsure where to enter diagnosis, coding issue, information inconclusive, etc.).* How will this information be communicated to the practice team?
Have you distributed lists to individual GPs for review and update of their diagnosis?	☐ Yes: continue with activity. ☐ No: **see action to be taken.**	Ensure you follow up in a week's time to receive the reviewed reports back from the GP. Refer to instructions.
After reviewing your patients with indicated diabetes with no diagnosis, are there any changes you would like to implement in the practice to help manage patients over the next 12 months?	☐ Yes, **see action to be taken to help set your goals**. ☐ No: you have completed this activity.	Refer to the MFI and the Thinking part at the end of this document. Refer to the Doing part - PDSA of the MFI to test and measure your ideas for success.

Practice decision point

It is recommended that you have a practice meeting to review the data collection table results and determine any action that need to be taken.

Activity 3 - Identifying patients who are at risk of developing

Who is at risk of type 2 diabetes?

People are at a higher risk of getting type 2 diabetes if they:

- have a family history of diabetes
- are older (over 55 years of age) - the risk increases as we age
- are over 40 years of age and are overweight
- are over 40 years of age and have high blood pressure
- are over 18 years of age and are from an Aboriginal or Torres Strait Islander background
- are over 18 years of age and are from Pacific Island, Indian subcontinent or Chinese cultural background
- are a woman who has given birth to a child over 4.5 kgs (9 lbs), or had gestational diabetes when pregnant, or had a condition known as Polycystic Ovarian Syndrome.[4]

Australian Risk Assessment Tool (AUSDRISK)

The Australian Risk Assessment Tool (AUSDRISK) should be used to identify people at high risk of developing diabetes.

It should be noted that the AUSDRISK may overestimate risk in those under 25 years of age and underestimate risk in Aboriginal and Torres Strait Islanders.

In absence of specific strategies targeting low socio-economic people, strategies aimed at the general population are recommended. Culturally appropriate lifestyle interventions should be provided in accessible settings. [5]

Activity 3.1 –Data collection from CAT4

The aim of this activity is to collect data to identify patients who may be at risk of developing Type 2 diabetes.

Complete the below table by collecting data from your CAT4 Data Extraction Tool. Note - Instructions on how to extract the data is available from the CAT4 website. Identify patients at risk of developing Type 2 diabetes.

	Description	Total number of active patients as per RACGP criteria (3 visits in 2 years)	Total number of active patients
3.1a	Number of patients aged >= 40 years old with a BMI >= 30		
3.1b	Number of patients aged >=40 with hypertension		

[4] https://www.diabetesaustralia.com.au/about-diabetes/type-2-diabetes/

[5] http://static.diabetesaustralia.com.au/s/fileassets/diabetes-australia/b1126d58-2763-403a-bd2d-44a241bb9189.pdf

	Description	Total number of active patients as per RACGP criteria (3 visits in 2 years)	Total number of active patients
3.1c	Number of female patients with a history of gestational diabetes mellitus		
3.1d	Number of patients taking anti-psychotic medication		
3.1e	Number of Aboriginal and Torres Strait islander patients aged >=18 years old		

Please note: You can search lists by individual providers and provide to them to identify patients with multiple chronic conditions.

Activity 3.2– Reviewing your patients at risk of developing type II diabetes

Complete the checklist below which reviews your patients at risk of developing type II diabetes.

Description	Status	Action to be taken
After completing **activity 3.1** are there any unexpected results with your patients at risk of developing type 2 diabetes?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Please explain: (*e.g. high number of people with a history of gestational diabetes).* How will this information be communicated to the practice team?
Do relevant team members know where to complete AUSDRISK tool in your practice clinical software?	☐ Yes: continue with activity. ☐ No: **see action to be taken**.	Refer to the AUSDRISK tool or see instructions for Best Practice.
Do all relevant team members know who is eligible for a type 2 diabetes risk assessment health assessment?	☐ Yes: continue with activity. ☐ No: **see action to be taken**.	Refer to MBS section.

Description	Status	Action to be taken
After reviewing your patients at risk of developing type 2 diabetes, are there any changes you would like to implement in the practice to help manage patients over the next 12 months?	☐ Yes, **see action to be taken to help set your goals**. ☐ No: you have completed this activity.	Refer to the MFI and the Thinking part at the end of this document. Refer to the Doing part - PDSA of the MFI to test and measure your ideas for success.

Cardiovascular risk calculator

Cardiovascular disease (CVD) is the leading cause of death in people with diabetes, making assessment of CVD risk a vital part of diabetes care. Some people, for example those with existing cardiovascular disease or people with diabetes who are over 60 years of age, do not need cardiovascular risk calculation as they are automatically considered at high cardiovascular risk.

Adults with any of the following conditions do not require absolute CVD risk assessment:

- Diabetes and aged >60 years
- Diabetes with microalbuminuria (>20 mcg/min or urine albumin-to-creatinine ratio [UACR] >2.5 mg/mmol for men, and >3.5 mg/mmol for women)
- Moderate or severe chronic kidney disease (CKD) (persistent proteinuria or estimated glomerular filtration rate [eGFR] <45 mL/min/1.73 m2)
- A previous diagnosis of familial hypercholesterolaemia
- Systolic blood pressure ≥180 mmHg or diastolic blood pressure ≥110 mmHg
- Serum total cholesterol >7.5 mmol/L.

Activity 3.3 –Data collection from CAT4

The aim of this activity is to collect data to identify patients with diabetes who may be at risk of developing cardiovascular disease.

Complete the below table by collecting data from your CAT4 Data Extraction Tool. Note - Instructions on how to extract the data is available from the CAT4 website: identify elevated CVD risk *(select diabetes under conditions)*.

	Description	Total number of active patients as per RACGP criteria (3 visits in 2 years)	Total number of active patients
3.3a	Number of patients with diabetes who are at high risk of a cardiovascular event in the next 5 years		
3.3b	Number of patients with diabetes who are at medium risk of a cardiovascular event in the next 5 years		
3.3c	Number of patients with diabetes who are missing data to be able to report on risk of cardiovascular event		

Activity 3.4– Reviewing your patients at risk of developing CVD.

Complete the checklist below which reviews your patients with diabetes at risk of developing cardiovascular disease.

Description	Status	Action to be taken
After completing **activity 3.3** are there any unexpected results with your patients with diabetes at risk of developing CVD?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Please explain: (*e.g. large number of patients missing data to report on CVD risk).* How will this information be communicated to the practice team?
Do relevant team members know where to complete CVD risk tool in your practice clinical software?	☐ Yes: continue with activity. ☐ No: **see action to be taken**.	Refer to instructions from Best Practice or MedicalDirector.
After reviewing your diabetes patients at risk of developing CVD, are there any changes you would like to implement in the practice to help manage patients over the next 12 months?	☐ Yes, **see action to be taken to help set your goals**. ☐ No: you have completed this activity.	Refer to the MFI and the Thinking part at the end of this document. Refer to the Doing part - PDSA of the MFI to test and measure your ideas for success.

Activity 4 – Goals for optimum management of diabetes

The following table lists lifestyle and blood sugar goals for optimum management for all people with type 2 diabetes. For guidance on specific assessment intervals, advice and arrangements, refer to the relevant sections of the Management of type 2 diabetes: a handbook for general practice.

Individual goals	
Encourage all people with type 2 diabetes to approach/reach these goals.	
Diet	Advise eating according to the *Australian dietary guidelines*, with attention to quantity and type of food Advise individual dietary review for people with difficulty managing weight, difficulty maintaining glucose levels in target range, CVD risk, or if otherwise concerned
BMI	Advise a goal of 5–10% weight loss for people who are overweight or obese with type 2 diabetes For people with BMI >35 kg/m^2 and comorbidities, or BMI >40 kg/m^2, consider facilitating greater weight-loss measures
Physical activity	Children and adolescents: at least 60 min/day of moderate-to-vigorous physical activity, plus muscle- and bone-strengthening activities at least three days/week Adults: 150 minutes of aerobic activity, **plus** 2–3 sessions of resistance exercise (to a total ≥60 minutes) per week
Cigarette consumption	Zero per day
Alcohol consumption	Advise ≤2 standard drinks (20 g of alcohol) per day for men and women
Blood glucose monitoring	Advise 4–7 mmol/L fasting and 5–10 mmol/L postprandial SMBG is recommended for patients with type 2 diabetes who are using insulin. Education should be provided regarding frequency and timing of insulin dose For people not on insulin, the need for and frequency of SMBG should be individualised, depending on type of glucose-lowering medications, level of glycaemic control and risk of hypoglycaemia, as an aid to self-management SMBG is recommended in pregnancy complicated by diabetes or gestational diabetes SMBG is also recommended for people with hyperglycaemia arising from intercurrent illness. It may be helpful in haemoglobinopathies or other conditions where HbA1c measurements may be unreliable

[6]

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[6] https://www.diabetesaustralia.com.au/wp-content/uploads/Available-here.pdf

Activity 4.1 – Data collection from CAT4

The aim of this activity is to collect data to identify patients who may not meet optimum type 2 diabetes management guidelines.

Complete the below table by collecting data from your CAT4 Data Extraction Tool.

Note - Instructions on how to extract the data is available from the CAT4 website: Conditions **AND** BMI or Physical activity or smoking status or alcohol status recorded or fasting blood glucose**.** *(Ensure you select type 2 diabetes under the conditions tab prior to each search).*

	Description	Total number of active patients
4.1a	Number of active patients with type 2 diabetes (from activity 1.1c)	
4.1b	Number of active patients with type 2 diabetes and a BMI classified as overweight and obese PIP QI	
4.1c	Number of active patients with type 2 diabetes and a BMI classified as morbid obesity PIP QI	
4.1d	Number of active patients with type 2 diabetes who are do not have height and weight recorded	
4.1e	Number of active patients with type 2 diabetes who have had a physical activity assessment completed	
4.1f	Number of active patients with type 2 diabetes who are daily smokers	
4.1g	Number of active patients with type 2 diabetes who have their alcohol status as drinker PIP QI	
4.1h	Number of active patients with type 2 diabetes who have nothing recorded in their alcohol status PIP QI	
4.1i	Number of active patients with type 2 diabetes with a fasting blood glucose between <5.5 and <7.0	
4.1j	Number of active patients with type 2 diabetes with a fasting blood glucose >=7.0	
4.1k	Number of active patients with type 2 diabetes with no fasting blood glucose recorded	

Please note: you may wish to conduct these searches on the RACGP's definition of an active patient i.e. 3 visits in 2 years.

Activity 4.2 - Reviewing your patients' goals for optimum diabetes management

Complete the checklist below which reviews your patients' diabetes optimum goals.

Description	Status	Action to be taken
After completing **activity 4.1**, are there any unexpected results with your patient's diabetes optimum goals?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Please explain: (*e.g. more people with type 2 diabetes who are overweight and obese than expected).* How will this information be communicated to the practice team?
After completing **activity 4.1c** please note the number of patients with diabetes with a BMI >35. Does the practice team have a plan to assist these patients?	☐ Yes: continue with activity**.** ☐ No: **see action to be taken**.	Consider facilitating greater weight loss measures. Consider conducting a search on CAT4 to identify if these patients have co-morbidities. How will this information be communicated to the practice team?
After completing **activity 4.1d**, do you have any patients with diabetes who do not have their height and weight recorded?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Does a practice team member have the responsibility to review the list of patients? □ Yes □ No Who is the team member? _____ What is the timeframe to ensure all of these patients have their height and weight recorded? _____ Consider creating a Topbar prompt for these patients.

Description	Status	Action to be taken
After completing **activity 4.1h**, do you have any patients with diabetes who do not have their alcohol status recorded?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Does a practice team member have the responsibility to review the list of patients? □ Yes □ No Who is the team member? _____ What is the timeframe to ensure all of these patients have their alcohol status recorded? _____ Consider creating a Topbar prompt for these patients.
After completing **activity 4.1k**, do you have any patients with diabetes who do not have their blood glucose level recorded in the past 12 months?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Does a practice team member have the responsibility to review the list of patients? □ Yes □ No Who is the team member? _____ What is the timeframe to ensure all of these patients have their blood glucose level recorded? _____ Consider creating a Topbar prompt for these patients.
After reviewing your patients' individual goals for optimum diabetes management, are there any changes you would like to implement in the practice to help manage patients over the next 12 months?	☐ Yes, **see action to be taken to help set your goals**. ☐ No: you have completed this activity.	Refer to the MFI and the Thinking part at the end of this document. Refer to the Doing part - PDSA of the MFI to test and measure your ideas for success.

Clinical management goals	
Treatment targets for people with type 2 diabetes include the following. For a comprehensive list of assessments and screening intervals, refer to the section 'Assessment of the patient with type 2 diabetes'.	
HbA1c	Target needs individualisation according to patient circumstances Generally ≤7% (53 mmol/mol)
Lipids	Initiation of pharmacotherapy is dependent on the assessment of absolute CVD risk (refer to the Australian absolute cardiovascular disease risk calculator). This uses multiple risk factors, which is considered more accurate than the use of individual parameters Once therapy is initiated, the specified targets apply; however, these targets should be used as a guide to treatment and not as a mandatory target
Total cholesterol	<4.0 mmol/L
HDL-C	≥1.0 mmol/L
LDL-C	<2.0 mmol/L; <1.8 mmol/L if established CVD is present
Non–HDL-C	<2.5 mmol/L
Triglycerides	<2.0 mmol/L
Blood pressure	≤140/90 mmHg Lower blood pressure targets may be considered for younger people and for secondary prevention in those at high risk of stroke The target for people with diabetes and albuminuria/proteinuria remains <130/80 mmHg. As always, treatment targets should be individualised and monitored for side effects from medications used to lower blood pressure
Urine albumin excretion	UACR: • women: <3.5 mg/mmol • men: <2.5 mg/mmol Timed overnight collection: <20 µg/min; spot collection: <20 mg/L
Vaccination	Recommended immunisations: influenza, pneumococcus, diphtheria-tetanus-acellular pertussis (dTpa). Consider: hepatitis B (if travelling), herpes zoster
BMI, body mass index; CVD, cardiovascular disease; GPs, general practitioners; HbA1c, glycated haemoglobin; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; SMBG, self-monitoring of blood glucose; UACR, urine albumin-to-creatinine ratio.	

[7]

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[7] https://www.diabetesaustralia.com.au/wp-content/uploads/Available-here.pdf

Activity 4.3 – Data collection from CAT4

The aim of this activity is to collect data to review clinical management goals for patients with type 2 diabetes.

Complete the below table by collecting data from your CAT4 Data Extraction Tool. You can also review your practice's data dashboard and diabetes management table on the monthly benchmark report provided by Brisbane South PHN.

Note - Instructions on how to extract the data is available from the CAT4 website: Conditions **AND** Hb+A1c **or** lipids **or** blood pressure **or** ACR **or** influenza **or** pneumococcal vaccine **or** adult vaccines**.** *(Ensure you select type 2 diabetes under the conditions tab prior to each search).*

	Description	Total number of active patients
4.3a	Number of active patients with type 2 diabetes (from activity 1.1c)	
4.3b	Number of active patients with type 2 diabetes with no HbA1c recorded in the past 12 months	
4.3c	Number of active patients with type 2 diabetes with a HbA1c within the normal range (<6% - ≤7%) recorded in the past 12 months	
4.3d	Number of active patients with type 2 diabetes with a HbA1c recorded in the past 12 months >7% - ≤ 8%	
4.3e	Number of active patients with type 2 diabetes with a HbA1c recorded in the past 12 months >8% - ≤ 10%	
4.3f	Number of active patients with type 2 diabetes with a HbA1c recorded in the past 12 months >10%	
4.3g	Number of active patients with type 2 diabetes with a cholesterol status >4mmol/L recorded in the past 12 months	
4.3h	Number of active patients with type 2 diabetes with triglycerides >2mmol/L recorded in the past 12 months	
4.3i	Number of active patients with type 2 diabetes with LDL >2.5mmol/L recorded in the past 12 months *(the target is over 2 or 1.8 if established CVD – please consider this when generating your report from CAT4)*	
4.3j	Number of active patients with type 2 diabetes with no blood pressure recorded in the past 12 months	
4.3k	Number of active patients with type 2 diabetes with a blood pressure recorded > 140/90 in the past 12 months	

	Description	Total number of active patients
4.3l	Number of active patients with type 2 diabetes with no ACR recorded in the past months	
4.3m	Number of active patients with type 2 diabetes with an ACR recorded >25 male or > 35 female in the past 12 months	
4.3n	Number of active patients with type 2 diabetes with no influenza vaccine recorded in the past 15 months 	
4.3o	Number of active patients with type 2 diabetes with an influenza vaccine recorded in the past 15 months 	
4.3p	Number of active patients with type 2 diabetes overdue for a pneumococcal vaccine	
4.3q	Number of active patients with type 2 diabetes with no pertussis vaccine recorded	
4.3r	Number of active patients with type 2 diabetes with their latest pertussis vaccine recorded > 10 years	

Please note: you may wish to conduct these searches on the RACGP's definition of an active patient i.e. 3 visits in 2 years.

Activity 4.4 - Reviewing your practice's type 2 diabetes patient's clinical management goals.

Complete the checklist below which reviews your patient's diabetes clinical management goals.

Description	Status	Action to be taken
After completing **activity 4.3**, are there any unexpected results with your patients' diabetes clinical management goals?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Please explain: (*e.g. more people with type 2 diabetes who have not had an influenza vaccine recorded than expected).* How will this information be communicated to the practice team?

Description	Status	Action to be taken
After completing **activity 4.3b** please note the number of patients with diabetes with no HbA1c recorded in the past 12 months. Is there an explanation for this result?	☐ Yes: continue with activity**.** ☐ No: **see action to be taken**.	Please explain: (*e.g. data issues with results being incorporated into patient's notes, new GP who requires training to use the practice software etc.).* Does a practice team member have the responsibility to review the list of patients? □ Yes □ No Who is the team member? _____ What is the timeframe to ensure all of these patients have a HbA1c recorded? _____
After completing **activity 4.3h**, do you have any patients with type 2 diabetes with no blood pressure recorded?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Does a practice team member have the responsibility to review the list of patients? □ Yes □ No Who is the team member? _____ What is the timeframe to ensure all of these patients have their blood pressure recorded? _____ Consider creating a Topbar prompt for these patients.
After completing **activity 4.3l & m**, are you happy with the rates of influenza vaccination for patients with type 2 diabetes in the past 15 months?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Does a practice team member have the responsibility to review the list of patients? □ Yes □ No Who is the team member? _____ What is the timeframe to increase the number of influenza vaccines recorded? _____

Description	Status	Action to be taken
Are all the diabetes measures being recorded in the correct fields in your clinical software? (e.g.: BP, BMI, HbA1c, LDL, cholesterol, smoking status).	☐ Yes: continue with activity. ☐ No, **see action to be taken.**	Review how and where your diabetes risk factor information is being recorded in your practice software. See instructions on entering information in Best Practice or MedicalDirector. Ensure all relevant team members are aware of how to record diabetes risk factor information. Document in practice policy.
After reviewing your patients' clinical management goals for type 2 diabetes, are there any changes you would like to implement in the practice to help manage patients over the next 12 months?	☐ Yes, **see action to be taken to help set your goals**. ☐ No: you have completed this activity.	Refer to the MFI and the Thinking part at the end of this document. Refer to the Doing part - PDSA of the MFI to test and measure your ideas for success.

PIP QI Measures

As part of the PIP QI measures, practices are to report on HbA1c results, influenza and blood pressure results specific to diabetes. See a snapshot on how your practice is going with reporting this information from your latest benchmark report provided by Brisbane South PHN. Information on how to access your practice reports is available on BSPHN website.

Dashboard QI 1. Diabetes – HbA1c result

55%
active patients with Type I Diabetes who have had a HbA1c result recorded in the previous 12 months

70%
active patients with Type II Diabetes who have had a HbA1c result recorded in the previous 12 months

Dashboard QI 5. Diabetes - Influenza immunisation

55%
active patients with Type I or II Diabetes who have been immunised against influenza in the previous 15 months

Dashboard QI 10. Diabetes – Blood pressure results

53%
active patients with Type I or II Diabetes who have had a blood pressure recorded at the practice in the previous 6 months

Activity 4.5 - Reviewing data from your practice's trend report

The aim of this activity is to review your practice's data trend lines from the trend report provided by Brisbane South PHN.

You will need your practice's trend report to complete this information. Information on how to access your practice reports is available on BSPHN website.

	Description	Percentage current quarter	Percentage last quarter
4.5a	Active patients with a diabetes diagnosis and HbA1c recorded in last year		
4.5b	Active patients with diabetes medication prescribed with no diabetes diagnosis		
4.5c	Active patients with a diabetes diagnosis and smoking, BP, LDL, BMI, foot/eye exam recorded in the last year		

Activity 4.6 – Reviewing your practice benchmark and trend reports

Complete the checklist below which reviews your practices benchmark and trend reports.

Description	Status	Action to be taken
After reviewing your practice's benchmark report are there any unexpected results with your diabetes measures?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Please explain: (*e.g. high number of patients with diabetes without an HbA1c recorded).* How will this information be communicated to the practice team?

Description	Status	Action to be taken
Is your practices data from your benchmark report similar to other practices in the Brisbane south region?	☐ Yes: continue with activity. ☐ No: **see action to be taken**.	Outline the differences – (*e.g. our practice's recording of BMI for patients with diabetes is much lower than other practices).* How will this information be communicated to the practice team?
After reviewing your PIP QI measures are you happy with your results?	☐ Yes: continue with the activity. ☐ No: **see action to be taken.**	Please explain: (*e.g. we have a low percentage of patients with diabetes and a blood pressure recorded in the past 6 months*). How will this information be communicated to the practice team?
After reviewing your practice's trend report in **activity 4.5**, are there any unexpected results?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Please explain: (*e.g. we only have a low percentage of patients with diabetes and measures recorded, however, our trend line is increasing).* How will this information be communicated to the practice team?
After reviewing your practice's benchmark and trend reports, are there any changes you would like to implement in the practice to help manage patients over the next 12 months?	☐ Yes, **see action to be taken to help set your goals**. ☐ No: you have completed this activity.	Refer to the MFI and the Thinking part at the end of this document. Refer to the Doing part - PDSA of the MFI to test and measure your ideas for success.

Activity 5 - Identifying patients with diabetes and other chronic medical conditions

Activity 5.1 –Data collection from CAT4

The aim of this activity is to collect data to identify patients with diabetes and at least one other chronic medical condition.

Complete the below table by collecting data from your CAT4 Data Extraction Tool. Note - Instructions on how to extract the data is available from the CAT4 website. Co-morbidities OR Chronic Conditions.

	Description	Total number of active patients as per RACGP criteria (3 visits in 2 years)	Total number of active patients
5.1a	Number of patients with diabetes and 1 other chronic medical condition		
5.1b	Number of patients with diabetes and 2 other chronic medical conditions		
5.1c	Number of patients with diabetes and 3 other chronic medical conditions		
5.1d	Number of patients with diabetes and 4 other chronic medical conditions		
5.1e	Number of active patients with diabetes & CVD *(select diabetes 'yes' & cardiovascular disease 'yes' and recalculate)*		
5.1f	Number of active patients with diabetes and chronic kidney disease (CKD) *(select diabetes 'yes' & renal impairment 'yes' and recalculate)*		

Please note: You can search lists by individual providers and provide to them to identify patients with multiple chronic conditions.

Activity 5.2– Reviewing your patients with multiple chronic medical conditions

Complete the checklist below to review your patients with multiple chronic medical conditions.

Description	Status	Action to be taken
After completing **activity 5.1**, are there any unexpected results with your patients' comorbidities?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Please explain: (*e.g. higher number of patients with 3 chronic medical conditions).*

Description	Status	Action to be taken
		How will this information be communicated to the practice team?
After completing **activity 5.1,** make note of the patients with diabetes and CVD. Do you need to review your process for managing these patients?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Consider completing a GP management plan. Refer to MBS online for criteria. Refer to Brisbane South PHN's QI Toolkit – Chronic Conditions – CVD.
After completing **activity 5.1**, make note of the patients with diabetes & CKD. Do you need to review your process for managing these patients?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Consider a medication review. Consider recalling the patient to check if they are meeting treatment goals. Refer to Brisbane South PHN's QI Toolkit – Chronic Conditions – CKD.
After reviewing your practice's comorbidities profile, are there any changes you would like to implement in the practice to help manage patients over the next 12 months?	☐ Yes, **see action to be taken to help set your goals**. ☐ No: you have completed this activity.	Refer to the MFI and the Thinking part at the end of this document. Refer to the Doing part - PDSA of the MFI to test and measure your ideas for success.

Activity 6 - Medicare item numbers for patients with Diabetes

Patients with diabetes ***may be eligible*** to access chronic disease item numbers within the Medicare Benefit Schedule (MBS). These are dependent on patient age, ethnicity and co-morbidities. Conditions apply to each item number, please ensure the GP understands these prior to claiming the item number/s. Brisbane South PHN have a comprehensive toolkit looking at MBS items, however, a summary of the item numbers include:

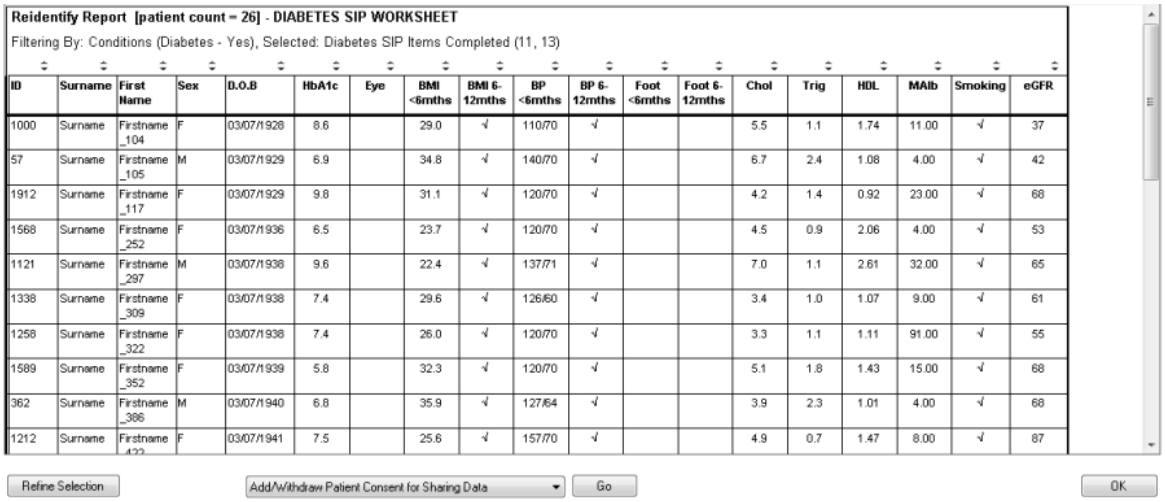
MBS items

- Diabetes cycle of care
- GP Management Plans (GPMP)
- Team Care Arrangements (TCA)
- Nurse chronic disease item number
- Mental health items
- Aboriginal and Torres Strait Islander health assessment
- Home medication review
- MBS telehealth fact sheet

TIP: GPs are required to make sure each patient meets the MBS criteria prior to claiming each item number.

Diabetes SIP worksheet – CAT4

This worksheet can be used to assist identify patients who have met the criteria for an annual diabetes cycle of care.



Reidentify Report [patient count = 26] - DIABETES SIP WORKSHEET

Filtering By: Conditions (Diabetes - Yes), Selected: Diabetes SIP Items Completed (11, 13)

ID	Surname	First Name	Sex	D.O.B	HbA1c	Eye	BMI <6mths	BMI 6-12mths	BP <6mths	BP 6-12mths	Foot <6mths	Foot 6-12mths	Chol	Trig	HDL	MAlb	Smoking	eGFR
1000	Surname	Firstname_104	F	03/07/1928	8.6		29.0	√	110/70	√			5.5	1.1	1.74	11.00	√	37
57	Surname	Firstname_105	M	03/07/1929	6.9		34.8	√	140/70	√			6.7	2.4	1.08	4.00	√	42
1912	Surname	Firstname_117	F	03/07/1929	9.8		31.1	√	120/70	√			4.2	1.4	0.92	23.00	√	68
1568	Surname	Firstname_252	F	03/07/1936	6.5		23.7	√	120/70	√			4.5	0.9	2.06	4.00	√	53
1121	Surname	Firstname_297	M	03/07/1938	9.6		22.4	√	137/71	√			7.0	1.1	2.61	32.00	√	65
1338	Surname	Firstname_309	F	03/07/1938	7.4		29.6	√	126/60	√			3.4	1.0	1.07	9.00	√	61
1258	Surname	Firstname_322	F	03/07/1938	7.4		26.0	√	120/70	√			3.3	1.1	1.11	91.00	√	55
1589	Surname	Firstname_352	F	03/07/1939	5.8		32.3	√	120/70	√			5.1	1.8	1.43	15.00	√	68
362	Surname	Firstname_386	M	03/07/1940	6.8		35.9	√	127/64	√			3.9	2.3	1.01	4.00	√	68
1212	Surname	Firstname_422	F	03/07/1941	7.5		25.6	√	157/70	√			4.9	0.7	1.47	8.00	√	87

Refine Selection | Add/Withdraw Patient Consent for Sharing Data | Go | OK

Activity 6.1 – Data collection from CAT4

The aim of this activity is to collect data to identify patients to assist with management of patients with diabetes.

Complete the below table by collecting data from your CAT4 Data cycle of care by items completed per patient **OR** Identify outstanding Diabetes Cycle of Care items**.**

	Description	Total number of active patients as per RACGP criteria (3 visits in 2 years)	Total number of active patients
6.1a	Active patients with Type 2 diabetes who have completed a DCOC within the last 12 months		
6.1b	Active patients with Type 2 diabetes with outstanding DCOC items		

Activity 6.2 - Recording components of the diabetes cycle of care in your clinical software

The aim of this activity is to review the process used in your practice to record components of the DCOC.

Description	Status	Action to be taken
Are all the components of the DCOC recorded in the correct fields in your clinical software?	☐ Yes: you have completed this activity. ☐ No, **see action to be taken.**	Review how and where your DCOC information is being recorded in your practice software. Refer to instructions on entering information for Best Practice and MedicalDirector software. Ensure all relevant team members are aware of how to record DCOC information. Document in practice policy.

Activity 6.3 – Data collection from CAT4

The aim of this activity is to collect data to determine the number of MBS claims made for patients with diabetes over the past 12 months.

Complete the below table by collecting data from your CAT4 Data Extraction Tool. You may also obtain management plan information from your latest benchmark report from Brisbane South PHN.

Note - Instructions on how to extract the data is available from the CAT4 website. Number of people eligible for a Home Medication Review **or** Number of people eligible for GPMP/TCA **or** Number of patients eligible for Health Assessment **or** Number of people eligible for an Aboriginal and Torres Strait Islander health assessment **or** Number of people eligible for a mental health treatment plan.

	Description	Total number of active patients
6.3a	Number of active patients with diabetes who ***may be*** eligible for a GPMP (*ensure you select diabetes under Conditions*)	
6.3b	Number of active patients with diabetes who ***may be*** eligible for a TCA (*ensure you select diabetes under Conditions*)	
6.3c	Number of active patients with diabetes who ***may be*** eligible for a Health Assessment (*ensure you select diabetes under Conditions*)	
6.3d	Number of active patients with diabetes who ***may be*** eligible for a Home Medication Review (*ensure you select diabetes under Conditions*)	
6.3e	Number of active patients with diabetes who ***may be*** eligible for an Aboriginal and Torres Strait Islander assessment (*ensure you select diabetes under Conditions*)	
6.3f	Number of patients with diabetes who ***may be*** eligible for a mental health treatment plan (*ensure you select diabetes under Conditions*)	

Please note: not all patients with diabetes are eligible for MBS item numbers. Please make sure that each patient meets the criteria prior to claiming.

Activity 6.4 – Checklist for reflection on MBS claiming

Complete the checklist below to review your practice's MBS claiming for patients with diabetes.

Questions to consider	Status	Action to be taken
After completing **activity 6.3** are there any unexpected results with your practice's diabetes MBS claiming?	☐ Yes: **see action to be taken.** ☐ No: continue with activity.	Please explain: (*e.g. a low percentage of patients with diabetes have a GPMP).* How will this information be communicated to the practice team?
Are there any patients with diabetes without a diabetes cycle of care completed in the past 12 months? (*refer to MBS criteria & **activity 6.1**).*	☐ Yes, **see action to be taken.** ☐ No, continue with activity.	Please explain What action will you take? How will you use this information to increase the number of DCOC completed?
Are you happy with the rates of HMRs for patients with diabetes in the last 12 months? (*Note: not all patients with diabetes will be eligible for a HMR, refer to MBS criteria).*	☐ Yes, continue with activity. ☐ No, **see action to be taken.**	Please explain What action will you take? How will you use this information to increase the number of Home Medication Reviews completed?

Questions to consider	Status	Action to be taken
Are there any patients with diabetes without a GPMP &/or TCA completed in the past 12 months? (*Note: not all patients identified in the search will be eligible for a GPMP or TCA e.g. not regular GP, refer to MBS criteria*).	☐ Yes, **see action to be taken.** ☐ No, continue with activity.	Please explain What action will you take? How will you use this information to increase the number of **m**anagement plans completed?
Have you created a Topbar prompt on all patients with diabetes who may be eligible for a GPMP?	☐ Yes: continue with activity ☐ No: **see action to be taken.**	Refer to instructions.
Do you know the contact details for any MBS related questions?	☐ Yes, continue with activity. ☐ No, **see action to be taken.**	Email: askMBS@health.gov.au Provider Enquiry Line - 13 21 50
Do relevant staff know that Medicare provides online training modules?	☐ Yes, continue with activity. ☐ No, **see action to be taken.**	More information can be obtained from Medicare Australia e-learning modules.
After reviewing the MBS claiming for patients with diabetes, are there any changes you would like to implement in the practice to help manage patients over the next 12 months?	☐ Yes, **see action to be taken to help set your goals**. ☐ No, you have completed this activity.	Refer to the MFI and the Thinking part at the end of this document. Refer to the Doing part - PDSA of the MFI to test and measure your ideas for success.

Activity 7 - Establishing appropriate care pathways using evidence-based guidelines

Activity 7.1 – Identify roles for managing diabetes patients within your practice

Complete the checklist below to review your practice's roles and responsibilities for managing patients with diabetes.

Consider how best to use your practice staff to provide optimum care and the impact this will have on the workload and appointment system. This involves systematically determining if your practice is set-up and equipped to provide evidence-based diabetes assessment and management.

Activity	Nurse	GP	Admin
Organise investigations (HbA1c, eGFR, lipids, BGL)			
Organise urine (microalbuminuria)			
Check immunisation status (influenza, pneumococcal and dTpa if required)			
Foot examination			
Monitor blood pressure			
Height, weight & BMI			
Eye examination			
Complete cardiovascular risk assessment			
Updating patient reminders for regular monitoring (frequency depends on patients condition)			
Review diet/healthy eating			
Review physical activity and exercise tolerance			
Review smoking & alcohol intake			
Check mental health status and offer support services			
Provide self-care education			
GPMP			
Consider comorbidities (CKD, anxiety, depression, cardiovascular disease, lung cancer)			
Review medications			
HMR			

Activity	Nurse	GP	Admin
Assess need for specialist referral			
Consider advanced care planning			
Maintain patient database			
Update and order patient resources			

Activity 8 - Recalls and reminders

As part of the RACGP accreditation standards, it is a requirement that practices provide health promotion, illness prevention, preventive care and a reminder system based on patient need and best available evidence. Brisbane South PHN have a comprehensive toolkit to assist you to review your practice recall and reminder systems, however, the aim of this activity is to assist with diabetes specific recall and reminders. You can also access other QI tools via medical software modules that will assist your practice to merge duplicate recall/reminder lists in your practice's clinical software. These modules are:

- Module 7 – Recalls, Reminders and Screening using MedicalDirector
- Module 8 – Recalls, Reminders and Screening using Best Practice

You can access these modules via DiscoverPHN**.**

Activity 8.1 – Reminder system

The aim of this activity is to review the practice's reminder system.

Question to consider	Status	Action to be taken
Does your practice have a routine reminder for appropriate diabetes care?	☐ Yes, continue with activity. ☐ No, **see action to be taken.**	Refer to instructions from Best Practice or MedicalDirector.
Do clinicians know how to initiate a patient reminder within clinical software?	☐ Yes, continue with activity. ☐ No, **see action to be taken.**	Clinician education on setting up patient reminders
Is there a system for ensuring patients recently diagnosed with diabetes are incorporated into the reminder system	☐ Yes, policy is working. ☐ Yes, policy is not working, see action to be taken. ☐ No policy, **see action to be taken.**	Revise policy Practice policy on reminders to be implemented
After reviewing your practice's recall and reminder system, are there any changes you would like to implement in the practice, to help manage patients, over the next 12 months?	☐ Yes, **see action to be taken to help set your goals**. ☐ No, you have completed this activity.	Refer to the MFI and the Thinking part at the end of this document. Refer to the Doing part - PDSA of the MFI to test and measure your ideas for success.

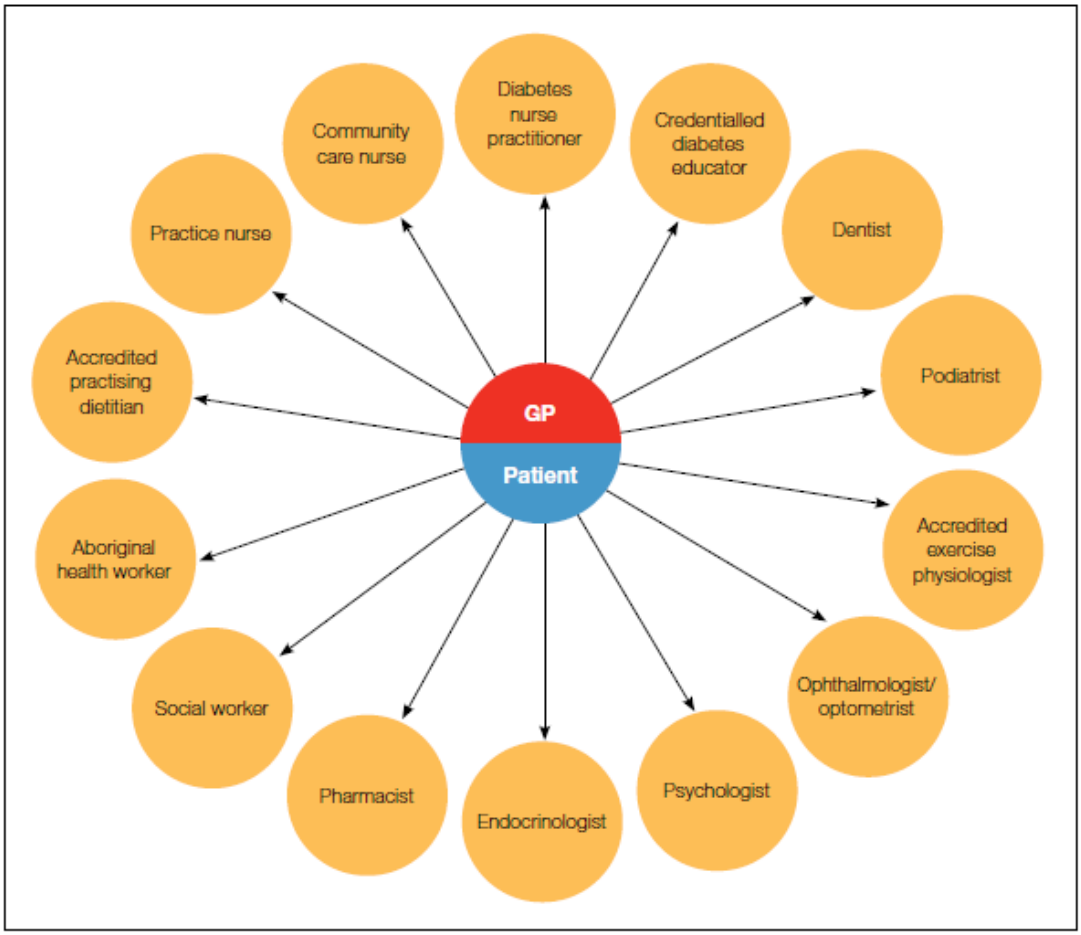
Activity 9 - Referral pathways

The aim is to ensure that practice staff have access to the relevant information and understand pathways for referral of patients to specialists and allied health staff as deemed clinically appropriate.

Engaging other medical services (e.g. diagnostic services; hospitals and consultants; allied health; social, disability and community services) assists the practice in providing optimal care to patients whose health needs require integration with other services.

Diabetes is best managed with the support of a diabetes healthcare team. The team approach will help patients learn everything they need to know about diabetes, treatment and management.[8]

Potential members of the multidisciplinary diabetes care team



[9]

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[8] https://www.diabetesaustralia.com.au/health-care-team
[9] https://www.diabetesaustralia.com.au/wp-content/uploads/Available-here.pdf

Essential referral information for diabetes patients – Refer your patient – Metro South health

Metro South Health is the major provider of public health services, and health education and research, in Brisbane south, including Logan, Redlands and Scenic Rim regions. Refer Your Patient website is to assist health professionals access public health services for patients. It provides a single point of entry for all new referrals.

On the website, it outlines available health professionals, criteria to access appointments with the health professionals, expected wait times plus all the information that is required in the referral.

Essential referral information for Diabetes mellitus referrals

- Type of diabetes and duration of disease
- Details of all treatments offered and efficacy
- Presence of any complications and details when screening last performed
- Previous allied health reviews of risk factors
- Height, weight, BMI
- BP
- History of smoking
- HbA1c (current and previous results)
- FBC, ELFT, fasting lipids – cholesterol, LDL, HDL, Tg results
- Urine albumin: creatinine results
- Medication history

If a specific test result is unable to be obtained due to access, financial, religious, cultural or consent reasons a Clinical Override may be requested. This reason must be clearly articulated in the body of the referral.

SpotOnHealth HealthPathways

SpotOnHealth HealthPathways provides clinicians in the greater Brisbane south catchment with web-based information outlining the assessment, management and referral to other clinicians for over 550 conditions.

It is designed to be used at point of care primarily by general practitioners but is also available to specialists, nurses, allied health and other health professionals.

Health Services Directory

Health Services Directory is a joint initiative of all Australian governments, delivered by HealthDirect Australia, to enable health professionals and consumers access to reliable and consistent information about health services.

My Community Directory

My Community Directory lists organisations that provide services that are free or subsidised to the public in thousands of locations across Australia. These services are organised into various Community Directories.

Allied health professionals

Allied Health Profession	Contact Details
Credentialled Diabetes Educators	Refer Your Patient website. OR Find a Credentialed Diabetes Educator (CDE).
Dietitian	Find an Accredited Practicing Dietitian (APD).
Exercise Physiologist	Find an exercise physiologist.
Podiatrist	Find a Podiatrist.
Optometrist	Find an Optometrist.

National Diabetes Services Scheme (NDSS)

The NDSS assists people to better understand and self-manage their life with diabetes. NDSS also provides people living with diabetes access to support, information, education services and self-management programs (such as DESMOND, SMARTS, Live You Life Expos etc).

After your patient has been registered with the NDSS, (please note GPs and nurse can register the patient), they will receive a registration card and an information booklet (NDSS starter pack) from Diabetes Queensland. The information book is designed to provide general information about the NDSS, services, products and provide an understanding of diabetes. The registration card will be required when purchasing products or accessing services. Further information about eligibility is available from NDSS.

Activity 9.1 – Referral pathways

Complete the checklist below in relation to referral pathways.

This activity is designed to raise your awareness of local referral options available for you and your patients to facilitate co-ordinated and therefore optimal care.

Question to consider	Status	Action to be taken
Do all GPs and nurses have login details for SpotOnHealth HealthPathways?	☐ Yes, continue with activity. ☐ No, see **action to be taken.**	Refer to instructions to obtain access.
Do all GPs and nurses know how to access SpotOnHealth HealthPathways via Topbar?	☐ Yes, continue with activity. ☐ No, see **action to be taken.**	Refer to instructions from PenCS. Or contact BSPHN Digital Health Team via email: support@bsphn.org.au.

Question to consider	Status	Action to be taken
How will you communicate information so clinicians know where to access details on referring a patient to specialist services?	What is the practice plan for communicating referral information?	
After reviewing your practice's referral system, are there any changes you would like to implement in the practice, to help manage patients, over the next 12 months?	☐ Yes, **see action to be taken to help set your goals**. ☐ No, you have completed this activity.	Refer to the MFI and the Thinking part at the end of this document. Refer to the Doing part - PDSA of the MFI to test and measure your ideas for success.

Support options for patients

DESMOND

DESMOND stands for Diabetes Education and Self-Management for Ongoing and Newly Diagnosed. The program recognises that there is no 'one size fits all' approach to diabetes management. It is intended to provide a welcoming and non-judgemental space where patients can plan how to manage their diabetes.

The program has demonstrated benefits for participants in both Australia and the UK. Results have shown that DESMOND can help patients to:

- lower their HbA1c
- develop a better understanding of diabetes
- improve physical activity levels
- take steps to lose weight
- take steps to quit smoking
- reduce risk of depression
- improve overall health.

SMARTS Program

The Smarts programs are a range of short group education sessions designed to help patients better manage their diabetes. They provide opportunities for patients to learn practical skills that can help to improve their diabetes management. This program is offered through Diabetes Queensland and is free of charge. Each session runs for two or three hours, dependent on the program. Bookings are essential.

These are the individual Smarts programs:

- Carb Smart
- Foot Smart
- Med Smart
- Monitor Smart
- Shop Smart
- Living with insulin
- Ready set go, let's move
- Pump workshop.

Activity 10 - Resources and education

Beat it program

Beat it is an 8 week group exercise and lifestyle program to help you better manage your diabetes and improve your general health. It is available for people living with type 1 or type 2 diabetes and involves moderate-intensity aerobic, strength and balance based exercises as well as education sessions on healthier living. It is free of charge for people registered with NDSS. The Beat it program includes:

- initial health and fitness assessment
- 16 group sessions (two per week)
- individualised exercise program
- education sessions throughout
- progress tracking
- final consultation.

OzDAFNE

OzDAFNE stands for Dose Adjustment For Normal Eating – less guesswork, more freedom, better health. It is a group program for adults with type 1 diabetes. The program is designed to equip participants with the tools to self-manage their insulin doses, including working out how much insulin is needed for the amount of carbohydrate eaten, and how to manage exercise, illness and hypoglycaemia.

The DAFNE program has been evaluated in a number of countries. Results have shown DAFNE can help participants to:

- improve their HbA1c
- reduce diabetes distress, depression and anxiety symptoms
- increase dietary freedom
- avoid weight gain
- reduce the incidence of severe hypoglycaemia.

Self Management of Chronic Conditions (SMoCC) service

This service delivers The COACH Program® which is a state-wide, structured, telephone-based, chronic disease program that helps people with in-scope chronic conditions such as:

- coronary artery disease (CAD), (such as myocardial infarction, angina pectoris, cardiac stenting or cardiac bypass surgery)
- type 2 diabetes
- pre-diabetes
- chronic obstructive pulmonary disease (COPD).

The service:

- aims to improve the quality of life of participants by developing in them the self-management skills required to reduce the progression of their chronic condition, and to better navigate the health system
- employs a partnership approach between the patient and their General Practitioner (GP). Patients are taught the skills required to self-manage their condition, with their GP as their primary care provider
- utilises The COACH Program, which has been shown to reduce avoidable hospitalisations and provides another option for individuals who have limited access or willingness to attend conventional services.

The program runs for approximately 6 months, with a call every 4-6 weeks.

- Refer a patient form (PDF, 66KB)
- SMoCC Program fact sheet (PDF, 91KB) - for health service providers
- SMoCC Program brochure (PDF, 2.93MB) - for patients

Diabetes resources for health professionals

- Management of type 2 diabetes: a handbook for general practice– RACGP
- National Evidence Based Guidelines for the Management of Type 2 Diabetes Mellitus – NHMRC
- National Evidence Based Clinical Care Guidelines for Type 1 Diabetes in Children, Adolescents and Adults
- Emergency Management of Hyperglycaemia in Primary Care - RACGP
- HbA1c and monitoring glycaemia – Australian Family Physician
- T2D Treatments: A New Blood Glucose Management Algorithm for Type 2 Diabetes – Australian Diabetes Society
- Guidance and clinical tips to help identify, manage and refer patient with CKD in your practice – Kidney Health Australia
- Microvascular complications: foot care – RACGP
- Basic Foot Assessment Checklist – National Association of Diabetes Centers: Australasian Podiatry Council
- Diabetes retinopathy – National Eye Institute (NEI)
- Australian Dietary Guidelines– NHMRC
- Clinical Guidelines: Supporting Smoking Cessation – RACGP.
- National Diabetes Nursing Education Framework 2020-2022 – NDSS.

Education for health professionals

- RACGP e-learning modules
- Brisbane South PHN education events
- Diabetes Management for Health Professionals – CAN, APNA & Diabetes QLD
- NDSS - online learning for health professionals
- Diabetes Nursing Education Framework
- Foot Forward For Health Professionals
- Diabetes Qualified
- Focus on Type 2 Diabetes – National Prescribing Service (NPS)

You can find a number of resources focused on type 2 diabetes on the NPS. Specific resources of interest to health professionals may include:

- MedicineWise News – stepwise approach to management when metformin is not enough
- Clinical eAudit – individualising management after metformin
- Online case study – intensifying therapy in type 2 diabetes
- Decision aid – lifestyle and metformin (to be used by consumers within a GP consultation)
- Principles of pharmacological management of type 2 diabetes
- Diabetes management for health professionals: Webinar Series – Diabetes QLD
- Programs for health professionals (including face-to-face and online sessions)– Diabetes QLD
- Diabetes update for Aboriginal and Torres Strait Islander Health Workers and Practitioners using Feltman

Resources for patients

- Diabetes Australia
- Diabetes Queensland
- National Diabetes Services Scheme (NDSS)
- MyDESMOND
- Baby Steps – support for women previously diagnosed with gestational diabetes
- Foot Forward
- Keep Sight
- Quitnow
- My health for life

Resources for Aboriginal and Torres Strait Islander patients

- First Nations Health Focus – Brisbane South PHN
- Aboriginal and Torres Strait Islanders and Diabetes
- Indigenous Diabetic Foot Program: Resource Store – Indigenous Diabetic Foot Program
- First Nations Health Unit – Diabetes Queensland

Resources for Culturally and Linguistically Diverse (CALD) patients

- Information in your language - NDSS
- Health Translations
- DESMOND – adapted for Arabic and Maori and Pacific Islander communities – contact Diabetes Queensland (info@diabetesqld.org.au) to enquire about when and where programs are planned.

Example PDSA for the management of patients with diabetes

See below for suggested goals related to diabetes you may wish to achieve within your practice:

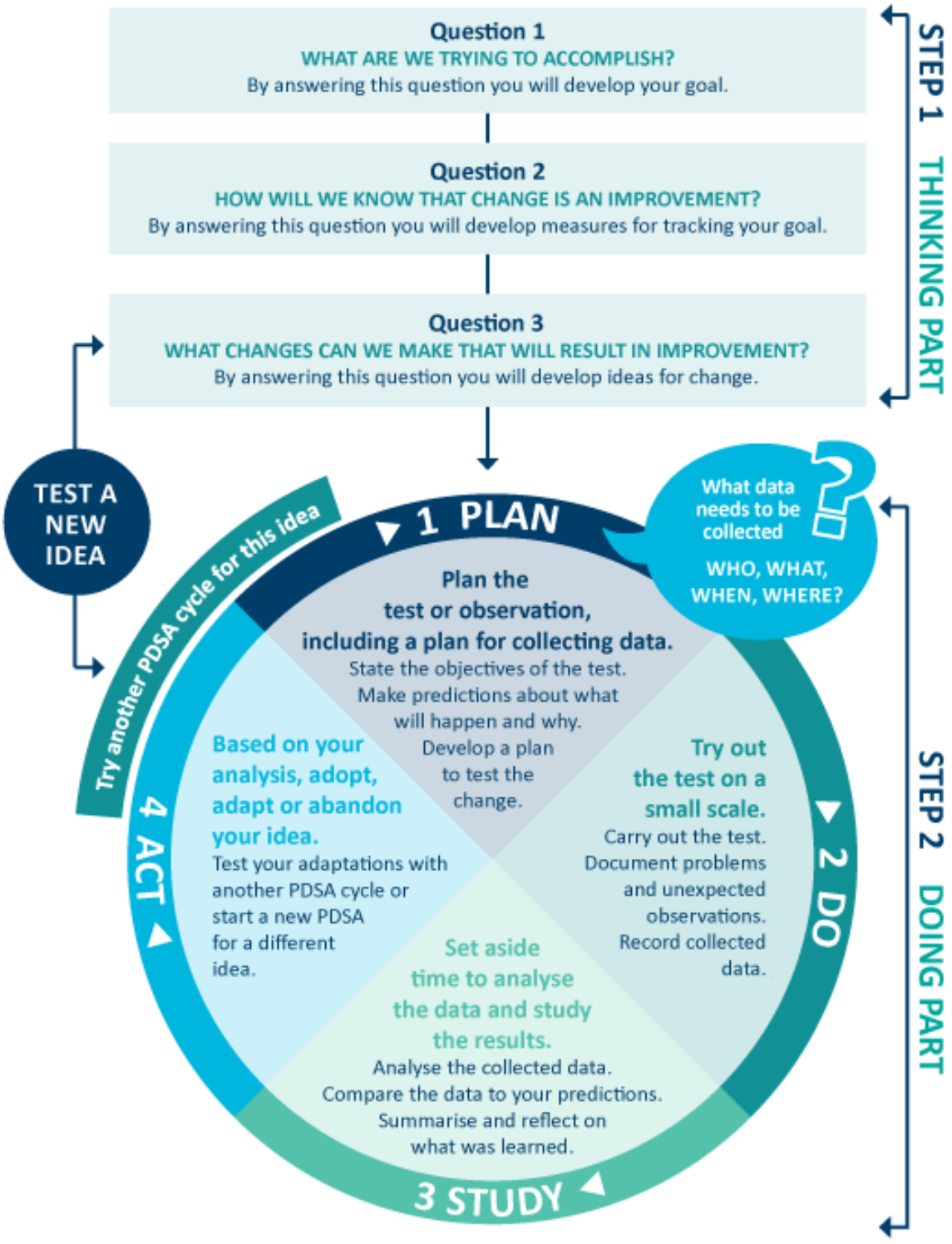
Goal	How you may achieve the goal
Ensure all diabetic patients are coded correctly with the correct diagnosis in the clinical software.	Refer to CAT4 recipe: ensure all diabetic patients are coded correctly with the correct diagnosis.
Increase adult smoking and alcohol status for patients with type 2 diabetes recorded in clinical software to 75%.	Refer to CAT4 recipe: increase adult smoking and alcohol status for patients with type 2 diabetes.
Increase HbA1c recording for type 2 diabetic patients to 95% or higher and increase ACR recording by 10%.	Refer to CAT4 recipe: increase HbA1c and ACR recordings for patients with type 2 diabetes.
Increase the number of flu injections given to diabetes patient over the past 15 months by 10%.	Refer to CAT4 recipe: identify the number of diabetes patients who have not received a flu injection in the past 15 months.
Ensure that 90% of active diabetes patients have their blood pressure recorded.	Refer to CAT4 recipe: CVD with no BP recorded – *please note: you will be required to select diabetes instead of CVD.*

Other ideas for improving diabetes measures

It is suggested that you meet in your practice team to discuss how at your practice you can improve the recording of diabetes measures. Some suggestions you may consider include:

- asking the practice nurse to opportunistically see patients prior to their GP appointment to obtain height, weight, waist measurements, BP, smoking and alcohol status
- asking patients to complete a summarised new patient form with their height, weight, waist measurements, BP, smoking and alcohol status and also check their address, contact details, NOK and emergency contact details
- actively contacting patients who are do not have measures recorded e.g.: proactively contact patients with diabetes who have not yet had their flu injection in the past 15 months
- ensuring Topbar is installed on every workstation and fully operational.

Model for Improvement diagram



Source: http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementTestingChanges.aspx

MFI and PDSA template EXAMPLE

Step 1: The thinking part - The 3 fundamental questions

Practice name:	**Date:**
Team members:	

Q1. What are we trying to accomplish? (Goal)

By answering this question, you will develop your GOAL for improvement.
Record this as a S.M.A.R.T. goal (**S**pecific, **M**easurable, **A**chievable, **R**elevant, **T**ime bound).

Our goal is to: Increase the number of HbA1c's recorded on active patients with diabetes.

This is a good start, but how will you measure whether you have achieved this goal? The team will be more likely to embrace change if the goal is more specific and has a time limit.

So, for this example, a better goal statement would be:

Our S.M.A.R.T. goal is to: Increase the proportion of HbA1c results recorded on our active patient diabetes patients by 15% by 31st December.

Q2. How will I know that a change is an improvement? (Measure)

By answering this question, you will determine what you need to MEASURE in order to monitor the achievement of your goal. Include how you will collect your data (e.g. CAT4 reports, patient surveys etc.). Record and track your baseline measurement to allow for later comparison.

We will measure the percentage of HbA1c results recorded on active patients with diabetes. To do this we will:

A) Identify the number of active patients with diabetes.

B) Identify the number of active patients with diabetes and an HbA1c result recorded in the past 12 months.

B divided by A x 100 produces the percentage of patients with diabetes who have a HbA1c recorded in the past 12 months.

BASELINE MEASUREMENT: 63% of active diabetes patients have an HbA1c recorded in the past 12 months.

Q3. What changes could we make that will lead to an improvement? (List your IDEAS)

By answering this question, you will generate a list of IDEAS for possible changes you could implement to assist with achieving your S.MA.R.T goal. You will test these ideas using part 2 of this template, the 'Plan, Do, Study, Act (PDSA)' cycle. Your team could use brainstorming or a driver diagram to develop this list of change ideas.

IDEA: Identify active patients with diabetes who do not have an HbA1c recorded in the past 12 months.

IDEA: Update the reminder criteria on the practice software to ensure the HbA1c reminder interval is set at the appropriate time.

IDEA: Complete diabetes cycle of care on an annual basis for all active patients with diabetes.

IDEA: Clinical team develop a system for flagging eligible patients and addressing screening opportunistically.

IDEA: Source and provide endorsed patient education resources (in waiting rooms, toilets etc.).

Note: Each new GOAL (1st Fundamental Question) will require a new MFI plan.

Source: Langley, G., Nolan, K., Nolan, T., Norman, C. & Provost, L. 1996, The Improvement Guide, Jossey-Bass, San Francisco, USA.

MFI and PDSA template EXAMPLE

Step 2: The doing part - Plan, Do, Study, Act

You will have noted your IDEAS for testing when you answered the 3rd fundamental question in step 1. You will use this template to test an idea. Ensure you communicate the details of the plan to the entire practice team.

IDEA	Record the change idea you are testing
Which idea are you going to test? *(Refer to Q3, step 1 above)*	
Identify active patients with diabetes who do not have an HbA1c recorded in the past 12 months.	
PLAN	**Record the details of how you will test your change idea**
Plan the test, including a plan for collecting data	What exactly do you plan to do? Record who will do what; when they will do it (day, time etc) and for how long (1 week, 2 weeks etc); and where (if applicable); the data to be collected; and predictions about the outcome.
WHAT: Lucy will set aside an hour on a Tuesday afternoon to conduct a search on CAT4 of all active patients with diabetes and no HbA1c recorded. A Topbar prompt will then be created to ensure these patients have a blood test done at their next appointment. WHO/WHEN/WHERE: Who: Practice Manager When: Begin 19th October. Where: Practice manager's office. DATA TO BE COLLECTED: Number of active diabetes patients and number of active diabetes patients who have not had an HbA1c completed in the past 12 months. PREDICTION: 78% of the active diabetes patient population will have had an HbA1c completed in the past 12 months.	
DO	**Run the test, then record your actions, observations and data**
Run the test on a small scale	What did you do? Were there any deviations from the original plan? Record exactly what you did, the data collected and any observations. Include any unexpected consequences (positive or negative).
Done – completed 20th December – on investigation it was identified that there were 5 different reminder categories for HbA1c. It took longer to do the check as categories needed to be merged, so there was only 1 category to choose from. The PHN staff provided some great instructions on merging reminder categories. A Topbar prompt was created which assisted the practice team identify diabetes patients who did not have an HbA1C result recorded when they attended for an appointment. Lucy contacted patients via SMS who did not have an HbA1c results recorded, which resulted in 17 people making an appointment to see their GP for their GPMP review.	

STUDY	Analyse the data and your observations
Analyse the results and compare them to your predictions	Was the plan executed successfully? Did you encounter any problems or difficulties? What worked/didn't work? What did you learn on the way? Compare the data to your predictions. Summarise and reflect on what was learned.

At the end of the focus on HbA1c results, 72% of patients with diabetes had a result recorded. This has resulted in a 9% increase in results which is 3% lower than our goal.

Results have been shared with the whole practice team. Whilst we didn't achieve our goal, we can see the benefit in discussing this with eligible patients. The practice principals were very pleased to hear about the 17 people who came in for a GPMP review. Lucy has been commended for her work in identifying eligible patients.

Communicate the results of your activity with your whole team. Celebrate any achievements, big or small.

ACT	Record what you will do next
Based on what you learned from the test, record what your next actions will be	Will you adopt, adapt or abandon this change idea? Record the details of your option under the relevant heading below. *ADOPT: record what you will do next to support making this change business as usual*; ADAPT: *record your changes and re-test with another PDSA cycle; or ABANDON: record which change idea you will test next and start a new PDSA.*

ADOPT:

The practice will regularly monitor HbA1c results via the monthly benchmark report supplied by Brisbane South PHN to ensure the rates are increasing.

Lucy will ensure a Topbar prompt has been created for all patients with diabetes to ensure they have their HbA1c recorded.

ADAPT:

ABANDON:

Repeat step 2 to re-test your adapted plan or to test a new change idea

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