Continuous Quality Improvement

WORKBOOK FOR GENERAL PRACTICE

Diabetes – Types 1 and 2

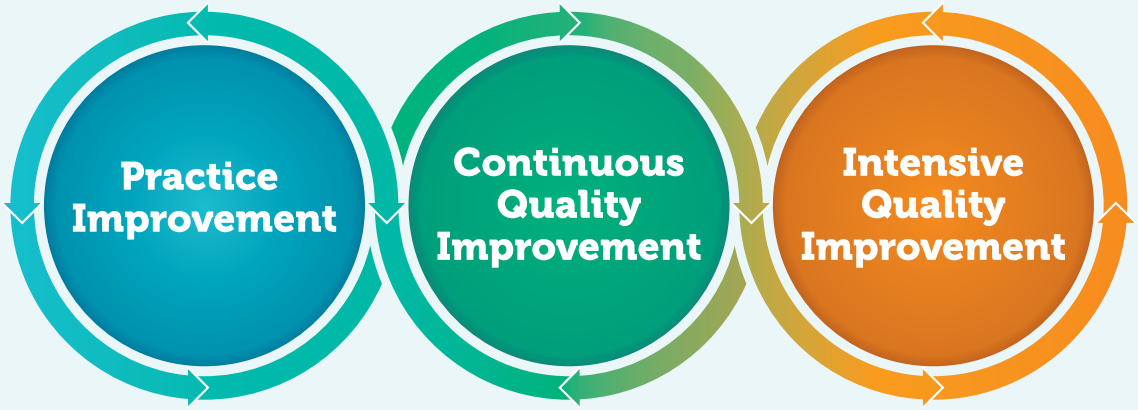
EDITION 1 | AUGUST 2021

phn NORTH WESTERN MELBOURNE

An Australian Government Initiative

A new model for general practice improvement

Our aim is to strengthen primary care to deliver integrated person-centred care that is comprehensive, accessible, safe and coordinated. Our new model has three modules of engagement. Your level of engagement will depend on your needs.



Focused on developing systems for quality improvement.

Focused on data-driven improvement. For accredited practices that share data and are new to quality improvement, or confident to implement quality improvement at their own pace.

A time-limited intensive facilitated quality improvement project for practices who want to further improve patient, clinical and whole of practice outcomes.

North Western Melbourne Primary Health Network (NWMPHN)
Website: www.nwmphn.org.au
Email enquiries: nwmphn@nwmphn.org.au
Telephone: (03) 9347 1188
Fax: (03) 9347 7433

Street address: Level 1, 369 Royal Parade,
Parkville, Victoria 3052

Postal address: PO Box 139,
Parkville, Victoria 3052

ABN 93 153 323 436

Acknowledgements
North Western Melbourne PHN acknowledges the peoples of the Kulin nation as the Traditional Custodians of the land on which our work in the community takes place. We pay our respects to their Elders past and present.

N20 0004 v.1

Acknowledgements

North Western Melbourne Primary Health Network (NWMPHN) would like to acknowledge Dr Jeannie Knapp and Dr Rita McMorrow for their review and contribution to this workbook.

While the Australian Government Department of Health has contributed to the funding of this material, the information contained in it does not necessarily reflect the views of the Australian Government and is not advice that is provided, or information that is endorsed, by the Australian Government. The Australian Government is not responsible in negligence or otherwise for any injury, loss or damage however arising from the use of or reliance on the information provided herein.

Illustrations by Sketch Group – pages 3, 5, 7, 10, 14, 20, 26, 32, 39, 40, 45, 46, 58 and 61.

Contents

From little things, big things grow

This workbook will show you how to do the 'little' things on the way to achieving the 'big'.

This workbook will show you how to do the 'little' on the way to achieving the 'big'.

It's a clear, four-step guide that draws on a proven approach, the Model for Improvement, with expert advice and resources specific to diabetes.

The four steps are:

Step 1: Understand diabetes

Step 2: Analyse data, set goals and brainstorm potential improvements

Step 3: Create a plan and act on it, following the 'plan, do, study, act' cycle

Step 4: Evaluate and celebrate.

These steps are complemented by links to resources and a comprehensive set of Appendices (p.42) covering:

- quality improvement and RACGP Standards (5th ed.)
- sample goals
- 'Plan, do, study, act' worksheet sample and template
- CAT4 'recipes'.

Using the Model for Improvement, you'll learn how to start small with your changes. Then systematically review, refine and re-test your ideas as necessary before broader implementation.

You'll find samples in Appendix 6 and a template for this system in Appendix 7.

It's a low-risk, high-return approach, and you'll have solid data to prove your achievements. But be warned – it's likely the process won't end there for your practice. Quality improvement can be a hard habit to shake.

Quality improvement (QI) workbooks

This workbook is part of a collection created by North Western Melbourne Primary Health Network (NWMPHN) to help general practices undertake self-directed quality improvement in a particular area of work, type of clinical practice or population group.

The workbooks have been created **by** general practice, **for** general practice, with input from NWMPHN teams and subject-matter experts, and through consultation with the community and the broader primary care sector.

They are designed to meet the particular needs of providers, patients and priority populations in the NWMPHN area. Links to appropriate local referral pathways are also included.

See a full list of workbooks on the NWMPHN website.

Before you start

The workbooks are designed to supplement the Quality Improvement Guide and Tools, **which we recommend reading first**. We've also included a primer below about the Model for Improvement (MFI), to refer back to while using the workbook.

About this workbook

This workbook is created as an interactive PDF. You can complete the tables in the book for your Priority 1 activity. Templates in the Appendix can be used for subsequent Priorities.

To complete this workbook, you will ideally use Adobe Acrobat or a similar compatible program to fill out the forms. If you add more content than what will fit in the text box, the text box will allow scroll for additional content to be added. Additional text will be shown with a + on the bottom of the panel. Please note that this additional content will not appear, however, if you print the document.

Your answers use only simple text formatting. You can paste into the text areas.

The Model for Improvement (MFI)

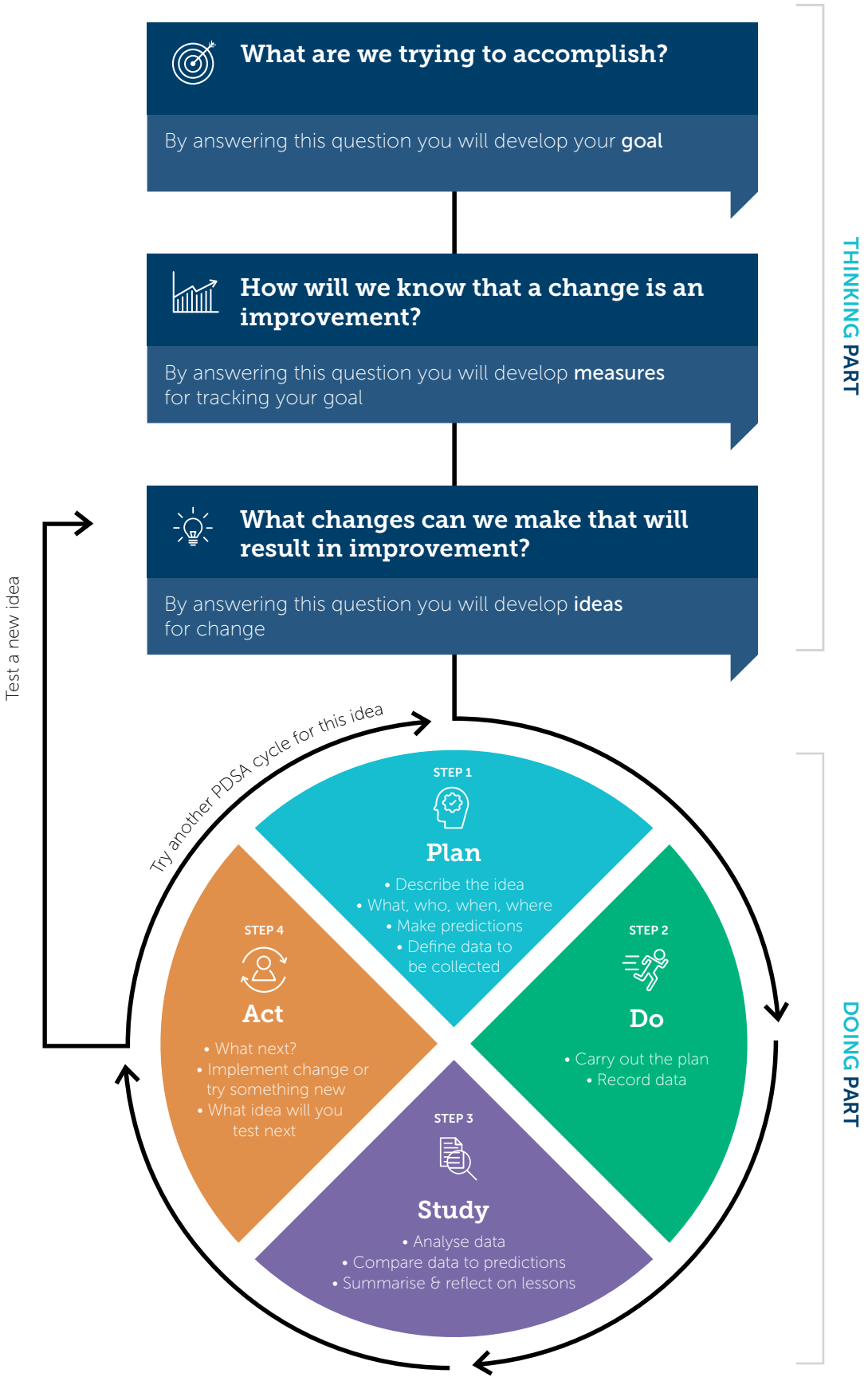
This is an evidence-based approach endorsed by leading health bodies, including the Royal Australian College of General Practitioners (RACGP) and the Institute for Healthcare Improvement (IHI).

It's easily applied and requires no specialist skills or background. It also has the advantage of encouraging creativity, and collegiality and collaboration.

Starting small is key, with change broken down into manageable pieces. Within your practice, this not only helps to reduce clinical and administrative risks, but also to foster unity within the practice team and avoid resistance to change. Proven changes can then be implemented more widely across the practice, while refined or new ideas can also be run through the mill.

As illustrated in Figure 1, MFI comprises a 'thinking part' and a 'doing part'. In the 'thinking part', you step through 'Goal', 'Measure' and 'Idea' (GMI). The 'doing part' consists of the 'Plan, Do, Study, Act' (PDSA) cycle. It's not a linear process – the idea is to cycle back and forth through both parts as often as required. You'll see these concepts mentioned frequently in this workbook. (See Videos on the Model for Improvement in this workbook.)

Figure 1: The Model for Improvement and the Plan, Do, Study, Act cycle



General practice considerations

Quality improvement in general practice can address one or more of the following:

- **Safety** – Avoiding harm to patients
- **Effectiveness** – Providing evidence-based care and only providing services likely to be of benefit
- **Patient-centricity** – Providing care that is responsive to individual patients' preferences, needs and values
- **Timeliness** – Reducing waiting times for care and avoiding harmful delays
- **Efficiency** – Avoiding waste
- **Equity** – Providing care of the same quality regardless of personal characteristics such as gender, ethnicity, location or socio-economic status.

Benefits and outcomes of QI are often categorised into four areas, as shown in Figure 2. Change that results in benefits across all four areas are said to have met the 'quadruple aim' – a useful target to keep in mind when developing your ideas.

Figure 2: The 'quadruple aim' for general practice

Improved Patient Experience

Better care: safe, quality care

Timely and equitable access

Patient and family needs met

Improved Provider Experience

Increased clinician and staff satisfaction

Leadership and teamwork

Quality improvement culture in practice

Population health

Better health outcomes

Reduced disease burden

Improvement in physical and mental health

Sustainable Cost

Efficient and effective services

Increased resources for primary care

Commissioning effectively

Links with PIP, accreditation and professional development

This workbook can be used by practices and individual professionals as evidence for:

- Practice Incentive Payment Quality Improvement (PIP QI)
- RACGP accreditation standards
- RACGP continuous professional development points

Appendix 1 has detailed information about how quality improvement activities included in this workbook can be used as evidence for continuing professional development (CPD) points for GPs and RACGP accreditation, including requirements relating specifically to diabetes.

Support from NWMPHN

For further support on implementing continuous quality improvement activities at your practice, contact your relationship manager at NWMPHN on (03) 9347 1188 or email primary.care@nwmphn.org.au

The use of the CAT4 data extraction tool

CAT4 is a data extraction tool that extracts and summarises key information about your practice population. It is compatible with a number of medical software systems and the PHN provides general practices with free access to the tool. This workbook uses CAT4 as a primary source of data; however, you can still undertake quality improvement if you don't have CAT4. There may be opportunities to extract the same data (or a modified version of it) directly from your clinical system. If you need assistance, contact your NWMPHN relationship manager.

Your four steps to improvement

Step 1 Understand Diabetes

What is diabetes?

The National Diabetes Strategy (2016–20) describes diabetes mellitus as 'a chronic disease that impedes the body's ability to produce and/or utilise insulin (a hormone produced by the pancreas to regulate blood glucose levels). This results in high blood glucose levels, which can lead to serious complications including stroke, diabetic retinopathy, heart disease, high blood pressure, kidney disease, vascular disease, nerve damage and foot problems.'

The strategy describes three commonly recognised forms of diabetes:

- **Type 1 diabetes** – an autoimmune condition that causes the immune system to destroy insulin-producing cells in the pancreas. Onset is commonly in childhood or early adulthood but can occur at any age. There is no cure, and people with type 1 diabetes require daily insulin treatment.
- **Type 2 diabetes** – the most common form. Insulin production by the pancreas slows down and organs become resistant to the effects of insulin (so cells are less able to extract glucose from the blood and use it for energy). It is more common among high-risk ethnicities and is often associated with lifestyle factors. In the past, type 2 diabetes was typically diagnosed after 50 years of age, but diagnosis in younger adults, adolescents and even children is increasingly common.

The strategy defines people with 'prediabetes' (impaired fasting glucose and/or impaired glucose intolerance) as having 'blood sugar levels that are higher than normal but not sufficiently high to diagnose type 2 diabetes'. These people are at increased risk of developing type 2 diabetes.

In addition to age, ethnicity and gender, other key risk factors for diabetes include lifestyle factors and biomedical factors such as body weight, tobacco use, physical activity and exercise and waist circumference.

NWMPHN and diabetes

Many local government areas (LGAs) in the NWMPHN region have higher rates of diabetes than the general Victorian and Australian averages. According to the Social Health Atlas (PHIDU) in 2021 prevalence rates in LGAs in the NWMPHN region are:

- **Brimbank:** 8.2%
- **Darebin:** 5.7%
- **Hobson's Bay:** 5.4%
- **Hume:** 6.6%
- **Macedon Ranges:** 3.3%
- **Maribyrnong:** 6.5%
- **Melbourne:** 4.1%
- **Melton:** 6.4%
- **Moonee Valley:** 4.7%
- **Moorabool**: 4.6%
- **Moreland:** 5.5%
- **Wyndham:** 6.1%
- **Yarra:** 4.3%

In some LGAs in the region, diabetes leads to more preventable deaths and avoidable hospitalisations than in the rest of Victoria and Australian, on average. See NWMPHN Health Needs Assessment Chronic Disease Profile 2018.

Why should diabetes be a priority for general practice?

General practice can mitigate the effects of diabetes, and help to prevent its occurrence.

Given the generally higher rates of diabetes in our region, general practices play a pivotal role – to diagnose, treat and educate people with diabetes to best manage their conditions and avoid complications, and also to help people avoid developing type 2 diabetes through preventative health care and health promotion.

See pages 23–26 for suggested activities and Appendix 2 MBS billing for diabetes care.

Components of effective diabetes care

Many factors contribute to, or detract from, effective diabetes care. These factors can relate to patients, practice systems or practitioners.

Effective care takes into account:

- **Patient activation.** That is, a patient's engagement with their condition and participation in self-management, as well as their access to self-management support, and to allied health support and education
- **Practitioner knowledge** and understanding of diabetes management principles, access to evidence-based guidelines, and provision of patient-centred care
- **Practice systems** including coding, reminders, data collection and responses to risk factors and clinical indicators, as well as systems to provided structured care, and team-based care.

The Diabetes Cycle of Care[1] is the minimum annual assessment that is recommended for a person with diabetes, and is an opportunity to coordinate care. It should be completed over a period of 11 months, for up to 13 months. Table 1 shows the minimum requirements, based on the recommendations in the RACGP's Management of type 2 diabetes: A handbook for general practice. (See Assessment of the patient with type 2 diabetes.)

Table 1: Diabetes Cycle of Care minimum requirements

At least 6 monthly	Annually	At least every two years
• Measure weight and height and calculate BMI • Measure blood pressure • Assess feet for complications (except if patient does not have both feet)	• Review medications (need for more frequenty review should be individualised) • Review and discuss diet, physical activity, and smoking status • Review and discuss complication prevention – eyes, feet, kidneys, cardiovascular disease • Assess diabetes management by measuring HbA1c • Measure total cholesterol, triglycerides and high-density lipoprotein (HDL) cholesterol • Assess for microalbuminuria	• Comprehensive eye examination (more frequently for those at high risk)

[1] *Whilst the Diabetes PIP payment no longer exists, the item for Diabetes Cycle of Care SIP 2517 can still be claimed, and is still considered best practice as per the RACGP's Management of type 2 diabetes: A handbook for general practice.*

Use HealthPathways Melbourne to support people with diabetes

HealthPathways Melbourne (melbourne.healthpathways.org.au) is an online resource that gives clinicians up-to-date, localised clinical and referral information.

HealthPathways Melbourne provides clear, concise guidance for assessing and managing patients with particular symptoms or conditions, as well as outlining the most appropriate referral pathways.

We recommend reviewing the following pages before you start:

- Screening and detection of diabetes and pre-diabetes
- Managing type 2 diabetes
- Diabetes medication management

How do I access HealthPathways Melbourne?

HealthPathways Melbourne access requires a username and password. Request access online or complete this form to request automatic login.

To receive the monthly HealthPathways Melbourne Bulletin, email info@healthpathwaysmelbourne.org.au

Access is limited to health professionals in the North Western and Eastern Melbourne PHN catchments.

Step 2 Work as a team to collect data and develop goals

Now you've done your background research, it's time to establish a brains trust and start examining ideas. By the end of this section, you'll be able to answer these key questions:

Goal

What are we trying to accomplish?

Measure

How will we know that a change is an improvement?

Idea

What changes can we make that will result in an improvement?

Team up

Evidence shows that improvement is most likely when all staff support change, so adopt a whole-of-team approach from the outset.

Form a QI project team

Your project team should include representatives from your whole-of-practice team. It might include your practice manager, reception and other administrative staff, nursing staff, GPs, allied health practitioners, dieticians and diabetes educators.

For each project, you will need at least two project leads:

1. A lead GP to inform any clinical content
2. Another person in your team capable of managing the project, who will be given allocated time to complete the work required.

As your practice becomes more experienced with quality improvement, you may consider including a patient in your project team – they can provide great insight from a patient perspective, particularly if the focus of your QI activities includes measuring and improving patient experience. Page 15 of the Quality Improvement Guide and Tools provides more ideas on how to include patients in your QI activities.

Download the NWMPHN Team Health Check PDSA* and Improvement Foundation's Team Health Check Score Sheet* to help you assess your team culture and identify roles and responsibilities. Along the way, you might also identify team members who might resist change, as well as potential issues or matters to address before your project begins.

**Documents will download directly from the links*

Collect baseline data

There is a saying that 'What gets measured gets done.' So, collect and collate as much relevant data as you can. This will help you accurately assess the current situation and pinpoint exactly where you want to improve. It will also give you a 'baseline' against which success (and failure) can be measured objectively.

Some baseline data is straightforward, such as clinical data retrieved from CAT4 searches. By contrast, information such as 'staff knowledge' or 'patient experience' is harder to measure but may be no less important.
(See Videos on the Model for Improvement on page 41.)

Baseline data may include, but is not limited to:

- CAT4 data
- practice system audits
- environment audits
- measurement of patient experience
- measurement of staff experience
- measurement of current staff knowledge and confidence.

Note too, that NWMPHN will also send quarterly reports to practices on their performance in relation to the Improvement Measures, and in relation to the aggregated performance of other NWMPHN general practices. This information may also be useful in establishing your baseline data.

Get your practice data ready

- Ensure staff are familiar with how to use CAT4.
- Ensure all diagnoses and clinical entries are correctly coded in the software by entering data into the designated places (such as BP in the 'observations' sections) and using available selections from the software (such as selecting from the drop-down box for diagnoses), rather than adding them as free-text in the clinical notes. This will ensure the information can be extracted into a report, allowing gaps in care to be identified. Ideas include:
    - discussing coding in clinical meetings to ensure clinical team members enter clinical information correctly, so it can be recognised by the software
    - appointing a staff member to use Cleansing CAT to clean up non-coded diagnoses so all of your population with diabetes will be correctly reflected in your database.

Stop and 'cleanse' your data

'Clean' data going in means 'clean' data coming out. Guides for undertaking a 'data cleanse' include:

- CAT4: Pen CS Data Cleansing Guide
- Medical Director: Data cleansing in Medical Director (Sydney North Health Network)
- Data cleansing in Best Practice: Best Practice's data clean up guide or Sydney North Health Network's Best Practice Data Cleansing Guide
- A Quality Improvement activity: Data Cleansing QI Activity (North Western Melbourne PHN).

Activity Table 1 will help you collate your baseline data. There are many options to chose from, and your practice may chose to focus on either data quality or improving patient management.

CAT4 is your data source for Activity Table 1. CAT4 has been well set up to enable you to extract all the data you need to complete the table below. Refer to the PEN CS guide using CAT4 and Topbar for PIP QI activities, which includes relevant measures for diabetes care and help on collecting your baseline data using CAT4. See your most recent CAT4 quarterly report from your PHN for the current PHN averages.

Activity Table 1: Collating baseline data

		Assessment of activity/status		
		Today	**3 months ago** *(if possible)*	**6 months ago** *(if possible)*
Item	**Question/Measure**	**Date:**	**Date:**	**Date:**
Improving diagnosis of diabetes				
1	**Number of active patients on our register who are at risk of developing type 2 DM (based on physical characteristics and current medical conditions)** **Data Source:** CAT4 – See At risk of Type 2 DM medical factors			
2	**Number of active patients on our register who are at risk of developing type 2 DM (based on lifestyle factors and physical measures)** **Data Source:** CAT4 – See At risk of Type 2 DM medical factors			
Improving data quality				
3	**Number of active patients with a coded diabetes diagnosis** **Data Source:** CAT4, or medical software			
4	**Number of active patients with a coded diabetes diagnosis, but not coded as type 1 or type 2** **Data Source:** CAT4 – See Coding Diabetes			
5	**Number of active patients without a diabetes diagnosis but on insulin and/or oral hypoglycaemic medications** **Data Source:** CAT4 – See Coding Diabetes			
6	**Number of active patients without a diabetes diagnosis but who have had an abnormal HbA1c or fasting blood glucose recorded** **Data Source:** CAT4 – See Coding Diabetes			

Activity Table 1: Collating baseline data (continued)

Improving diabetes care (and MBS claiming)				
7	**Number of active patients with diabetes who have not had their HbA1c recorded in the last 12 months** **Data Source:** CAT4 – See Appendix 4			
8	**Number of active patients with diabetes who have not had their BP recorded in the last 6 months** **Data Source:** CAT4 – See Appendix 4			
9	**Number of active patients with diabetes who have not had their BMI recorded in the last 6 months** **Data Source:** CAT4 – See Appendix 4			
10	**Number of active patients with diabetes who have not had their waist measured in the last 6 months** **Data Source:** CAT4 – See Appendix 4			
11	**Number of active patients with diabetes who have not had their ACR measured in the last 12 months** **Data Source:** CAT4 – See Appendix 4			
12	**Number of active patients with diabetes who have not had their total cholesterol, LDL, HDL and triglycerides measured in the last 12 months** **Data Source:** CAT4 – See Appendix 4			
13	**Number of active patients with diabetes who do not have a GP Management Plan (GPMP) or Team Care Arrangement (TCA)** **Data Source:** CAT4 – See Appendix 4			
14	**Number of active patients with diabetes with a GPMP that have not have a review** **Data Source:** CAT4 – See Appendix 4			

Add any other measures you think are relevant including any patient feedback you already have in hand – this is valuable baseline data!

Reflect on the data

Reflect on the information you've compiled. You might consider the following questions:

- How does your performance compare to current data?
- Does any data surprise you?
- How does the data compare from year to year?
  Can significant differences be explained?
- Are there clear areas for improvement that could form the basis of your QI project?

Based on this discussion, identify and prioritise key areas for improvement using Activity Table 2.

Remember – You don't need to improve in all areas at once. You might decide to concentrate on one measure at a time. How you do this is up to you. You can pick and choose ideas in this workbook to suit the approach that best meets your practice's needs.

Activity Table 2: Analysing baseline data

Item	Identified area for improvement	Number each in order of priority for improvement (i.e. 1, 2, 3, etc.)
1		
2		
3		
4		
5		
6		

Completed by:	Date:

Set a goal

Now that you have identified the top priority area for your practice, the next step is to work together to set a goal for this area. Goals should be 'SMART', so ask if each goal is:

- **Specific** – Does the goal say exactly what we want to achieve?
- **Measurable** – Have we included a measurable target, such as 'to increase annual ACR rates to 75 per cent', or 'to achieve 100 "at risk of diabetes" 40 to 49-year-old health checks'?
- **Achievable** – Is it likely our practice will be able to accomplish the goal?
- **Relevant** – Does the goal align with our practice's broad vision and aims?
- **Time-based** – Do we have a clear deadline for achieving your goal? (Deadlines should be challenging but realistic.)

See Appendix 5: Sample goals for diabetes.

Describe your goal

Once you have established your first goal, describe it in more detail in Activity Table 3.
(This table will also be used for any subsequent goals.)

Activity Table 3: Setting your SMART goal for a priority area

Our priority for improvement is:	**Our target population is:**
Our goal is to:	**Check that the goal is:** ☐ Specific ☐ Measurable ☐ Achievable ☐ Relevant ☐ Time-based

We will use the following measures to know if we've been successful:

Measure:	Source:
Measure:	Source:
Measure:	Source:
Measure:	Source:
Measure:	Source:

*add more as appropriate

We want to achieve our goal by:	**We will collect our measures every:** For example: 1st of the month, two months, quarter, six months.

Brainstorm ways to achieve your goal

Now use Activity Table 4 to list activities that might help your practice achieve its goal or goals. Activities might include, but are not limited to:

- staff training and education
- system changes
- workplace/environmental changes
- regular reviews/audits/meetings.

There is no minimum or maximum number of activities. As a guide, we have provided room to record six.

See brainstorming tools for identifying a change idea, recommended by IHI, including:

- Affinity Tool
- Five Whys
- Driver Diagram
- Flow Chart
- Cause and Effect (Fishbone)

Activity Table 4: Brainstorm of ideas for implementing change

Idea no.	Activity	Expected outcomes
1		
2		
3		
4		
5		
6		

Completed by:	Date:

Sample activities

Adjust these sample activities to suit your needs, strike-off those you've already done, or develop your own activities.

Communication

These communication activities can help you get your practice onboard and prepared, and could improve practitioners' knowledge and confidence:

Communications for practice staff

- Introduce the new QI project at the next all-staff meeting, and discuss it at regular meetings. Talk about rationale, targets, activities and roles. Invite ideas for any other activities which may help achieve the goal.
- Discuss the new QI project at the next clinical meeting, to address clinical-specific issues and tactics. Add it to regular meeting agendas.
- Have relevant staff complete education/online training/ online learning modules by a specified date.
- Develop staff questionnaires (see Appendix 9 🔧) to assess whether knowledge and confidence has increased because of training. Have staff complete the questionnaires before and after the training.
- Develop a reminder sticker for GPs' and nurses' computers to remind them about the area of focus.
- Add an update to the staff newsletter about the project, its aim and starting position, as well as updates on outcomes in subsequent newsletters.

Communications for patients

- Develop a poster for the waiting room/consulting rooms on the area of focus.
- Source patient information about your area of focus in English and other appropriate languages. See the Victorian Government's Health Translations and Better Health Channel websites.

These are examples of activities you could adapt for your practice.

Clinical education and resources

- Hold clinical education session about diabetes – including prevention, screening, diagnosis, treatment and monitoring outcomes (See RACGP: Goals for optimum management).
- Discuss external training for clinicians regarding diabetes.
- Discuss HealthPathways Melbourne diabetes-related pathways.
- Consider if your practice would benefit from training/ employing a diabetes educator.
- Run an in-house session to simulate a Diabetes Care Plan discussion with a patient.

Improving diabetes data quality

- Ensure a 'clean' register of patients with type 1 and type 2 diabetes.
- Agree on a clear system for recording diabetes-related information with the clinical team: develop and share a written protocol.
- Develop systems to maintain your diabetes register (addressing who will maintain these, and how often).

Primary preventative activities for diabetes

- Focus on one or two key activities for the prevention of diabetes – for example, smoking cessation, healthy diet, regular exercise or reduced alcohol consumption – and develop relevant programs.
- Organise training for staff (clinical and non-clinical) in promoting preventative activities.
- Decide on appropriate patient brochures and include translated information where appropriate.
- Run a campaign for a month promoting your chosen preventative activities.
- Target your campaign towards the general practice population, or towards specific groups, such as smokers, or those with high BMIs.

Improve screening/diagnosis of diabetes

- Screen all individuals who are 40+ years of age with an AUSDRISK test every 3 years.
- Search CAT4 for all patients at risk of diabetes using the CAT4 recipes At risk of type 2 DM (medical factors) and At risk of type 2 DM (lifestyle factors). If your lists are very long, consider tackling one risk factor at a time.
- Recall these patients for testing* if not completed in the past three years to check if they have diabetes or pre-diabetes, and to discuss how to reduce their risk factors (see the CAT4 guide to recall using SMS and voice messaging).
- Recall people with a history of Impaired Glucose Tolerance (IGT)/Impaired Fasting Glucose (IFG) without HbA1c testing in the past 12 months for testing, and to discuss with them ways to reduce their risk.
- Incorporate screening for risk factors and diabetes into existing templates; for example, into the 45 to 49-year-old health check, the 75+ health check, or the CVD health check.
- Add Topbar prompts to remind clinicians to take appropriate opportunities to discuss risks, or diabetes management, with relevant patients (see 'how to' guide here).
- Create posters for your waiting room that encourage people with risk factors to talk to their nurse or GP.
- Agree on resources to be given to each patient at risk of diabetes, including those with pre-diabetes.

**Testing = complete and AUSDRISK test with all patients who have a risk factor for diabetes. Follow with a fasting glucose test or HbA1C if patient is at high risk*

Improve management of diabetes and prevention of complications

- Maintain a diabetes register.
- Choose indicators to monitor regularly, to gauge if changes are working. (For example, you could monitor improvement in HbA1c in the past 12 months, or the number of patients with diabetes who have had a urine albumin to creatinine ratio (urine ACR) recorded in the past 12 months.). Run an audit to see whether or not your patients are generally showing improvements, and consider what you can do to improve, or improve further.
- Choose other measurements to monitor regularly, such as waist measurement, Body Mass Index (BMI) or blood pressure
- Measure the amount of time in ideal blood glucose range, for people wearing Continuous Glucose Monitors.
- Consider creating a dedicated nurse-led diabetes clinic.
- Find ways to increase the number of patients with diabetes who are undertaking annual check-ups. Strategies could include:
    - sending pathology forms by email, to be completed prior to the review appointment (see Annual cycle of care checklist)
    - audit uptake of retinal screening, or foot checks.
- Develop autofills/comments to improve consistency of care for routine diabetes reviews.

Improve use of GP Management Plan (GPMP) or Team Care Arrangement (TCA) for patients with diabetes (using the Diabetes Care Plan)

- Discuss your practice's current Diabetes Care Plan at a clinical meeting with GPs and nurses. Agree on ways to use the plan to aid shared discussion and support patient-centred goals. Amend the template to suit your practice and agree how it can best be used. See PEN CS recipe: identify patients with diabetes, CVK, or CKD.
- Decide as a team how you will proactively recall patients for care plans.
- Develop a Diabetes Care Plan with patients, and give them a copy.
- Create/review a GPMP or TCA and claim appropriately.
- Set dates with patients for subsequent reviews (for example, when the next measurements are due) so they have something to aim for. Add a reminder for the next review into your recall system.

Improve patients' experience of their diabetes management

- Develop a short patient survey (see Appendix 8 🔧). Gauge patients' thoughts about the diabetes care they receive at your practice, including any ideas for improvements. Analyse the survey, plan changes to address feedback, and inform patients of these changes and any consequent improvements.

Improve knowledge and confidence of patients with diabetes to manage their condition

- As a practice, agree on:
    - appropriate posters for your waiting room, with general information or that encourage discussion about diabetes, pre-diabetes, risk factors etc.
    - appropriate printed information for newly diagnosed patients (consider Diabetes Victoria resources), including translated information for the practice's key language groups
    - appropriate self-management support to suggest to patients (consider the DESMOND program or local peer support groups)
- Ask people with diabetes to complete a Problem Areas in Diabetes Scale during appointments. This helps clinicians gauge patients' wellbeing and areas of care that are problematic for them. Have patients do this at regular intervals (such as every six months, when you collect their measurements) and compare the scores to see whether their knowledge and confidence is improving.
- Start to use a Diabetes Care Plan with patients, which gives them more 'ownership' of their goals for improvement.
- Promote annual events such as Diabetes Awareness Month (November) and World Diabetes Day (14 November).

Step 3 Plan, Do, Study, Act – time to 'cycle'

You're now ready to take action, using a 'Plan, Do, Study, Act' (PDSA) cycle for each activity you've decided to implement.

To get started, take the activities you've listed and prioritised in Activity Table 4 and assign a responsible person/persons, and intended due dates, to keep the activities moving along. Use Activity Table 5, and regularly check in on your team's progress. This is part of the 'plan' part of the cycle. (You may also want to review the explanation of PDSA under Model for Improvement heading in the introduction to this workbook.)

Activity Table 5: Timeframes and responsibilities

1	**Activity**		
	Person responsible	**By when**	
	Expected outcomes		
2	**Activity**		
	Person responsible	**By when**	
	Expected outcomes		

Activity Table 5: Timeframes and responsibilities (continued)

3	**Activity** **Person responsible** / **By when** **Expected outcomes**
4	**Activity** **Person responsible** / **By when** **Expected outcomes**
5	**Activity** **Person responsible** / **By when** **Expected outcomes**

Activity Table 5: Timeframes and responsibilities (continued)

6	**Activity** **Person responsible** / **By when** **Expected outcomes**

Next, create copies of the PDSA table (Activity Table 6: PDSA cycle template) and fill one out for **each activity**. This will help you to break your project down into manageable chunks, allocate responsibilities more easily, and accurately assess what's working and what's not. Ensure that each PDSA table includes details of who is doing what, and by when, to keep your project on track.

Note that you can run more than one PDSA at a time. This will depend on the change you're making, and the time it's likely to take before any measurable improvement. If results are likely to take longer (more than a month, for example, or a year), running separate, sequential PDSAs for each activity would mean the project would take too long.

PDSA cycle template

You've got your plan and are now ready to start cycling through PDSAs. Use the template in Activity Table 6, and see samples in Appendix 6.

Activity Table 6: PDSA cycle template

Priority area number	**Priority area goal**
Activity number	**Staff member responsible**
Date started	**Date completed**

Activity Table 6: PDSA cycle template (continued)
Part 2: The doing part – Plan, Do, Study, Act

Plan	**Describe the brainstorm idea you are planning to work on. (Idea)**
Plan the test, including a plan for collecting data	What exactly will you do? Include what, who, when, where, predictions and data to be collected.

Idea (activity)

What (step-by-step)

Who	**When**
Where	**Prediction**

Data to be collected

Baseline

Do	**Carry it out, and describe how you went (Action)**
Run the test on a small scale	Was the plan executed successfully? Did you encounter any problems or difficulties?

Activity Table 6: PDSA cycle template (continued)
Part 2: The doing part – Plan, Do, Study, Act (continued)

Study	Does the data show a change? (Reflection)
Analyse the results and compare them to your predictions	What does the data say? Did you meet your predictions, or did you fall short?

Act	Do you need to make changes to your original plan? (What next?) OR Did everything go well?
Based on what you learned from the test, plan for your next step	If this idea was successful you may like to implement this change on a larger scale or try something new. If the idea did not meet its overall goal, consider why not and identify what can be done to improve performance.

Repeat Step 2 for other ideas. What idea will you test next?

Tip: Do your first lot of activities for your first priority then proceed to manage and monitor your progress/success. Begin again on page 20 (setting a goal) when you're ready to tackle the process again for your next priority area.

Manage and monitor your project

Now you're in the swing of things, ensure you monitor the project regularly, with an eye on your 'baseline data'.

Ensure each PDSA template for each project activity is completed as the activity is completed. As soon as practical, reflect on how the activity went, and any obstacles, and decide whether to continue with the change, or amend it and try it again.

Look back at the data you collected in Activity Table 1, as well as any other measures you decided to collect as part of your project.

Now collect the same data again and complete Activity Table 7. As you do, assess whether there's any improvement since the last measurement. If not, consider why not. Is it too early to see change, or is an extra effort needed to push performance along? And what might be the best activity to tackle next?

Manage and monitor – tips for successful PDSA

- Allocate 'protected time' so that those responsible can effectively implement the changes.
- Set dates in the project team's calendars **now** for reviewing the project. Use the PDSA due dates as a guide, and also set regular review periods (perhaps monthly or quarterly). Regular monitoring is important so that the team can support and encourage each other to complete activities.
- Keep your project team and other practice staff well-informed.
- Catch-up with staff about their PDSAs and offer support where needed.
- Conduct regular check-ups, both to help encourage staff, and to iron-out issues.

Copy the relevant data results from Activity Table 1, but note the order of columns is different here.

Activity Table 7: Manage and monitor your activity

1	**Measure**				
	Source of data				
	6 months before project	3 months before project	Start of project	3 months into project	6 months into project
2	**Measure**				
	Source of data				
	6 months before project	3 months before project	Start of project	3 months into project	6 months into project
3	**Measure**				
	Source of data				
	6 months before project	3 months before project	Start of project	3 months into project	6 months into project

Activity Table 7: Manage and monitor (continued)

4	**Measure**				
	Source of data				
	6 months before project	3 months before project	Start of project	3 months into project	6 months into project
5	**Measure**				
	Source of data				
	6 months before project	3 months before project	Start of project	3 months into project	6 months into project
6	**Measure**				
	Source of data				
	6 months before project	3 months before project	Start of project	3 months into project	6 months into project

Step 4 Evaluate and celebrate

Evaluation is, of course, a regular and integral part of the PDSA process. But it's also important to conduct broader evaluations of the overall project, which is what Step 4 is all about.

Once you have completed all activities for a priority area, reflect on the process and complete Activity Table 8 as a team.

Celebrate and share

Celebrating your success doesn't just feel good – it will help you capitalise on your quality improvement efforts. Under the Model for Improvement, quality improvement is a 'virtuous cycle'. Each benefit has a positive effect on the next, leading to a 'snowball' of improvement.

By celebrating your 'wins', you'll engage your practice team more deeply with your QI project, enhance morale and foster a culture where striving for improvement is as integral as payroll – or lunch!

Depending on the stage and scale of your success, you could share results at staff meetings, hold a celebratory lunch, post your achievements in the waiting area, or even in local media or online.

Has your practice completed a quality improvement activity or project that you'd like to share?

Submit your case study, resources or photos to primary.care@nwmphn.org.au

Activity Table 8: Evaluate achievements

Did you achieve your goal?

What are you most proud of?

What were the things that helped you?

Were there any barriers?

How did you overcome these?

Activity Table 8: Evaluate achievements (continued)

What were the changes for: • Patients • Staff/Clinicians • Population • Business?

What would you have done differently?

What are your next steps for the changes that were made?

Date started	Date completed

What's next?

Now that you have completed these activities for priority one, it is time to tackle your next priority. Head back to Activity Table 2 on page 19 to identify the next priority area for your practice and work through the activities again.

Education and training in diabetes

Formal courses and learning modules

Education for general practitioners

Diabetes Academy (University of Melbourne)

- What's new in diabetes? is an evidence-based update on novel medications and emerging technologies for improving outcomes for people with diabetes.
- Fee required. Approximately 20 hours of online study, to be completed within 12 months.
- RACGP Cat 1 accredited (40 points).

RACGP

Login and search 'diabetes' for related available courses/e-learning.

National Diabetes Services Scheme

The NDSS has online learning modules covering topics such as continuous glucose monitoring, working with Aboriginal and Torres Strait Islander peoples, and pre-pregnancy planning and care.

Diabetes Australia

Diabetes Australia has links to various tools and eLearning materials for GPs.

Education for practice nurses

Graduate certificates: diabetes educator

Offered by various institutions. Each course differs in duration and delivery (such as online or face-to-face).
See courses accredited by the Australian Diabetes Educators Association.

Diabetes Management in the Primary Care Setting (APNA)

This 26-hour course aims to improve general diabetes knowledge, and provides detailed information to help adapt a care plan to patient requirements. (Discount for APNA members.)

Diabetes Qualified

The Diabetes in Practice for Nurses online course is a person-centred, evidence-based program incorporating contemporary health literacy principles. This course counts for 12 CPD hours, to be completed over 12 months. It is accredited by APNA, and currently subsidised by the NDSS.

Diabetes Australia

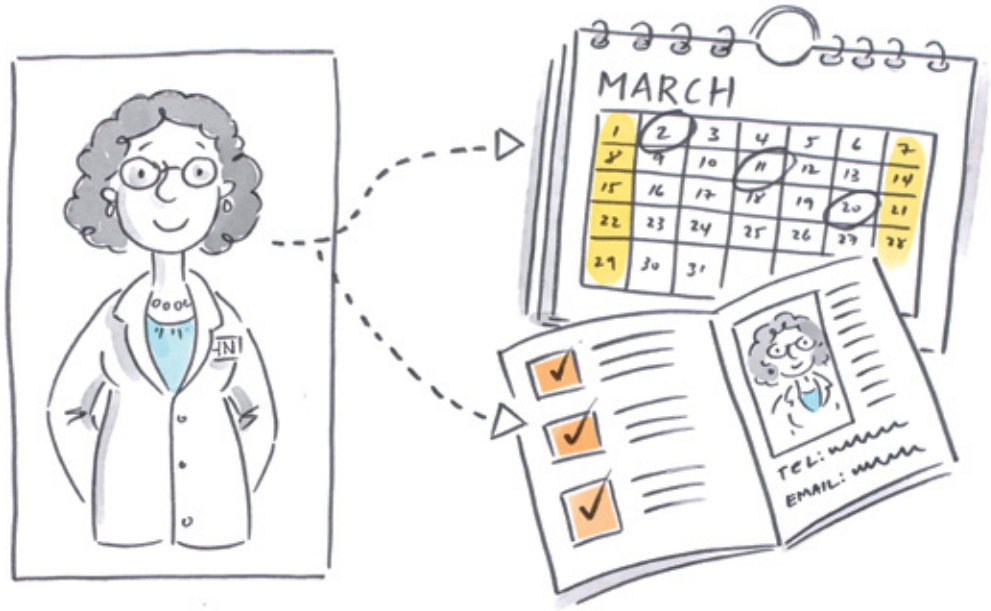
Diabetes Australia has links to various tools and eLearning materials for nurses.

Tools and resources to build your skills and confidence

Diabetes resources for health professionals

Resources include:

- RACGP – Guide to General Practice Management of Type 2 diabetes (2016–2018)
- Department of Health – Australian National Diabetes Strategy 2016–2020
- Diabetes Australia – Diabetes Management Journal – magazine appropriate for GPs, endocrinologists and other AHPRA-registered health professionals. Request a copy by emailing dmj@tangello.com.au and citing your AHPRA number
- HealthPathways Melbourne – provides clinical information and localised referral pathways for diabetes.



Diabetes resources for patients

Resources for patients include:

- Diabetes Australia resources
- Diabetes Victoria patient resources and information about peer support groups
- Type 2 diabetes risk calculator
- Diabetes Cycle of Care webpage
- DESMOND program (Diabetes Education and Self-Management for Ongoing and Newly Diagnosed) – a free, one-day (six-hour) self-management program helping diabetic people better understand their condition, and supporting them to improve their overall health.
- DAFNE program (Dose Adjustment for Normal Eating) – a self-management course for people with type 1 diabetes.
- National Diabetes Services Scheme resources, information, support services and subsidised products to all eligible people with diabetes (such as blood and urine-testing strips, syringes and pen needles)
- Healthtranslations resources about diabetes for patients who speak languages other than English.

General

Videos on the Model for Improvement

Short videos are available at IHI website. In particular, see:

- Model For Improvement Part 1 (2 min. 54 sec.) – IHI – MFI – Part 1
- Model For Improvement Part 2 (3 min.) – IHI – MFI – Part 2
- Plan Do Study Act Part 1 (4 min. 45 sec.) – IHI – PDSA – Part 1
- Plan Do Study Act Part 2 (3 min. 48 sec.) – IHI – PDSA – Part 2.

Australian Bureau of Statistics

Access this page for questionnaire design advice.

Case studies

Local examples of quality improvement success, including example PDSA cycles, can be found on the NWMPHN primary care pages.

Appendices

Appendix 1: Quality Improvement and RACGP accreditation

RACGP's Standards for general practices (5th edition) now includes several QI requirements. Undertaking a QI activity helps demonstrate that a practice can meet or exceed the following:

*Indicator (> Denotes indicator is mandatory)

Criterion QI1.1: Quality improvement activities

Indicators

QI1.1>A Our practice has at least one team member who has the primary responsibility for leading our quality improvement systems and processes.

Claiming RACGP Continuing Professional Development Points

GPs who complete activities in this workbook may be eligible to accumulate 40 RACGP CPD Accredited Activity points as a Practice Audit. Speak to one of our Workforce Development Team members about requirements before starting your activities. For more information email education@nwmphn.org.au or call (03) 9347 1188.

QI1.1>B Our practice team internally shares information about quality improvement and patient safety.

QI1.1>C Our practice seeks feedback from the team about our quality improvement systems and the performance of these systems.

QI1.1>D Our practice team can describe areas of our practice that we have improved in the past three years.

The standards also include a range of requirements relating to diabetes. Undertaking diabetes QI activities will help demonstrate that a practice can meet or exceed the following indicators:

Criterion C1.3: Informed patient decisions

Indicators

C1.3>A Our patients receive information about proposed investigations, referrals and treatments, including their purpose, importance, benefits, and risks.

C1.3>B Our patients receive information to support the diagnosis, treatment, and management of their conditions.

Criterion C1.4: Interpreter and other communication services

Indicators

C1.4>A Our practice endeavours to use an interpreter with patients who do not speak the primary language of our practice team.

C1.4>B Our practice endeavours to use appropriate communication services to communicate with patients who have a communication impairment.

C1.4>C Our patients can access resources that are culturally appropriate, translated, and/or in plain English.

Criterion C3.4: Practice communication and teamwork

Indicators

C3.4>A Our practice team has the opportunity to discuss administrative matters with the principal practitioners, practice directors, practice management, or owners when necessary.

C3.4>B Our practice encourages involvement and input from all members of the practice team.

C3.4>C Our clinical team discusses the practice's clinical issues and support systems.

Criterion C4.1: Health promotion and preventive care

Indicators

C4.1>A Our patients receive appropriately tailored information about health promotion, illness prevention, and preventive care.

Criterion C5.1: Diagnosis and management of health issues

Indicators

C5.1>A Our clinical team is able to access relevant current clinical and other guidelines that help diagnose and manage our patients.

C5.1>B Our clinical team supports consistent diagnosis and management of our patients.

Criterion C7.1: Content of patient health records

Indicators

C7.1>G Our patient health records contain, for each active patient, lifestyle risk factors.

Criterion C8.1: Education and training of non-clinical staff

Indicators

C8.1>A Our non-clinical staff complete training appropriate to their role and our patient population.

Criterion QI1.2: Patient feedback

Indicators

QI1.2>A Our practice collects feedback from patients, carers and other relevant parties in accordance with the RACGP's Patient feedback guide.

QI1.2>B Our practice analyses, considers and responds to feedback.

QI1.2>C Our practice informs patients, carers and other relevant parties about how we have responded to feedback and used feedback to improve quality.

Criterion QI1.3: Improving clinical care

Indicators

QI1.3>A Our practice team uses a nationally recognised medical vocabulary for coding.

QI1.3>B Our practice uses relevant patient and practice data to improve clinical practice (e.g. chronic disease management, preventive health).

Criterion GP2.2: Follow-up systems

Indicators

GP2.2>D Our practice initiates and manages patient reminders.

Criterion GP2.3: Engaging with other services

Indicators

GP2.3>A Our practice collaborates with other health services to deliver comprehensive care.

Criterion GP3.1: Qualifications, education and training of healthcare practitioners

Indicators

GP3.1>A Members of our clinical team actively participate in continuing professional development (CPD) relevant to their position and in accordance with their legal and professional organisation's requirements.

GP3.1>C Our clinical team is trained to use the practice's equipment that they need to properly perform their role.

Appendix 2: Billing for diabetes care

Billing

Billing items include:

- Chronic care items: GPMP/TCA items, if applicable
- Health check items, if applicable.
    - For example, 45 to 49-year-old health assessment [once] or 40 to 49-year-old 'at risk of diabetes' check [once every three years for a person without diabetes but with an Ausdrisk score of 12 or more].
    - For longer, more complex health assessments alternative item numbers 705 and 707 can be used, however these are not typically expected for the diabetes risk assessment (40–49) or 45–49 year old health assessment. If claiming a 705 or 707 item number, check the MBS descriptor to ensure the visit is compliant with the expected care at that level.
- Heart health assessment item, if applicable – Cardiovascular Disease (CVD) risk factor assessment (diabetes is a known risk factor for CVD).

Use normal consult items if none of the above apply.

Appendix 3: Finding diabetes measures in CAT4

CAT4 has many 'recipes' to help you find and correct clinical data in your system for a wide range of conditions. These recipes show you step-by-step what selections to make in the CAT4 software to find the information you need.
See the full range of available recipes.

This PEN recipe shows you how to find data in CAT4 for patients with diabetes who have not had a Hba1c measured in the past 12 months.

You can use this same recipe but substitute the HbA1c measure with another measure such as

- HbA1c
- ACR
- Total cholesterol
- HDL
- LDL
- Triglycerides

Appendix 4: CAT4 recipe – extracting GP management plans (GPMP)/Team Care Arrangement (TCA) information

This PEN recipe shows you how to find a list of active patients who are eligible for a GPMP or TCA.

Use the filters pane to select patients with Diabetes to find those patients with diabetes who are eligible for a GPMP/TCA.

Appendix 5: Sample SMART goals for diabetes

Sample goal #1: Improve data quality

Our goal is:

To improve our data quality about diabetes by reviewing and cleaning up our register. This means ensuring that:

- all people with diabetes are coded as either type 1 or type 2
- 50% of patients without coded diabetes diagnosis but who are on insulin and/or oral hypoglycaemic medications are reviewed and confirmed to have either type 1 diabetes, type 2 diabetes or GDM.
- 50% of patients without a coded diabetes diagnosis with an abnormal HbA1c or fasting blood glucose result are reviewed and confirmed to have either type 1 diabetes, type 2 diabetes, GDM or IGT/IFG.

We will do this by 30 June 2021.

Our target population is:

Our patients with diabetes, and any patients who have pathology or medication suggestive of diabetes.

Check that the goal is:

- ☑ Specific
- ☑ Measurable
- ☑ Achievable
- ☑ Relevant
- ☑ Time-based

We will use the following measures to know if we've been successful:

Measure A:	Source:
Number of active patients coded as having type 1 or type 2 diabetes. (Should increase)	CAT4 – use the 'General' filter to tick 'Active (3 x in 3 yrs)' then use the 'Conditions' filter to tick 'Type I' diabetes, then repeat the activity ticking 'Type II' diabetes
Measure B:	**Source:**
Number of active patients with an unspecified diabetes diagnosis (in CAT4, this is characterised by 'undefined diabetic' in the filter pane). (Should reduce to 0)	CAT4 (See Patients with incorrect Diabetes coding)
Measure C:	**Source:**
Number of patients without a diabetes diagnosis BUT who are on anti-diabetic medication OR have an abnormal HbA1c or fasting blood glucose result. (The number of patients measured at the start of the project should decrease by 50% by the end of the project.)	CAT4 (See Coding Diabetes)

We want to achieve our goal by:

30 June 2021

We will collect our measures every:

1st of the month

Sample goal #2: Improved diabetes care through GPMPs or TCAs

Our goal is:

To improve the care we give our diabetic patients by developing, or reviewing, a GPMP or TCA with at least 30% of our diabetic population by 31 December 2021. We will use the Diabetes Care Plan to make the plan patient-centred.

Our target population is:

Active patients with a diagnosis of diabetes.

Check that the goal is:

- ☑ Specific
- ☑ Measurable
- ☑ Achievable
- ☑ Relevant
- ☑ Time-based

We will use the following measures to know if we've been successful:

Measure A:	Source:
Number of active patients with a diagnosis of diabetes.	CAT4 – use the 'General' filter to tick 'Active (3 x in 3 yrs)' then use the 'Conditions' filter to tick diabetes 'Yes'
Measure B:	**Source:**
Number of active patients with diabetes who have never had a GPMP or TCA, or who have not had a GPMP or TCA in the last two years. (Expect this to decrease as GPMPs/ TCAs/reviews are carried out.)	CAT4 (See Appendix 4)
Measure C:	**Source:**
Number of active patients with diabetes who have received a GPMP/TCA in the last 2 years. (Expect this to increase as GPMPs/TCAs are carried out.)	(See Appendix 4, but note: instead of clicking **No** next to 721 and 723, click on **721** and **723**.)

We want to achieve our goal by:

31 December 2021

We will collect our measures every:

1st of the month

Sample goal #3: Improve patient knowledge and confidence in managing their diabetes

Our goal is:

To assess whether patients are improving in their knowledge and confidence to manage their diabetes.

To achieve this, we will implement the Problem Areas in Diabetes Scale twice with at least 30 patients with diabetes by 31 December 2021, and compare the scores.

The results will help us see whether we need to make **overall** changes in our care planning approach so that our population feels more able to self-manage. They will also help us see what each **individual** needs in terms of support and information.

Our target population is:

Active patients with a diagnosis of diabetes.

Check that the goal is:

- ☑ Specific
- ☑ Measurable
- ☑ Achievable
- ☑ Relevant
- ☑ Time-based

We will use the following measures to know if we've been successful:

Measure A: Number of active patients with a diagnosis of diabetes.	Source: CAT4 – use the 'General' filter to tick 'Active (3 x in 3 yrs)' then use the 'Conditions' filter to tick diabetes 'Yes'
Measure B: Number of active patients with diabetes who have completed the Problem Areas in Diabetes Scale (PAIDS) once or more. (Expect this to increase as the project is carried out.)	Source: Keep a manual list of patients with their total score each time they complete the scale.
Measure C: Percentage of people who completed the scale twice whose knowledge and confidence to manage their diabetes **improved** (i.e. they had a higher score the second time).	Source: Use the manual list you created.
Measure D: Percentage of people who completed the scale twice whose knowledge and confidence to manage their diabetes **stayed the same** (i.e. first and second scores were the same).	Source: Use the manual list you created.

Sample goal #3: Improve patient knowledge and confidence in managing their diabetes (continued)

Measure E:	Source:
Percentage of people who have completed the scale twice whose knowledge and confidence to manage their diabetes **worsened** (i.e. had a lower score the second time).	Use the manual list you created.
We want to achieve our goal by:	**We will collect our measures every:**
31 December 2021	1st of the month

Note that these three goals are examples only: practices should amend details, including dates, percentage targets and other variables, so that goals are achievable (but still challenging) in relation to current performance.

Remember to start small, and pick one area that will benefit your patients and practice.

Appendix 6: PDSA worksheet samples

You will have noted your ideas for testing when you worked through earlier activities. Here are two samples of how to complete the PDSA template (provided in Appendix 7) to test each new idea.

PDSA worksheet sample 1

Priority area number	**Activity number**
1	3
Goal	
To improve the care we give our patients with diabetes by developing, or reviewing, a GPMP or TCA with at least 30% of our population with diabetes by 31 December 2021. We will use the Diabetes Care Plan to make the plan patient-centred.	
Staff member responsible	
Date started	**Date completed**

PDSA worksheet sample 1 (continued)

Part 2: The doing part – Plan, Do, Study, Act

Plan	Describe the brainstorm idea you are planning to work on. (Idea)
Plan the test, including a plan for collecting data	What exactly will you do? Include what, who, when, where, predictions and data to be collected.

Idea

Improve our staff knowledge of diabetes.

What (step-by-step)

1. Find out which staff members are interested in diabetes education and help them register.
2. Develop short 'pre' and 'post' staff surveys to see if knowledge and skills improve as result of education/training. (Dr X to check questions)
3. Staff to complete survey prior to training
4. Staff to complete training
5. Staff to complete follow-up survey
6. Assess change in scores.

Who:

Project manager (Sam)

When:

Begin 1 June, allow three months (30 Aug)

Where:

N/A

Prediction:

Improved knowledge and confidence in diabetes.

Data to be collected:

- Number of staff who have completed education, and pre- and post-surveys measuring knowledge and confidence.

Baseline:

One GP and one nurse have previously completed training. Two GPs and two nurses have not. Baseline knowledge and confidence will be measured once surveys have been developed.

PDSA worksheet sample 1 (continued)

Part 2: The doing part – Plan, Do, Study, Act (continued)

Do	Who is going to do what? (Action)
Run the test on a small scale	Was the plan executed successfully? Did you encounter any problems or difficulties?

- One GP and one nurse already completed training previously; they did not need to complete more.
- One GP and two nurses chose to complete education.
- GP completed X, nurses completed Y.
- One person completed training by 30 August. Realised we need to allocate protected time to complete training. Extended timelines and everyone completed by 30 September.

Study	Does the data show a change? (Reflection)
Analyse the results and compare them to your predictions	What does the data say? Did you meet your predictions? If you fell short, suggest why.

At the end of October, a total of 87 active patients (36%) with type 2 diabetes have had a GPMP recorded this year. We fell short of our aim of 40%.

Despite falling short, it is encouraging that we were able to improve by 6% in one month.

- We may not have allowed ourselves enough time to achieve our goal.
- We did have one main GP on sick leave this month, which may have reduced our ability to reach our goal.
- We also may have GPs who are not completing GPMPs appropriately, or not claiming them properly through MBS items.

One GP and two nurses completed education, which brings the total up to two GPs and three nurses who have completed diabetes further education in our practice.

All three said they found their education useful.

According to the survey (x1 GP and x2 nurses):

- 1/1 GPs and 2/2 nurses said that their basic knowledge of diabetes improved
- 1/1 GPs said their confidence in creating a Diabetes Care Plan had increased
- 2/2 nurses said that they were more confident to talk about lifestyle factors which increase the risk of future diabetes.

We therefore think that the training has been highly successful in giving our staff more skills and confidence around diabetes care.

PDSA worksheet sample 1 (continued)

Part 2: The doing part – Plan, Do, Study, Act (continued)

Act	Do you need to make changes to your original plan? (What next) OR Did everything go well?
Based on what you learned from the test, plan for your next step	If this idea was successful, you may like to implement this change on a larger scale or try something new. If the idea did not meet its overall goal, consider why not and identify what can be done to improve performance.

For now, this is the end of our cycle of training. We will ensure everyone knows that we will support other clinicians to undertake training in the future if they are interested.

Repeat Step 2 for other ideas. What idea will you test next?

PDSA worksheet sample 2

Priority area number	Activity number
1	5

Goal

To improve the care we give our patients with diabetes by developing, or reviewing, a GPMP or TCA with at least 30% of our population with diabetes by 31 December 2021. We will use the Diabetes Care Plan to make the plan patient-centred.

Staff member responsible

Date started	Date completed

Part 2: The doing part – Plan, Do, Study, Act

Plan	Describe the brainstorm idea you are planning to work on. (Idea)
Plan the test, including a plan for collecting data	What exactly will you do? Include what, who, when, where, predictions and data to be collected.

Idea

Recall patients with diabetes without GPMPs or TCAs

PDSA worksheet sample 2 (continued)

Part 2: The doing part – Plan, Do, Study, Act (continued)

What (step-by-step)

1. Extract a list of patients with diabetes diagnosis who have never had a GPMP or TCA
2. Get clinician to review and see which patients would benefit from a GPMP or TCA.
3. Send those patients a recall letter via mail merge.
4. Recall patients again if necessary (31 Jul, 30 Oct) – consider if need new recall approach.

Who:

Project manager (Sam)

When:

Begin 1 Apr, continue until 31 December

Where:

N/A

Prediction:

Improvement of GPMPs or TCAs to 30% of our population with diabetes. Currently only 18% have a GPMP or TCA (measured via baseline data).

Data to be collected:

- Feedback from clinicians at meetings (minuted) to assess their experience of doing GPMPs/TCAs
- Number of patients with diabetes in total (monthly)
- Number of patients with diabetes who have a GPMP or TCA (monthly)

Baseline:

We start with 302 patients with diabetes. 110 patients have had a GPMP/TCA.

Do

Run the test on a small scale

Who is going to do what? (Action)

Was the plan executed successfully?
Did you encounter any problems or difficulties?

As of 31 May: Initial patient lists were easily created. GP X believed everyone would benefit from a GPMP or TCA, so we sent a recall letter to all patients. Recall letters were sent early – 18 Apr – to 192 patients.

31 July: Only 20 GPMPs/TCAs were developed. We recalled the rest again via another letter.

30 Oct: 43 more GPMPs/TCAs completed in previous period. Admin called the rest to try to organise appointments.

31 Dec: 25 more GPMPs/TCAs completed.

PDSA worksheet sample 2 (continued)

Part 2: The doing part – Plan, Do, Study, Act (continued)

Study

Analyse the results and compare them to your predictions

Does the data show a change? (Reflection)

What does the data say? Did you meet your predictions? If you fell short, suggest why.

We have 234 patients with diabetes.

At the start of the project we had 42 with a GPMP or TCA (18%).

At the end of December, we had 130 patients with a GPMP or TCA. This means we recorded 88 during this project.

This means we have achieved 55% – we have nearly doubled our target of 30%.

Act

Based on what you learned from the test, plan for your next step

Do you need to make changes to your original plan? (What next) OR Did everything go well?

If this idea was successful, you may like to implement this change on a larger scale or try something new.

If the idea did not meet its overall goal, consider why not and identify what can be done to improve performance.

We are proud of our achievement and have shared it with the entire team.

As we made a follow-up appointment with each patient at their GPMP visit, we can keep on top of our GPMP/TCA reviews.

Now that clinicians are very used to doing diabetes GPMPs/TCAs, we can make this part of normal process – we have 'calendared' a reminder to send out a recall every year so that we can deliver as many new plans as possible.

November is Diabetes Awareness Month, so next year we will have a whole-of-clinic drive to complete GPMP/TCA reviews in November, with posters around the practice and an educational event for patients and staff on 14 November (World Diabetes Day).

We will also put a Topbar reminder in so that clinicians can discuss with patients when opportunities arise.

Repeat Step 2 for other ideas. What idea will you test next?

Appendix 7: PDSA worksheet template

Priority area number	Activity number

Goal

Staff member responsible

Date started	Date completed

Part 2: The doing part – Plan, Do, Study, Act

Plan

Plan the test, including a plan for collecting data	Describe the brainstorm idea you are planning to work on. (Idea)
	What exactly will you do? Include what, who, when, where, predictions and data to be collected.

Idea

What (step-by-step)

Who:	When:

Where:	Prediction:

Data to be collected:

Baseline:

Part 2: The doing part – Plan, Do, Study, Act (continued)

Do

Run the test on a small scale

Who is going to do what? (Action)

Was the plan executed successfully?
Did you encounter any problems or difficulties?

Study

Analyse the results and compare them to your predictions

Does the data show a change? (Reflection)

What does the data say? Did you meet your predictions?
If you fell short, suggest why.

Act

Based on what you learned from the test, plan for your next step

Do you need to make changes to your original plan? (What next) OR Did everything go well?

If this idea was successful, you may like to implement this change on a larger scale or try something new.

If the idea did not meet its overall goal, consider why not and identify what can be done to improve performance.

Repeat Step 2 for other ideas. What idea will you test next?

Appendix 8: Patient feedback on Diabetes Health Care Plan

RACGP General Practice Standards (5th edition) includes a Patient feedback guide, explaining how and why to seek patient feedback. Below is an example of a patient feedback form that aims to obtain feedback after a Diabetes Care Planning session (as part of a GPMP or TCA). Your practice's feedback form might concentrate on other specific parts of care you are providing.

As you develop each question, ask:

- Why do I want this information – how will I use the answers to change/improve my practice?
- How will I analyse the data that comes back? Do I want a free-text answer, or do I want to give specific answer options?
- Are my questions clear and in simple language?
- How will I reach people who do not speak English, or with limited English?

Consider developing translated versions if you have a large population of patients with limited English. You could also consider other ways of asking questions and getting feedback. After each care plan visit, give your patient this feedback form. Ask them to put the completed form in a box at front desk (or somewhere else prominent), so their response can remain anonymous.

Review the answers, consider where your practice could make improvements, then use what you've learned when you develop your next PDSA.

Patient feedback form

About you:

Age	**Gender** ○ Male ○ Female ○ Non-binary
Ethnicity	
Country of birth	**Are you:** ○ Aboriginal ○ Torres Strait Islander ○ Both Aboriginal and Torres Strait Islander ○ Neither
Language spoken at home	

About your visit today:

Is this the first time you've had a Diabetes Care Plan? ○ Yes ○ No	**Who did you make your Diabetes Care Plan with today? Nurse and/or Doctor:**

Tell us what you think about these statements:

	Totally disagree	Disagree	Neutral	Agree	Totally agree
I felt listened to.	○	○	○	○	○
I had the opportunity to ask questions.	○	○	○	○	○
I think I understand diabetes well.	○	○	○	○	○
I understand where I am managing my condition well and where I can improve.	○	○	○	○	○
I was able to make my own goals for managing my diabetes.	○	○	○	○	○
I felt supported.	○	○	○	○	○
I feel like I have a clear plan for my future health.	○	○	○	○	○

Patient feedback form (continued)

Please tell us in your own words:

What did you like about making your Diabetes Care Plan today?

What didn't you like about it?

What would make your experience better?

Do you need any information or support?

Thank you for your feedback. It is really important to us! The information will help us improve our diabetes care.

Appendix 9: Template for assessing staff knowledge and confidence before and after education/training

This is a template, so adapt the questions depending on what the training entails and the areas where you expect to see improved knowledge and confidence.

Ask staff to complete this survey before and after completing training so that you can compare the difference that training has made.

Template for assessing staff knowledge and confidence before and after education/training

About you:

Your name:

When did you complete this survey?

- ○ Pre-education
- ○ Post-education

Date:

Your role:

- ○ GP
- ○ Practice nurse
- ○ Administrator
- ○ Dietician
- ○ Educator
- ○ Nurse immuniser
- ○ Practice manager
- ○ Receptionist
- ○ Diabetes nurse

Name of training / course / modules you are completing / you have completed:

Template for assessing staff knowledge and confidence before and after education/training (continued)

How would you rate...	Not knowledgeable 0	1	2	3	4	Very knowledgeable 5	N/A It's not part of my role
your *knowledge* about the **risk factors for developing diabetes**?	○	○	○	○	○	○	○
your *confidence* in **discussing risk factors for diabetes** with parents/carers/patients?	○	○	○	○	○	○	○
your *knowledge* about **reducing the risk of diabetes**?	○	○	○	○	○	○	○
your *confidence* to **explain risk reduction strategies** to a patient?	○	○	○	○	○	○	○
your *knowledge* about **potential diabetes complications and how to avoid/manage them**?	○	○	○	○	○	○	○
your *confidence* to discuss **potential diabetes complications and avoidance/ management strategies**?	○	○	○	○	○	○	○
your *knowledge* about the value of a **personalised Diabetes Care Plan** for your patient?	○	○	○	○	○	○	○
your *confidence* to **develop a Diabetes Care Plan** with your patient?	○	○	○	○	○	○	○
your *knowledge* **of medical treatment options** for diabetes?	○	○	○	○	○	○	○
your *confidence* in **discussing diabetes medical treatment options** with a patient?	○	○	○	○	○	○	○
your *knowledge* of **supportive self-management programs** for patients?	○	○	○	○	○	○	○
your *confidence* to **discuss self-management programs** with a patient?	○	○	○	○	○	○	○

phn
NORTH WESTERN
MELBOURNE

An Australian Government Initiative

North Western Melbourne Primary Health Network
(03) 9347 1188

nwmphn.org.au