



# Quality Improvement Guide & Tools

For General Practice

EDITION 2



**phn**  
NORTH WESTERN  
MELBOURNE

An Australian Government Initiative

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### **Acknowledgements**

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

### **Disclaimer**

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# Glossary

<b>AAPM</b>	Australian Association of Practice Managers
<b>ACRRM</b>	Australian College of Rural and Remote Medicine
<b>AHPRA</b>	Australian Health Practitioner Regulation Agency
<b>APCC</b>	Australian Primary Care Collaborative
<b>CAT4</b>	Clinical Audit Tool Version 4
<b>CPD</b>	Continuing Professional Development
<b>CPR</b>	Cardiopulmonary Resuscitation
<b>ED</b>	Emergency Department
<b>EOI</b>	Expression of Interest
<b>GP</b>	General Practitioner
<b>IF</b>	Improvement Foundation
<b>IHI</b>	Institute for Healthcare Improvement
<b>IT</b>	Information Technology
<b>MBS</b>	Medicare Benefits Schedule
<b>MFI</b>	Model for Improvement
<b>NP</b>	Nurse Practitioner
<b>NWMPHN</b>	North Western Melbourne Primary Health Network
<b>PATCAT</b>	Practice Aggregation Tool for the Clinical Audit Tool
<b>PENCAT</b>	PEN CS Clinical Audit Tool
<b>PDSA</b>	Plan Do Study Act
<b>PIP</b>	Practice Incentive Program
<b>PLAN</b>	Plan Learning and Need activity
<b>QI</b>	Quality Improvement
<b>QPA</b>	Quality Practice Accreditation
<b>Qualitative</b>	Measures that are descriptive or subjective (e.g. patient feedback)
<b>Quantitative</b>	Measures expressed in a numerical format (e.g. weight, height)
<b>RACGP</b>	Royal Australian College of General Practitioners
<b>SIP</b>	Service Incentive Program
<b>SMART goal</b>	A goal that is specific, measurable, achievable, relevant and time-based

# 1

## Introduction

### Purpose

This Guide is designed to help your practice complete Quality Improvement (QI) activities.

While it primarily focuses on QI activities that are for your practice, [Appendix 1: Professional development and QI Activities](#) (page 20) contains information about how QI can also benefit different members of your practice.

*This QI Guide shows how to successfully implement Quality Improvement at your general practice.*

### Our commitment to Quality Improvement

North Western Melbourne Primary Health Network (NWMPHN) can provide you with practical advice and resources that will help you plan, implement and review QI activities in all areas of your practice (see [The Quadruple Aim](#)). Contact us to find out how we can help you.

One of the best-known QI programs in the primary health care is the [Australian Primary Care Collaborative](#) (APCC), established in 2005. Prior to establishing NWMPHN, Melbourne Primary Care Network was involved in 17 waves of activity with the APCC, and this experience continues to inform our work in QI.

The APCC was delivered by the Improvement Foundation (IF), with funding from the Commonwealth Department of Health, and we used many of their ideas to develop this Guide.

### Methodologies and approaches in this Guide and Tools

The methodologies and approaches in this Guide have been developed by:

- [The Improvement Foundation](#) (IF)
- [The Institute of Healthcare Improvement](#) (IHI)
- [The Royal Australian College of General Practitioners](#) (RACGP)

NWMPHN recognises these organisations as leaders in QI, and we recommend that you contact them for any additional information you need about these methodologies and approaches.

# 2

## Quality Improvement

### What is Quality Improvement?

Quality Improvement is a system of regularly reviewing and refining processes in order to improve them, and therefore improve the quality of care your patients receive and their health outcomes. A growing body of evidence demonstrates that QI activities lead to positive change in practices, particularly when implemented using a whole-of-team approach.

Quality Improvement in your general practice can address one or more of the following six domains:

- **Safety:** avoiding harm to patients.
- **Effectiveness:** providing evidence-based care and only providing services that are likely to be of benefit.
- **Patient-centricity:** providing care that is responsive to each individual patient's 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.

### Why undertake Quality Improvement?

Improving all aspects of your primary care practice helps you deliver better care and health outcomes to your patients. Continuous quality improvement also makes the practice a better place to work and a stronger and more viable business.

Benefits and outcomes of QI are often categorised into the following four areas:

- **Patient Experience:** Improving patients' access to care; quality and safety; and outcomes.
- **Care Team Wellbeing:** Improving staff satisfaction, morale, team-work, and workforce sustainability.
- **Population Health:** Reducing the burden of disease and health inequalities across your region.
- **Reducing Costs:** Reducing unnecessary hospital admissions; improving the return on innovative investments; and managing the cost of providing care to the population.



**The QI PIP readiness tool → is a template that will help your team prepare for Quality Improvement, and includes the following:**

- Identifying your current QI challenges and past successes
- Using CAT4 to ensure data quality
- Identify patient populations and establish baseline data
- Assigning a QI project lead and team responsibilities
- Identifying the tools and resources you need

## The Quadruple Aim

When an improvement affects all of the four areas listed above, we say that it has achieved the 'quadruple aim'.

When developing ideas for QI in your practice, you should identify how each proposed improvement would affect each of the four areas below, and whether it would affect all four and therefore achieve the quadruple aim.



### 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



# 3

## Conducting a Quality Improvement Activity

A QI Activity is any activity your practice undertakes as part of your QI process.

### The Model for Improvement and Plan, Do, Study, Act

The Model for Improvement (MFI)<sup>1</sup> is a proven approach for developing, testing and implementing changes in general practice, and is the approach many peak health bodies prefer, including the RACGP and the Improvement Foundation (IF).

The MFI helps you to break down your change into manageable pieces, which are then tested to ensure that the change results in measurable improvements, and that minimal effort is wasted. Remember: although every improvement is a change, not every change is an improvement.

#### The benefits of using the Model For Improvement

- It is a method to plan, develop and implement change that anyone can apply.
- It reduces risk by testing small changes before wider implementation.
- By starting small, there is less resistance to change.
- You can achieve team unity on common goals.
- It encourages individual creativity and ideas from team members.

Implementations of MFI have shown that it will work best when you:

- Define the problem
- Think small and test
- Use a whole team approach
- Share success and lessons learnt

#### The Thinking Part and the Doing Part

The MFI is a two-step process comprised of the 'thinking' part; and the 'doing' part.

The 'thinking part' asks you to answer these questions:

- 1 The Goal: What are we trying to accomplish?
- 2 The Measure: How will we know that a change is an improvement?
- 3 The Idea: What changes can we make that will result in an improvement?

The aim of these questions is to help you develop a relevant goal, and the measures and ideas that will form the basis of your activity plan.

During the 'doing part', you work through PDSA cycles that will:

- Help you test the ideas
- Help you assess whether you are achieving your desired objectives
- Enable you to confirm which changes you want to adopt permanently



<sup>1</sup> Associates for Process Improvement, 1993

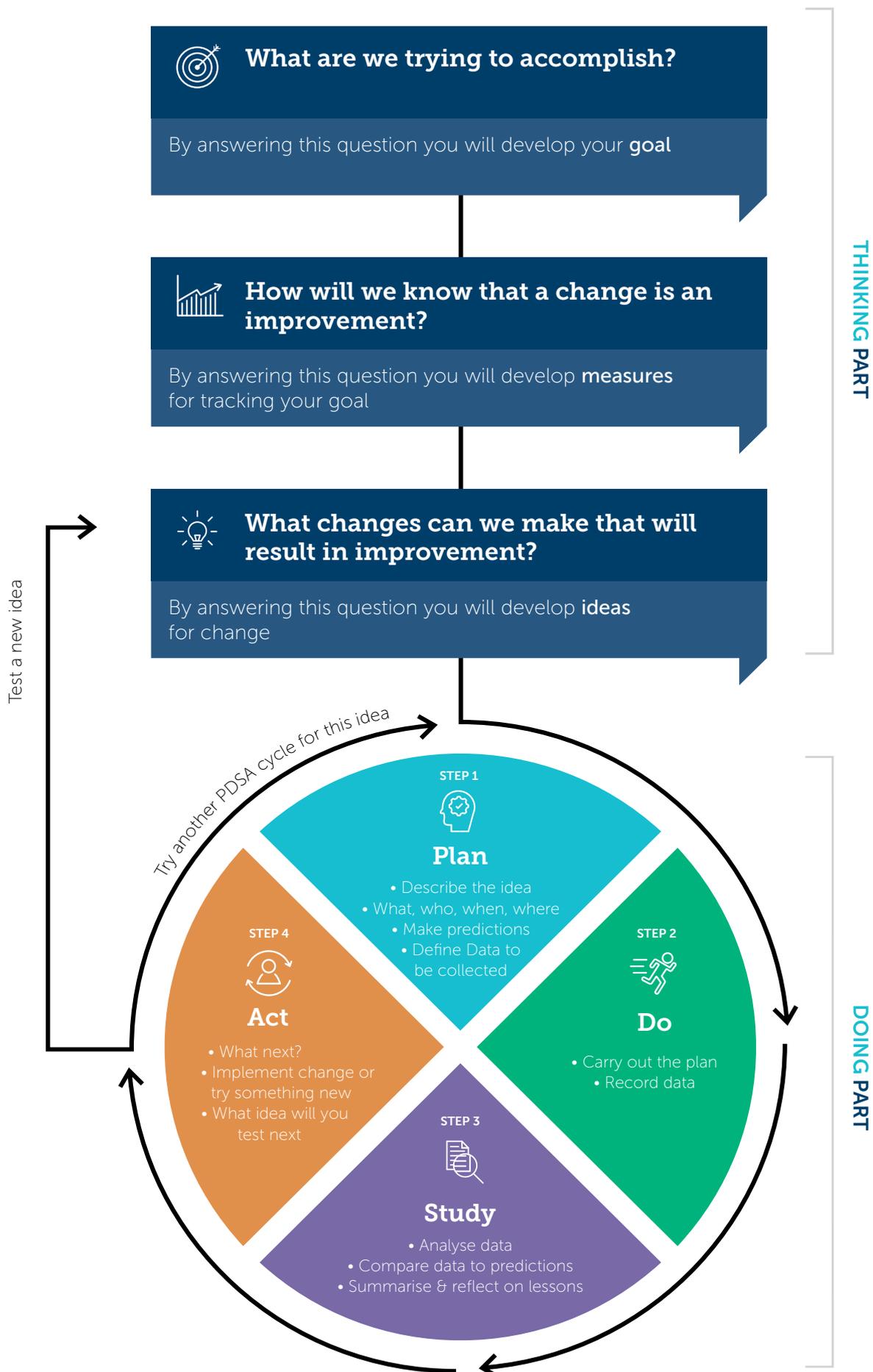


Figure 1: The Model for Improvement

## The PDSA Cycle of Quality Improvement

Implementing the PDSA cycle allows you to use simple measurements to monitor the effect of multiple changes over time. You begin with small changes, which, once proven, can quickly become larger or be implemented more widely. As you go through successive cycles of change (shown in *Figure 2: The PDSA Cycle*) you review the process and identify what you have learnt so far. And you can quickly and easily test a suggested improvement based on ideas, research, or changes that have worked elsewhere. The successive cycles of change are shown in *Figure 1: The Model for Improvement* and *Figure 3: Repeated Use of the PDSA Cycle*.

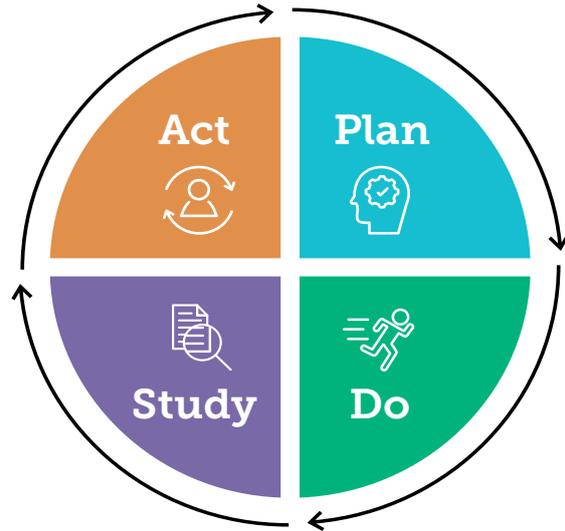


Figure 2: The PDSA Cycle: Plan, Do, Study, Act

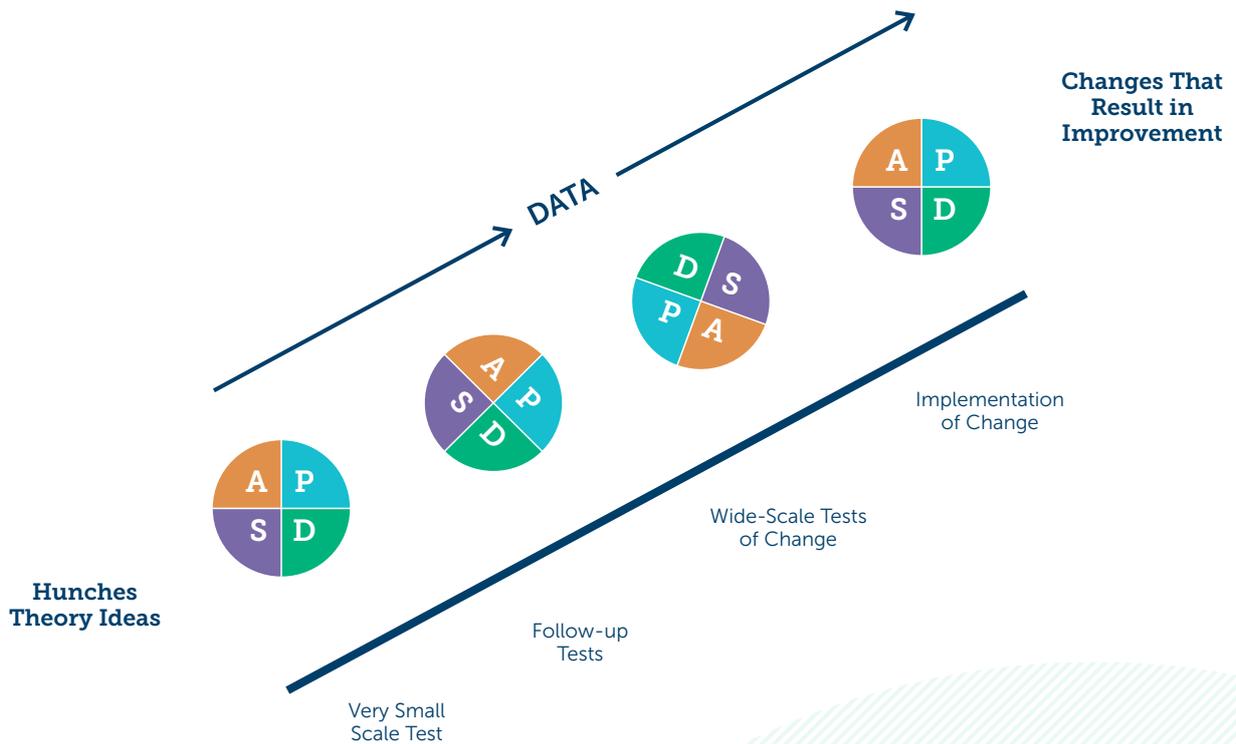


Figure 3: Repeated Use of the PDSA cycle

## An overview of the QI process

The following table lists the tasks you need to complete during a QI activity. An explanation of each task is included after the table. See [Appendix 3: Process for conducting a QI activity](#) (page 24).

The Thinking Part	The Doing Part – PDSA Cycle
 <p>Identify a change idea Develop a S.M.A.R.T. goal</p>	<p><b>PLAN</b></p>  <p>Establish the QI team Develop a QI project plan Collect baseline data</p>
 <p>Select measures</p>	<p><b>DO</b></p>  <p>Implement the planned activities Monitor progress via process measures Inform and engage with whole of practice team</p>
 <p>Brainstorm ideas for implementing change Develop objectives</p>	<p><b>STUDY</b></p>  <p>Compare new data to baseline data Share outcomes with team</p>
	<p><b>ACT</b></p>  <p>Collect evidence of outcomes Review and continue or review and start next cycle</p>

### Step 1: The Thinking Part

#### Identify a change idea

Use data and evidence to identify where you need to make an improvement, or where there is an opportunity for improvement. For example, you could examine:

- Practice feedback from patients, staff or accreditation
- Data (e.g. routine practice data, CAT4 reports, PHN provided data)
- Periodic reviews or audits of system information (e.g. review how thoroughly you identify Aboriginal and Torres Strait Islander status of patients, or the currency of your General Practice Management Plans)



When identifying a possible improvement, think about whether the improvement will:

- Address one or more of the [6 domains](#) (page 6) of Quality Improvement
- Affect patient experience, population health outcomes, care team wellbeing and cost effectiveness. In other words, will it achieve the quadruple aim?

#### Develop a SMART goal

After you have identified a need, identify the overall goal of your QI activity.

You might need to complete several [PDSA cycles](#) (page 10) to achieve this high-level goal. (See page 5 of the [Sample Project Plan](#))

Make your goal SMART<sup>2</sup>: specific, measurable, achievable, relevant and time-based.



<sup>2</sup> <https://www.healthdirect.gov.au/smart-goals>

## Example – Change ideas to consider

Area	SMART Goal
Aboriginal Health	Increase the number of health assessments completed and claimed for Aboriginal patients attending our practice by 15% by December 2019.
Accreditation	Become an accredited practice against the 5th edition standards by July 2020.
After Hours	By February 2019, explore at least five potential opportunities to improve access to care outside of normal business hours.
Aged Care	Work with the local residential aged care service to increase the number of patients with Advance Care Plans, so that at least 20% have them by the end of 2019.
Alcohol and other Drugs	By June 2019, upskill all practice staff in how to best support patients experiencing harm from alcohol and other drugs.
Cancer	By June 2019, increase cancer screening rates by 20%, by upskilling all practice staff in cancer prevention, screening referrals and pathways.
Chronic Disease	By March 2019, increase uptake of asthma cycle of care plans by 20%.
Chronic Disease	By March 2019, decrease waist circumference and/or Hb1Ac levels for our patients with, or at risk of, type 2 diabetes.
Children and Families	During 2018, promote child vaccination, in order to achieve immunisation rates of 90% for children attending our practice before end of 2019.
Digital Health	Increase the number of Shared Health Summaries uploaded to a patient's My Health Record by December 2018 to 50% of active patients.
Mental Health	Provide professional development to all staff by end of December 2018, so that they can effectively manage patients experiencing mental ill-health.
Workforce	Complete a team health check before December 2018 and identify opportunities for continuing professional development for each team member.

## Select measures



Select measures that you can use to evaluate your progress towards your goal. This means that you need to “measure” your current situation before you begin, and regularly “measure” the changed situation during the project.

Follow these guidelines so that you select measures that will provide you with meaningful information:

- Collect measurements at the beginning of the project (these are called baseline measurements) and then at regular intervals throughout the project. For example, identify how many health assessments you complete and claim for Aboriginal patients now, in six months' time, and in another six months' time.
- Use data that you can obtain easily. For example, data that you can easily extract from your clinical software or from other data extraction tools such as CAT4.
- Select a combination of process measures and outcome measures.

[Process measures](#) (page 18) provide information about what is happening (e.g. what/how much is being done/delivered) and should be taken throughout the project. See [Section 4](#) (page 17) for more information.

[Outcomes measures](#) (page 18) provide information about the results or performance of a process (e.g. beneficial changes) after the project.

- Collect a combination of qualitative data (e.g. comments and descriptions) and quantitative data (e.g. results of surveys and data collected from aggregation tools).
- Present data and findings visually (e.g. using graphs, tables and charts) so that your team can quickly and easily understand and use the information.

For more information on how to measure improvement, see [Section 4: Measuring Improvement](#) (page 17).

## Brainstorm ideas

Developing high-level ideas (sometimes called “change concepts”) can help you to generate specific ideas that lead to improvement.



The following table shows examples of change concepts.

Example of change concepts	
Change concept	Examples
Eliminate waste	Waste of stock, inefficient use of time, repetitive work
Improve work flow	Improved planning, re-ordering steps in a process, prioritising steps differently
Strengthen workforce	Professional development, updating roles and responsibilities
Improve work environment	Improving team culture, change management, staff morale
Improve GP/patient communication	Understanding the customer’s needs, understanding the practice’s expectations
Manage time	Reducing waiting times, protecting staff time so they can complete work
Improve processes	Using standard templates, using HealthPathways for all referrals
Reduce errors	Redesigning a process, implementing more efficient technology

You may also need to **clarify what is in scope and what is out of scope**. In other words, are there any parts of the issue or processes that the improvement team should not address? For example, if your aim is to improve influenza immunisation rates, you may want to focus on children aged 6 months to 5 years and exclude other age brackets until you have evidence that your change idea is effective.



### Brainstorming Tools

During the Thinking Part, you can use a variety of tools to identify areas of your practice that would be relatively easy to improve.

Having identified these areas, you can move into the Doing Part and conduct your first PDSA.

Some brainstorming tools commonly recommended by IHI include:

- [Affinity Tool](#)
- [Five Whys](#)
- [Driver Diagram](#)
- [Flow Chart](#)
- [Cause and Effect \(Fishbone\)](#)

## Develop Specific objectives



To develop specific objectives:

- Identify what you need to **do** to achieve that outcome
- Identify what needs to **change** to achieve that outcome

One way to do this is to brainstorm ways you could achieve the outcome. Each specific objective might become a PDSA cycle.

For each specific objective:

- Consider how your practice will implement it
- Identify (high-level) steps to achieve the objective
- Include these actions in the [Implementation Plan](#)
- Consider how to address concerns staff might have:
  - Consider possible apprehension or resistance in staff
  - Identify potential responses from each stakeholder group (e.g. non-clinical staff might feel that new technology will threaten their job security)
  - Identify actions you can take to reduce these concerns

### Developing a specific objective: scenario

*Evidence has shown that early intervention reduces the incidence, morbidity and management costs of chronic disease. You decide to check your CAT4 data and discover that only 2% of your active patients<sup>3</sup> aged 45-49 have attended for a health check in the past 12 months, even though there is a Medicare item number for the 45-49-year-old health check.*

*You decide that the specific objective you want to achieve is to get 50% of all active patients aged 45-49 to attend for a health check over the next 12 months. Achieving this objective will deliver health benefits to patients, and financial benefits to your practice.*



### KEY TIPS

- Use the quadruple aim to help inform your change ideas
- Create a goal is specific, measurable, achievable, relevant and time-based (S.M.A.R.T)
- Identify how you will measure change before, during and after the activity
- Use change concepts to help brainstorm ideas
- Use a tool such as NWMPHN's [QI Implementation Plan](#) to turn your ideas into a PDSA

<sup>3</sup> According to RACGP standards, active patients are patients who have visited the practice at least 3 times in the past 2 years.

## Step 2: The Doing Part (PDSA Cycles)

### PLAN –Involve your team, and develop a QI Project Plan



#### Prepare your team

Adopt a **whole-of-team approach** from the outset. Evidence has shown that improvement is most likely to occur when all staff support the change<sup>4</sup>.

Establish a QI Project Team

- 1 Establish a QI Project team that includes representatives of all stakeholders (e.g. the practice manager, reception and other administrative staff, nursing staff, GPs, allied health practitioners).
- 2 For each project, assign at least 2 project leads:
  - A lead GP to inform any clinical content.
  - Another person in your team capable of managing the project, to whom you give protected time so that they can complete the work required.
- 3 Use 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. This will help you to identify:
  - Team members who might resist or influence change
  - Issues that could arise during the project
  - Concerns that need to be addressed before you begin an activity.

#### Consider including a patient in your QI project team



Including a patient's perspective in the planning, implementation and evaluation of a Quality Improvement project will help you achieve meaningful change and empower your patients to become decision-makers of their own health.

#### Consider using other patients in QI activities



Although involving patients can be challenging, it can lead to greater behavioural change and the uptake of new processes. To include patients in your QI activities, you could:

- Invite them to participate in workshops as patient advisors
- Consult with them about specific issues they have knowledge or expertise in
- Ask them to help you develop resources
- Invite them to complete a survey or provide feedback
- Use previous patient experiences to identify changes you could make
- More information on patient feedback is available on the [RACGP website](#).

#### Develop a QI Project Plan

Develop a plan that includes the what, who, when, where, possible outcomes, and the data to be collected during this QI project. The [project plan](#) should be an extension of the implementation plan that you developed in [Develop specific objectives](#) (page 14).

- For each PDSA cycle, identify:
  - The steps
  - Who will be involved
  - What procedures need to be developed or updated
  - IT system implications
  - How much time will be required
  - Costs
  - Any other ramifications

Develop a detailed timeframe of the whole project so you can clearly see how and when to assign resources to the project and what might affect its implementation (e.g. public holidays, scheduled leave, concurrent projects or activities). Remember that the 'T' in SMART goals refers to Time-based, so for each step, you need to identify the proposed start and end dates.

- Document how you will monitor the project, by including:
  - Performance indicators you will use to monitor the effectiveness of your activity
  - How the data will be collected, by whom, and how often

<sup>4</sup> Improvement Foundation, 2009

- Who the results will be reported to
- How long you will implement this project before you review its performance
- Who will be involved in the review

When you have completed the activity plan:

- The practice leaders should endorse the plan and give authority to proceed
- Document that the plan has been endorsed



Another useful tool is an **Activity Plan** → which help to set and monitor specific timeframes as your progress through the project.

## DO – Taking action

Taking action may involve:

- Training
- Writing and updating procedures
- Making changes to systems
- Providing information about the change to patients and others affected by the change



Implement the changes through a series of steps taken over time.

- Regularly review your progress towards the goal. Many teams set regular meetings to do this.
- Communicate with other practice members. Your project team needs to agree on the use of different communication channels and all staff must know of, and have access to, these channels. For example, you could give regular updates at staff meetings and display graphs showing improvements on the team notice board.
- Keep your project team informed and involved, recognise their efforts (big and small), and provide them with feedback. As well as keeping everyone on track, this will help them stay enthusiastic about the change and their work.
- Reflect on and review what you are doing as you go, and monitor your progress towards achieving your goal.
- Document, publicise and demonstrate the support given by the practice leaders.

## STUDY – Review and communicate your performance



When you have fully implemented the implementation plan, collect relevant data to determine the results of the changes, and measure them against the goals you have set.

To study the change, you should:

- Collect appropriate performance data
- Review and compare the new performance data to the baseline data
- Summarise the lessons learnt – did the change result in an improved performance? Was the improvement as large as expected?

Inform the rest of your practice team of the outcomes, and your patients if it is appropriate.

## ACT – Review and improve



Determine what to do next based on how successful the implementation was:

- If the project met or exceeded its overall goal, lock in the change and/or scale up the change.
- If the project did not meet its overall goal, consider why not and identify what can be done to improve performance. You need to clearly document the lessons learnt so you can determine how to implement the next PDSA cycle.

Start planning the next cycle sooner rather than later, so that you maintain your improvement momentum. In particular, consider what you will do differently to achieve a better outcome.

Even if the change met or exceeded its overall goal, you should look for ways to improve the approach or how the project was implemented or monitored.

If you are going to implement a change more broadly, consider how to make the change sustainable, and how and when you will monitor its success in the future.

IHI's [Seven Spreadly Sins](#) (page 29) has great tips for successfully sharing and embedding change.



### KEY TIPS

- Plan your PDSA cycles and document using a project plan.
- Remember to engage, communicate, reflect with your team.
- Compare new data to baseline data.
- Share outcomes and celebrate wins!
- Ensure your change is sustainable

# 4

## Measuring Improvement

Throughout the QI project, you need to monitor and evaluate your progress towards the overall goal, using the measures you decided on during the planning stage. You also need to assess processes and evaluate the outcomes and impacts of change activities you undertake.



You can collect a variety of data in a variety of different ways and from a variety of sources, including:

- CAT4
- Manual measure worksheets
- Clinical audit worksheets
- Patient feedback
- Staff surveys



**Your staff might need basic training on how to best use CAT4, especially if they have not used earlier versions. [PEN Computer Systems](#) → have several resources on their website that may be helpful, including videos, training manuals and webinars.**

### Types of data and measures

#### CAT4 data

CAT4 is the current version of the PEN Clinical Audit Tool (commonly referred to as PENCAT). This is a clinical audit tool that allows you to:

- Analyse data
- Devise the necessary strategies to improve patient care
- Report on QI activities undertaken in your practice

Compatible with most major clinical software platforms, CAT4 aims to give you the information you need to improve health outcomes for patients and business outcomes for your practice.

You can use CAT4 data to:

- Build registers of patients, set up and implement practice recall and reminder registers
- Investigate and identify population health issues that are specific to your practice
- Identify patients who are not meeting clinical targets
- Identify key health outcome measures for an individual patient
- Identify potential sources of income via MBS item numbers
- Provide evidence to support QI initiatives as part of practice accreditation

#### Baseline and progressive data

Begin collecting data while you are developing insight and ideas (as outlined in [The Thinking Part and the Doing Part](#) (Section 3, page 11) so that you can set a realistic and relevant goal. For example, if you are aiming to increase the number of health assessments completed, you should know how many assessments have been completed before the beginning of the project. You can then compare this baseline data with results during and after the project.

Identifying the long-term goal will help you determine what baseline data you might need to collect. The following table shows:

- Some of the best practice measures your practice should be aiming to achieve
- The baseline data that you need to collect so that you can measure your progress

## Example

Best practice measure	Baseline data to collect
90% of active patients have allergies recorded in the system	The current number of active patients with allergies recorded
75% of active patients' records contain an accurate health summary (smoking status, immunisations, medicines list)	The current number of active patients with a completed health summary
90% of active patients should have waist circumference recorded	The current number of active patients with waist circumference recorded
All patients with cardiovascular disease should have blood pressure recorded every 6 months	The current number of cardiovascular disease patients with blood pressure recorded, and the date of each patient's most recent record
All patients with diabetes should have Hb1Ac results recorded every 12 months	The current number of diabetic patients with Hb1Ac recorded

While you are implementing your QI project, your results should be progressively improving. Recording this progressively improving data is a process measure, as described below.

## Process measures

Process measures allow you to identify whether current activities are working towards achievement of intended outcomes and whether you need to change your plan. These measures should be taken at regular intervals during the project via PDSA cycles.

*Example: Measuring HbA1C levels in diabetic patients each quarter for 12-months to determine if a specific intervention is working. The 'process measure' might be the number of HbA1cs that are performed in a certain time period or per diabetic patient.*

## Outcome measures

Outcome measures identify if the project aims have been achieved. They will identify the project's actual effect on the change concept such as patient outcomes, business processes, practice revenue.

*Example: The average HbA1C measure for patients with diabetes after an intervention. Having set a goal to improve the average long-term blood sugar of diabetic patients in your practice, your 'outcome measure' might be a comparison of the average for the last 3 months and the average for the previous three months (your baseline data).*

## Qualitative and quantitative measures

You should collect both qualitative and quantitative data at regular intervals.

**Qualitative data** refers to descriptive information. For example, you could collect information from satisfaction scales, Likert scales, answers to questions on a survey form, 'self-reported wellness', minutes from meetings, willingness to maintain the 'change'. This type of data may help you to identify patterns and gauge patients' level of satisfaction with the care they have received.

*Example: Responses to the question, what are the challenges that you face as a nurse when measuring Hba1C levels in patients each quarter?*

**Quantitative data** refers to definitive information that is expressed in terms of quantity, amount or range, such as the number of diabetic patients with Hb1Ac recorded, the range of temperatures recorded on a thermometer in a refrigerator that stores vaccines.

CAT4 provides data to measure a change quantitatively (i.e. actual numerical changes in a data element such as blood sugar or blood pressure).

## Sampling measures

If a QI project targets a large population, using a small sample of that population is a simple and realistic way to measure its effectiveness.

*Example: Sampling just 10 patients over three months to measure the effectiveness of a new recall system for testing Hb1aC levels.*

## Presenting evidence of the improvement

Presenting evidence of an improvement is an effective way of:

- Informing your team about the project
- Demonstrating outcomes
- Providing relevant evidence if you are participating in a QI activity that is being facilitated by another organisation (see Appendix 2, page 23)

Use graphs and diagrams, including those easily accessed from CAT4, to display information visually, so that people can quickly and easily understand the data.

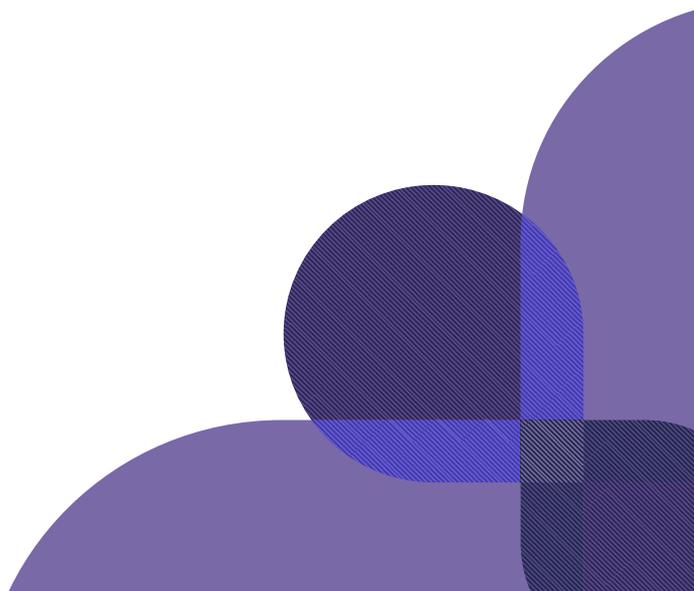
When deciding which information to present, consider the following questions:

- What does the data say?
- What story are you trying to tell?
- How should it be summarised?
- Can it be used to motivate or influence?



### KEY TIPS

- Use a clinical audit tool such as CAT4 to improve the quality of your data, identify your population, and measure your results.
- Maintain accurate data so that your baseline data is reliable.
- Decide early on what measures you will use to determine the success of your project.
- Collect data progressively, and display data visually (e.g. graphs) so that it is clear and easy to understand.



# 5

## Summary

For your Quality Improvement activities to be successful, you need to **plan, implement** and **review** thoroughly and systematically. Using the methodology and processes in this guide means you are more likely to achieve your goal and meet the quadruple aims.

### Set your practice up for success:

- Ask us about how we can help you
- Identify and consider several ideas for improvement
- Set SMART goals that are realistic
- Consider the effect of the change on patient experience, population health, care team wellbeing, costs (does the change achieve the quadruple aim?)
- Implement small changes first and work up to larger changes, using the PDSA cycle

### Collect useful, accurate and varied data:

- Collect feedback from your patients and team members
- Collect baseline data and progressive data
- Collect qualitative and quantitative data
- Keep stakeholders informed, involved and engaged:
- Involve your staff, keep them informed, and acknowledge their contributions and successes
- Involve some of your patients in QI activities
- Display information visually (e.g. graphs, charts, and tables)

### Review your outcomes and learn from them:

- Monitor and assess the outcomes honestly, so you can improve your processes and achieve real improvement
- Document your process and outcomes, including how the process could be improved, so you can learn from them

# 6

## Appendices

### Appendix 1: Professional development and QI activities

Professional associations and colleges offer a range of formal professional development opportunities. However, working on QI activities in your practice and in local or state health facilities can also be considered professional development. For example:

- Nurses and allied health staff can meet Continual Professional Development (CPD) requirements by completing practice-based QI activities and attending education sessions both within and outside the practice
- GPs can participate in a clinical audit of their practice.

The Royal Australian College of General Practitioners (RACGP) and the Australian Centre for Remote and Rural Medicine (ACRRM) have information and resources that can help you plan and conduct QI activities in your practice.

#### Professional development for GPs

The RACGP and ACRRM offer GPs a range of Continuous Professional Development (CPD) programs. Completing these programs is one way that GPs can satisfy fellowship and credentialing requirements of the colleges and relevant agencies, including AHPRA.

#### *RACGP's Quality Improvement and Continuing Professional Development (QI&CPD) Program*

The RACGP's QI&CPD Program is recognised by many regulatory bodies, including Australian Health Practitioner Regulation Agency (AHPRA) and Medicare Australia. After meeting AHPRA's formal requirements for medical registration, GPs can achieve professional credentials required in a range of situations and access preferential rates from Medicare.

The current 2017-19 Triennium requires that each GP participates in:

- At least two Category 1 activities, at least one of which needs to be a QI activity, which can include any of the following:
  - Clinical audit
  - PDSA cycles
  - Small group learning
  - Supervised clinical attachment
  - GP research
- The development of a Plan Learning and Need (PLAN) to identify their professional development needs, how they intend to achieve their goals and what evidence will prove that these needs are being met
- Cardiopulmonary resuscitation (CPR) training

The RACGP has several resources that can help you plan a QI activity. GPs may be able to apply for RACGP QI&CPD points if they participate in a QI activity that satisfies the requirements specified in the [RACGP's QICPD Handbook](#).

#### *Australian College of Rural and Remote Medicine PDP Program (Individual QI and CPD program)*

ACRRM has a Professional Development Program (PDP) for GPs, as well as resources that may help you to develop a QI activity.

More information can be found via the [PDP Handbook](#) or on the [ACRRM website](#).

## CPD Program for nurses and midwives

The Australian Nursing and Midwifery Board of Australia provides a range of resources and services that support the professional development needs of nurses and midwives working in primary health care. These include:

- **Registration standards: Continuing professional development.** These registration standards specify numerous measures and requirements of nursing competency. One of these is that all practicing nurses and midwives must complete at least 20 hours of CPD each year.
- **Guidelines: Continuing professional development.** These guidelines contain more information about the minimum annual CPD requirements and how nurses can meet these requirements.
- **Fact sheet: Continuing professional development.** This fact sheet addresses common queries about the Registration standard: Continuing professional development.

### *AAPM CPD program for practice managers*

The Australian Association of Practice Managers (AAPM) has a Professional Development Program that supports and promotes a manager's personal and professional growth. This program focuses on:

- Core Principles
- Qualifications
- Fellowship Program through certification

They also offer CPD, which allows managers to maintain their Certified Practice Manager and Fellow membership status.

Although membership is not mandatory, managers with certification or fellowship must be members to participate in the CPD.

More information can be found on the [AAPM website](#).



## Appendix 2: Preparing QI project documents

When conducting a QI activity, the QI team must document activities and write reports that demonstrate the outcomes of improvement or changes made.

In addition to plans, two key documents that you may need to produce are:

- responses to Expressions of Interest
- Project Reports.

### Responses to Expressions of Interest

If you are planning to participate in a QI activity that is facilitated by an external organisation such as NWMPHN, you may need to complete an application. An application is sometimes referred to as an Expression of Interest (EOI) or tender.

The NWMPHN website and newsletters contain opportunities for EOIs and tenders. Please [subscribe](#) or visit the [NWMPHN website](#) for current opportunities.

Before applying:

- Check that your practice is eligible and meets all mandatory criteria listed
- Note the duration and timing of the QI project and identify any other proposed activity that may affect your ability to complete every aspect of the project on time (for example, if your practice is undergoing accreditation during this period, this might affect your capacity to complete reporting)
- Calculate the amount of protected time staff will require in order to participate and commit to deadlines and/workshops

In your application:

- Discuss how your practice will benefit from the project
- Discuss how your patients will benefit from the project
- Keep your language simple, clear and to the point!

### Project Reports

To produce a useful Project Report, you need to document the QI process and provide evidence of the resulting change.

The Project Report will help you to:

- identify gaps in the project
- document the progress of the project
- demonstrate success

It will also allow others to use the change ideas you have trialled and tested.

Before compiling the report:

- Understand what others expect from the report
- Identify the key words in questions or criteria before writing your response

When compiling the report:

- Use the STAR method when providing examples and case studies:
  - Situation – What was the situation, problem, issue or challenge?
  - Task – What was required? What were the objective?
  - Action – What did you do? How did you respond?
  - Result – What was the outcome? What did you learn? Did you meet objectives?
- Write clear and concise responses to each question. Avoid using jargon, acronyms and complicated words.
- Keep your answers relevant by referring back to the action plan and goals.
- Provide evidence of the outcomes, achievements and results. For example:
  - PENCAT data, graphs and timelines
  - Resources (such as a position descriptions and fact sheets) that were developed and are being used
  - Demonstrated outcomes such as staff attendance at training
  - Minutes of staff meetings
  - Reports generated from medical software
  - Reports from stakeholders you have worked with (e.g. community health, allied health, pharmacy)
  - Feedback from patients
  - Details of patients' experiences

## Appendix 3: Process for conducting a QI Activity

The following [checklist](#) contains each task in the QI process outlined in Section 3: Conducting a Quality Improvement Activity.

Practice Name:		Targeted Completion Date	Actual Completion Date
Project Lead:			
Task			
<b>The Thinking Part</b>			
	Identify a change idea		
	Develop a S.M.A.R.T. goal		
	Select measures		
	Brainstorm ideas for implementing change		
	Develop objectives		
<b>The Doing Part – PDSA Cycle</b>			
	Establish the QI team		
	Collect baseline data		
	Implement the planned activities		
	Monitor progress via process measures		
	Inform and engage with whole of practice team		
	Compare new data to baseline data		
	Share outcomes with team		
	Collect evidence of outcomes		
	Review and continue or review and start next cycle		

## Appendix 4: Ideas for changes you could implement

As part of the QI Grant Program which ran from January 2016 until June 2017, general practices in the north western Melbourne region trialled the following changes. Each practice developed their own ideas and adopted the Model for Improvement (MFI).

For more information about these ideas, please email [quality@nwmpfn.org.au](mailto:quality@nwmpfn.org.au) or phone us on (03) 9347 1188.

Area	Change ideas
<b>Aboriginal Health</b>	<p>Improve access to health services for Aboriginal patients in the region.</p> <p>Improve cultural awareness of practice staff.</p>
<b>Advance Care Planning</b>	<p>Improve the knowledge and skills of practice staff so that the aged population can make informed choices about their end of life wishes.</p>
<b>Chronic Disease Management</b>	<p>Reduce the risk of cardiovascular disease (CVD) in patients.</p> <p>Improve the quality of statin prescribing.</p> <p>Improve the current process of asthma diagnosis.</p> <p>Review the smoking status of asthma patients.</p> <p>Increase uptake of asthma cycle of care plans.</p> <p>Establish a chronic kidney disease (CKD) program to develop well defined processes and improve patient care.</p> <p>Improve the health of current patients over the age of 15 who have been diagnosed with a chronic condition.</p> <p>Develop a business model that will enable us to employ a nurse practitioner after hours.</p> <p>Establish a wellbeing clinic to provide patients with goal-centred care that includes disease prevention and making changes to health behaviour.</p> <p>Develop and trial a template of a patient-centered care plan for patients with co-morbidities and a HbA1c greater than 7%.</p> <p>Improve Type 2 Diabetic patient indicators such as waist circumference and Hb1Ac levels.</p> <p>Implement a nurse-led clinic to provide a more integrated service to patients with chronic disease.</p>
<b>Family Violence</b>	<p>Improve staff's understanding of family violence.</p> <p>Promote awareness in the local community of family violence.</p> <p>Engage with the local Maternal Health Centre to identify and help members of the community who are experiencing family violence.</p>
<b>Health Literacy</b>	<p>Implement the 'teach back' method to improve communication with patients, using specific resources and support for those working in a clinical setting.</p> <p>Deliver health education sessions to students at local secondary schools to increase young people's awareness of and access to general practice.</p> <p>Implement a men's health clinic in the general practice to increase health literacy skills for male patients aged 25-55.</p>

Area	Change ideas
<b>Hepatitis C</b>	Develop processes and upskill staff to identify and manage patients with Hepatitis C.
	Identify patients who are eligible for treatment.
	Increase vulnerable populations' uptake of Hepatitis C therapy and treatment.
	Raise community awareness to de-stigmatise Hepatitis C.
<b>Immunisation</b>	<p>Increase vaccine rates in older adults.</p> <p>Promote the benefits of being vaccinated.</p>
<b>Information Technology</b>	<p>Completely computerise the practice.</p> <p>Increase practice revenue by using clinical audit tools and software.</p>
<b>LGBTIQ</b>	Develop tools or undertake training so the practice becomes a lesbian, gay, bisexual, transgender, intersex and queer (LGBTIQ) inclusive practice.
<b>Mental Health</b>	Provide support to adolescents and their families experiencing psychological stress in the lead up to, and during, the VCE exam period.
<b>Refugee Health</b>	<p>Encourage new refugee patients into the clinic.</p> <p>Complete health assessments and plan vaccination catch ups for these patients, where required.</p>
	Introduce dedicated school holiday sessions for young children and their families from refugee and asylum-seeker communities.
	Establish a culturally appropriate service that can conduct refugee health assessments as needed.
	Implement a nurse-led contact-tracing program for refugee patients at risk of Hepatitis B.
	Identify refugee patients, conduct refugee health assessments and provide interpreter facilities for patients and clinicians.
	Improve the practice's processes of identifying, treating and managing the health of refugee and asylum seeker patients.

## Appendix 5: Case Studies

### A better plan for patient care

Premier Health Partners developed and trialled a template for patient-centred care plans.

#### How it worked:

Patients with the greatest need (those with co-morbidities and a HbA1c greater than 7%) were identified using the PenCS Clinical Audit Tool (known as CAT4). The practice nurse gave each patient a resource folder that contained:

- Their personal care plan
- Referrals made to allied health services
- Educational resources, such as brochures explaining their condition and treatments
- Relevant test results
- Other relevant material relating to the patient's needs

Patients were asked to take the folder to all relevant appointments, including those with allied health and community health providers.

Providing clearly identified goals unique to each patient kept them motivated and engaged.

#### The outcomes:

- Patients addressed needs as they arose (instead of waiting for a crisis that resulted in intervention such as hospitalisation), indicating that patients' self-management skills improved.
- Patients' feedback indicated that they had:
  - An improved sense of satisfaction in achieving goals
  - Improved quality of life
  - Increased self-confidence in their ability to manage their health
- CAT4 data reported a significant improvement in biometric measurements



Improved patient experience



Sustainable cost

### Holiday Clinics a healthy connection for refugees and asylum seekers

Clinicians at cohealth Fitzroy introduced dedicated school holiday sessions for young children and their families from refugee and asylum seeker communities. Because some parents found it difficult to access health care outside of school hours, their children were often missing catch-up immunisation and health assessment appointments. The sessions gave families an opportunity to access primary care more efficiently and achieve better health outcomes.

#### The trial:

The first school holiday clinic serviced approximately 80 refugee patients.

Specialised nurses and support workers:

- Assessed physical and mental health needs
- Checked for vitamin D and iron deficiencies
- Gave catch-up vaccinations
- Provided other health and social services such as nutrition advice, dental services, and maternal and child health

#### Outcomes:

- The Refugee Health Nurse advised that an unexpected, but welcome, outcome was that through inviting families to the holiday clinics, she gained a better understanding of the strong sense of community amongst the refugee families. She also established relationships with local networking groups who work together across various services.
- The school holiday clinics have continued because of the success of the project.



Population health



Improved patient experience



Excerpt from media release 2016:

## New program helps reduce pressure on VCE students

Hundreds of VCE students in Caroline Springs had a less stressful time this year thanks to a new mental health program offered by local medical centre, Active Medical.

Helped by a \$3000 grant from North Western Melbourne PHN, Active Medical delivered a mindfulness and meditation session to over 300 students at Lakeview Senior College, as well as an evening discussion with Active Medical clinical staff for students and their parents.

Practice Manager Raphael Sammut said there was an overwhelmingly positive response to the sessions from the students and benefits for the practice. "In the following weeks we saw a lot of students come in, and it was clearly linked to the sessions that we did," Mr Sammut said.

Active Medical Centre's aim was to provide support to adolescents and their families during periods of high psychological stress in the lead up to, and during, the VCE exam period. The practice approached the local secondary school, Lakeview College, to discuss running mindfulness sessions during school hours.

After consulting with key school staff, the clinic developed presentations and scheduled them to suit the school's curriculum and timetable. Working together with Smiling Mind and a psychologist, the clinic conducted sessions for VCE students in August 2016.

### Outcomes

- Early in 2017, the school told Active Medical that they had had their best VCE results so far and that they felt the sessions were a contributing factor.
- There was an increase in the number of young patients attending Active Medical after the session.
- The practice increased their business through referrals made by students, their families and teachers.

Excerpt from media release 2016:

## Young people keep themselves safe

So far this year, Nurse Samantha Read from Hampstead Drive Medical Centre has given health education sessions about sexual health, mental health and general health to more than 600 local students and young people. The sessions aim to help young people feel comfortable about seeking health care advice from a medical practice if they need further assistance.

Ms Read says the results show the sessions are successfully engaging participants, particularly young people who have felt isolated from the health care system.

"Teenagers want to know how to protect themselves from sexually transmitted diseases and unwanted pregnancies. Our sessions provide a safe environment for them to ask questions."

The nurse at a medical centre in Hopper Crossing delivered health education sessions focusing on sexual and mental health to over 600 students at local secondary schools in the Wyndham area. The aim was to help students feel comfortable about seeking health care advice from a medical practice. She also ran sessions for people from vulnerable groups under the age of 25, including young refugee mothers, Aboriginal and Torres Strait Islander Australians and people from the LGBTIQ community.

In each session, she engaged and educated students by using the Tea Consent You Tube video and the adolescent psychosocial tool, HEADSS (Home, Education/employment, peer group Activities, Drugs, Sexuality, and Suicide/depression).

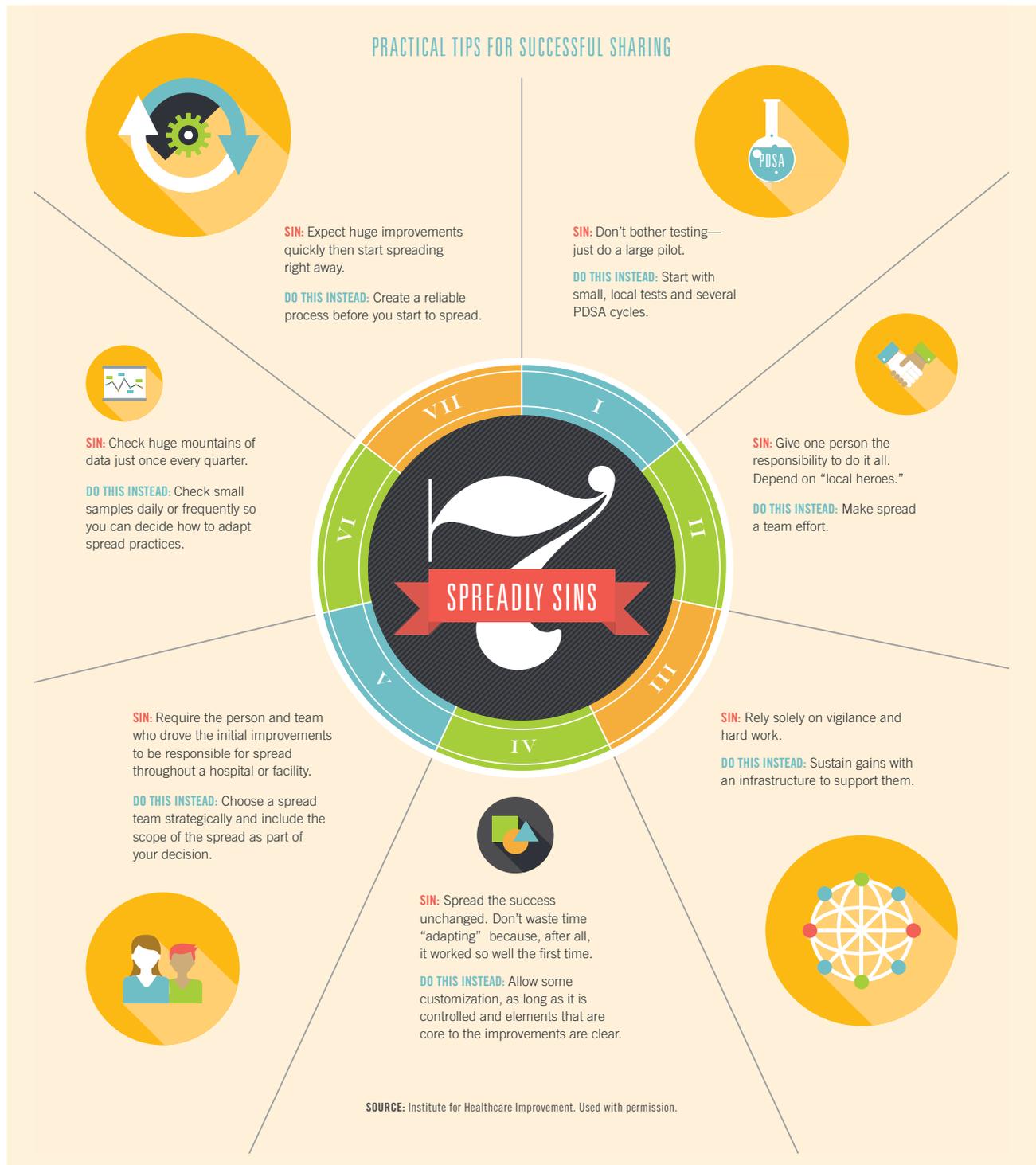
### Outcomes

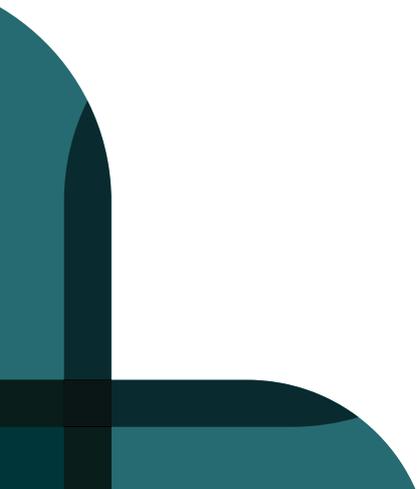
The success of these sessions is evident in the CAT4 data and survey results that show that:

- The number of people aged 12-25 who have attended the practice in the last 24 months has increased by 465
- Feedback from students and parents indicated that the sessions were highly informative and that families felt confident to seek further help from their medical practitioner



# Appendix 6: IHI's Seven Spreadly Sins





## Your Feedback

We would like to hear what you think to help inform the second edition of the 'QI Guide and Tools'. Please email [quality@nwmpnh.org.au](mailto:quality@nwmpnh.org.au) to share your ideas and suggestions.

## Support for Quality Improvement

If you would like further support from NWMPHN to prepare your practice for Quality Improvement or the Quality Improvement Practice Incentive Payment, please email to [quality@nwmpnh.org.au](mailto:quality@nwmpnh.org.au). Please provide your practice name, contact name, contact role and phone number.

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