

QUALITY IMPROVEMENT TOOLKIT FOR GENERAL PRACTICE

# Prevention

Vaccination – Pneumococcal  
MODULE

Version 2

August 2020



# ADULT VACCINATION – PNEUMOCOCCAL

## Introduction

### The Quality Improvement (QI) toolkit

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

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

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

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

The MFI helps you break down your change implementation into manageable pieces, which are then tested to ensure that the change results in measurable improvements and that minimal effort is wasted.

There is an example using the MFI on increasing the number of adult pneumococcal immunisations and a blank template for you to complete at the end of this module.

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

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



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

### Acknowledgements

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

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**Brisbane South PHN, 2021**

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## VACCINATIONS – PNEUMOCOCCAL

### What is pneumococcal disease?

Pneumococcal disease is caused by streptococcus pneumoniae bacteria (also known as pneumococcus). These bacteria are commonly found in the nose and throat of some people, most of whom remain healthy.

Pneumococcus bacteria can cause infections of the inner ear, sinus, lungs (pneumonia) and elsewhere. The most severe infections occur in places usually free of bacteria (for example the blood stream or membranes around the brain) and are known as invasive pneumococcal disease (IPD). Young children, older adults, Aboriginal and Torres Strait Islander people, and people with underlying illnesses are at a higher risk of IPD than others.<sup>1</sup>

### Who is at risk of pneumococcal disease?

Those at a higher risk are:

- people 70 years and over
- people with medical conditions such as diabetes, cancer or a chronic disease affecting the lungs, heart, kidney or liver
- tobacco smokers
- Aboriginal and Torres Strait Islander people
- infants aged 12 months and under.<sup>2</sup>

### Deaths due to pneumococcal disease

Between 1997 and 2016, 622 people in Australia died from pneumonia, meningitis or blood stream infection caused by pneumococcus bacteria. The death rate has fallen since vaccination was introduced for all infants in the mid-2000s.<sup>3</sup>

### Pneumococcal vaccines funded under the National Immunisation Program (NIP)

From 1 July 2020 changes to the timing, type and number of pneumococcal vaccines given were made under the NIP. These changes apply to the following groups:

- children and adults with conditions that increase their risk of [pneumococcal disease](#)
- Aboriginal and Torres Strait Islander children.
- all Aboriginal and Torres Strait Islander people aged 50 years and older.
- all non-Indigenous people aged 70 years and older.

The list of conditions associated with an increased risk of pneumococcal disease has been updated. There is now a single list of risk conditions for funded NIP pneumococcal vaccination. For further details go to the [Australian Immunisation Handbook](#).

There are 2 types of pneumococcal vaccines:

- pneumococcal [conjugate vaccine](#) (PCV)
- pneumococcal [polysaccharide vaccine](#) (PPV).

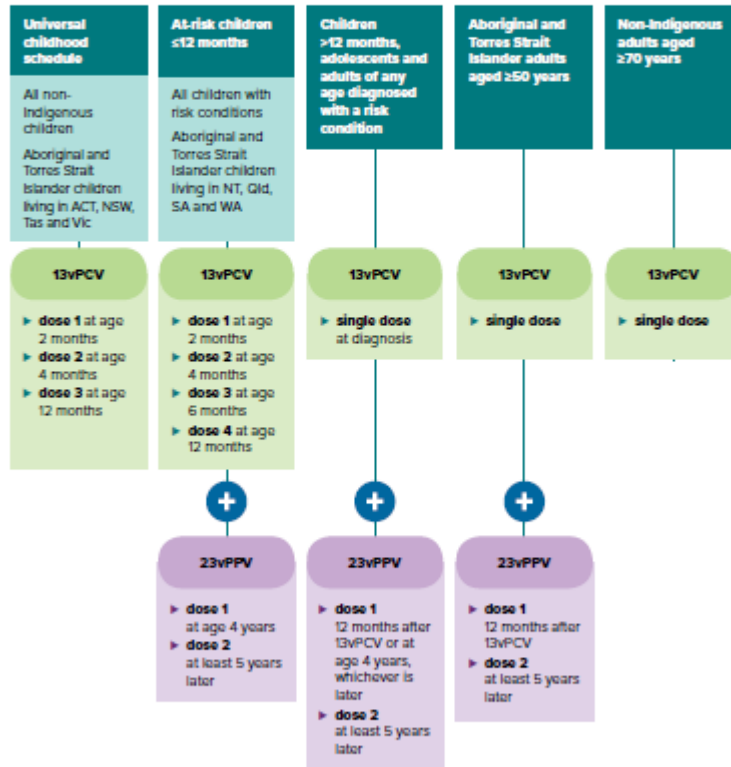
<sup>1</sup> [https://www.aihw.gov.au/getmedia/0e959d27-97c9-419c-8636-ecc50dbda3c1/aihw-phe-236\\_Pneumococcal.pdf.aspx](https://www.aihw.gov.au/getmedia/0e959d27-97c9-419c-8636-ecc50dbda3c1/aihw-phe-236_Pneumococcal.pdf.aspx)

<sup>2</sup> <https://lungfoundation.com.au/patients-carers/living-with-a-lung-disease/other-lung-conditions/pneumonia/>

<sup>3</sup> [https://www.aihw.gov.au/getmedia/0e959d27-97c9-419c-8636-ecc50dbda3c1/aihw-phe-236\\_Pneumococcal.pdf.aspx](https://www.aihw.gov.au/getmedia/0e959d27-97c9-419c-8636-ecc50dbda3c1/aihw-phe-236_Pneumococcal.pdf.aspx)

## Pneumococcal vaccination for all Australians

Pneumococcal disease is a rare but serious condition that can cause significant illness, disability and death.



These vaccines are funded under the National Immunisation Program. See the Australian Immunisation Handbook for the list of specified risk conditions that are eligible to receive free pneumococcal vaccines.

See the Australian Immunisation Handbook for more details.

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For up-to-date information in relation to dosage, eligibility, administration please refer to:

- [Australian Immunisation Handbook - Pneumococcal disease](#)
- [The Queensland Immunisation schedule](#)
- [National Vaccine Storage Guidelines 'Strive for 5'](#).

<sup>4</sup> <https://immunisationhandbook.health.gov.au/>

## Schedule changes from 1 July 2020 for the pneumococcal vaccine

There have been a number of changes in the recommendations for pneumococcal vaccination. These include:

- Children and adults with conditions that increase the risk of pneumococcal disease:
  - Individuals aged >12 months with risk conditions for pneumococcal disease are recommended to receive 1 dose of 13vPCV and 2 lifetime doses of 23vPPV.
  - Children diagnosed with risk conditions for pneumococcal disease at ≤12 months of age who have received 4 doses of 13vPCV according to the existing recommendations do not require an additional 13vPCV dose.
- Aboriginal and Torres Strait Islander children who reside in NT, Qld, SA and WA are already recommended to receive an extra dose of 13vPCV. In addition, they should now receive two doses of 23vPPV. This is because a considerable proportion of invasive pneumococcal disease in Aboriginal and Torres Strait Island children is caused by serotypes that are present in 23vPPV but not in 13vPCV.
- All Aboriginal and Torres Strait Islander adults ≥50 years of age are recommended to receive 13vPCV and two doses of 23vPPV.
- Australians aged ≥70 years without risk conditions for pneumococcal disease should receive a single dose of 13vPCV. The age for receiving a dose of pneumococcal vaccination for older Australians has been moved from ≥65 years because pneumococcal disease is much more common in people 70 years and over than in people aged 65–69 years. Vaccination from 70 years will provide better protection as people move into older age groups with increasing pneumococcal disease risk.<sup>5</sup>

Immunisation providers should check the online [Australian Immunisation Handbook](#) for changes.

### Risk conditions for pneumococcal disease

Children and adults with risk conditions are at [increased risk](#) of pneumococcal disease and would benefit from additional doses of pneumococcal vaccine.

Many children and adults with risk conditions are eligible for funded doses of 13vPCV and 23vPPV under the [National Immunisation Program \(NIP\)](#).

However, some people with risk conditions for whom the vaccine is recommended **are not eligible** to receive funded vaccine doses. This is because the incidence of pneumococcal disease for these risk conditions is not sufficient to meet cost effectiveness thresholds.<sup>6</sup>

**Please note:** refer to the [Australian Immunisation Handbook](#) to ensure your patient is eligible for a funded vaccination under the NIP.

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<sup>5</sup> <https://www.health.gov.au/resources/publications/national-immunisation-program-pneumococcal-vaccination-schedule-from-1-july-2020-clinical-advice-for-vaccination-providers>

<sup>6</sup> <https://immunisationhandbook.health.gov.au/resources/handbook-tables/list-risk-conditions-for-pneumococcal-disease>

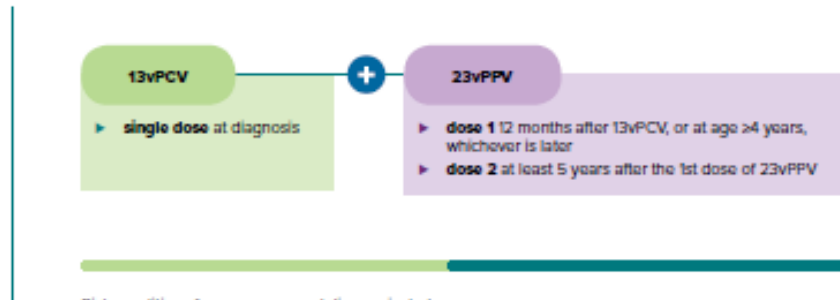




## Pneumococcal vaccination for people with risk conditions for pneumococcal disease

People with certain conditions have an increased risk of pneumococcal disease. They need extra doses of vaccines to optimise protection.

Anyone over 12 months of age who is diagnosed with a **risk condition** should receive:



Risk conditions for pneumococcal disease include:

- ▶ previous episode of invasive pneumococcal disease
- ▶ immunocompromising conditions, including asplenia
- ▶ CSF leak
- ▶ chronic respiratory disease
- ▶ chronic kidney disease
- ▶ chronic liver disease
- ▶ cardiac disease
- ▶ extremely premature birth
- ▶ trisomy 21
- ▶ diabetes
- ▶ smoking
- ▶ harmful use of alcohol

See the Australian Immunisation Handbook for the full list of risk conditions, including which conditions are funded under the National Immunisation Program.

Many children and adults with these risk conditions are eligible for funded doses of pneumococcal vaccines under the National Immunisation Program

See the Australian Immunisation Handbook for more details.

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<sup>7</sup> <https://immunisationhandbook.health.gov.au/>

## Aim of this QI toolkit

General practice is the ideal setting to address immunisation rates. General practice is often the first point of contact for treatment coordination, access to medications, additional tests and referrals to other providers.

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*Toolkit aim - To identify who in your practice is at risk and eligible to receive a pneumococcal vaccination.*

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

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

Once you have an accurate register you will be able to easily identify who of your patients would benefit from receiving the vaccination, ensuring your practice is providing optimum care.

**Please note:** The following activities are based on people at standard risk of pneumococcal disease. People with a [higher risk](#) above require additional vaccinations which will not be included in the activities below.

## How to use this toolkit

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

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

## For more support



[support@bsphn.org.au](mailto:support@bsphn.org.au)



1300 467 265

## Activity 1 – Understanding your adult patient population who may be eligible for pneumococcal vaccination

### Activity 1.1 – Adult population - data collection from CAT4

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



**Note** - Instructions on how to extract the data is available from the CAT4 website: [Adult – pneumococcal OR immunisation reports.](#)

The aim of this activity is to collect data to determine the number of patients aged 70 years and older eligible for a pneumococcal vaccine and also identify any patients who have not received their pneumococcal vaccine.

	Description	Total number of active patients as per RACGP criteria (3 visits in 2 years)	Total number of active patients
1.1a	Number of active patients aged 70 years and older		
1.1b	Number of active patients aged 70 years and older are up to date with their pneumococcal vaccination		
1.1c	Number of active patients aged 70 years and older who are overdue for their pneumococcal vaccination		
1.1d	Number of active patients aged 70 years and older who are at risk and have no pneumococcal vaccination recorded		
1.1e	Number of active Aboriginal and Torres Strait Islander patients aged 50 years and older		
1.1f	Number of active Aboriginal and Torres Strait Islander patients aged 50 years who are at risk and have no pneumococcal vaccination recorded		

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

## Activity 1.2– Reviewing your practice population who are not up to date with pneumococcal vaccination



Complete the checklist below which reviews your practice’s patients who are not up to date with their pneumococcal vaccination.

Description	Status	Action to be taken
<p>After completing <b>activity 1.1</b> note how many eligible patients with overdue and NO pneumococcal vaccination recorded? (Include Aboriginal and Torres Strait Islander patients) (1.1d and 1.1f).</p>	<p><input type="checkbox"/> Number: _____</p> <p><input type="checkbox"/> Percentage of population: _____</p> <p>(To work out %, take total number from 1.1 and divide by 100 (make a note of this figure). Then divide total number of not recorded by the figure you have taken note of. e.g. If your total eligible population is 2209 divide by 100 = 22.09 and your total not recorded is 734, then 734 divide by 22.09 = 33%).</p>	<p>Is the percentage of not recorded patients low (less than 20%) or high (greater than 40%)?</p> <p><input type="checkbox"/> Low <input type="checkbox"/> High</p> <p>How will this information be communicated to the practice team?</p>
<p>Is there an explanation as to this result?</p>	<p><input type="checkbox"/> Yes: continue with activity.</p> <p><input type="checkbox"/> No: <b>see action to be taken.</b></p>	<p>Outline the reason (e.g. loss or gain of GP/s, influx of patients, patients attend multiple practices, data entry etc.)</p> <p>How will this information be communicated to the practice team?</p>
<p>After reviewing the number of patients without a pneumococcal vaccination, are there any changes you would like to implement in the practice, to help manage patients, over the next 12 months?</p>	<p><input type="checkbox"/> Yes: <b>see action to be taken.</b></p> <p><input type="checkbox"/> No: you have completed this activity.</p>	<p>Refer to the MFI and the <a href="#">Thinking part</a> at the end of this document.</p> <p>Refer to the <a href="#">Doing part - PDSA</a> of the MFI to test and measure your ideas for success.</p>

## Activity 2 – Understanding your child patient population eligible for pneumococcal vaccination

### Activity 2.1 – Child population - data collection from CAT4



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

**Note** - Instructions on how to extract the data is available from the CAT4 website: [child – immunisation](#) OR [immunisation reports](#) OR [Best Practice](#) OR [MedicalDirector](#)

*The aim of this activity is to collect data to determine the number of infants and children aged less than 5 years who may not be fully immunised for pneumococcal disease.*

	Description	Total number of active patients as per RACGP criteria (3 visits in 2 years)	Total number of active patients
2.1a	Number of active patients aged < 5 years old (or 59 months old)		
2.1b	Number of active patients aged < 5 years who are fully immunised		
2.1c	Number of active patients aged < 5 years who are due for an immunisation		
2.1d	Number of active patients aged <5 years who are overdue for an immunisation		

**Please note:** the above CAT4 searches will review the full immunisation status of a child, not just the pneumococcal vaccination. You may wish to search specifically for these in your clinical software package. Instructions are available on how to do this for [Best Practice](#) and [MedicalDirector](#).

**Additional doses:** please note that some children that are at risk and Aboriginal and Torres Strait Islander children require additional doses of the vaccine. Refer to the [Australian Immunisation Handbook](#) to ensure your patient receives adequate pneumococcal vaccinations.

## Activity 2.2– Reviewing your practice childhood population who are not up to date with their pneumococcal vaccination



Complete the checklist below which reviews your practices patients who are not up to date with their pneumococcal vaccination.

Description	Status	Action to be taken
<p>After completing <b>activity 2.1</b> are there any unexpected results with your childhood immunisation status?</p>	<p><input type="checkbox"/> Yes: <b>see action to be taken.</b></p> <p><input type="checkbox"/> No: continue with activity.</p>	<p>Please explain: (e.g. <i>higher number of children not fully immunised than expected</i>).</p> <p>How will this information be communicated to the practice team?</p>
<p>After reviewing the practice’s childhood immunisation rates, are there any changes you would like to implement in the practice, to help manage patients, over the next 12 months?</p>	<p><input type="checkbox"/> Yes: <b>see action to be taken.</b></p> <p><input type="checkbox"/> No: you have completed this activity.</p>	<p>Refer to the MFI and the <a href="#">Thinking part</a> at the end of this document.</p> <p>Refer to the <a href="#">Doing part - PDSA</a> of the MFI to test and measure your ideas for success.</p>

## Activity 3 – Building your pneumococcal immunisation register

In your practice there may be multiple ways clinical staff enter a patient’s immunisation status in the practice software. Some will type this information directly into the patient progress notes as free text. Free text is not easily searchable in any database by the clinical software or third-party software (e.g. extraction tools) and is therefore not the preferred process.

The recommended process is to use the immunisation tab and select from the drop-down boxes provided in the clinical software. This is a coded immunisation entry. If all clinical staff within the practice use the same mechanism to record an immunisation, then it is easier to search for these. This makes the immunisation registers more accurate and it is easier to generate recall and reminder lists.

### Activity 3.1 – Importance of using consistent recording in your practice software



*The aim of this activity is to review the practice’s processes for recording immunisation data.*

Description	Status	Action to be taken
Are relevant practice team members aware of the importance of quality immunisation data (avoiding free text)?	<input type="checkbox"/> Yes, continue with activity.  <input type="checkbox"/> No, <b>see action to be taken.</b>	Communicate to relevant practice team members the importance of data quality in your clinical software.  Additional resources available from Brisbane South PHN: <ul style="list-style-type: none"> <li>• Quality Improvement via medical software module 5</li> <li>• Essential clinical data entry using MD and Module 6</li> <li>• Essential clinical data entry using BP.</li> </ul> These modules can be accessed via <a href="#">DiscoverPHN</a> .
Are practice team members aware of how to enter immunisation records into your practice clinical software?	<input type="checkbox"/> Yes, continue with activity.  <input type="checkbox"/> No, <b>see action to be taken.</b>	Refer to instructions for <a href="#">Best Practice</a> and MedicalDirector – <a href="#">child</a> or MedicalDirector - <a href="#">adult</a> .
After reviewing your practice’s immunisation data entry, are there any changes you would like to implement to manage your patients over the next 12 months?	<input type="checkbox"/> Yes, <b>set goals and outline in actions to be taken.</b>  <input type="checkbox"/> No, continue with activity.	Refer to the MFI and the <a href="#">Thinking part</a> at the end of this document.  Refer to the <a href="#">Doing part - PDSA</a> of the MFI to test and measure your ideas for success.

### How to improve your practice data using your practice software

As part of your practice’s software maintenance, you are able to improve your practice data. In this activity, we will look at merging duplicate immunisation categories.

### Activity 3.2 – Merging duplicate immunisations in your clinical software



The aim of this activity is to evaluate your practice’s duplicate immunisation lists in your clinical software program.

Description	Status	Action to be taken
Do relevant staff know how to review for any un-coded immunisations in your clinical software package?	<input type="checkbox"/> Yes, continue with activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	Best Practice user – not relevant. MedicalDirector users refer <a href="#">here</a> .
Does someone in the practice have the responsibility to check for un-coded immunisations?	<input type="checkbox"/> Yes, <b>see action to be taken.</b>	Who is responsible: _____
	<input type="checkbox"/> No, <b>see action to be taken.</b>	How often is this checked? <input type="checkbox"/> weekly <input type="checkbox"/> monthly <input type="checkbox"/> annually <input type="checkbox"/> ad-hoc Delegate responsibility to a team member/s and include in their position description. Agree on frequency of checking for un-coded immunisations.
Do relevant team members understand the importance of using drop down lists provided with your clinical software program?	<input type="checkbox"/> Yes, continue with activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	Provide training to all team members on importance of <a href="#">data entry</a> .
How many un-coded immunisations do you currently have in your clinical software package?	<input type="checkbox"/> None <input type="checkbox"/> Between 1 and 10 <input type="checkbox"/> Between 11 and 30 <input type="checkbox"/> Between 31 and 50 <input type="checkbox"/> More than 51	
After reviewing your practice’s immunisation code entering processes, are there any changes with the management of your patients you would like to implement over the next 12 months?	<input type="checkbox"/> Yes, <b>set goals and outline in action to be taken.</b> <input type="checkbox"/> No, continue with activity.	Refer to the MFI and the <a href="#">Thinking part</a> at the end of this document.  Refer to the <a href="#">Doing part - PDSA</a> of the MFI to test and measure your ideas for success.



## Activity 4 – Australian Immunisation Register (AIR)

Australian Immunisation Register (AIR) for vaccination service providers

The [Australian Immunisation Register](#) (AIR) is a national register that records all vaccines given to all people in Australia.

The AIR includes vaccines given:

- under the National Immunisation Program (NIP)
- through school programs
- privately, such as for flu or travel.

**Please note:** Some patients may have had their pneumococcal vaccine performed elsewhere. Always check AIR prior to providing the vaccine.

### Activity 4.1 – Using AIR in general practice



*The aim of this activity is to ensure the relevant staff in your practice know how to use AIR.*

Question	Status	Action to be taken
Are all GPs in your practice registered to use PRODA?	<input type="checkbox"/> Yes, continue with activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	See information on <a href="#">registering for an individual account</a> .  See information on <a href="#">registering an organisation</a> .
Do relevant team members know how to login to AIR via PRODA?	<input type="checkbox"/> Yes, continue with activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	See video <a href="#">How to login to AIR via PRODA</a> .
Do relevant staff know they can search for an immunisation history for individual patients on AIR?	<input type="checkbox"/> Yes, continue with activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	See information <a href="#">How to find and interpret immunisation records on AIR</a> .
Do relevant staff know how to record immunisation encounters on AIR?	<input type="checkbox"/> Yes, continue with activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	See information <a href="#">How to record immunisation encounters on AIR</a> .
Do relevant staff know how to lodge a medical exemption on AIR?	<input type="checkbox"/> Yes, continue with activity <input type="checkbox"/> No, <b>see action to be taken.</b>	See information on <a href="#">How to lodge a medical exemption on AIR</a> .

Question	Status	Action to be taken
Does your practice follow up patients on the due/overdue report to ensure they are immunised?	<input type="checkbox"/> Yes, continue with the activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	Consider adding patients to the practice recall and reminder system.  Contact patient to organise appointment time.
Do you know that patients can view their immunisation history statement from AIR	<input type="checkbox"/> Yes, continue with the activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	See information on <a href="#">How to get an immunisation history statement.</a>
Do you know the contact details of AIR?	<input type="checkbox"/> Yes, continue with the activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	AIR contact number is 1800 673 809.
After reviewing your processes for reporting to AIR, are there any changes you would like to implement in the practice to help manage patients over the next 12 months?	<input type="checkbox"/> Yes, <b>see action to be taken.</b> <input type="checkbox"/> No, you have completed this activity.	Refer to the MFI and the <a href="#">Thinking part</a> at the end of this document.  Refer to the <a href="#">Doing part - PDSA</a> of the MFI to test and measure your ideas for success.

### Instructions on accessing AIR

- [Accessing AIR using PRODA for organisations](#)
- [Accessing AIR using PRODA for individuals](#)

## Activity 5 – Tools to assist in improving immunisation rates

### Identifying areas that can assist your practice manage and improve your pneumococcal immunisation rates

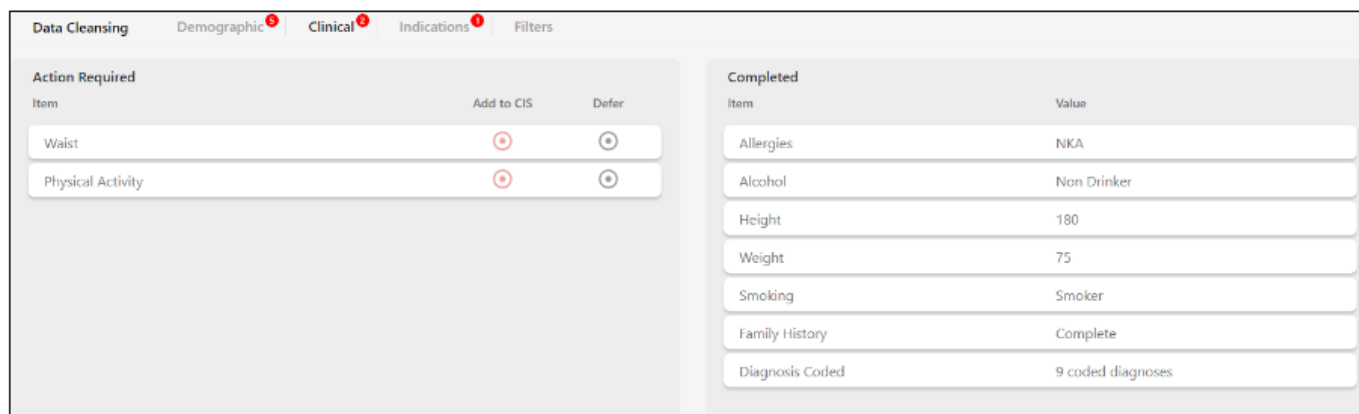
There are tools your practice can use to assist with managing its pneumococcal vaccinations. These include:

- Topbar from PenCS
- AIR (see activity 4)
- assessing immunisation status when completing a 75+ health assessment
- assessing immunisation status when completing an Aboriginal and Torres Strait Islander health assessment
- assessing immunisation status when completing a driver’s licence assessment
- other vaccinations – assessing pneumococcal immunisation status when completing other immunisations e.g. influenza, shingles etc.

### Improving your pneumococcal immunisation rates using Topbar

Topbar is designed to provide prompts and relevant information to all practice staff based on the patients being seen and also those who are on the wait list for the day. Topbar can be used to help set up a prompt for any eligible patients missing their pneumococcal vaccination.

[Topbar Clinical Tab cleansing app](#) – This tab displays any missing and completed items in relation to the patient’s clinical information from their patient record in the GP application. Items that require actions are displayed on top and completed items at the bottom of the screen.



### Activity 5.1 – Using Topbar to improve your practice data

*The aim of this activity is to ensure relevant team members have access to and use Topbar*

Description	Status	Action to be taken
Is Topbar installed on all workstations at your practice?	<input type="checkbox"/> Yes, continue with activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	Follow the <a href="#">Running Topbar</a> resource, or Follow the <a href="#">Topbar Installation Guide.</a>

Description	Status	Action to be taken
Have relevant team members been set up as a Topbar user?	<input type="checkbox"/> Yes, continue with activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	Follow the <a href="#">Managing Topbar Users</a> resource.
Have relevant Topbar users been set up with appropriate access rights?	<input type="checkbox"/> Yes, continue with activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	Follow the <a href="#">Topbar Access Rights</a> resource.
Do relevant team members understand all the Topbar apps?	<input type="checkbox"/> Yes, you have completed this activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	Refer to <a href="#">Topbar Flip Guide.</a>
After reviewing your practice's Topbar use, are there any changes with the management of your patient's you would like to implement over the next 12 months?	<input type="checkbox"/> Yes, <b>set goals and outline in action to be taken.</b> <input type="checkbox"/> No, continue with activity.	Refer to the MFI and the <a href="#">Thinking part</a> at the end of this document.  Refer to the <a href="#">Doing part - PDSA</a> of the MFI to test and measure your ideas for success.

## Improving your pneumococcal immunisation rates using health assessments

### 75+ health assessment (Medicare Benefit Schedule (MBS) items 701-707)

There are time-based [MBS health assessment items](#): 701 (brief), 703 (standard), 705 (long) and 707 (prolonged). These item numbers can be claimed for people aged 75 years and older. As part of the assessment it is recommended that the immunisation status of the patient is updated.

### Aboriginal and Torres Strait Islander health assessment (MBS item 715)

The [Aboriginal and Torres Strait Islander Peoples](#) health assessment is available to:

- children between ages of 0 and 14 years
- adults between the ages of 15 and 54 years
- older people over the age of 55 years.

As part of the assessment it is recommended that the immunisation status of the patient is updated.

### Activity 5.2 – Data collection from CAT4



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

**Note** - Instructions on how to extract the data is available from the CAT4 website. [MBS items](#) and [Adult - Immunisations](#)

The aim of this activity is to identify the number of patients who have had a health assessment completed in the past 12 months are up to date with their pneumococcal vaccination.

	Description	Total number
5.2a	Number of patients who have had a 75+ health assessment completed in the past 12 months	
5.2b	Number of patients who have had a 75+ health assessment completed in the past 12 months who are up to date with their pneumococcal vaccination	
5.2c	Number of Aboriginal and Torres Strait Islander patients aged 50+ who have had a health assessment completed in the past 12 months	
5.2d	Number of Aboriginal and Torres Strait Islander patients aged 50+ who have had a health assessment completed in the past 12 months who are up to date with their pneumococcal vaccination	

**Please note:** the above searches may not include those people with [at risk conditions](#) who require extra doses. It is suggested that you discuss with relevant team members in your practice to identify any additional searches you may wish to do to ensure at risk patients are fully immunised.

### Activity 5.3 –Reflection on your practice’s use of tools to improve pneumococcal immunisation rates



Complete the checklist below to review your practice’s use of tools to improve pneumococcal injection rates.

Description	Status	Action to be taken
After reviewing the number of patients who have had a health assessment and pneumococcal vaccination given, are there any unexpected results?	<input type="checkbox"/> Yes, <b>see action to be taken.</b>  <input type="checkbox"/> No, continue with activity.	Please explain (e.g. low number of patients who have had a 75+ health assessment completed are up to date with their pneumococcal injection).  What action will you take?  How will you use this information to increase the number of pneumococcal vaccinations completed?

Description	Status	Action to be taken
Do relevant team members know who is eligible for a pneumococcal vaccinations?	<input type="checkbox"/> Yes, continue with activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	Refer to <a href="#">Australian Immunisation Handbook</a> .  or  <a href="#">Queensland Immunisation schedule</a> .
Do relevant team members check pneumococcal vaccination status when completing a medical certificate for driver’s assessment?	<input type="checkbox"/> Yes, continue with activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	Hold a team meeting to discuss how this may be implemented in your practice.
Do relevant team members check pneumococcal vaccination status when completing other immunisations? (e.g. <i>child schedule, influenza, shingles etc.</i> )	<input type="checkbox"/> Yes, continue with activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	Discuss with relevant team members the importance of checking immunisation status at each visit.
After reviewing the tools your practice can use to improve pneumococcal vaccination rates, are there any changes you would like to implement in the practice, to help manage patients, over the next 12 months?	<input type="checkbox"/> Yes, <b>see action to be taken</b> to help set your goals. <input type="checkbox"/> No, you have completed this activity.	Refer to the MFI and the <a href="#">Thinking part</a> at the end of this document.  Refer to the <a href="#">Doing part - PDSA</a> of the MFI to test and measure your ideas for success.

## Activity 6 – Recalls and reminders

### Recall/reminder toolkit

As part of the RACGP accreditation standards, it is a requirement that practices provide health promotion, illness prevention, preventive care and a reminder system based on patient need and best available evidence. To ensure your patients are followed up with an appropriate recall/reminder/prompt, Brisbane South PHN have a toolkit to assist with this. Please access this [toolkit](#) from Brisbane South PHN website under the Quality Improvement section.

Brisbane South PHN also have access to a number of Quality Improvement tools via medical software modules that will assist your practice to merge duplicate recall/reminder lists in your practice’s clinical software. These modules are:

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

You can access these modules via [DiscoverPHN](#) or by contacting Brisbane South PHN on [support@bsphn.org.au](mailto:support@bsphn.org.au).

### Activity 6.1 – Reminder system



*The aim of this activity is to review your practice’s reminder system for pneumococcal immunisations.*

Description	Status	Action to be taken
How does the practice record if a patient <b>DOES NOT</b> wish to be contacted offering reminder appointments?	Refer to <a href="#">settings</a> and <a href="#">patient consent</a> instructions.	
Is there a system to identify in the appointment book when a patient is coming in for a reminder appointment?	<input type="checkbox"/> Yes, continue with activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	You may wish to use of a symbol in the appointment book to identify that the patient is attending for a reminder appointment.
Is there a process for acting on or removing outstanding reminders? <i>E.g. patients fail to attend, reminder no longer needed.</i>	<input type="checkbox"/> Yes, continue with activity. <input type="checkbox"/> No, <b>see action to be taken.</b>	GP education on removing reminders.  Document practice process on removing reminders.
Is there a system for ensuring patients recently eligible for the pneumococcal vaccination are incorporated into the reminder system? ( <i>e.g. patient turning 70</i> )	<input type="checkbox"/> Yes, policy is working. <input type="checkbox"/> Yes, policy is not working, see action to be taken. <input type="checkbox"/> No policy, <b>see action to be taken.</b>	Revise policy.  Practice policy on reminders to be implemented.
After reviewing your practice’s recall and reminder system, are there any changes you would like to implement in the practice to help manage patients over the next 12 months?	<input type="checkbox"/> Yes, <b>see actions to be taken.</b> <input type="checkbox"/> No, you have completed this activity.	Refer to the MFI and the <a href="#">Thinking part</a> at the end of this document.  Refer to the <a href="#">Doing part - PDSA</a> of the MFI to test and measure your ideas for success.

## Activity 7 - Pneumococcal resources

### Sharing Knowledge About Immunisation (SKAI) –tools for providers and parents with questions

The National Centre for Immunisation Research and Surveillance (NCIRS) has partnered with the University of Sydney and other expert collaborators to develop a new, evidence-based communication package called Sharing Knowledge About Immunisation (SKAI).

Funded by the Australian Government, the SKAI package aims to support healthcare providers in communicating confidently and effectively with all parents about immunisation.

The SKAI package includes:

- For parents – [SKAI website for parents](#)
- For providers – [SKAI eLearning module](#)
- For providers – SKAI website for providers (available upon completion of the SKAI eLearning module).

The **SKAI website for parents** provides a suite of resources and information for parents and carers of babies and young children, designed to support conversations about childhood vaccination. This includes independently assessed information about vaccines included on the [NIP](#) and answers to common questions parents ask in an accessible and easily interpreted format.

The **SKAI eLearning module** has been designed to help providers adapt their clinical communication skills to meet the needs of all parents, whether they are ready to vaccinate, have questions, or intend to decline vaccination altogether. The eLearning module also introduces a SKAI website that has been developed specifically for providers. The module takes approximately 1–1.5 hours to complete and providers can earn Continuing Professional Development (CPD) points for their participation, depending on their profession.

You can also visit the [NCIRS website](#) to learn more about the SKAI project and sign up to receive news and future updates.

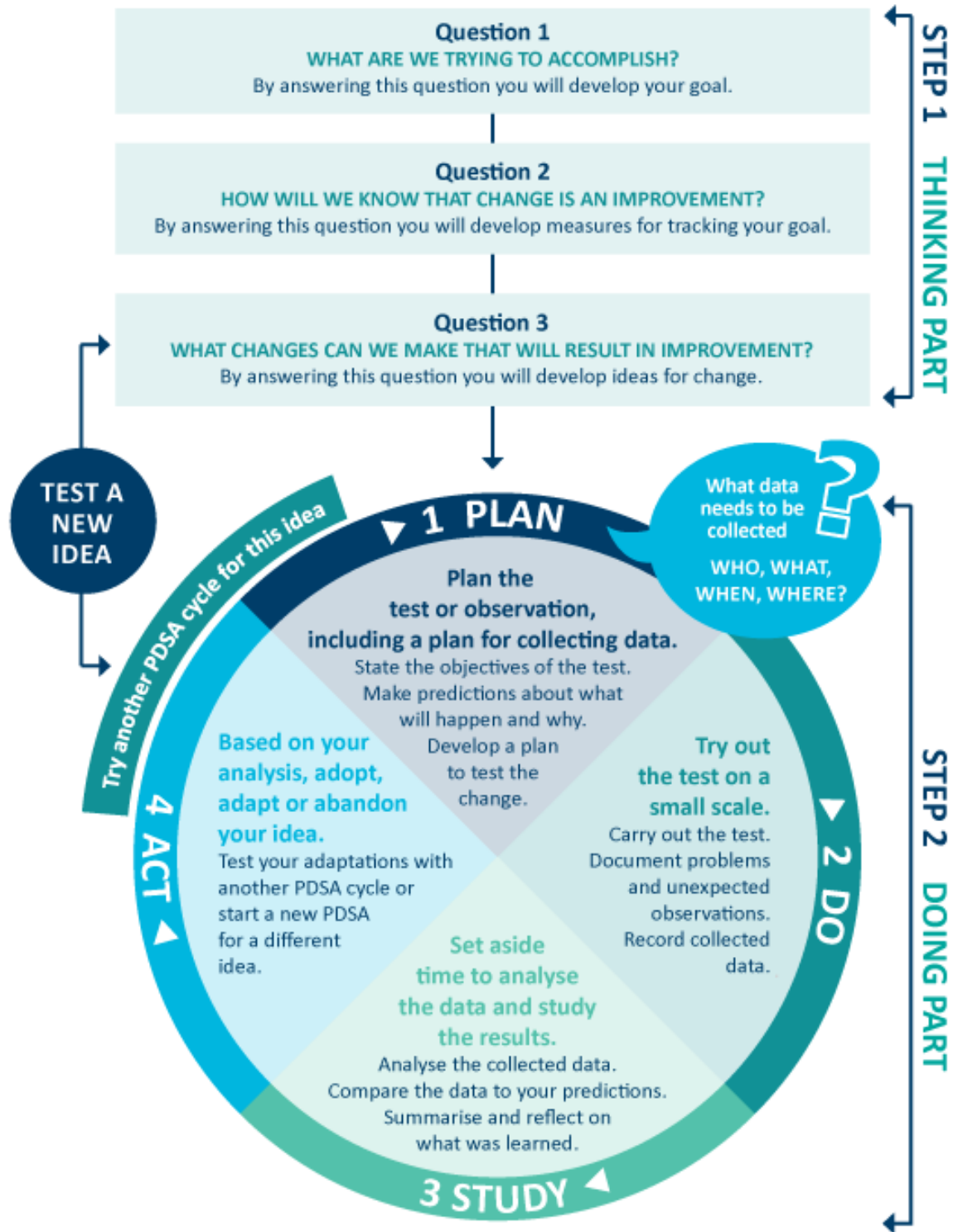
### Other resources

- Australian Technical Advisory Group on Immunisation (ATAGI) – [changes to recommendations for pneumococcal vaccines from 1 July 2020](#)
- [Australian Immunisation Handbook](#)
- NCIRS – [pneumococcal fact sheet and FAQ](#)
- NIP – [clinical decision tree for vaccination providers](#)
- NIP - [pneumococcal vaccination schedule from 1 July 2020 - Clinical advice for vaccination providers](#)
- NIP – [following vaccinations – what to expect and what to do](#)
- Pfizer – [pneumococcal disease diagnosis, treatment and causes](#)
- Diabetes Australia - [Diabetes and Pneumococcal](#)
- RACGP – [Pneumococcal Disease Prevention](#)
- NPS MedicineWise - [Pneumococcal vaccine, past, present and future](#)
- Lung Foundation – [living with Pneumonia.](#)
- [Immunisation consent form.](#)

A number of other resources are available on Brisbane South PHN website under the [practice nurse support program](#).



# Model for Improvement diagram



Source: <http://www.ihl.org/resources/Pages/HowtoImprove/ScienceofImprovementTestingChanges.aspx>

## MFI and PDSA template EXAMPLE

### Step 1: The thinking part - The 3 fundamental questions

<b>Practice name:</b>	<b>Date:</b>
<b>Team members:</b>	
<b>Q1. What are we trying to accomplish? (Goal)</b>	
By answering this question, you will develop your GOAL for improvement. Record this as a S.M.A.R.T. goal ( <b>S</b> pecific, <b>M</b> easurable, <b>A</b> chievable, <b>R</b> elevant, <b>T</b> ime bound).	
Our goal is to: ensure all patients aged 70 years and older are up to date with their pneumococcal vaccinations.	
This is a good start, but how will you measure whether you have achieved this goal? The team will be more likely to embrace change if the goal is more specific and has a time limit. <i>So, for this example, a better goal statement would be:</i> Our S.M.A.R.T. goal is to: Increase the proportion of our patients aged 70 years and older that have a pneumococcal vaccination by 20% by 25 June.	
<b>Q2. How will I know that a change is an improvement? (Measure)</b>	
By answering this question, you will determine what you need to MEASURE in order to monitor the achievement of your goal. Include how you will collect your data (e.g. CAT4 reports, patient surveys etc). Record and track your baseline measurement to allow for later comparison.	
We will measure the percentage of active patients aged 70 years and older who have a pneumococcal vaccination recorded. To do this we will: A) Identify the number of active patients over 70 years old and older. B) Identify the number of active patients over 70 years who have a pneumococcal vaccination recorded. B divided by A x 100 produces the percentage of patients over 70 years who have pneumococcal vaccination recorded.	
BASELINE MEASUREMENT: 43% of active patients over 70 years old have had a pneumococcal vaccine DATE:	
<b>Q3. What changes could we make that will lead to an improvement? (List your IDEAS)</b>	
By answering this question, you will generate a list of IDEAS for possible changes you could implement to assist with achieving your S.M.A.R.T. goal. You will test these ideas using part 2 of this template, the 'Plan, Do, Study, Act (PDSA)' cycle. Your team could use brainstorming or a driver diagram to develop this list of change ideas.	
IDEA: Identify patients aged 70 and older who have not had a pneumococcal vaccination. Contact these patients via letter, phone, SMS etc. to encourage vaccination against pneumococcal disease.	
IDEA: Identify Aboriginal and Torres Strait islander patients aged 50 and older. Contact those patients who have not yet had a vaccination against pneumococcal disease.	
IDEA: Ensure all patients aged 75 years and over are up to date with their pneumococcal vaccination when completing 75-year-old health assessment.	
IDEA: Ensure practice nurses attend at least one immunisation education session per year.	

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

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

## MFI and PDSA template EXAMPLE

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

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

IDEA	Record the change idea you are testing
Which idea are you going to test? (Refer to Q3, step 1 above)	
Increase the number of our patients over 70 years who have pneumococcal vaccination recorded by 20% by 25 June.	
PLAN	Record the details of how you will test your change idea
Plan the test, including a plan for collecting data	What exactly do you plan to do? Record who will do what; when they will do it (day, time etc) and for how long (1 week, 2 weeks etc); and where (if applicable); the data to be collected; and predictions about the outcome.
<p>WHAT: Practice team meeting to be organised to discuss how patients can be offered pneumococcal vaccination opportunistically. The practice manager will conduct a search on CAT4 to identify eligible patients and bring individual GP reports to the practice meeting.</p> <p>WHO/WHEN/WHERE:                      Who: Practice team.                      When: 12 April.                      Where: Practice staff room.</p> <p>DATA TO BE COLLECTED: Number of active patients aged 70 years and the status of their pneumococcal vaccination.</p> <p>PREDICTIONS: The practice team believe they can achieve this goal with a collaborative approach.</p>	
DO	Run the test, then record your actions, observations and data
Run the test on a small scale	What did you do? Were there any deviations from the original plan? Record exactly what you did, the data collected and any observations. Include any unexpected consequences (positive or negative).
Done – completed 12 April – Practice meeting was held and it was decided that the practice would use Topbar prompts to assist with opportunistic immunisations. Some GPs also wished to have a small note stuck to their computer monitor which said “Pneumococcal vaccination” to remind them to have the discussion with their patients. At the meeting it was identified that the receptionists needed training using Topbar, so a training session was organised with PHN staff.	
STUDY	Analyse the data and your observations
Analyse the results and compare them to your predictions	Was the plan executed successfully? Did you encounter any problems or difficulties? What worked/didn't work? What did you learn on the way? Compare the data to your predictions. Summarise and reflect on what was learned.
<p>At the end of the focus on improving pneumococcal immunisation rates for patients aged 70 years and older, only 52% of patients have had a pneumococcal vaccination completed. Whilst there was a 9% increase, the practice did not meet the 20% increase. This was due to unexpected leave by one of the GPs. The practice agreed to continue this project to try and increase the % completed.</p> <p><i>Communicate the results of your activity with your whole team. Celebrate any achievements, big or small.</i></p>	

ACT	Record what you will do next
<p>Based on what you learned from the test, record what your next actions will be</p>	<p>Will you adopt, adapt or abandon this change idea? Record the details of your option under the relevant heading below. <i>ADOPT: record what you will do next to support making this change business as usual; ADAPT: record your changes and re-test with another PDSA cycle; or ABANDON: record which change idea you will test next and start a new PDSA.</i></p>
<p>ADOPT: The practice will adopt this change as business as usual. Pneumococcal vaccination rates will be reviewed on a quarterly basis to ensure rates are increasing.</p> <p>ADAPT:</p> <p>ABANDON:</p>	

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

## MFI and PDSA template

### Step 1: The thinking part - The 3 fundamental questions

<b>Practice name:</b>	<b>Date:</b>
<b>Team members:</b>	
<b>Q1. What are we trying to accomplish? (Goal)</b>	
By answering this question, you will develop your GOAL for improvement. Record this as a S.M.A.R.T. goal ( <b>S</b> pecific, <b>M</b> easurable, <b>A</b> chievable, <b>R</b> elevant, <b>T</b> ime bound).	
<b>Q2. How will I know that a change is an improvement? (Measure)</b>	
By answering this question, you will determine what you need to MEASURE in order to monitor the achievement of your goal. Include how you will collect your data (e.g. CAT4 reports, patient surveys etc). Record and track your baseline measurement to allow for later comparison.	
BASELINE MEASUREMENT:	DATE:
<b>Q3. What changes could we make that will lead to an improvement? (List your IDEAS)</b>	
By answering this question, you will generate a list of IDEAS for possible changes you could implement to assist with achieving your S.M.A.R.T. goal. You will test these ideas using part 2 of this template, the 'Plan, Do, Study, Act (PDSA)' cycle. Your team could use brainstorming or a driver diagram to develop this list of change ideas.	
IDEA:	
IDEA:	
IDEA:	
IDEA:	

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

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

## MFI and PDSA template

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

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

IDEA	Record the change idea you are testing
Which idea are you going to test? (Refer to Q3, step 1 above)	
PLAN	Record the details of how you will test your change idea
Plan the test, including a plan for collecting data	What exactly do you plan to do? Record who will do what; when they will do it (day, time etc) and for how long (1 week, 2 weeks etc); and where ( <i>if applicable</i> ); the data to be collected; and predictions about the outcome.
<p>WHAT:</p> <p>WHO/WHEN/WHERE:</p> <p>DATA TO BE COLLECTED:</p> <p>PREDICTIONS:</p>	
DO	Run the test, then record your actions, observations and data
Run the test on a small scale	What did you do? Were there any deviations from the original plan? Record exactly what you did, the data collected and any observations. Include any unexpected consequences (positive or negative).



