



# Primary Health Care Data Quality and Cleansing

## Quality Improvement Toolkit

A practical guide to implement Data Quality and Cleansing initiatives as a CQI activity.



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***Gold Coast Primary Health Network would like to acknowledge and pay respect to the land and the traditional practices of the families of the Yugambah Language Region of South East Queensland and their Elders past, present and emerging.***

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## Where to get help?

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Data Quality and Cleansing – Quality Improvement Toolkit

# About the Data Quality and Cleansing Toolkit

In this quality improvement toolkit, general practice teams will be provided strategies to update and maintain quality clinical records to offer a better understanding of patient cohorts and enable extraction of reliable data to manage patient populations.

## Outcome

- Understand the importance of data quality and its benefits to the practice and patient outcomes.
- Review existing data quality processes to validate data accuracy and reliability (data cleansing, coding and risk mitigation).
- Understand your patient demographic data and lifestyle risk factors to inform areas for improvement.
- Implement data cleansing activities (archiving patients, removing duplicate) to keep your clinical information system up to date.

## Acronyms

- BP: Best Practice (clinical software)
- CALD: Culturally and linguistically diverse
- CQI: Continuous Quality Improvement
- CPD: Continuing Professional Development
- GP: General Practitioner also termed a *Responsible Provider* in MyMedicare
- HPI-I: Healthcare Provider Identifier - Individual
- HPOS: Health Professionals Online Services
- MFI: Model For Improvement
- MD: Medical Director (clinical software)
- PHN: Primary Health Network
- PIP: Practice Incentive Program
- PM: Practice Manager
- PDSA: Plan Do Study Act (Quality Improvement Cycle)
- QI: Quality Improvement
- QIM: Quality Improvement Measure
- RACGP: The Royal Australian College of General Practitioners
- SMART: Specific, Measurable, Attainable, Realistic and Time-bound

## Data Extraction Tools

- [Pen CS Suite](#)
- [Primary Sense](#)
- [POLAR](#)
- Cubiko

## How to use the toolkit

This toolkit is designed for staff in your practice to understand the importance of data quality, how to maintain accurate data and use data to inform quality improvement (QI) activities. When conducting QI activity (including data cleansing) it is recommended to use the Plan Do Study Act (PDSA) cycle to make sustainable changes and record key learning for your practice team.

- A PDSA template and examples are provided in the appendices.
- New to quality improvement or need a refresher? Refer to the [Quality Improvement Essential Toolkit](#)

# 1 Importance of Data Quality

## What is High Quality Data?

Data extracted from a high-quality health record, provides a view of your patient’s health status. By having up-to-date patient information, you will have accurate, accessible and comprehensive data. It is crucial for effective patient care and practice management.

## What is High Quality Data?

The [Royal Australian College of General Practice](#) suggests quality health records have six attributes:

1. Accurate – correctly reflects the patients’ details, information captured in consultation, and information collected from other sources.
2. Complete – contains sufficient information, keeping in mind the “expect to share” principle.
3. Consistent – uses a recognised medical vocabulary, standardised terms and abbreviations.
4. Easily read and understood – written in a way that is meaningful to other uses.
5. Accessible – data recorded in ways that make it readily retrievable.
6. Up to date – updated in a timely manner.

## Benefits of High Quality Data

Benefit	Description
Diagnose and Treat	Maintaining continuity of care, assisting clinical decision making and receive accurate and appropriate prompts and reminders. <i>Example PDSA: <b>Data Coding Accuracy for Chronic Conditions</b></i>
Quality Improvement	The ability to analyse data for healthcare delivery or business system reasons including identifying areas for improvement including resource allocation, efficiency and participation in the <a href="#">Practice Incentive Program</a> . <i>Example PDSA: <b>Identifying Active Patients &amp; Linking to MyMedicare Program</b></i>
Communication	Ability to clearly communicate with other health professionals quickly and accurately to deliver high quality patient care. <i>Example PDSA: <b>Correcting Missing Demographic Information</b></i>
Risk Identification	Identify and manage health-related risks for patients and reduce medico-legal risk (contact your medical defence organisation for clarification if required). <i>Example PDSA: <b>Accurate Recording of Demographic Data and Lifestyle Risk Factor</b></i>
Accreditation	Maintain and achieve <a href="#">RACGP Accreditation Standards – QI 1.3 Improving Clinical Care</a> with the use of nationally recognised medical vocabulary for coding (indicator QI 1.3A) and the use of relevant patient and practice data to improve clinical practice (e.g. chronic conditions management, preventative health (QI 1.3B)).
Professional Development	Participate in relevant Continued Professional Development (CPD) hours for <a href="#">General Practitioners</a> (GPs), <a href="#">Nurses</a> and <a href="#">Pharmacists</a> .

## 2 Data Quality Process

Data quality processes refer to the range of activities that the general practice has in place, that individual staff undertake daily, to ensure that data within any health record is recorded and maintained over time as per the general practice's policy.

### Readiness Checklist

Getting started: Quality Improvement activities	Action/ Guides
<input type="checkbox"/> Achieve or maintain <b>RACGP Accreditation</b> .	RACGP Standards for General Practice ( <a href="#">5th edition</a> )
<input type="checkbox"/> Engage the <b>whole team</b> in data quality initiative. Educate the team about the importance of high-quality health records, how to produce and maintain them.	Watch Eastern Melbourne PHN webinars <a href="#">Introduction to data quality video</a>
<input type="checkbox"/> Establish a <b>data records and coding policy</b> , implement it, and include it in new staff induction.	RACGP <a href="#">coding policy</a>
<input type="checkbox"/> Schedule <b>team meetings</b> to discuss, review and communicate QI activities to <b>fulfil PIP QI, Accreditation and CPD requirements</b> on a regular basis.	<input type="checkbox"/> Fortnightly <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Ad hoc
<input type="checkbox"/> <b>Set shared goals</b> using the <a href="#">Model for Improvement</a> and test change ideas through <a href="#">Plan, Do Study and Act</a> cycles.	<a href="#">Refer to Appendix 1</a>
<input type="checkbox"/> <b>Establish a measure</b> , source and frequency include baseline, set targets and analyse patterns linked to improvement activities.	Use <a href="#">run chart tool</a> to track and analyse progress
<input type="checkbox"/> Regularly review processes and systems that contribute to data quality to ensure that they are effective.	Use <a href="#">Run Chart tool</a> to graph data over time and assess effectiveness

Steps: to improve and maintain data quality	Action / Guides
<input type="checkbox"/> Archive inactive patients every 6–12 months based on <a href="#">RACGP's active patient definition</a> (3 visits in 2 years). Consider archiving for the following reasons: <ul style="list-style-type: none"> <li>• Irrelevant postcode</li> <li>• No Medicare (international patients)</li> <li>• Moved away or stopped attending</li> <li>• Never attended, e.g. registered but never showed up (online bookings)</li> </ul>	Refer to <a href="#">BP, MD</a> Refer to <a href="#">CAT4</a> to generate a patient list
<input type="checkbox"/> Merge <b>duplicate patient</b> records	Refer to <a href="#">BP, MD</a> Refer to <a href="#">CAT4</a>
<input type="checkbox"/> Check for <b>missing PIP QI measures</b>	Refer to <a href="#">BP, MD</a> Refer to <a href="#">CAT4</a> Refer to Primary Sense Report: <a href="#">Patients with missing PIP QI or Accreditation Measures (youtube.com)</a>
<input type="checkbox"/> Use <a href="#">medical vocabulary that can be mapped against a nationally recognised</a> disease classification or terminology system. Create & disseminate an <b>agreed clinical code</b> for diagnosis	Refer to <a href="#">BP</a> or <a href="#">MD</a>
<input type="checkbox"/> Clinical staff uses <b>coded diagnosis</b> instead of free-text coding. To configure user options to help maintain data quality, refer to appendix <a href="#">6 for BP users</a> and <a href="#">appendix 7 for MD users</a>	Refer to <a href="#">BP, MD</a> Refer to <a href="#">CAT4</a>

<input type="checkbox"/>	<b>Run a bulk clean-up of free text diagnosis</b>	Refer to <a href="#">CAT4 indication</a> Refer to <a href="#">BP cleaning up uncoded and free text</a> Refer to <a href="#">MD Database Clean-Up tips</a>
<input type="checkbox"/>	Use your chosen data extraction tool to identify <b>missing demographic and clinical information</b>	Refer to <a href="#">CAT4 Topbar</a> Refer to <a href="#">Primary Sense Videos</a>
<input type="checkbox"/>	Capture and regularly <b>update risk factors</b> including: <input type="checkbox"/> Alcohol (QIM 7) <input type="checkbox"/> Medications <input type="checkbox"/> Allergies & reactions <input type="checkbox"/> Relevant Social History <input type="checkbox"/> Cancer screening <input type="checkbox"/> Smoking (QIM 2) status <input type="checkbox"/> Ethnicity <input type="checkbox"/> BMI (Weight and Height) (QIM 3) <input type="checkbox"/> Immunisation (QIM 4,5,6) <input type="checkbox"/> Waist circumference <input type="checkbox"/> Family history	Refer to CAT4 <a href="#">Missing information</a> Refer to <a href="#">BP cleaning up uncoded and free text</a> Refer to <a href="#">MD Missing Information</a> Refer to Primary Sense - <a href="#">Improve your practice PIP QI Improvement Measures (youtube.com)</a>
<input type="checkbox"/>	Clinicians can access <b>latest clinical guidelines and referral pathways</b>	Refer to <a href="#">HealthPathways</a>

IT & computer capabilities		Action/ Guide
<input type="checkbox"/>	Confirm that the <b>software/tools are up to date</b>	
<input type="checkbox"/>	Use automated tools where possible to reduce manual errors	<a href="#">PenCS - Top Bar</a>
<input type="checkbox"/>	Participate in a Data Sharing Agreement with your local Primary Health Network (PHN)	<a href="#">Primary Health Networks Contacts</a>
<input type="checkbox"/>	Educate staff in how to use data extraction tools	- <a href="#">CAT4 starter guide</a> - <a href="#">CAT4 webinars</a> - <a href="#">Making the most of Primary Sense (youtube.com)</a> - <a href="#">Primary Sense Demonstration Webinar (youtube.com)</a>
<input type="checkbox"/>	Conduct regular data audits (e.g. monthly) to better understand your patient population, MyMedicare status, measure outcomes and optimise MBS revenue.	- <a href="#">CAT4 webinars</a> - <a href="#">Primary Sense Reports &amp; Videos</a>
<input type="checkbox"/>	Participate and maintain eHealth Incentive (eHealth Incentive/ePIP) requirements: <ul style="list-style-type: none"> <li>• secure messaging capability</li> <li>• data records and clinical coding terminologies</li> <li>• electronic transfer of prescriptions</li> <li>• participating in My Health Record.</li> </ul>	<a href="#">eHealth Incentive Payment Eligibility</a>
<input type="checkbox"/>	All clinical staff have their Healthcare Provider Identifier-Individual (HPI-I) to enable access to My Health Record	<a href="#">Register for Healthcare Identifiers (HI) Service)</a>
<input type="checkbox"/>	All clinical staff have received training in My Health Record	<a href="#">My Health Record Education and Training</a>
<input type="checkbox"/>	Use secure messaging and provides <a href="#">secure messaging ID</a> to external providers.	Implementation guide for <a href="#">Secure Messaging</a>
<input type="checkbox"/>	Recall and reminder system established including capturing consent.	Refer to <a href="#">RACGP patient consent</a>

### 3 Understanding your population

Understanding your population and creating a register is crucial for effective, tailored care. It supports early intervention, optimises resources, enhances coordination, and empowers patients.

This will help you identify fundamental areas for improvement prior to undertaking CQI cycles in your patient population groups:

- Children and Adolescents
- Elderly Patients
- Patients with a Chronic Conditions
- Women's Health
- Mental Health
- Aboriginal and Torres Strait Islander Peoples
- Culturally and Linguistically Diverse (CALD) Communities
- Low Socioeconomic Status Groups
- Rural and Remote Populations
- People with Disabilities
- LGBTQ+ Individuals



#### Clinical Coding

*Avoid using free text for diagnosis in your patient records.  
Instead, using coded diagnosis will enable efficient and reliable recall for patients with chronic conditions and make your reporting more reliable.*





# Case Study: Voluntary Patient Enrolment (MyMedicare)

Utilising MyMedicare for voluntary patient registration, especially for those with chronic conditions, can further streamline patient management and optimise business operations by creating targeted recalls for registered patients.

## Goal

**Improve data quality to support voluntary patient enrolment in MyMedicare and enhance chronic condition management and prevention.**

## Steps

### 1. Data Cleansing

- Use your chosen data extraction tool to extract current eligible patient data (e.g. hold a Medicare Care or DVA card and have visited the practice in the past 24 months).
  - *Note You will use the the extracted list to identify patients in the practice management system and complete the following steps.*
- Remove duplicate records, complete missing information and standardise data coding.
- Ensure all relevant fields in the are accurate (e.g., contact information, assign a Responsible Provider (see [MyMedicare FAQs](#)), coded chronic conditions are complete and accurate.

### 2. Initial Assessment

- Identify patients with chronic conditions and those eligible for MyMedicare enrolment.

### 3. Enrolment Campaign

- Use the cleansed data to contact eligible patients to discuss MyMedicare enrolment (e.g. SMS campaign, at their next visit or via a pending invite through MyMedicare in HPOS)
- Collect patient registration forms and enrol patients in MyMedicare (in HPOS) and update their enrolment status in the practice management
- Track enrolment progress and outcomes using your chosen data extraction tool.

### 4. Ongoing Monitoring of Improvement

- Regularly update and clean data using the above steps.
- Use your chosen data extraction tool to monitor patient outcomes and improve chronic conditions management (i.e. care plans).

## PDSA Examples

- **Appendix 2 - PDSA - Identifying Active Patients & Linking to MyMedicare Program**
- **Appendix 5 - PDSA - Data Coding Accuracy for Chronic Conditions**

## 4 Tools for Data Quality Improvement

Quality improvement tools help practices enhance processes through a systematic approach. Before implementing any system changes, it's crucial to test them first, as not all changes lead to improvements. Testing changes beforehand saves time and resources and ensures a positive impact.

To determine if a proposed change will bring about improvement, employ the Model for Improvement, which encompasses the PDSA cycle (see **Appendix 1: MFI and PDSA Template**). An example application of this model is in bulk archiving of patient records (see **Appendix 2: Identifying Active Patients & Linking to MyMedicare**).

When testing a change idea, it's crucial to evaluate its outcomes. Numerous software solutions are available to help practices measure and monitor both clinical outcomes and operational efficiency.

Examples of software solutions include:

- **Practice Software:** Best Practice, Medical Director and other applications
- **Data Extraction and Reporting Tools:** [Pen CS](#), [Primary Sense](#), [POLAR](#) and Cubiko



### Benchmark Your Practice

*Benchmarking with PHN data entails comparing your practice's data quality and patient outcomes to regional and national standards. This process helps pinpoint areas for improvement and assess the effectiveness of quality improvement initiatives within your practice.*

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## 5 Finishing Points

### Sustainability checklist – maintaining the change

<b>Document</b>	<ul style="list-style-type: none"><li>• Have you recorded your completed activities?</li><li>• Resource: PDSA Template (see <b>Appendix 1: MFI and PDSA</b>)</li></ul>
<b>Action</b>	<ul style="list-style-type: none"><li>• Adopt: excellent work, embed that change.</li><li>• Adapt: determine if a change is needed to the plan and start a new PDSA.</li><li>• Abandon: Rethink the next PDSA.</li><li>• Lessons can be learned from PDSAs that are abandoned. Keep a record of learnings.</li></ul>
<b>Sustaining project outcomes</b>	<p>Consider which practice documentation may need to be updated to include the change:</p> <ul style="list-style-type: none"><li>• Update to Policy and Procedure manual.</li><li>• Use automated tools where possible to reduce manual errors.</li><li>• Specific task procedures e.g. Document how to record data regularly, include baseline, set targets and analysis patterns linked to improvement activities.</li><li>• Local signs or instructions.</li><li>• Staff work practices e.g. Schedule regular data cleansing sessions led by nominated QI champions.</li><li>• Position descriptions.</li><li>• Staff induction.</li><li>• Staff skills, development and education e.g. Involve all practice staff in quality improvement initiatives and ensure they are trained in using QI tools.</li></ul>
<b>Communicate</b>	<ul style="list-style-type: none"><li>• QI project outcome feedback to staff.</li><li>• Present project strengths and challenges.</li></ul>
<b>Celebrate</b>	<ul style="list-style-type: none"><li>• Celebrate your outcomes and achievements by sharing with a morning tea with your team.</li></ul>
<b>Review &amp; Reflect</b>	<ul style="list-style-type: none"><li>• Discuss project strengths and challenges.</li><li>• Annually review the PDSA outcomes to ensure activities are still being adhered to and completed.</li><li>• Annually review your topic specific activity results. Identify gaps, areas for improvement and set new activity targets if applicable.</li><li>• Where to next on your continuous QI journey.</li><li>• Consider potential topics for a new CQI activity, and how your experience with this activity can help you be more efficient and effective.</li></ul>

# 6 Appendices

## Appendix 1: MFI and PDSA Template

### Model for Improvement

#### Step 1: Thinking Part - Three Fundamental Questions

Complete the Model for Improvement (MFI) as a whole team.

<b>AIM</b>		<b>1. What are we trying to accomplish?</b>	
<p><i>By answering this question, you will develop your GOAL for improvement. It is important to establish a S.M.A.R.T (Specific, Measurable, Achievable, Relevant, Time bound) and people-crafted aim that clearly states what you are trying to achieve.</i></p>			
<b>MEASURE(S)</b>		<b>2. How will we know that a change is an improvement?</b>	
<p><i>By answering this question, you will develop the MEASURE(S) you will use to track your overarching goal. Record and track your baseline measurement to allow for later comparison.</i></p> <p><i>Tip: Use a Run Chart to plot trends.</i></p>			
<b>Baseline:</b>		<b>Baseline date:</b>	
<b>CHANGE IDEAS</b>	<b>3. What changes can we make that will result in improvement?</b>		
<p><i>By answering this question, you will develop IDEAS for change.</i></p> <p><i>Tip: Engage the whole team in formulating change ideas using tools such as brainstorming, driver diagrams or process mapping. Include any predictions and measure their effect quickly.</i></p>			
<b>Idea 1</b>			
<b>Idea 2</b>			
<b>Idea 3</b>			
<b>Idea 4</b>			
<b>Idea 5</b>	<i>Add other rows if needed.</i>		
<b>Next steps:</b>	<i>Each idea may involve multiple short and small PDSA cycles.</i>		

## PDSA (Plan-Do-Study-Act)

### Step 2: Doing Part - Plan-Do-Study-Act

Once you have completed the Model for Improvement (MFI), use the template below to document and track your PDSA cycles (i.e. small rapid tests of change).

Idea	Plan		Do	Study	Act
#	Plan the test	Prediction	Do the test on small scale	Analyse the results	Make a plan for next step
	<i>How will we run this test? Who will do it and when? What will we measure?</i>	<i>Prediction or hypothesis on what will happen.</i>	<i>Was the plan completed? Yes or No. Collect data. Consider what worked well and why? Document any unexpected observations, events or problems.</i>	<i>Analyse results, compare them to predictions, and reflect on what you learned. .</i>	<i>Based on your learnings from the test, what will you do next (e.g., adopt, adapt or abandon)? How does this inform the plan for your next PDSA?</i>
<b>Change idea 1.1</b>	<i>Specify</i>				
	<i>Keep adding rows and cycles as needed.</i>				
<b>Change idea 1.2</b>	<i>Introduce a new change idea is required.</i>				
	<i>Keep adding rows and cycles as needed.</i>				
<b>Summary of Results</b>					

# Appendix 2: MFI and PDSA - Identifying Active Patients & Linking to MyMedicare Program

## Model for Improvement

### Step 1: Thinking Part - Three Fundamental Questions

Complete the Model for Improvement (MFI) as a whole team.

<b>AIM</b>	<b>1. What are we trying to accomplish?</b>		
<i>By answering this question, you will develop your GOAL for improvement. It is important to establish a S.M.A.R.T (Specific, Measurable, Achievable, Relevant, Time bound) and people-crafted aim that clearly states what you are trying to achieve.</i>			
Improve the accuracy of active patient identification and ensure 10% of eligible active patients are registered for the MyMedicare program within the next six months.			
<b>MEASURE(S)</b>	<b>2. How will we know that a change is an improvement?</b>		
<i>By answering this question, you will develop the MEASURE(S) you will use to track your overarching goal. Record and track your baseline measurement to allow for later comparison. Tip: Use a Run Chart to plot trends.</i>			
Percentage of active patients identified who are successfully registered with MyMedicare.			
<b>Baseline:</b>	4000 active patients and 50 registered with MyMedicare	<b>Baseline date:</b>	10/11/2023
<b>CHANGE IDEAS</b>	<b>3. What changes can we make that will result in improvement?</b>		
<i>By answering this question, you will develop IDEAS for change. Tip: Engage the whole team in formulating change ideas using tools such as brainstorming, driver diagrams or process mapping. Include any predictions and measure their effect quickly.</i>			
<b>Idea 1</b>	Extract a list of patients flagged as active patients who are not registered for MyMedicare.		
<b>Idea 2</b>	Engage with staff to verify patient records (e.g., contact patients to confirm activity status and preferred GP).		
<b>Idea 3</b>	Ensure patients are properly registered with MyMedicare and that their records are accurate.		
<b>Idea 4</b>	Incorporate MyMedicare enrolment discussions during patient contact and pre-plan for upcoming appointments		
<b>Idea 5</b>	<i>Add other rows if needed.</i>		
<b>Next steps:</b>	<i>Each idea may involve multiple short and small PDSA cycles.</i>		

## PDSA (Plan-Do-Study-Act)

### Step 2: Doing Part - Plan-Do-Study-Act

Once you have completed the Model for Improvement (MFI), use the template below to document and track your PDSA cycles (i.e. small rapid tests of change).

Idea	Plan		Do	Study	Act
#	Plan the test	Prediction	Do the test on small scale	Analyse the results	Make a plan for next step
<b>Change idea 1.1</b>	Practice Manager to extract a list of patients flagged as active patients who are not registered for MyMedicare by 1/11/23. <b>Prediction:</b> there will be patient that are inactive.	Completed on 1/1/23	Conduct the first round of active patient verification for 50 patients and 10 were inactive as predicted. 15 were enrolled but MyMedicare status was missing. Update records to correct status and register them for MyMedicare.	Conduct a bulk archive of inactive patients. Bulk import MyMedicare enrolments to PMS instead of manual/per patient. Incorporate MyMedicare enrolment discussions during patient contact and pre-plan for upcoming appointments	Practice Manager to extract a list of patients flagged as active patients who are not registered for MyMedicare by 1/11/23. <b>Prediction:</b> there will be patient that are inactive.
<b>1.2</b>	Conduct a bulk archive of inactive patients <b>Prediction:</b> need to this regularly.				
<b>Change idea 1.2</b>	Incorporate MyMedicare enrolment discussions during patient contact <b>Prediction:</b> some staff will not be comfortable with inviting patients to register				
	<i>Keep adding rows and cycles as needed.</i>				
<b>Summary of Results</b>					

# Appendix 3: MFI and PDSA - Correcting Missing Demographic Information

## Model for Improvement

**Step 1: Thinking Part - Three Fundamental Questions**  
 Complete the Model for Improvement (MFI) as a whole team.

### AIM 1. What are we trying to accomplish?

*By answering this question, you will develop your GOAL for improvement. It is important to establish a S.M.A.R.T (Specific, Measurable, Achievable, Relevant, Time bound) and people-crafted aim that clearly states what you are trying to achieve.*

Reduce the number of patient records with missing or incorrect demographic information (age, sex, and duplicate records) by 250% within three months, while promoting MyMedicare enrolment.

### MEASURE(S) 2. How will we know that a change is an improvement?

*By answering this question, you will develop the MEASURE(S) you will use to track your overarching goal. Record and track your baseline measurement to allow for later comparison.*

*Tip: Use a Run Chart to plot trends.*

Percentage of corrected records regarding age, sex, and elimination of duplicates, including enrolment status for MyMedicare.

<b>Baseline:</b>	6 duplicate records, 4 missing age and 1 missing gender.	<b>Baseline date:</b>	
	50 MyMedicare enrolled		

### CHANGE IDEAS 3. What changes can we make that will result in improvement?

*By answering this question, you will develop IDEAS for change.*

*Tip: Engage the whole team in formulating change ideas using tools such as brainstorming, driver diagrams or process mapping. Include any predictions and measure their effect quickly.*

<b>Idea 1</b>	Audit 200 patient records to identify missing or incorrect age, sex, and duplicates or use a data extraction tool (e.g. Primary Sense or CAT4 data cleansing report)
<b>Idea 2</b>	Engage front desk and clinical staff to fill in or update missing details.
<b>Idea 3</b>	Remove duplicate records by merging data.
<b>Idea 4</b>	During this process, ensure eligible patients are informed about and enrolled in the MyMedicare program.
<b>Idea 5</b>	<i>Add other rows if needed.</i>
<b>Next steps:</b>	<i>Each idea may involve multiple short and small PDSA cycles.</i>



## PDSA (Plan-Do-Study-Act)

### Step 2: Doing Part - Plan-Do-Study-Act

Once you have completed the Model for Improvement (MFI), use the template below to document and track your PDSA cycles (i.e. small rapid tests of change).

Idea	Plan		Do	Study	Act
#	Plan the test	Prediction	Do the test on small scale	Analyse the results	Make a plan for next step
<b>Change idea 1.1</b>	Audit 200 patient records to identify missing or incorrect age, sex, and duplicates or use a data extraction tool (e.g. Primary Sense or CAT4 data cleansing report). <b>Prediction:</b> there will be patient that are incomplete record due to booking system.	Completed on 1/1/23	Perform audits and update records for the initial 200 patients, including enrolling those who are eligible for MyMedicare. 11 were incomplete records as predicted. 15 were enrolled but MyMedicare status was missing. Update records to correct status and register them for MyMedicare.	Engage front desk and clinical staff to fill in or update missing details.  Incorporate MyMedicare enrolment discussions during patient contact and pre-plan for upcoming appointments	Audit 200 patient records to identify missing or incorrect age, sex, and duplicates or use a data extraction tool (e.g. Primary Sense or CAT4 data cleansing report). <b>Prediction:</b> there will be patient that are incomplete record due to booking system.
<b>Change idea 1.2</b>	Engage front desk and clinical staff to fill in or update missing details. <b>Prediction:</b> staff at get busy and forgot to capture missing info.				
	<i>Introduce a new change idea is required.</i>				
	<i>Keep adding rows and cycles as needed.</i>				
<b>Summary of Results</b>					

# Appendix 4: MFI and PDSA – Accurate Recording of Demographic Data and Lifestyle Risk Factor

## Model for Improvement

### Step 1: Thinking Part - Three Fundamental Questions

Complete the Model for Improvement (MFI) as a whole team.

<b>AIM</b>		<b>1. What are we trying to accomplish?</b>	
<p><i>By answering this question, you will develop your GOAL for improvement. It is important to establish a S.M.A.R.T (Specific, Measurable, Achievable, Relevant, Time bound) and people-crafted aim that clearly states what you are trying to achieve.</i></p>			
<p>Ensure 80% of active patients have their life risk factors &lt;e.g. smoking, alcohol, height, weight, waist measurement and BP&gt; recorded accurately within six months, and that these factors are integrated into MyMedicare enrolment processes.</p>			
<b>MEASURE(S)</b>		<b>2. How will we know that a change is an improvement?</b>	
<p><i>By answering this question, you will develop the MEASURE(S) you will use to track your overarching goal. Record and track your baseline measurement to allow for later comparison.</i></p> <p><i>Tip: Use a Run Chart to plot trends.</i></p>			
<p>Percentage of active patient records containing complete life risk factors in the past 6 months, with cross-checks against MyMedicare registration.</p>			
<b>Baseline:</b>	<ul style="list-style-type: none"> <li>Active patients = 4000</li> <li>BP (recorded &lt;6month) = 500</li> <li>MyMedicare enrolled = 50</li> </ul>	<b>Baseline date:</b>	1/7/2024
<b>CHANGE IDEAS</b>		<b>3. What changes can we make that will result in improvement?</b>	
<p><i>By answering this question, you will develop IDEAS for change.</i></p> <p><i>Tip: Engage the whole team in formulating change ideas using tools such as brainstorming, driver diagrams or process mapping. Include any predictions and measure their effect quickly.</i></p>			
<b>Idea 1</b>	Review 500 patient records to identify gaps in life risk factors.		
<b>Idea 2</b>	Update any missing information during the patient's next appointment.		
<b>Idea 3</b>	Discuss MyMedicare enrolment with eligible patients during consultations.		
<b>Idea 4</b>	Review 500 patient records to identify gaps in life risk factors.		
<b>Idea 5</b>	<i>Add other rows if needed.</i>		
<b>Next steps:</b>	<i>Each idea may involve multiple short and small PDSA cycles.</i>		

## PDSA (Plan-Do-Study-Act)

### Step 2: Doing Part - Plan-Do-Study-Act

Once you have completed the Model for Improvement (MFI), use the template below to document and track your PDSA cycles (i.e. small rapid tests of change).

Idea	Plan		Do	Study	Act
#	Plan the test	Prediction	Do the test on small scale	Analyse the results	Make a plan for next step
<b>Change idea 1.1</b>	Practice Nurse to review 500 patient records using a selected data extraction tool to identify gaps in life risk factors. <b>Prediction:</b> low rates are due to no proactive reminder system	Completed on 1/7/24	Practice Nurse to review 500 patient records only 100 patients had BP recording done in the past 6month. 15 were found to be inactive patients.	Create prompts/action for clinicians to record life risk factors during consultations.  Put a bright label on BP machine as a visual prompt for staff to record BP.	Practice Nurse to review 500 patient records using a selected data extraction tool to identify gaps in life risk factors. <b>Prediction:</b> low rates are due to no proactive reminder system
<b>Change idea 1.2</b>	Put a bright label on BP machine as a visual prompt for staff to record BP. <b>Prediction:</b> effective visual prompt				
	<i>Keep adding rows and cycles as needed.</i>				
<b>Summary of Results</b>					

# Appendix 5: MFI and PDSA - Data Coding Accuracy for Chronic Conditions

## Model for Improvement

### Step 1: Thinking Part - Three Fundamental Questions

Complete the Model for Improvement (MFI) as a whole team.

<b>AIM</b>		<b>1. What are we trying to accomplish?</b>	
<p><i>By answering this question, you will develop your GOAL for improvement. It is important to establish a S.M.A.R.T (Specific, Measurable, Achievable, Relevant, Time bound) and people-crafted aim that clearly states what you are trying to achieve.</i></p>			
<p>Ensure that 95% of patients with chronic conditions (e.g. diabetes, hypertension, COPD) have correctly coded conditions in their medical records within the next six months, with a focus on MyMedicare enrolment.</p>			
<b>MEASURE(S)</b>		<b>2. How will we know that a change is an improvement?</b>	
<p><i>By answering this question, you will develop the MEASURE(S) you will use to track your overarching goal. Record and track your baseline measurement to allow for later comparison.</i></p> <p><i>Tip: Use a Run Chart to plot trends.</i></p>			
<p>Percentage of patient records with correctly coded chronic conditions (e.g. diabetes, hypertension, COPD), and the proportion of these patients enrolled in MyMedicare.</p>			
<b>Baseline:</b>	<ul style="list-style-type: none"> <li>Active patients = 4000</li> <li>Coded Diabetes = 200</li> <li>Indicated diabetes and not diagnosed = 150</li> <li>MyMedicare enrolled = 50</li> </ul>	<b>Baseline date:</b>	
<b>CHANGE IDEAS</b>		<b>3. What changes can we make that will result in improvement?</b>	
<p><i>By answering this question, you will develop IDEAS for change.</i></p> <p><i>Tip: Engage the whole team in formulating change ideas using tools such as brainstorming, driver diagrams or process mapping. Include any predictions and measure their effect quickly.</i></p>			
<b>Idea 1</b>	Identify a cohort of patients with diabetes, and review for coding accuracy		
<b>Idea 2</b>	Train clinical staff on best practices for chronic condition coding		
<b>Idea 3</b>	Include MyMedicare enrolment as part of the coding review process.		
<b>Idea 4</b>			
<b>Idea 5</b>	<i>Add other rows if needed.</i>		
<b>Next steps:</b>	<i>Each idea may involve multiple short and small PDSA cycles.</i>		

## PDSA (Plan-Do-Study-Act)

### Step 2: Doing Part - Plan-Do-Study-Act

Once you have completed the Model for Improvement (MFI), use the template below to document and track your PDSA cycles (i.e. small rapid tests of change).

Idea	Plan		Do	Study	Act
#	Plan the test	Prediction	Do the test on small scale	Analyse the results	Make a plan for next step
<b>Change idea 1.1</b>	Identify a cohort of patients with diabetes, and review for coding accuracy <b>Prediction:</b> inconsistent coding and free-text of conditions	Completed on 1/7/24	Principal GP to review 150 patients with indicated and not diagnosed patients. The majority 80 patients have pre-diabetes and 45 were overdue for a HBA1C test. 5 were inactive patients. 10 were on metformin relating to polycystic ovary syndrome, 20 were incorrectly coded and the remaining 35 patient were provided to other GPs for investigation.	Schedule a clinician meeting to create a uniform coding for diabetes and update clinical coding policy. Invite PHN to present to your team on the importance of clinical coding	Identify a cohort of patients with diabetes, and review for coding accuracy <b>Prediction:</b> inconsistent coding and free-text of conditions
<b>Change idea 1.2</b>	Schedule a clinician meeting to create a uniform coding for diabetes and update clinical coding policy.	Clinical meeting held 14/5/23	5 out of 7 GPs attend this meeting. 3 of the GPs were not aware of comment and provisional diagnosis fields and therefore have been free-texting diagnosis. Reason for visit was also defaulting to add to patient history due to BP preference settings. This was fixed for all GPs.	PMs preference settings to be fixed for all GPs to not enforce reason for visit to be added automatically to patient history.	Schedule a clinician meeting to create a uniform coding for diabetes and update clinical coding policy.
	<i>Keep adding rows and cycles as needed.</i>				
<b>Summary of Results</b>					

# Appendix 6: Best Practice - Configuring user options to help maintain data quality

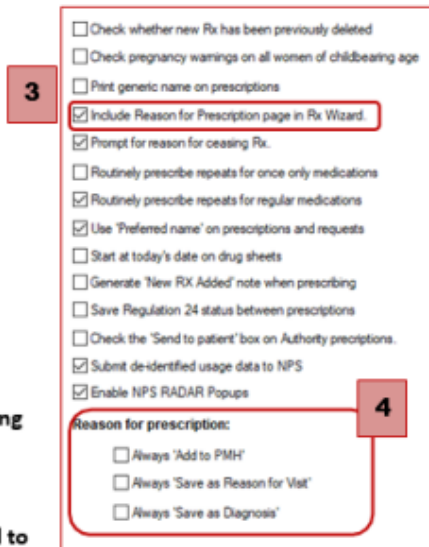
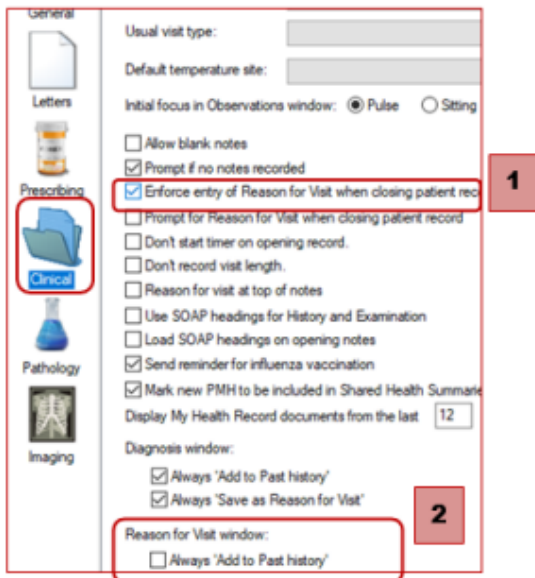
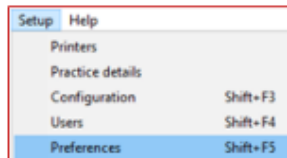


## Summary Sheet

Individual users can change their default setting 'preferences' in Bp Premier to assist with data collection & quality.

### Change default option to mandate an entry of 'Reason for Visit' that does not automatically add to 'Past History':

1. From the **main screen** select the **Setup** menu
2. Select **Preferences** from the drop-down list.
3. Select **Clinical** from the icons on the left
4. Tick **'Enforce entry of Reason for Visit when closing patient record'**
5. Under 'Reason for Visit window:' **untick 'Always Add to Past History' & Save.**  
(NB. If reason for visit is a new diagnosis it will need to be added to the Past History list).



### Entering Reason for Prescription

1. From within Setup>Preferences select the **Prescribing icon**.
2. Tick **'Include Reason for Prescription page in Rx Wizard'**.
3. Under 'Reason for prescription' **untick 'Always Add to PMH'**



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# Appendix 7: Medical Director- Configuring user options to help maintain data quality

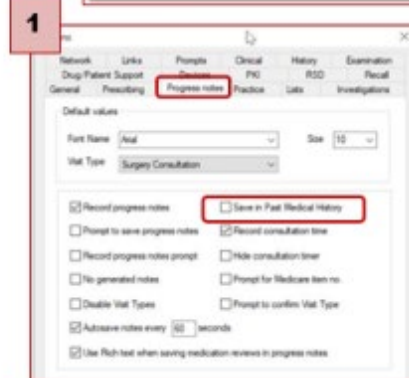
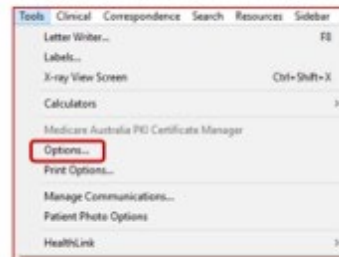


## Summary Sheet

Individual users can change their default settings 'Options' in MedicalDirector Clinical to assist with data collection & quality.

### Changing default option so that 'Reason for Contact' does not automatically add to 'Past Medical History':

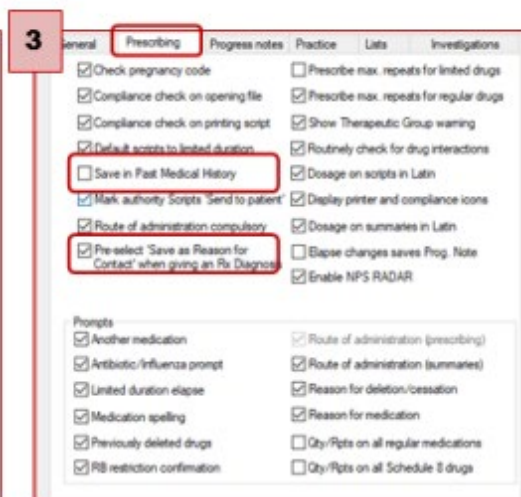
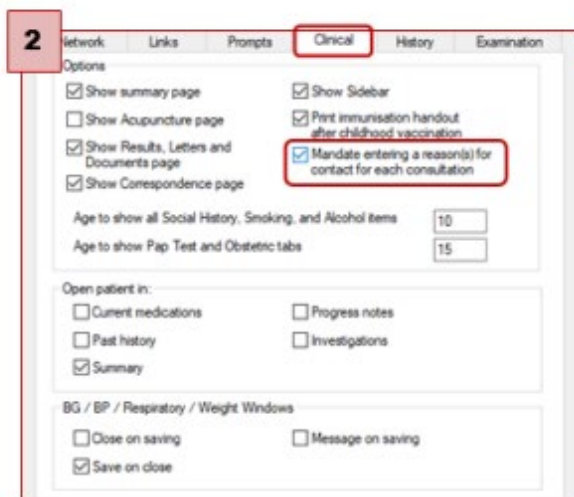
1. From the **main screen** (not from within a patient record), select the **Tools** menu
2. Select **Options** from the drop-down list.
3. Select the **Progress Notes** tab.
4. Untick **'Save in Past Medical History'** & **Save**.  
*(NB. If reason for contact is a new diagnosis it will need to be added to the Past History list).*



### Mandating 'Reason for Contact' & 'Reason for Medication':

Mandating 'reason for contact' & 'reason for medication' means a prompt will appear when the patient record is closed if this information has not yet been entered.

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Select <b>Tools &gt; Options &gt; Clinical</b> tab</li> <li>2. Tick <b>'Mandate entering a reason(s).....'</b></li> </ol> | <ol style="list-style-type: none"> <li>1. Select <b>Tools &gt; Options</b></li> <li>2. <b>Prescribing</b> tab &gt; Tick <b>'Reason for medication'</b></li> <li>3. <b>Prescribing</b> tab &gt; untick <b>'Save in PMH'</b></li> </ol> |
|---|---|



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