



MEDICATION MANAGEMENT TOOLKIT

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INTRODUCTION

HNECC PHN Medication Management Strategy

HNECC PHN is committed to delivering innovative, locally relevant solutions that measurably improve the health outcomes of our communities.

Not all patients in Primary Health Care use medication, but all patients who do take medication deserve to do so safely and therapeutically under the guidance of their primary health care team.

HNECC PHN encourages and supports General Practice to consider Quality Improvement activities around Medication Management as a means of increasing patient centred care, providing better management of chronic disease and co-morbidities, reducing potentially preventable hospitalisations, increasing positive health outcomes for Aboriginal and Torres Strait Islander people and providing a collaborative and integrated approach to patient care.

At a glance: Medication Use

Medication errors are a problem throughout Australia, New South Wales and the Hunter, New England and Central Coast areas. The Pharmaceutical Society of Australia reported in January 2019 that 250,000 hospital admissions annually are a result of medication related problems, with an additional 400,000 presentations to emergency departments likely to also be medication related. Over 90% of patients have at least one medication related problem post-discharge from hospital and 1.2 million Australians have experienced an adverse medication event in the last 6 months.

At least 50% of this harm is preventable

Improving medication safety is a key area of focus for the Australian Government Department of Health and the Australian Commission on Safety and Quality in Health Care.

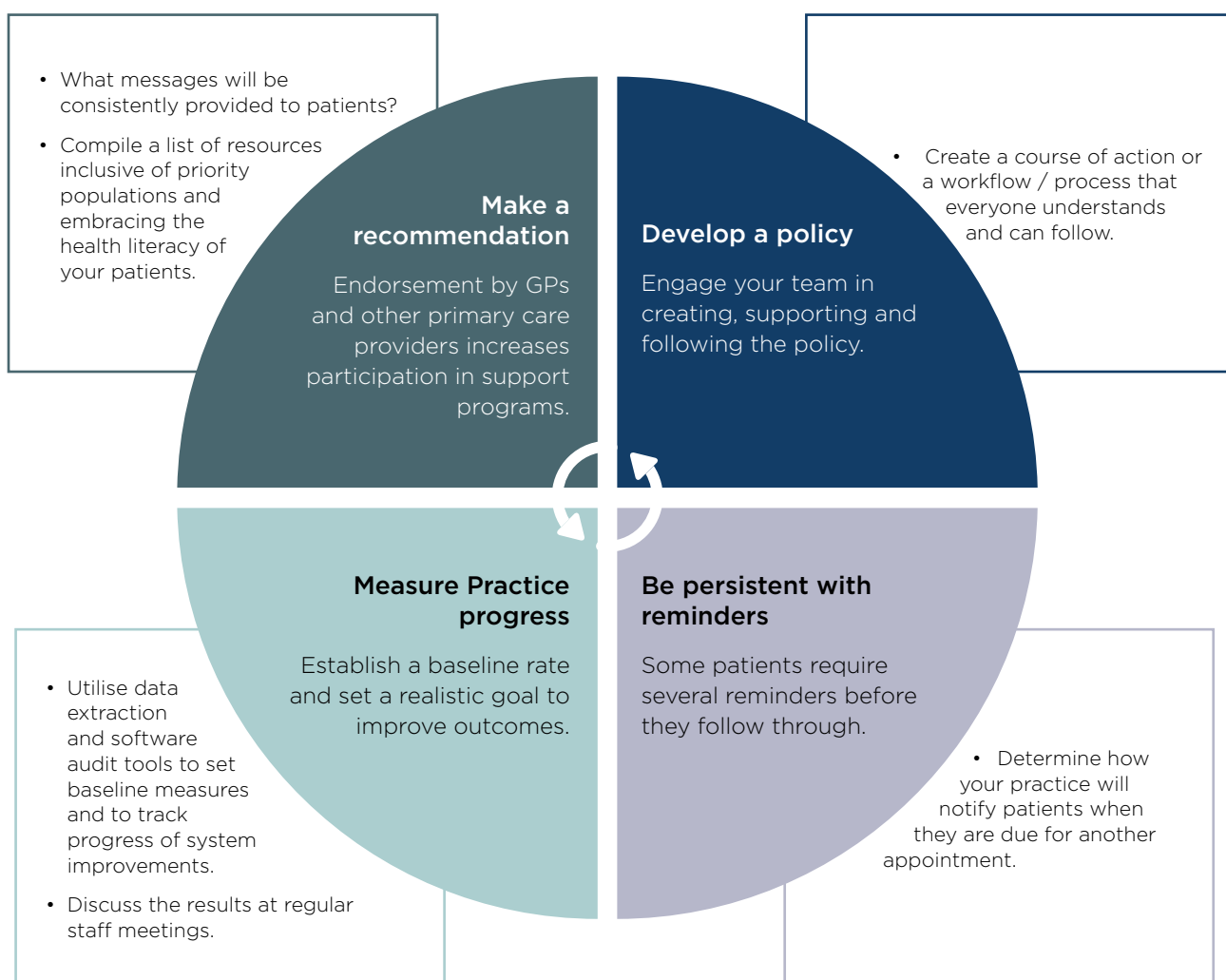
The World Health Organisation (WHO) Third Global Patient Safety Challenge also commenced a program in 2017 named 'Medication Without Harm' to help countries strengthen their systems to reduce medication errors. Medication mismanagement is identified as a global issue compromising patient safety and quality of life.

A random snapshot of 200 practices in the Hunter New England and Central Coast areas in February 2019 demonstrates 64.56% of patients aged 65 or older are taking 5 or more medications, potentially placing them at high risk of harm. Reducing or removing prescribed medications may not be clinically indicated, but Primary Care Clinicians have the opportunity to review, monitor and manage medication use as a quality improvement activity to provide better patient care and potentially prevent hospitalisations attributed to medication use.



Four essentials to improving Medication Management in Primary Care

1. Implement practice changes.
2. Take a person-centred approach.
3. Involve staff and put office systems in place.
4. Follow a continuous improvement model to develop and test the changes.



DEVELOPING A SYSTEMATIC APPROACH

Data cleansing

The information available in clinical software is invaluable when developing streamlined practice systems and providing quality patient care. For practice data to be useful, information within your clinical database must be accurate and up to date.

Ensuring electronic results are received correctly is key to providing effective and efficient patient care.



HELPFUL TIPS

- Regularly mark patients as 'inactive'
- Merge duplicate patient records
- Ensure pathology results are received in the correct format
- Develop and agree on processes to ensure data quality is maintained
- Clean up reminder lists: Ask your Primary Care Improvement Officer for instructions on 'Bulk Reminder Clean Up'
- Document processes clearly in your Policy and Procedure Manual
- Regularly discuss clinical coding in team meetings to develop clear standards and requirements for patient files.

Work flow

Work flow is defined as a series of steps, frequently performed by different staff members that accomplishes a task. Workflows represent how work gets done, not the protocols that have been established to do the work.

Work flow mapping is a way of making the invisible "visible" to a practice to improve processes to increase efficiency, reduce errors, and improve outcomes.

Workflow mapping is the process of documenting the specific steps and actions that take place in completing a task. Creating a workflow map allows the opportunity to see what is currently happening, identify opportunities for improvement or change, and design new, more effective processes. It is helpful to consider workflows associated with the following three processes:

1. Perceived process (what we think is happening)
2. Reality process (what the process actually is)
3. Ideal process (what the process could be).



HELPFUL TIPS

Important rule of mapping: the person who controls the process controls the pen. Meaning whomever carries out the process, maps the steps.

- Be realistic: map what is happening not what is desired.
- Identify each step of the activity and person responsible.
- Communicate: ensure all team members involved understand how the activity is executed.



HELPFUL LINKS & RESOURCES

Train IT Medical have sample workflows for:

[Correspondence Management](#)

[Inbox Management](#)

[Train IT Medical Practice Management resources](#)



Implementing robust recall and reminder systems

The RACGP Standards for General Practice view a **reminder** as an offer to provide patients with systematic preventative care. A **recall** is when it is paramount for a patient to attend the clinic, usually in the instance of an abnormal result. A recall is further defined as a system to make sure patients receive further medical advice on matters of clinical significance.

Clinical significance is determined by:

- the probability that the patient will be harmed if further medical advice is not obtained; and
- the likely seriousness of the harm.

It will be up to each practice to design a system which effectively differentiates between their general preventive reminders and their true recalls (RACGP, 2017).



HELPFUL TIPS

- Ensure there is a written policy which is communicated to the practice team which outlines a consistent and validated process for recording results, entering recalls and sending reminders
- Define roles and responsibilities for individual team members
- Review systems for managing overdue patient recall and reminders.



HELPFUL LINKS & RESOURCES

Speak to your Primary Care Improvement Officer to gain access to best practice resources:

[Medical Director: Recall, Reminders Action Fact Sheet](#)

[The Dos and Dont's of Patient SMS](#)

[AMA Recall Systems and Patient Consent](#)

It is recommended that GPs who are coordinating patient-centred care should not assume that clinically significant test results ordered by others have been adequately followed up.

Clear and agreed systems for receiving and following up on test results are needed to ensure safe and effective continuity of patient care. For further information regarding RACGP's position on non-GP initiated testing [click here](#).

How can PEN CS support patient-based outcomes in General Practice?

When leading change in a General Practice, you will require data to help guide your thinking, discussions and planning.

PEN CS's Clinical Audit Tool 4 (CAT 4) is a user-friendly software tool that interrogates the data contained within GP clinical and management software. The extracted data can be then filtered to select a specific target group and viewed through a range of clinically relevant patient reports to support quality improvement.

PEN CS and your Practice

A significant number of General Practices across the HNECC PHN already use CAT 4 to investigate and report against their patient data. Using CAT 4 to extract relevant data provides practices a range of benefits including:

- Improving the quality of patient care by identify patients requiring periodic screening and ensuring the appropriate treatment or referral is delivered proactively
- Identifying patients “at risk” of developing certain diseases or conditions and offering preventative treatment.



HELPFUL TIPS

- Use current data by performing monthly data collection
- Ensure correct coding principles are implemented to ensure data can be extracted
- Upskill; participate in CAT 4 and [TopBar webinars](#) and speak with your Primary Care Improvement Officer to assist in understanding your practice data.



HELPFUL LINKS & RESOURCES

PEN CS has developed ‘recipes’ which are simple step by step guides to extract meaningful data correctly.

Visit www.pencs.com.au to source recipes identifying patients who may benefit from better medication management.



WHAT IS QUALITY IMPROVEMENT?

The RACGP Standards for General Practice describes quality activity undertaken within a general practice where the primary purpose is to monitor, evaluate or improve the quality of health care delivered by the practice. The Standards recommend practices engage in quality improvement activities that review structures, systems and processes to aid the identification of required changes to increase the quality of healthcare delivery and safety of patients.

Quality improvement consists of systematic and continuous actions that lead to measurable improvement in health care services and the health status of targeted patient groups.

Engaging in quality improvement activities is an opportunity for the practices' GPs and other staff members to come together as a team to consider quality improvement. Quality improvement can relate to many areas of a practice and achieving improvements will require the collaborative effort of the practice team.

Standards for General Practice - 5th Edition

The RACGP 5th Edition Standards have been released with a new module specifically identified for Quality Improvement. Criterion QI 1.1 identifies four indicators that relate to Practice based activity around Quality Improvement and reference a team-based approach. The criterion recommends having at least one team member responsible for leading quality improvement in the practice, which establishes clear lines of accountability. Please refer to the guidelines.

Criterion QI 1.3 relates to improving clinical care, specifically practice use of relevant patient and practice data to improve clinical practice. Establishing and utilising robust reminder and recall systems could be a focus under this criterion.

The Quality Improvement process is divided into two manageable steps, the "thinking" and "doing" part. This process allows ideas to be broken down into management sections which can be tested and reviewed to determine whether improvement has been achieved prior to implementing on a larger scale.

The 'Thinking' part

The thinking part consists of three fundamental questions that are essential for guiding improvement.

1. What are we trying to accomplish?

By answering this question, you will develop your aim for the activity.

Consider exactly what it is you are seeking to change.

- Define the problem. Success comes through preparation Understanding what the problem is and thinking about why there is a problem helps in developing your aim.
- Set realistic objectives which are specific, have a defined timeframe and are agreed (SMARTA). Use plain language and avoid jargon so that the meaning is clear to everyone.
- Include information that will help keep the team focused.

2. How will we know that change is an improvement?

By answering this question, you will develop measures for tracking your goal.

Without measuring, it is impossible to know whether the change you are testing is an improvement.

- Communicate to the team what you are measuring, how, when and who is responsible (see 'Measuring Success').
- Make the measurement as simple as possible.
- Only collect the data that is required.

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

By answering this question, you will develop ideas for change.

Encourage the whole team to contribute ideas. Be creative. Think outside the box.

- You know your General Practice and your patients best. Keep this in mind and use your knowledge and experiences to guide your ideas.
- Adapt from others.
- Think small and test. Think about testing a change with one GP or a select group of patients. This will assist in determining if the change had the desired effect and suitable for wider implementation.

FOR EXAMPLE - your General Practice may decide to focus on Medication Management.

You may have an aim like this:

To review patients at highest risk of poor medication management to ensure patient safety, drug efficacy and to reduce risk of medication errors or interactions.

Your response may be:

We will measure through CAT 4:

- Active patients in our practice taking 5 or more medications.
- Active patients taking medications requiring therapeutic monitoring.

Your outcome may include:

- We will provide training to ensure all clinicians are confident with the process for reviewing medications and referring patients for a home medication review (DMMR) where clinically indicated.
- We will routinely review medication lists and actively ask our patients if they experience any difficulties in self-administering the correct medication in the correct dose, by the correct route, at the correct time.
- We will routinely ask patients if they have been prescribed any medications from another healthcare provider and whether the patient is taking any over the counter or complementary medicines.
- We will send reminder letters to high risk patients to attend the surgery for medication reviews.
- We will liaise with local Pharmacists to ensure a co-operative team based approach to managing patients at high risk of adverse events or sub-optimal medication use.
- We will utilise TopBar prompts and/or clinical software to set alerts and reminders for regular review of identified high risk patients.

The 'Doing' part

The doing part is made up of rapid, small Plan, Do, Study Act (PDSA) cycles to test and implement change in real work settings.

Not every change is an improvement, but by making small changes you can test the change on a small scale and learn about the risks and benefits before implementing change more widely. Several PDSA cycles may be required to achieve your improvement goal.

You will find through PDSA cycles some changes lead to improvements. If so, these improvements can be implemented on a wider scale. You may also find that some improvement ideas are not successful. Analyse why they didn't work and learn from this. By carrying out small tests in PDSA cycles, you have avoided implementing unsuccessful change on a wider scale.

Step One: Plan

A well-developed plan includes what, who, when, where and your predictions and what data is to be collected.

Make your plan as clear and as detailed as possible:

- What exactly will you do?
- Who will carry out the plan?
- When will it take place?
- Where will it take place?
- What do you predict will happen?
- What data/information will we collect to know whether there is an improvement?

Step Two: Do

Write down what happens when the plan is implemented (both negative and positive) and other observations.

Collect any data you identified in the plan phase.

Step Three: Study

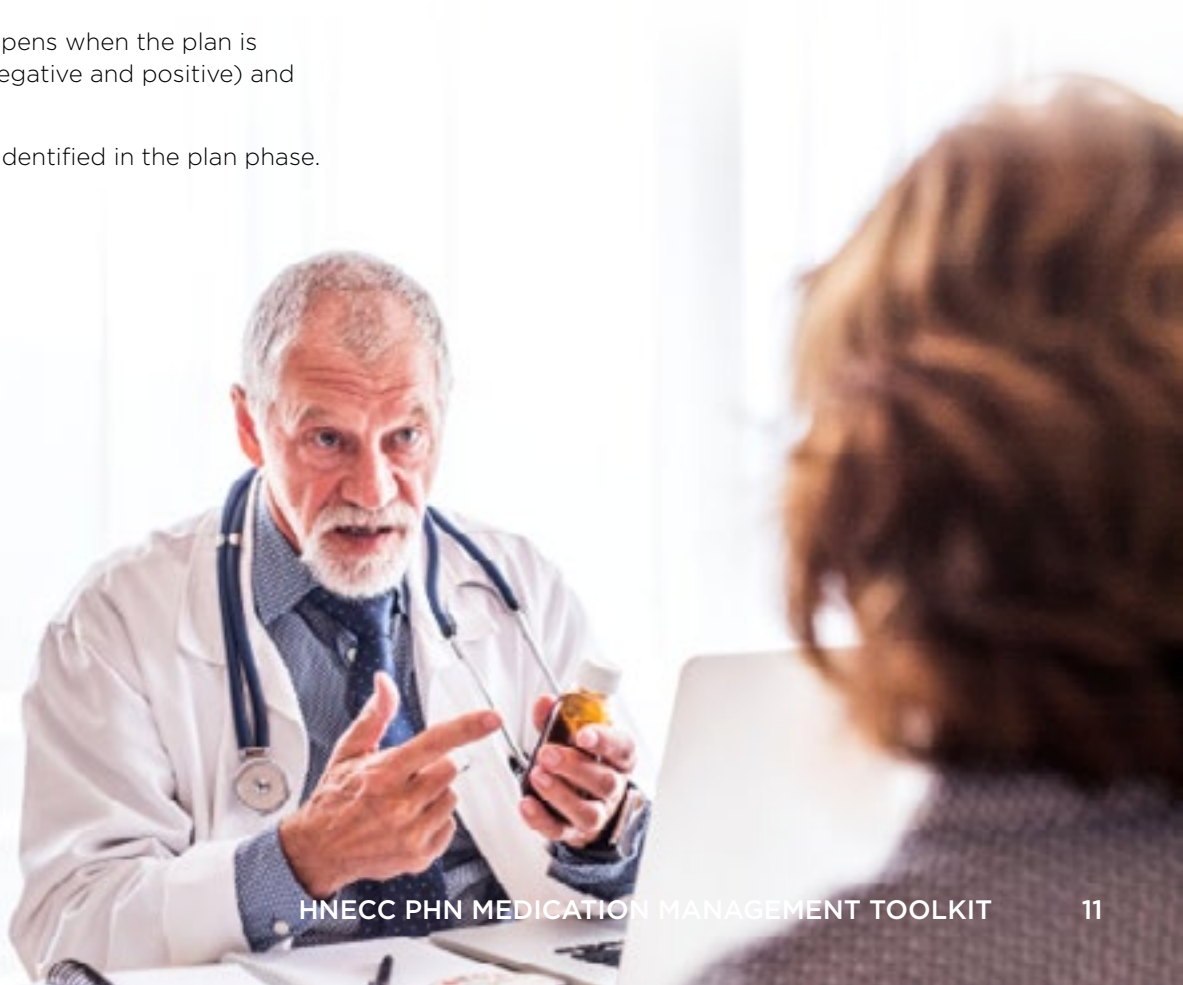
Reflect on what happened.

Think about and summarise what you have learnt. Analyse the data collected and compare with your initial predictions. If there is a difference in the data and predictions, consider what happened and why.

Step Four: Act

Considering the results from your tests; will you implement the tested change or amend and test or try something else?

Write down the next idea you will test. Be sure to start planning the next cycle early to keep up the momentum of change.



FOR EXAMPLE - your General Practice may decide to focus on Medication Management.

Idea

Identify our active patients aged 65 years or older taking 5 or more medications who haven't had a Medication Review attended within the past 12 months as this demographic is recognised as being at high risk of medication mismanagement.

Plan

What: Use CAT4 to extract data

Who: Administration Team Leader

When: Tuesday 11th June 2019

Where: General Practice

Data to be collected: Active patients, 65 years and older, taking 5 or more medications, no MBS item number 900 or 903 billed within the past 12 months.

Prediction: Older Australians who take five or more medicines a day are twice as likely to report a side effect or other medicine problem. They are also seven times more likely to be taking medicines that could interact. Once we have identified which patients fall into this high-risk group, we can devise strategies and implement systems to improve medication management within our practice.

Do

Receptionist extracted data as planned using CAT4

Study

Percentage of patients identified as high risk was significantly higher than expected. Data presented at team meeting to discuss strategies.

Act

Medication management strategies are implemented within the practice for a defined period of time. Strategies are evaluated for effectiveness throughout the cycle and at the completion of the designated activity with consideration to data driven improvement.



HELPFUL TIPS

- Practices need to engage in quality improvement activities to improve quality and safety for patients in areas such as practice structures, systems and clinical care
- Decisions on changes should be based on practice data (PEN CS and clinical database audits, near misses and patient and/or staff feedback)
- Achieving improvements requires the collaborative effort of the practice team and all members of the team should feel empowered to contribute
- Utilise the Readiness Tool to assist identify ideas and areas for improvement
- No PDSA cycle is too small; keep it simple
- You may complete a series of PDSA cycles to achieve your goal. Results will be achieved through building on previous cycles
- Set aside protected time to complete the agreed upon tasks
- Document your PSDA cycles and present findings at team meetings
- Improvement is a team effort.

See Criterion C4.1 - [Health Promotion and Preventative Care RACGP 5th Standards](#)

READINESS TOOL

There are many ways to improve patients' participation in better managing their medications.

This Readiness Tool is designed as a starting point to encourage General Practice to generate ideas and strategies in medication management that may be applied to a quality improvement activity. This may assist with the 'thinking part' of the QI cycle.

In working through the Readiness Tool, start by identifying if your practice and staff are already undertaking activity in the identified area. In the action column you could identify any ideas or processes that may need to be introduced or changed.

Medication Management Quality Improvement Readiness Tool

General Practice Name:	
Completed by:	
Staff involved in change process:	

AREA: Quality Improvement Change Readiness	Yes/No	Action/Comment (what, when, who)
1. Our surgery has engaged leadership at all levels of the organisation and our staff share an active focus on Quality Improvement.		
2. We recognise the value of team-based care and empower all staff to take an active role in quality improvement activities within their scope of practice.		
3. We reserve appointments for all our clinicians to allow our patients prompt access to care from their regular GP and care team as much as possible.		
4. We obtain consent from our patients to participate in recall and reminder systems and for sharing relevant information with other providers actively involved in their team care in line with our privacy policy.		
5. Our Doctors are aware of Closing the Gap Initiatives and all prescriptions for registered Aboriginal and Torres Strait Islander patients are annotated with 'CTG' to increase affordability and compliance.		
6. There is an active focus on Prevention or Management of Patient Care (Chronic Disease Management, Indigenous Health, Cancer Screening).		

AREA: Information Systems and Data Driven Improvement	Yes/No	Action/Comment (what, when, who)
1. Our staff are confident in using our clinical software and all other computer programs required to fulfil the duties of their role (e.g. Excel, Word).		
2. Our staff recognise the importance of clinical coding and use of clinical software functions in facilitating data collection. We actively avoid free text diagnoses as much as possible.		
3. We regularly complete data cleansing activities to ensure accurate and current registers of patients. This role is allocated to one or more staff members in their position description to ensure consistency and accountability.		
4. Our clinical staff upload and view shared health summaries/event summaries to My Health Record to ensure accurate information is available to all providers involved in the team care of our patients.		
5. Our staff have access to clinical audit tools and are trained in using CAT filters effectively and efficiently to create patient registers.		

AREA: General Practice Systems	Yes/No	Action/Comment (what, when, who)
1. We record Allergies and Adverse Reactions for our patients and update these lists regularly.		
2. All prescriptions and medication lists are recorded in our clinical software.		
3. We have policies and procedures for reminders and recalls. Staff follow these established protocols to ensure consistency and accuracy in their role.		
4. Protected time is scheduled to ensure staff have capacity and resources to accurately complete their tasks within allocated timeframes.		

AREA: Patient Centred Care	Yes/No	Action/Comment (what, when, who)
1. Medication use is opportunistically discussed in general consults and routinely reviewed in Health Assessments and Chronic Disease Management:		
<ul style="list-style-type: none"> Aboriginal and Torres Strait Islander (715) Health Assessment – All ages 		
<ul style="list-style-type: none"> 45 - 49 year Health Assessment 		
<ul style="list-style-type: none"> 75+ Years Health Assessment 		
<ul style="list-style-type: none"> GP Management Plan and Team Care Arrangements 		
<ul style="list-style-type: none"> Practice Nurse / Aboriginal Health Practitioner Chronic Disease monitoring and support (MBS item 10997) 		
<ul style="list-style-type: none"> Practice Nurse / Aboriginal Health Practitioner follow up of Health Assessments for Indigenous patients (MBS Item 10987) 		
2. Our patients are engaged in shared decision making that respects their personal goals to facilitate the patient-team partnership.		
3. We undertake health promotion and health coaching activities that consider the health literacy of our patients.		
4. Our staff know how to access resources in languages other than English and ways to provide non-written information for patients who are illiterate or sight impaired.		
5. We routinely identify Indigenous patients to ensure culturally appropriate care is provided.		
6. We routinely identify patients who may require assistance to communicate and we utilise Telephone Interpreter or Relay Services where appropriate. All of our clinicians are registered and familiar with the use of these programs.		
7. We support people with disabilities and physical or cognitive conditions to maintain capacity, dignity and independence by considering assistive devices such as dosing aids and appropriate medications tailored to individual patient requirements.		
8. Our patients are invited to share their experience of medication management activities to enable us to measure and refine our patient centred programs and develop a template for future activities.		

AREA FOR ACTION (Go to PDSA template in your toolkit or see suggested PDSA activities)

1.

2.

MEDICATION MANAGEMENT PRACTICE TEAM

Clinical lead (GP):

Administrative lead (PM/PS):

Clinician involvement (GP/PN):



CHANGE IDEAS TO CONSIDER

These ideas are suggestions only, with the concept adaptable for any patient, taking any medication.

Idea: Encourage person centred care by inviting patients to discuss medication management with their GP.

- Display Medication Management promotional material in the waiting room. This could incorporate posters, newsletters, signs etc.
- Have the reception team give all patients a small checklist asking if they have recently changed or commenced taking any medications. The patient can then take this into their appointment, opening the door for a discussion with their Doctor or Nurse.
- Provide information on your website and/or social media page inviting patients to discuss their medications with their healthcare team. Promote relevant bodies such as NPS and Patient Info as reliable sources of information regarding safer medication use.

Idea: Develop and maintain an effective recall and reminder system.

- There is often a lot of work that needs to be done to improve how practices use software to maintain effective recall and reminder systems. Staff education is the first step towards improvement.
- Ask your Primary Care Improvement Officer to provide a short information session to staff and provide reminder and recall resource manuals if you require assistance.

Idea: Appoint 1 or 2 staff members who are responsible for creating and maintaining a register of patients at highest risk of medication errors and mismanagement. Add this role to their job description.

- These staff members may become the Practice Champions for medication management. Providing and supporting professional development opportunities for these staff members will assist with recognising their contribution to the team.

Idea: Hold a team meeting to brainstorm how recall and reminder systems could be optimised to improve patient care (e.g. by linking multiple recalls such as medication review, GP Management Plans, Health Assessments together)

- Dedicate time at a staff meeting to discuss how health assessments can include medication usage prompts.
- Review health assessment and care plan templates to ensure that medication management questions are included.
- Consider developing standing orders for nursing staff to generate draft DMMR referrals (to be approved and signed off by the GP) for eligible high risk patients who are identified during health assessments and chronic disease management planning.

Idea: Send a medication review reminder letter to eligible patients due for assessment.

- The medication management initiative suggests two key times where Practice reminders can really add value:
 1. For patients who have never been assessed.
 2. On a patient's re-screen due date (every 1-2 years routinely).

RESOURCES FOR UNDERTAKING QUALITY IMPROVEMENT

Quality Improvement Goal Setting

1. What are we trying to accomplish?

By answering this question, you will develop your goal for improvement.

2. How will we know that a change is an improvement?

By answering this question, you will develop measures to track the achievement of your goal.

3. What changes can we make that can lead to an improvement?

List your ideas for change. By answering this question, you will develop the ideas you would like to test towards achieving your goal.

IDEA 1.

IDEA 2.

IDEA 3.

IDEA 4.

Quality Improvement Action Worksheet

PLAN, DO, STUDY, ACT

Please complete a new worksheet for each change idea you have documented on the previous page.

Where there are multiple change ideas to test, please number the corresponding worksheet(s).

Describe the idea you are testing.

IDEA

Must include what, who, when, where, predictions & data to be collected.

What:

Who:

PLAN

When:

Where:

Data to collect/record:

What do we think will happen?

Was the plan executed? Document any unexpected events or problems.

DO

Record, analyse and reflect on the results.

Extract same data to measure for improvement:

STUDY

What will you take forward from this cycle (next step or next PDSA cycle)

ACT



Measuring Success

The overall aim of undertaking a Medication Management Quality Improvement activity is to increase patient centred care and reduce potentially preventable hospitalisations.

Choosing an activity or idea to explore will have its own measure of success. It is important to identify in each activity what you are wanting to change and how you will know when the change has occurred.

Applying a SMARTA (Specific, Measurable, Attainable, Realistic, Timebound and Agreed) goal setting process will assist you.¹

SMARTA Goal Setting

- **Specific.** Goals that are too vague and general are hard to achieve, for example 'be a better parent'. Goals that work include specifics such as 'who, where, when, why and what'.
- **Measurable.** Ideally goals should include a quantity of 'how much' or 'how many' for example drinking 2 litres of water per day. This makes it easy to know when you have reached the goal.
- **Achievable.** Goals should be challenging, but achievable. Goals work best when they are neither too easy or too difficult. In many cases setting harder goals can lead to better outcomes, but only if the person can achieve it. Setting goals which are too difficult can be discouraging and lead to giving up altogether.
- **Relevant.** The goal should seem important and beneficial to the person who is assigned the goal.
- **Time-related.** 'You don't need more time, you just need a deadline.' Deadlines can motivate efforts and prioritise the task above other distractions
- **Agreed.**

Activity identified on page 11, you have undertaken a data analysis utilising CAT 4. This has shown the percentage of active patients who are recorded as taking 5 or more medications. By also extracting data regarding the billing of Home Medicine Reviews, you can now identify eligible patients at higher risk who may benefit from a Medication review with either their GP or referred to Pharmacy for a DMMR if clinically indicated. This forms your baseline measure.

The next step is to decide on an activity and set a goal. For this example, you may like to set a goal to increase home medicine medication reviews by 10%. When this has been implemented, within a set time frame, you can then repeat the data analysis to see the change in status has increased.

When reflecting on the Medication Management

¹Health Direct November 2016 <https://www.healthdirect.gov.au/smart-goals>

An Example of Measuring Success in Medication Management

Practice X has 600 active male and female patients. Of these patients, following the use of CAT 4, 200 males and females are taking 5 or more medications.

Numerator: The number of male and female patients with 3 or more visits in the previous 2 years, who are taking 5 or more medications.

Denominator: The number of active male and female regular clients in the database.

$$[\text{Numerator of 200}] \div [\text{Denominator of 600}] = 30\%$$

Practice X then decides as a QI activity to undertake a data cleansing and improvement activity for medication management. The measurement of change will be the increase in recording of 10%. This could be a measure after 3 months as this is a measurement of data management and system change.

Measurement for Medication Management

Medication Use

NUMERATOR The number of active clients who are recorded as taking 5 or more medications.

DENOMINATOR The number of active clients taking 5 or more medications who had a Home Medicine Review billed to Medicare.

High risk of medication error

NUMERATOR The number of active clients aged over 50, who are recorded as taking 5 or more medications.

DENOMINATOR The number of active clients who are recorded as taking 4 or less medications.

Eligibility for DMMR

NUMERATOR Active patients taking medications with a narrow therapeutic index or common interactions with other medications.

DENOMINATOR The number of these patients who have already had a DMMR attended and billed within the past 12 months.

Individuals for whom quality use of medicines may be an issue

NUMERATOR Active patients with the potential to experience difficulties in managing their medications because of cultural background, language differences or dementia diagnosis regardless of the number of medicines they are taking.

DENOMINATOR The number of these identified patients who have already had a DMMR attended and billed within the past 12 months.

NOTES:

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- A national census of medicines use: a 24-hour snapshot of Australians aged 50 years and older. (Morgan TK, Williamson M, Pirotta M, Stewart K, Myers SP, Barnes J. Med J Aust. 2012 Jan 16;196(1):50-3.) [4 January 2019]
- Prescribing in older people (Australian Family Physician Vol. 33, No. 10, October 2004) [21 December 2018]
- Patients' ideas, concerns, and expectations in general practice: impact on prescribing. (Matthys J, Elwyn G, Van Nuland M, Van Maele G, De Sutter A, De Meyere M, Deveugele M. Br J Gen Pract. 2009 Jan;59(558):29-36) [5 January 2019]
- Hospital admissions caused by adverse drug events: an Australian prospective study. (Phillips. AL, Nigro O, Macolino KA, et al. Australian health review Feb 2014;38(1):51-5) [3 February 2019]

Useful Online Resources:

For Clinicians:

- **Medicine Safety: Take Care**, Pharmaceutical Society of Australia
- **RACGP Position Statement** "Too Much Medicine"
- **Sample DMMR referral form**
- **MBS Item 900**
- **Choosing Wisely Recommendations**, An initiative of NPS MedicineWise
- Health Pathways: Medication Management: **Hunter New England Central Coast**
- **Pen CAT Recipes**

For Consumers:

- **NPS MedicineWise Managing Your Medicines**
- Home Medicines Review **information leaflet**

HNECC PHN acknowledges the traditional owners and custodians of the lands that we live and work on as the First People of this Country.

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