



**Cancer
Council**

Quality Improvement Activity for General Practice.

Bowel Cancer Screening
Plan Do Study Act (PDSA)



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Plan, Do, Study, Act (PDSA) activity

The PDSA activity focuses on improving the capability of the practice to deliver on quality patient care. The PDSA uses a series of steps to implement a planned improvement or change. The steps are broken down into small manageable parts. Each change is tested to ensure things are improving and no efforts are wasted. Benefit is not always achieved in one cycle, which means the process can be refined and the cycle repeated, with a minimum of two cycles required.

Activity summary

This bowel cancer screening PDSA activity includes two cycles. Each cycle includes four components: **plan** the change, **do** the change, **study**, and then **act** on the results.

Practices who complete the PDSA will trial the effectiveness of reminder prompts (i.e., letters, SMS, audio message) in encouraging bowel cancer screening participation. For example:

- 30 patients (per GP) who have not yet had an FOBT result recorded are selected: 10 patients are contacted via reminder prompt A; 10 patients are contacted via reminder prompt B; and 10 patients receive no reminder prompt; or
- 30 patients (per GP) who have not yet had an FOBT result recorded are selected: 15 patients are contacted via reminder prompt A; and 15 patients receive no reminder prompt.

FOBT results of the 30 patients are reviewed in 3-6 months' time.

Example bowel cancer screening PDSA

Cycle 1:	PLAN	DO	STUDY	ACT
Audit patients aged 50 years and 4 months or older who have no recorded FOBT or no recorded FOBT in the past 28 months to determine current participation rate amongst eligible patients at the clinic.	<p>What: Practice manager to use the GP1 office to conduct an audit using the PenCS CAT recipe and identify eligible patients aged 50 years and 4 months or older with no recorded FOBT or no recorded FOBT in the past 28 months.</p> <p>Who: Practice manager.</p> <p>When: 10 January.</p> <p>Where: At the clinic.</p> <p>Data collected: Number of eligible patients and the status of their FOBT result record. This can be achieved by using the PenCS CAT recipe.</p>	Done - completed on the 10 January.	334 out of 547 practice patients eligible for the NBCSP had no recorded FOBT or no recorded FOBT in the last 28 months (61%).	<p>Trial the effectiveness of reminder prompts in encouraging participation in bowel screening.</p> <p>The designated practice team decided to trial two reminder methods - letter and SMS in the next cycle.</p>

Cycle 2:	PLAN	DO	STUDY	ACT
<p>Audit patients aged 50 years and 4 months or older who have no recorded FOBT or no recorded FOBT in the past 28 months and send reminder prompts to a randomly selected patients who have not yet had an FOBT result recorded.</p>	<p>What: Designated practice team to select and record details of 30 audited patients (per GP) and randomly divide the patients into three equal groups i.e., 10 patients receive no reminder prompt; 10 patients are contacted via SMS; 10 patients are contacted via letter. GP1 to draft and post letters to the 10 patients selected for this intervention. John to draft and send SMS to the 10 identified patients selected for this intervention.</p> <p>Who: Practice team.</p> <p>When: GP1 & GP2 to complete by 1 February. Practice team review FOBT results in 6 months: 1 August.</p> <p>Where: At the clinic.</p> <p>Data collected: Number of patients who have a FOBT result recorded in 6 months (data collection template provided).</p>	<p>Done - reminder prompts sent on the 1 February.</p>	<p>20 of the 30 patients identified were sent reminder prompts (10 letters; 10 SMS); 10 patients received no intervention. Patient records were checked, and it was noted that within 6 months, 6/10 who received letters had an FOBT recorded; 7/10 who received SMS had an FOBT recorded; 3/10 who received no intervention had an FOBT recorded.</p>	<p>Consider if you will adopt, reject or modify the reminder prompts to all eligible patients moving forward.</p> <p>The practice team decided to complete a third cycle trialling the SMS reminder prompt again, comparing to patients with no intervention.</p>

Needs assessment

Australia has one of the highest rates of bowel cancer in the world.

Bowel cancer screening helps identify individuals who have a higher risk of harbouring a polyp or early cancer (via detection of blood in stool) and thus to remove precancerous lesions (i.e., polyps) or early cancer to stage-shift cancer detection to less advanced stages, and thus reduce mortality.



The recommended strategy for population screening in Australia remains the immunochemical faecal occult blood test (iFOBT), commencing at age 50 and continuing to 74 years in asymptomatic individuals at average risk of bowel cancer.

Around 95%

of the population are at near-average risk of bowel cancer and should be screened by FOBT, rather than colonoscopy.

Increasing participation in the NBCSP to **60%** can help **save 84,000 lives over 50 years.**



80%

re-participation rate for those who had previously taken part and were receiving a subsequent screening invitation.

Individuals are less likely to participate if they are at the younger end of the eligibility age range (closer to age 50 than 74); identify as Aboriginal or Torres Strait Islander, come from non-English speaking background, are male, or live in low socioeconomic or remote regions.



Relevance to general practice

Encouragement by GPs and practice staff is a key component of boosting participation in bowel cancer screening; evidence shows that a recommendation by a primary care provider is a key motivator to participate. Primary care health professionals have several important roles in the NBCSP, including encouraging and supporting participation, managing participants who have a positive FOBT, providing information about referrals to the NBCSP, and managing individuals who, by way of symptom(s) or significant family history, require diagnostic investigations or targeted surveillance rather than screening.

It is important to note that for some patients, regardless of their age, it may not be clinically appropriate for them to participate in bowel screening. Patients are not eligible for bowel cancer screening if they:

- are symptomatic - individuals who are symptomatic should not participate in the screening program but should be referred directly for appropriate investigation;
- have a recent history of bowel cancer, chronic inflammatory bowel disease, or certain high-risk genetic disorders;
- have had a recent high-quality colonoscopy (within four years); or
- have done a FOBT through another source.

The National Health and Medical Research Council (NHMRC) guidelines provide clear guidance regarding the current screening and management of bowel cancer and can be found on the [Cancer Council Australia website](#).

Role and responsibilities of the primary care team

General practitioners (GP)

- Engage in opportunistic discussions about bowel cancer screening with eligible patients.
- Support eligible patients to participate, including [addressing potential barriers](#) i.e., fear, embarrassment.
- Provide support to patients ordering an FOBT kit online via the [NCSR website](#).
- Demonstrate how to complete the FOBT. Free demonstration kits can be ordered by emailing NBCSP@health.gov.au.
- Display the NBCSP kit in practice room to prompt opportunistic discussion.
- Manage patients' participation including deferring their next screening, or opt out on behalf of your patient, provided the patient's consent is granted.
- Assess and support patients following a positive FOBT. Additionally, report referrals or non-referrals of further investigation back to the National Cancer Screening Register via the [Health Care Provider Portal](#).
- Manage patients identified as being at increased risk of bowel cancer as per the [NHMRC-approved guidelines](#).

Practice nurses

- Engage in opportunistic reminders about bowel cancer screening with eligible patients.
- Support eligible patients to participate including [addressing potential barriers](#) i.e., fear, embarrassment.
- Provide support to patients ordering an FOBT kit online via the [Healthcare Provider Portal](#) or the [NCSR website](#).
- Demonstrate how to complete the FOBT. Free demonstration kits can be ordered by emailing NBCSP@health.gov.au.
- Enter screening results received and appropriate re-screening reminders in the clinical software.
- Contact and provide support to patients following a positive FOBT result and refer to a GP for further investigation.

Practice manager

- [Integrate](#) the National Cancer Screening Register Health Care Provider with your clinical information system vendor (i.e., Best Practice Premier, MedicalDirector Clinical, Communicare). Healthcare providers using integrated clinical information systems can directly access patient screening data from within the software interface to manage patient participation in the NCSP and NBCSP. Integrated software users can:
 - » check patient screening information and program status
 - » update patient details
 - » manage your patient's participation in the bowel and cervical screening programs
 - » view patient program correspondence for bowel and cervical screening programs
 - » create and send program forms for bowel and cervical screening programs.
- Undertake screening quality improvement activities (PDSA or Audit) to identify never or under-screened patients.
- Monitor progress against cancer screening goals and measures.
- Establish and oversee recall/reminder systems for never and under-screened patients using clinical software.

Reception staff

- Order and maintain supplies of promotional resources.
- Display brochures, flyers, and posters.
- Engage in opportunistic reminders i.e., handing relevant flyers to patients in the waiting room.

Learning outcomes

Analyse current reminder procedures/systems for bowel cancer screening engagement in the practice.

Identify patients who are eligible for bowel screening through the National Bowel Cancer Screening Program.

Implement a reminder system targeting patients that are eligible for bowel cancer screening.

Evaluate the effectiveness of the reminder system developed as part of this activity.

CPD points application process

This activity has been approved under the measuring outcomes CPD activity type (activity ID: 401342).

Cancer Council WA will apply the GPs CPD hours once the activity has been completed. Please email the completed PDSA activity template to gp@cancerwa.asn.au.



Bowel Screening PDSA

Summary

The General Practice Cancer Education team at Cancer Council WA has developed a PDSA activity to support general practices identify and encourage eligible patients to participate in the National Bowel Cancer Screening Program (NBCSP). Practices will audit patients aged 50 years and 4 months or older with no recorded FOBT or no recorded FOBT in the past 28 months and trial a reminder prompt/s to encourage screening. This will be compared to those patients who receive no intervention.

Activity aim

Increase the proportion of patients aged 50 to 74 who participate in bowel cancer screening in your practice by increasing awareness of the NBCSP and encouraging informed participation.

How will we know that the change is an improvement?

An improvement will be observed if patients who were contacted via a reminder prompt/s log more FOBT results proportionally in practice records compared to patients who received no intervention after a completed PDSA activity. Ongoing uptake of delivering reminder prompts within the practice may provide further opportunity to determine efficacy.

Starting point

1. Identify a GP lead and someone to organise the group - this can be the same person.
2. Review the [Clinical practice guidelines for the prevention, early detection and management of colorectal cancer](#) to ensure the team is up-to-date with best practice guidelines.

Cycle 1 – Audit patients aged 50 years and 4 months or older who have no recorded FOBT or no recorded FOBT in the past 28 months to determine current participation rate amongst eligible patients at the clinic.

PLAN – What will you do?

GP (or designated staff member/s) to host a practice meeting and plan Cycle 1.

GP (or designated staff member/s) to audit patient records using your practice's available data extraction clinical software to determine the proportion of patients aged 50 years and 4 months or older who have no recorded FOBT or no recorded FOBT in the past 28 months.

Who will do this?

When and where will it be done?

Data to be collected

Number of eligible patients and the status of their FOBT result record. This can be achieved by using the PenCS CAT recipe: <https://help.pencs.com.au/display/CR/Patients+eligible+for+the+NBCSP+aged+50+years+and+4+months+or+older>

Additional comments:

DO – Carry out the plan, and record observations and relevant data

GP (or designated staff member/s) to use PenCS Cat recipe to audit patient records to determine the proportion of patients aged 50 years and 4 months or older who have no recorded FOBT or no recorded FOBT in the past 28 months.

Summarise what happened when the plan was implemented. Document any unexpected events or problems.

STUDY - Analyse, compare and reflect on the results

GP (or designated staff member/s) meet to review and discuss findings (proportion of patients with no FOBT recorded or no FOBT recorded in the past 28 months).

How do the results compare to your expectations? Consider patient barriers and enablers, and potential practice amendments.

What have you learned?

ACT - What's your next step or cycle?

Consider trialling a reminder method/s (i.e., letter, SMS, audio message) to help encourage participation in bowel screening.

Select one or two reminder prompts to trial in the Cycle 2.

Cycle 2 – Send reminder prompt/s to randomly selected patients who have not yet had an FOBT result recorded to encourage screening.

PLAN – What will you do?

Staff meet to consider logistics and delegate roles for Cycle 2.

GP (or designated staff member/s) to select and record details of 30 randomly selected patients (per GP) who have not yet had an FOBT recorded or an FOBT recorded in the last 28 months.

Group the 30 identified patients into equal groups. This will depend on the number of reminder prompts you are trialling. For example:

- If trialling **one reminder** prompt: 15 patients will receive the reminder prompt; 15 patients will not receive the reminder prompt.
- If trialling **two reminder** prompts: 10 patients will receive reminder prompt A; 10 patients will receive reminder prompt B; and 10 patients will not receive any reminder prompt.

GP (or designated staff member/s) to plan, draft and send reminder prompt/s.

Who will do this?

When and where will it be done?

How will it be done?

Select and record details of 30 patients (per GP) who have not yet had an FOBT recorded or an FOBT recorded in the last 28 months. This can be achieved by randomly selecting patients from the audited information in Cycle 1.

Record the selected patient details in the [data collection template](#).

Reminder prompt templates:

- [Letter template](#)
- [SMS reminders](#)
- [Audio message reminders](#)

Additional comments:

DO - Carry out the plan, and record observations and relevant data

Delegated staff to draft and send reminder prompt/s to identified patients.

Summarise what happened when the plan was implemented. Document any unexpected events or problems.

STUDY - Analyse, compare and reflect on the results

Practices staff meet and review records 3–6 months after reminder prompt/s and discuss findings (proportion of identified patients from each group that participated in bowel screening).

Reflect on what happened. What have you learned? Consider patient barriers and enablers, and potential practice amendments.

ACT - What will you take away from this cycle?

What's your next step or cycle? Consider if you will adopt, reject or modify the activity.

Another QI improvement ideas to test in a Cycle might include:

- *Trial one or another reminder prompt method.*
- *Check practice records against the National Cancer Screening Register.*

Group evaluation and reflection

Name/s: _____ RACGP No: _____

Please rate to what degree the learning outcomes of the program were met:

At the end of this CPD activity, GP participants will be able to:	Not met	Partially met	Entirely met
Analyse current reminder procedures/systems for bowel cancer screening engagement in the practice			
Identify patients who are eligible for bowel screening through the National Bowel Cancer Screening Program			
Implement a reminder system targeting patients that are eligible for bowel cancer screening			
Evaluate the effectiveness of the reminder system developed as part of this activity			

Please rate to what degree this CPD activity met your expectation about:

	Not met	Partially met	Entirely met
Content <ul style="list-style-type: none"> Current, contemporary, evidence-based, and relevant to general practice 			
Comments:			
Delivery <ul style="list-style-type: none"> Engaging/interactive, eg with opportunity for questions and feedback 			
Comments:			

Would you likely recommend this CPD activity to a colleague? Yes No

Why?

Would you likely change anything in your practice as a result of this CPD activity? Yes No

Why?

Appendices

Additional resources

For health professionals

1. [PenCS CAT Recipe](#): identify patients aged 50 years and 4 months or older with no recorded FOBT or no recorded FOBT in the past 28 months
2. Reminder prompts:
 - [Letter template](#)
 - [Sending SMS messages](#)
 - [Sending audio voice messages](#)
3. [How to address patient barriers to bowel screening](#)
4. [National Health and Medical Research Council \(NHMRC\) Clinical practice guidelines for the prevention, early detection, and management of colorectal cancer](#)
5. About the [National Cancer Screening Register Health Care Provider Portal](#)
 - [Clinical Information System Registration Guide](#)
6. Order a [free replacement FOBT](#) for your patient through the NCSR website
7. [Optimal care pathway for people with colorectal cancer: Quick reference guide](#)
8. Tip sheet to correctly record FOBT results:
 - [Best Practice Premier](#)
 - [Medical Director](#)
9. [GP education webinar: Appropriate use of colonoscopy](#)
10. [PPV guide to determining risk for colorectal cancer](#)
11. Order free FOBT demonstration kit(s) by emailing NBCSP@health.gov.au

For patients

1. [Cancer Council WA bowel screening reminder cards*](#)
2. [Cancer Council WA bowel cancer screening information flyer*](#)
3. [Guides to best cancer care for patients with bowel cancer](#) (available in: Arabic, Simplified Chinese, Filipino, Greek, Hindi, Italian, Vietnamese)
4. [NBCSP resources](#) including posters, factsheets, information booklet, and multilingual and Aboriginal and Torres Strait Islander resources
5. [Video - using the bowel screening home test kit](#)

*Cancer Council WA resources can be ordered via the [resource order form](#).