Cancer Council

Quality Improvement Activity for General Practice.

Bowel Cancer Screening Plan Do Study Act (PDSA)

Contents

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:

- 60 patients (per GP) who have not yet had an FOBT result recorded are selected: 20 patients are contacted via reminder prompt A; 20 patients are contacted via reminder prompt B; and 20 patients receive no reminder prompt; or
- 60 patients (per GP) who have not yet had an FOBT result recorded are selected: 30 patients are contacted via reminder prompt A; and 30 patients receive no reminder prompt.

FOBT results of the 60 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.	**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. **Who:** Practice manager. **When:** 10 January. **Where:** At the clinic. **Data collected:** Number of eligible patients and the status of their FOBT result record. This can be achieved by using the PenCS CAT recipe.	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%).	Trial the effectiveness of reminder prompts in encouraging participation in bowel screening. The designated practice team decided to trial two reminder methods - letter and SMS in the next cycle.

Cycle 2:	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 and send reminder prompts to a randomly selected patients who have not yet had an FOBT result recorded.	**What:** Designated practice team to select and record details of 60 audited patients (per GP) and randomly divide the patients into three equal groups i.e., 20 patients receive no reminder prompt; 20 patients are contacted via SMS; 20 patients are contacted via letter. GP1? to draft and post letters to the 20 patients selected for this intervention. John to draft and send SMS to the 20 identified patients selected for this intervention. **Who:** Practice team. **When:** GP1 & GP2 to complete by 1 February. Practice team review FOBT results in 6 months: 1 August. **Where:** At the clinic. **Data collected:** Number of patients who have a FOBT result recorded in 6 months (data collection template provided).	Done - reminder prompts sent on the 1 February.	40 of the 60 patients identified were sent reminder prompts (20 letters; 20 SMS); 20 patients received no intervention. Patient records were checked, and it was noted that within 6 months,10/20 who received letters had an FOBT recorded; 13/20 who received SMS had an FOBT recorded; 6/20 who received no intervention had an FOBT recorded.	Consider if you will adopt, reject or modify the reminder prompts to all eligible patients moving forward. The practice team decided to complete a third cycle trialling the SMS reminder prompt again, comparing to patients with no intervention.

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 (suggested)

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.

Domains of general practice (suggested)

CS3.1.1 The patterns and prevalence of disease are incorporated into screening and management practices.

CS3.2.1 Barriers to equitable access to quality care are addressed.

CS5.1.3 Relevant data is clearly documented, securely stored and appropriately shared for quality improvement.

CPD Points application process

The bowel screening PDSA activity, if followed correctly, will be eligible for 40 CPD points with RACGP. The GP lead submits the online PDSA application form via the RACGP website on behalf of the group including supporting documentation (i.e., activity template). Once a PDSA application is submitted on the RACGP dashboard, all GP members should be allocated 40 CPD points.

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 60 randomly selected patients (per GP) who have not yet had an FOBT recorded or an FOBT recorded in the last 28 months.

Group the 60 identified patients into equal groups. This will depend on the number of reminder prompts you are trialling. For example:

- If trialling **one reminder** prompt: 30 patients will receive the reminder prompt; 30 patients will not receive the reminder prompt.
- If trialling **two reminder** prompts: 20 patients will receive reminder prompt A; 20 patients will receive reminder prompt B; and 20 patients will not receive any reminder prompt.

GP (or designated staff member/s) to plan to 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 60 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

How well were the learning outcomes met?	☐ Not met ☐ Partially met ☐ Entirely met
Is there any other feedback about the learning outcomes?	
To what degree were the learning needs of the participants met?	☐ Not relevant ☐ Partially relevant ☐ Entirely relevant
Is there any other feedback about individual's learning needs?	
To what degree was this activity relevant to your practice?	☐ Not relevant ☐ Partially relevant ☐ Entirely relevant
Is there any other feedback about the activity's relevance to practice?	
Please indicate how participants considered this activity might have contributed to a systems-based patient safety outcome for their practice. Please explain the group response.	
Please indicate how this activity could have been improved. Please explain the group response.	

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.