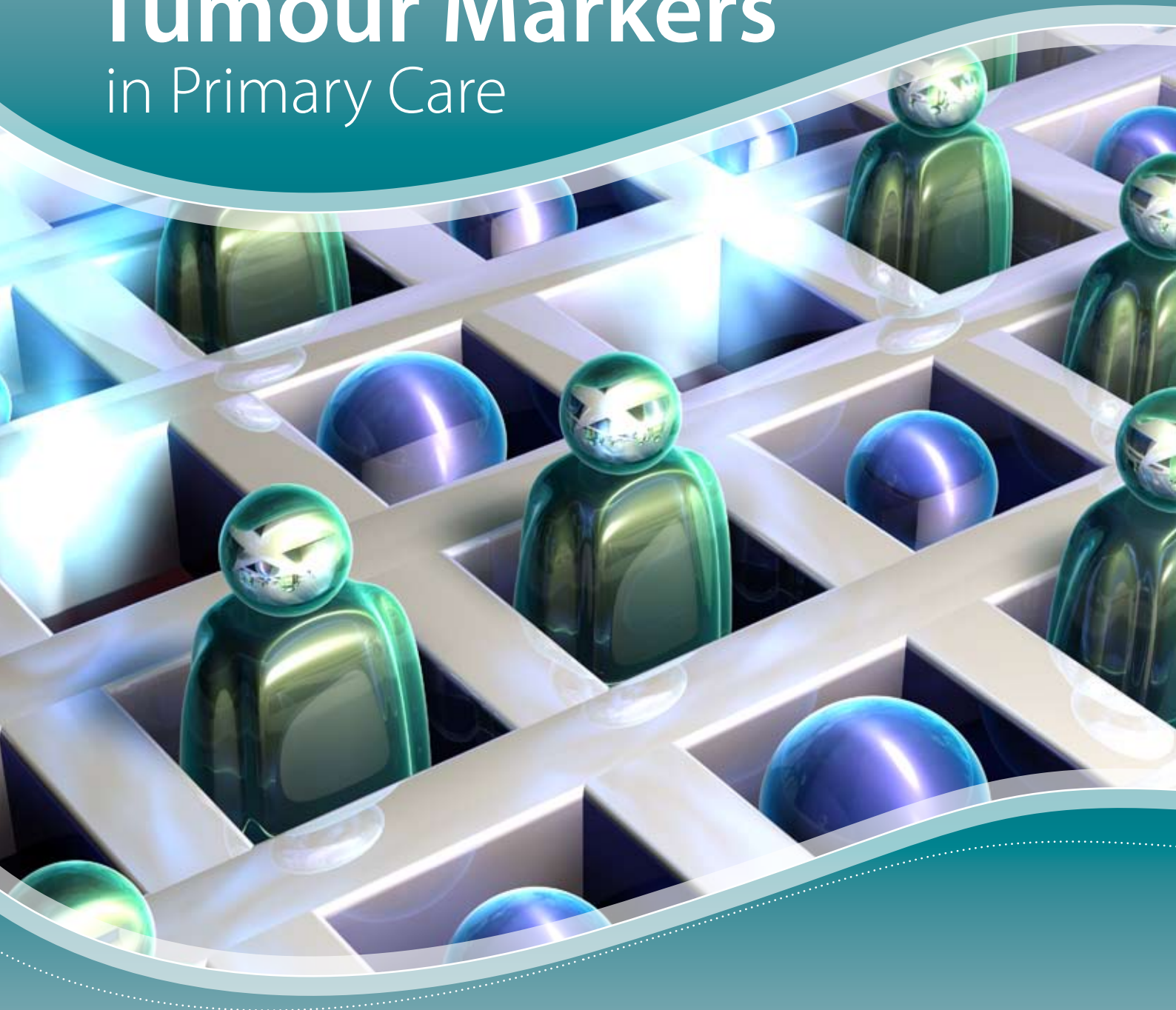
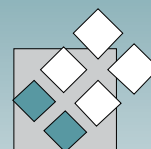


CLINICAL AUDIT

Appropriate Use of Tumour Markers in Primary Care



Valid to September 2013



bpac^{nz}
better medicine

Background

It is important that tumour markers are requested appropriately, to allow them to provide useful information.

In most cases, the key role for individual tumour markers is in the management of patients with established malignancy. They have a limited role in diagnosis and screening due to low sensitivity and specificity. As a result, an inappropriately ordered test that returns an elevated result, can lead to a cascade of unnecessary investigations, whereas a negative result may lead to false a reassurance being given.

- Non specific = many patients may have an elevated result due to benign disease
- Low sensitivity = many patients with malignancy will have a normal result

Due to these test characteristics, carbohydrate antigen 125 (CA 125) and carcinoembryonic antigen (CEA) are not recommended for screening asymptomatic patients for malignancy.

CA 125 is best used in the monitoring of patients undertaking a course of chemotherapy for epithelial serous ovarian cancer. Serial CA 125 levels have the potential to detect recurrent disease earlier and more cost effectively than radiological procedures. CA 125 levels after chemotherapy are one of the strongest available indicators of disease outcome. Testing frequency will normally be determined by secondary care, with the first sample usually taken within 2 weeks prior to treatment. Patients are frequently monitored every 3–4 months for a number of years.

The main application of CEA is for monitoring patients with previously diagnosed colorectal cancer. CEA may give independent prognostic information that can help with surgical management and provide a baseline level for subsequent determinations. Testing frequency will normally be determined by secondary care and monitoring may be continued for at least 3 years after diagnosis.

Recommendations

CA 125 or CEA should only be requested in the management of patients with established malignancy.

In most situations, these tumour markers should not be used as a screening test for ovarian or colorectal malignancy.

Therefore, they should only be requested when there is evidence in the notes that the patient has either ovarian or colorectal cancer.

Focus of this audit

This audit focuses on the indications for requesting the tumour markers CA 125 and CEA in primary care.



Plan

Indicators

CEA and CA 125 should only be requested in known cases of colorectal or ovarian malignancy

Criteria

The patient notes record CEA and CA 125 have only been requested for patients known to have a colorectal or ovarian malignancy

Standards

The patient notes record that 90% of CEA and CA 125 tests have been requested for patients known to have a colorectal or ovarian malignancy

Data

Eligible people

All patients who have had a CA 125 or CEA requested are eligible for this audit.

Identifying patients

You will need to have a system in place that allows you to identify eligible patients. Many practices will be able to identify patients by running a 'query' through their PMS system. We suggest you identify all patients for whom you have requested either a CA 125 or CEA test, and then determine if they are known to have ovarian or colorectal malignancy.

Sample size

The number of eligible patients will vary according to your practice demographic. It would be optimal to identify 20 – 30 patients. If you identify more, take a random sample of 20 – 30 patients whose notes you will audit.

Data analysis

Use the data sheet to record your data:

The diagnosis of ovarian or colorectal malignancy may be recorded in classifications in PMS, found within the medical notes or in letters from secondary care.

From your findings, calculate the percentage of tumour marker tests requested on patients known to have a colorectal or ovarian malignancy. Compare these percentages to the standards set in advance by the practice team. A standard of 90% is suggested in this protocol but may also be set at a practice/practitioner level, dependent upon the practice population. Discussion amongst peers may be useful in establishing standards.

Data sheet – cycle 1

Audit: Appropriate use of Tumour Markers

	The patient notes record a diagnosis of colorectal or ovarian malignancy prior to the request for CEA or CA 125	Notes
Patient	YES/NO	
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
Total		
%		

Data sheet – cycle 2

Audit: Appropriate use of Tumour Markers

	The patient notes record a diagnosis of colorectal or ovarian malignancy prior to the request for CEA or CA 125	Notes
Patient	YES/NO	
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
Total		
%		

Identifying opportunities for CQI

Taking action

The first step in taking action is to identify where gaps exist between expected and actual performance and decide on priorities for change.

Once priority areas for change have been decided on, an action plan should be developed to implement any changes.

The plan should assign responsibility for various tasks to specific members of the practice team and should include a timeline.

It is important to include the whole practice team in the decision-making and planning process.

It may be useful to consider the following points when developing a plan for action (RNZCGP 2002).

Problem solving process

- What is the problem or underlying problem(s)?
- Change it to an aim.
- What are the solutions or options?
- What are the barriers?
- How can you overcome them?

Overcoming barriers

- Identifying barriers can provide a basis for change.
- What is achievable? – find out what the external pressures on the practice are and discuss ways of dealing with them in the practice setting.
- Identify the barriers.
- Develop a priority list.
- Choose one or two achievable goals.

Effective interventions.

- No single strategy or intervention is more effective than another, and sometimes a variety of methods are needed to bring about lasting change.
- Interventions should be directed at existing barriers or problems, knowledge, skills and attitudes, as well as performance and behavior.
- How can you overcome them?

Review

Monitoring change and progress

It is important to review the action plan against the timeline at regular intervals with the practice team. It may be helpful to discuss the following questions:

- Is the process working?
- Are the goals for improvement being achieved?
- Are the goals still appropriate?
- Do you need to develop new tools to achieve the goals you have set?

Following the completion of the first cycle, it is recommended that practices complete the first part of the CQI activity summary sheet (Appendix 1).

Undertaking a second cycle

In addition to regular reviews of progress with the practice team, a second audit cycle should be completed in order to quantify progress on closing the gaps in performance.

It is recommended that the second cycle be completed within 12 months of completing the first cycle. The second cycle should begin at the data collection stage. Following the completion of the second cycle it is recommended that practices complete the remainder of the CQI activity summary sheet.

Claiming MOPS credits

This audit has been endorsed by the RNZCGP as a CQI Activity for allocation of MOPS credits. General practitioners taking part in this audit can claim credits in accordance with the current MOPS programme. This status will remain in place until **19 September 2013**.

To claim points for MOPS or CPD online please enter your credits on your web records. Go to the RNZCGP website <http://www.rnzcgp.org.nz/> and claim your points on 'MOPS online' for vocationally registered doctors, or 'CPD online' for general registrants. Alternatively MOPS participants can indicate completion of the audit on the annual credit summary sheet which is available from the College on request.

As the RNZCGP frequently audit claims you should retain the following documentation, in order to provide adequate evidence of participation in this audit:

1. A summary of the data collected
2. A Continuous Quality Improvement (CQI) Activity summary sheet (included as Appendix 1).

Appendix 1: RNZCGP Summary Sheet – CQI Activity

DOCTORS NAME

The activity was designed by (please tick appropriate box):

- RNZCGP
- Organisation e.g. IPA/PHO/BPAC (name of organisation) bpac^{nz}
- Individual (self)

TOPIC

Appropriate use of tumour markers in primary care

Describe why you chose this topic (relevance, needs assessment etc):

FIRST CYCLE

1. DATA

Information collected

Date of data collection:

Please attach:

- A summary of data collected **or**
- If this is an organisation activity, attach a certificate of participation.

2. CHECK

Describe any areas targeted for improvement as a result of the data collected.

3. ACTION

Describe how these improvements will be implemented.

4. MONITOR

Describe how well the change process is working. When will you undertake a second cycle?

SECOND CYCLE

1. DATA	Information collected
Date of data collection:	
Please attach:	
<ul style="list-style-type: none">▪ A summary of data collected or▪ If this is an organisation activity, attach a certificate of participation.	
2. CHECK	Describe any areas targeted for improvement as a result of the data collected.
3. ACTION	Describe how these improvements will be implemented.
4. MONITOR	Describe how well the change process is working. Will you undertake another cycle?
COMMENTS	

AUDIT CHECKLIST

Date:

1 Audit Planning

FIRST CYCLE

2 Data collected

3 RNZCGP Summary Sheet completed

4 MOPS Credits claimed

SECOND CYCLE

5 Data collected

6 RNZCGP Summary Sheet completed

7 MOPS Credits claimed

bpac^{nz}

10 George Street

PO Box 6032, Dunedin

phone 03 477 5418

free fax 0800 bpac nz



bpac^{nz}
better medicine

www.bpac.org.nz