### THEME Palliative care



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# Malignant neoplasms

# Management in Australian general practice

The BEACH program, a continuous national study of general practice activity in Australia, gives us an overview of encounters at which malignant neoplasms were managed. This synopsis provides a backdrop against which the articles in this issue of Australian Family Physician can be further considered.

#### Because basal cell and squamous cell carcinomas

dominated the results (representing over 40% of malignant neoplasms), we decided to exclude them from this analysis to maintain relevance to this month's theme of palliative care. Melanoma, malignant mole/naevus were included together with all other malignant neoplasms.

In total, these conditions were managed in BEACH 8084 times in the 7 years from April 1998 to March 2005, at a rate of 1.1 per 100 general practice encounters (Figure 1). This represents an average of approximately 1.1 million encounters at which malignant neoplasms are managed in general practice across Australia in any 1 year. Malignant neoplasm of the prostate was the most commonly managed, accounting for 20.4% of all of these problems, followed by malignant neoplasm of the breast (women), which made up 16.2%. Malignant neoplasm of the colon/rectum accounted for 10.4% of these problems. Malignant neoplasms of the lung and skin (melanoma) were also commonly managed.

#### **Gender and age of patients**

Malignant neoplasms were managed at a significantly higher rate for male patients (1.5 per 100 encounters) than female patients (0.9 per 100 encounters). Almost a third of encounters where malignant neoplasms were managed (referred to here as malignant neoplasm encounters) were with patients aged 45-64 years and another third were with patients aged 75 years and over. Over a quarter of encounters were with patients aged 65-74 years. The age specific rates ranged from 0.1 per 100 encounters with patients aged 15-24 years to 2.8 per 100 encounters with patients aged 65-74 years.

#### **Reasons for encounter**

A prescription request was the most common reason for encounter stated by patients (19 per 100 of these encounters). Test results were the reason given by patients at 9 per 100 malignant neoplasm encounters.

#### Other problems managed

Hypertension was the most common other problem managed, at a rate of 10 per 100 malignant neoplasm encounters. Diabetes was managed at a rate of 4 per 100 and immunisation at 3 per 100 of these encounters.

#### Medications

The rate of medications prescribed/advised/supplied was significantly lower than average: 48 per 100 malignant neoplasm problems compared with 70 per 100 total problems managed in BEACH. Morphine sulphate was prescribed for 7 per 100 malignant neoplasms, goserelin acetate for 5 per 100, and tamoxifen for 3 per 100 of these problems.

#### Other treatments

The rate of other treatments provided, 31 per 100 of these problems, was close to the average for BEACH. Most commonly the treatment was counselling, provided at a rate of 13 per 100 malignant neoplasms managed.

#### Referrals

The average referral rate for BEACH is 8 per 100 problems managed. Patients with malignant neoplasms were referred at a rate of 19 per 100 problems. Referrals were made most frequently to surgeons, oncologists and urologists.

#### Pathology and imaging orders

The pathology ordering rate of 31 per 100 malignant neoplasms was similar to the BEACH average. Full blood count was the test most commonly ordered, at a rate of 7 per 100 of these problems, and prostate specific antigen tests were ordered for 5 per 100 malignant neoplasms managed. Imaging ordering rates were also close to average, the most common being a chest X-ray.

Conflict of interest: none.



The patients		
Gender	Percent	Rate <sup>(a)</sup>
Men	52.0	1.5
Women	48.0	0.9
Age group	р	
15–24	1.1	0.1
25–44	7.5	0.4
45–64	31.3	1.4
65–74	27.2	2.8
75+	32.4	2.7
I		

## Malignant neoplasms (MN)

(n=8084, 1.1 per 100 patient encounters)

#### Specific conditions

% of malignant neop	lasms
Malignant neoplasm prostate	20.4
Malignant neoplasm breast (women)	16.2
Malignant neoplasm colon/rectum	10.4
Malignant neoplasm bronchus/lung	7.5
Malignant neoplasm skin**	7.0
Malignancy unspecified	6.1
Leukaemia	4.5

#### Medications

(n=3902, 48 per 100 MN problems)

	- /
Rate per 100 MN pro	blems <sup>(b)</sup>
Morphine sulphate	7.0
Goserelin acetate	4.6
Tamoxifen	2.8
Paracetamol/codeine	2.2
Oxycodone	2.1
Paracetamol	1.9
Metoclopramide	1.7
Leuprorelin	1.6
Dexamethasone	1.1
Morphine hydrochloride	1.1

#### Reasons for encounter

(n=13 441, 169 per 100 MN encounters)

(II=13 441, 169 per 100 Min encounters)		
Rate per 100 MN encounters(b)		
Prescriptions all*	18.5	
Test results*	8.5	
Malignant neoplasm prostate	5.5	
General check up*	5.2	
Cardiac check up*	4.8	
Malignant neoplasm breast (women)	3.8	
Immunisation/vaccination all*		
Other referrals		
Blood test unspecified		
Follow up encounter unspecified		

#### Other problems managed

(n=7281, 91 per 100 MN encounters)

Rate per 100 MN encounters <sup>(b)</sup>		
Hypertension*	10.4	
Diabetes*	3.9	
Immunisation/vaccination all*	3.4	
Depression*	2.6	
Lipid disorders*	2.5	
Osteoarthritis*	2.3	
Ischaemic heart disease*	2.0	
Sleep disturbance	2.0	
Oesophagus disease	1.9	
Prescriptions all*	1.4	

#### Other treatments

(n=2531, 31 per 100 MN problems)

Rate per 100 MN problems<sup>(c)</sup>

Therapeutic counselling/listening 13.1
Observation/health education/advice 8.4
Administrative procedure 1.7

#### Referrals

(n=1544, 19 per 100 MN problems)

Rate per 100 MN problems<sup>(c)</sup>
Surgeon 4.3
Oncologist 2.6
Urologist 2.4
Hospital 1.1

#### **Pathology**

(n=2479, 31 per 100 MN problems)

	Rate per 100 MN problems <sup>(c)</sup>	
Full blood count	7.1	
Prostate specific antigen test	4.5	
Liver function test	2.9	
Electrolyte, urea, creatinine (EUC) test		
Erythrocyte sedimentation rate (ESR) test	1.1	

- (a) Specific rate per 100 encounters in each gender and age group
- (b) Expressed as a rate per 100 encounters at which malignant neoplasm was managed
- (c) Expressed as a rate per 100 malignant neoplasm problems managed
- \* Includes multiple ICPC-2 and ICPC-2 PLUS codes
- \*\* Includes melanoma/malignant mole/naevus

Figure 1. Content of encounters at which malignant neoplasm was managed