



# Bettering the Evaluation and Care of Health (BEACH) 2001–2002

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The following overview is designed to disseminate key findings from BEACH, publicise the annual report and to thank the general practitioner participants without whose generous contribution this study would not be possible.

General practitioners make a major contribution to the health of the community, providing the majority of the 103 million nonspecialist Medicare paid services annually. These services generate over \$2873 million in primary costs and over \$4 billion in secondary costs (pathology, imaging, referrals, medications) each year.

The BEACH (Bettering the Evaluation and Care of Health) program is a continuous national study of general practice. It is run by the General Practice Statistics and Classification Unit of the University of Sydney, a collaborating unit of the Australian Institute of Health and Welfare. The program is supported financially by the Department of Health and Ageing and a consortium of private industry organisations.

BEACH has been gathering data for the past four years and surveys approximately 1000 GPs per year. The variables collected in the BEACH relational databases (Figure 1) can be directly related to unidentified GP and patient characteristics and to the encounter. Reasons for encounter have only an indirect relationship with problems managed. All types of management are directly related to the problem being treated. This year's data

are reported in 'General practice activity in Australia 2001–2002', and this article highlights selected topics from that report. These include GP and patient characteristics (Figures 2–4), diagnoses and treatments (Figure 5, 6, Table 1, 2), and health risk factors such as tobacco and alcohol consumption (Figure 7a, b, c).

## BEACH methods

- paper based data collection
- national GP random sample (from HIC)
- 1000 GPs per year – 20 GPs record per week
- 100 consecutive encounters per GP
- 100 000 encounters per annum weighted to represent all Australian GP encounters
- subsampling of selected topics, including population risk factors, eg. smoking, alcohol use, and BMI.

## ICPC-2 plus

Data collected are classified using the International Classification of Primary Care which has:

- an extended vocabulary of terms used by GPs
- labels for diagnoses, symptoms, ill defined conditions, clinical treatments, referrals,

pathology and radiology, and was

- developed by WONCA (World Organisation of Family Doctors).

## CAPS

Medications are classified using the Coding Atlas for Pharmaceutical Substances

- which codes all drugs, generic and proprietary, used in general practice in Australia
- has a hierarchical system divided into drug groups and subgroups based on anatomical site and therapeutic utility
- is mapped to the Anatomical Therapeutic Chemical classification (ATC) and is compatible with MIMS
- gives pharmaceutical data including drug name, form, strength, dose, frequency and number of repeats.

## Measuring changes over time

This fourth year of BEACH has provided the opportunity to investigate changes in morbidity and management rates since April 1998.

Statistically significant changes that have occurred in general practice since 1998 are shown in Figures 8–10.

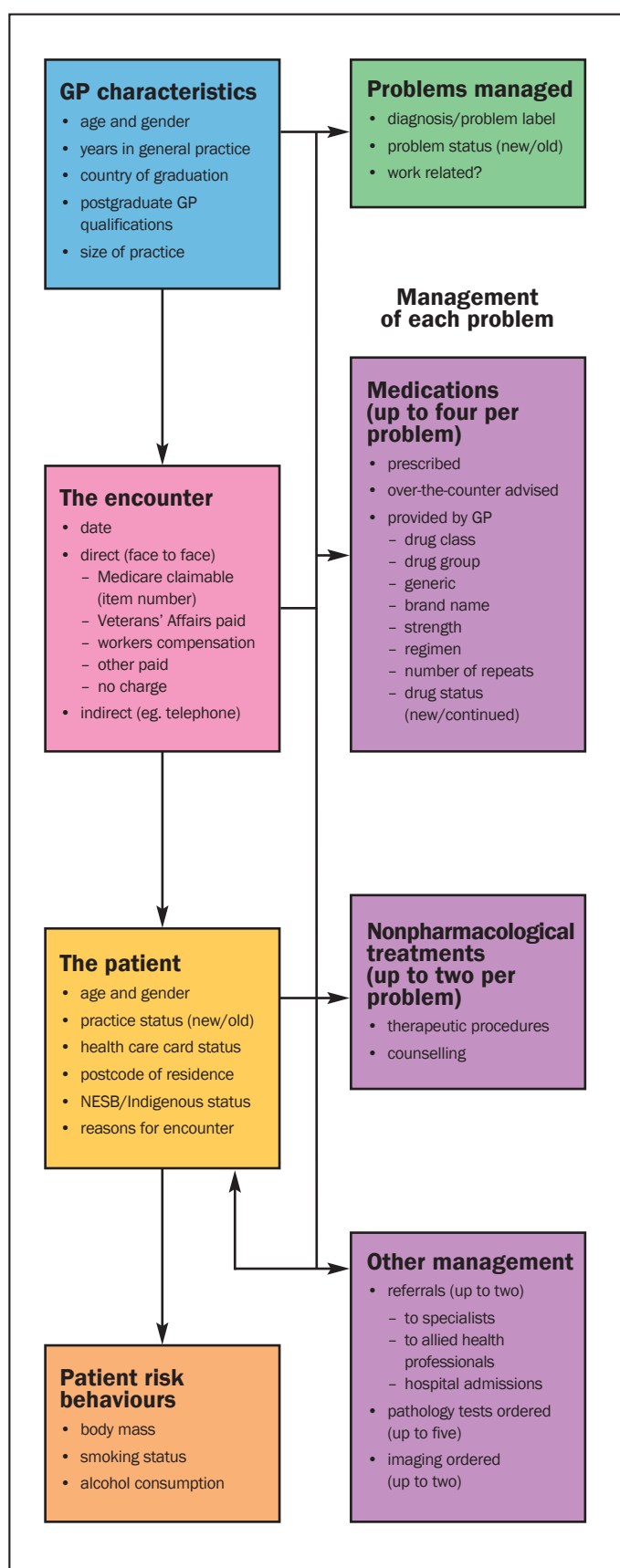


Figure 1. The relational database

Table 1. Most common problems managed

| Problem managed                   | Rate per 100 encounters (n=96 973) | Percent of total problems |
|-----------------------------------|------------------------------------|---------------------------|
| Hypertension                      | 9.0                                | 6.3                       |
| Upper respiratory tract infection | 6.2                                | 4.3                       |
| Immunisation/vaccination all      | 4.7                                | 3.3                       |
| Depression                        | 3.4                                | 2.4                       |
| Diabetes                          | 3.1                                | 2.2                       |
| Lipid disorder                    | 2.9                                | 2.0                       |
| Asthma                            | 2.8                                | 2.0                       |
| Acute bronchitis/bronchiolitis    | 2.7                                | 1.9                       |
| Back complaint                    | 2.6                                | 1.8                       |
| Osteoarthritis                    | 2.6                                | 1.8                       |

Table 2. Most frequently prescribed medications

| Generic medication                | Rate per 100 encounters (n=96 973) | Percent of total prescriptions |
|-----------------------------------|------------------------------------|--------------------------------|
| Paracetamol                       | 3.1                                | 3.5                            |
| Amoxycillin                       | 2.9                                | 3.3                            |
| Paracetamol/codeine               | 2.2                                | 2.5                            |
| Cephalexin                        | 2.0                                | 2.3                            |
| Salbutamol                        | 2.0                                | 2.2                            |
| Amoxycillin/potassium clavulanate | 1.6                                | 1.8                            |
| Influenza virus vaccine           | 1.5                                | 1.7                            |
| Roxithromycin                     | 1.4                                | 1.6                            |
| Celecoxib                         | 1.4                                | 1.6                            |
| Temazepam                         | 1.3                                | 1.5                            |

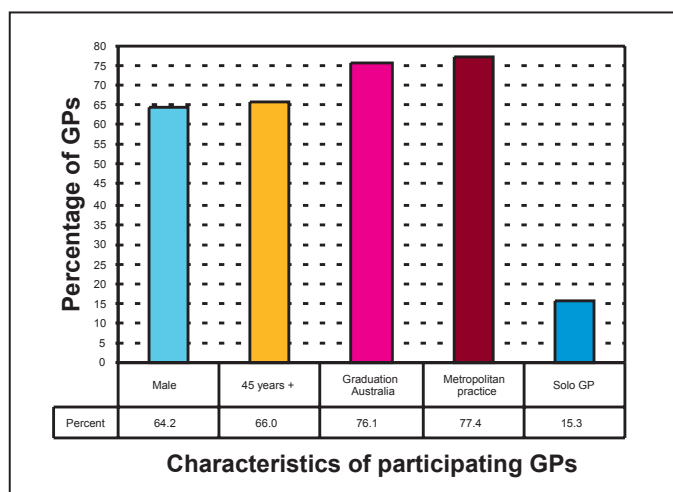


Figure 2. Characteristics of the 983 GPs who took part in BEACH in 2001-2002

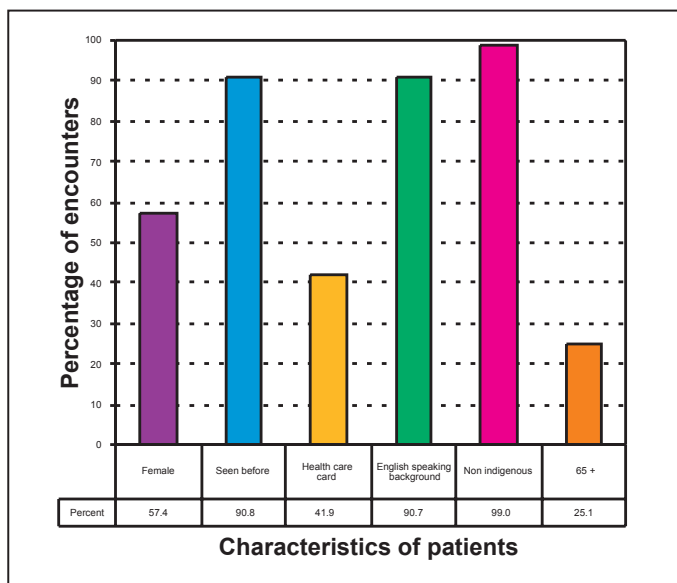


Figure 3. Characteristics of the patients at encounters recorded during 2001-2002

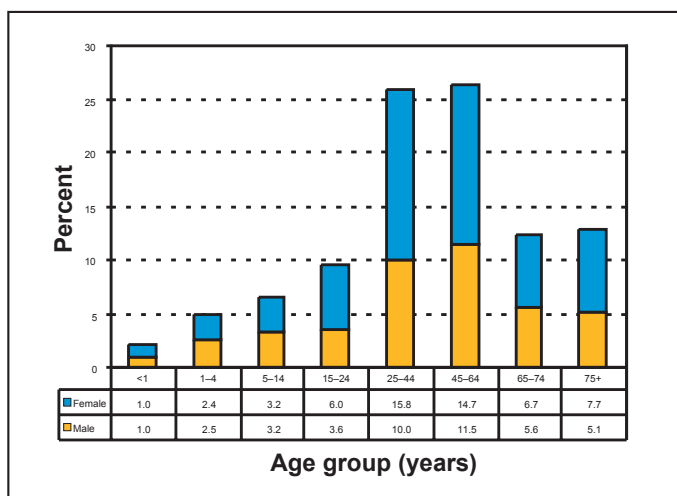


Figure 4. Age-sex distribution of patients at encounters  
Note: Missing data removed

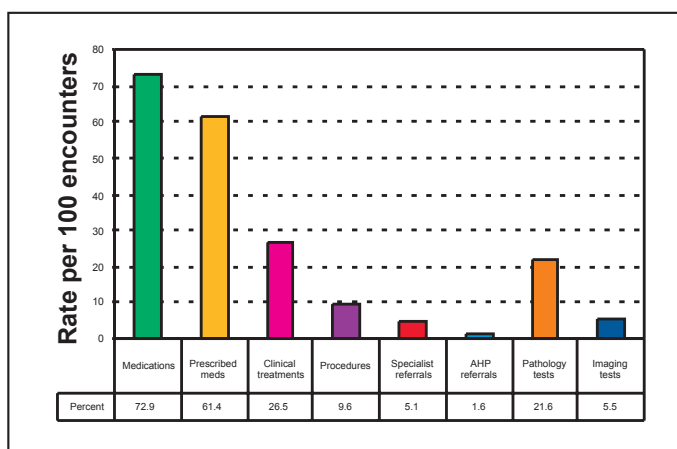


Figure 5. Management rates per 100 problems

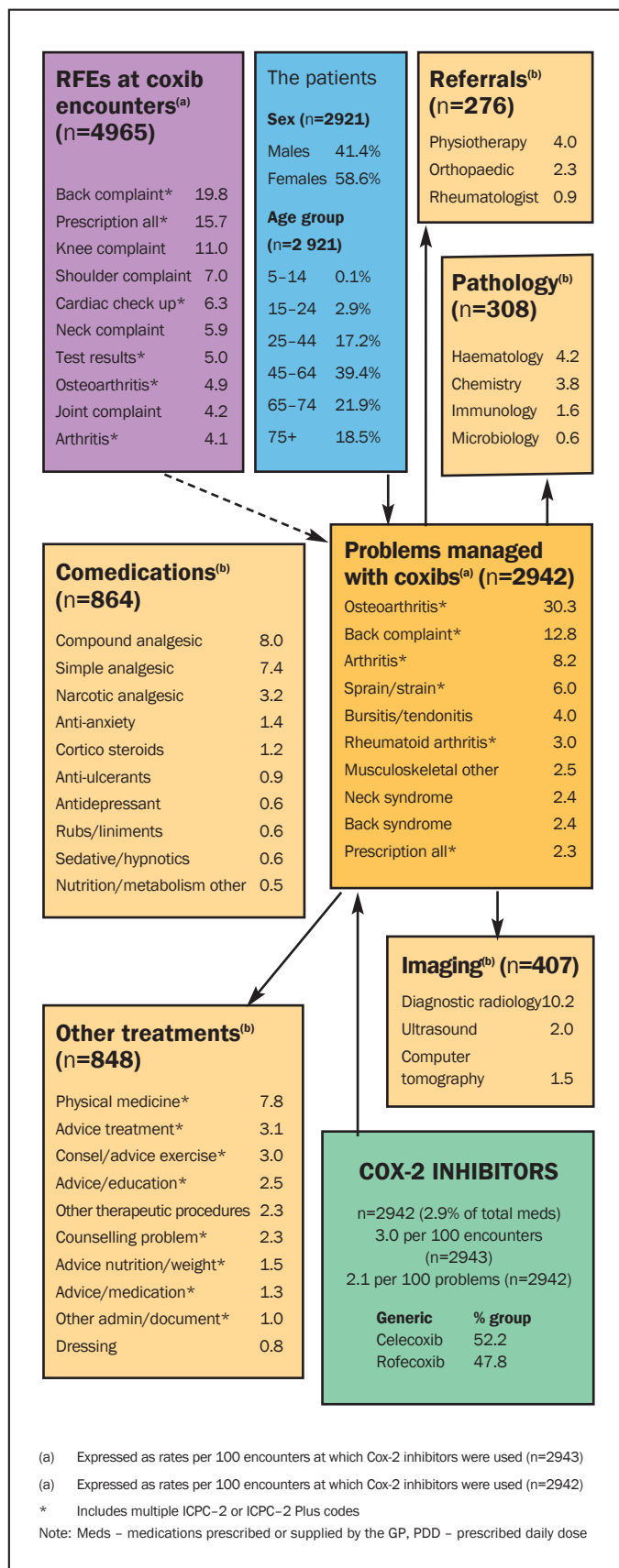


Figure 6. Selected topic - an in depth look at current use of coxibs

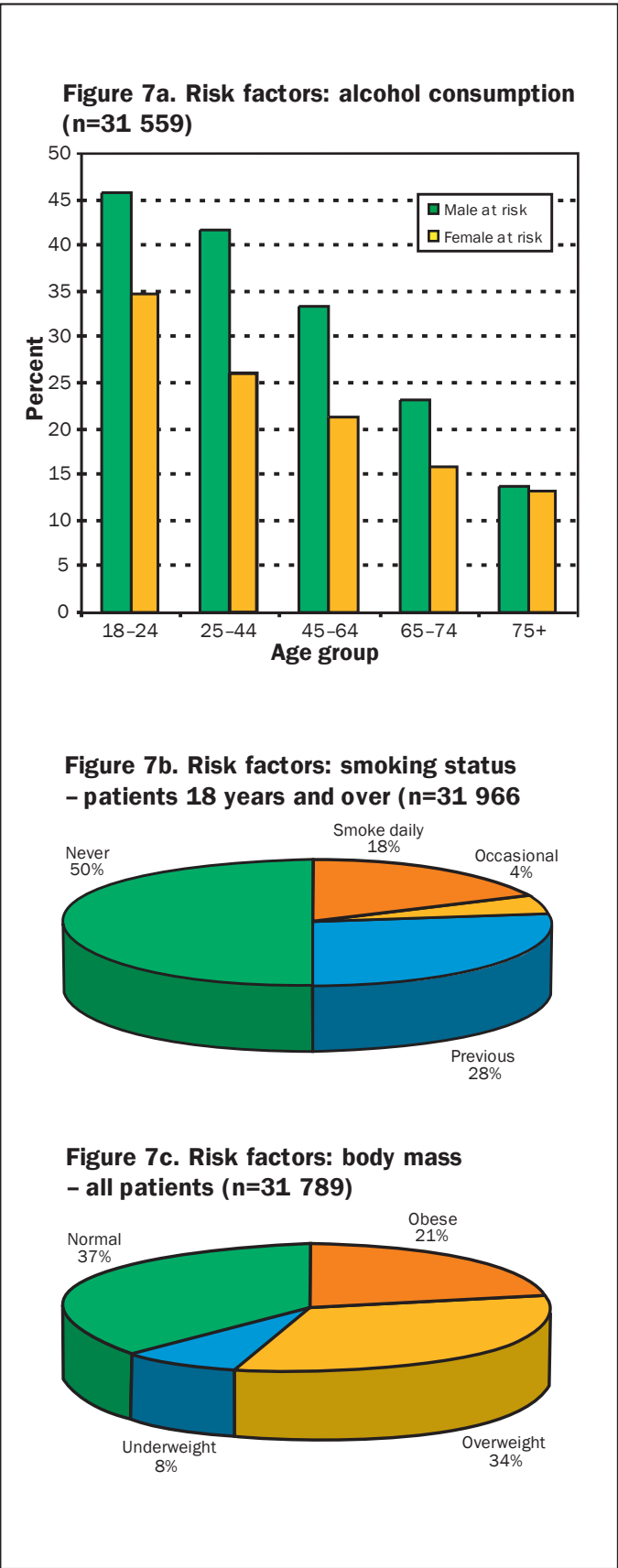


Figure 7. Risk factors

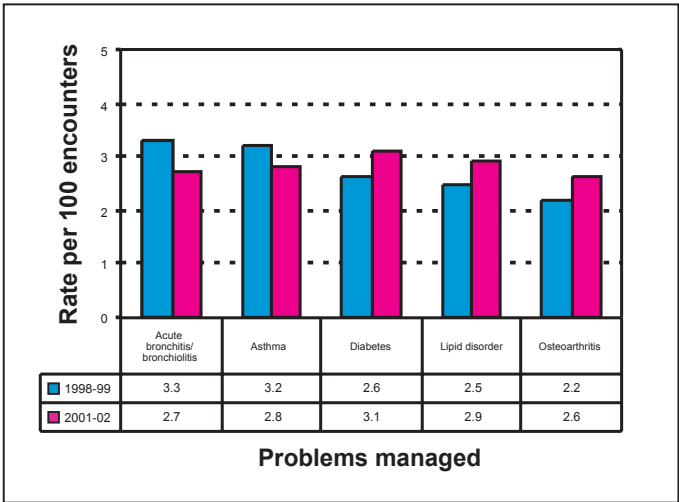


Figure 8. Significant changes in problem management rates from 1998-2002

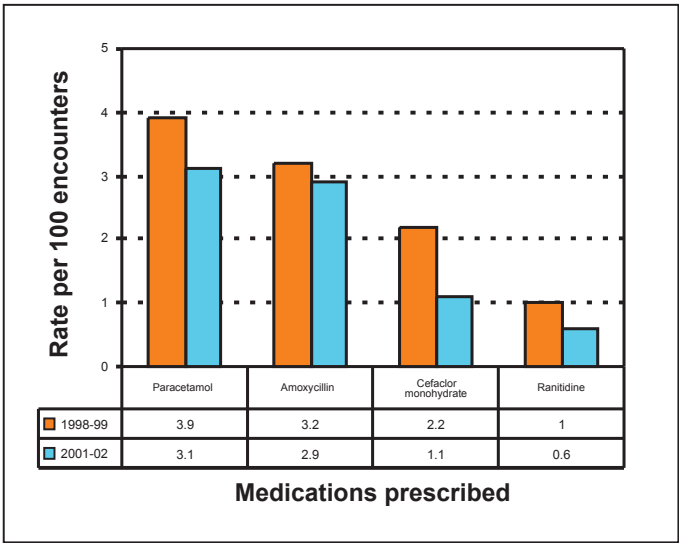


Figure 9. Significant changes in prescribed medication rates from 1998-2002

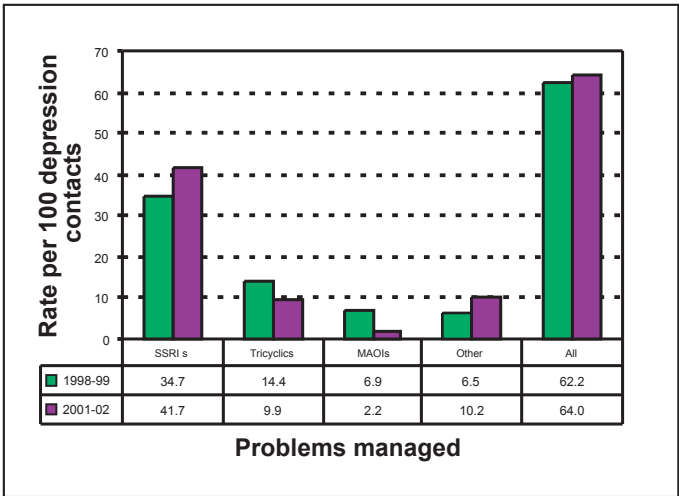


Figure 10. Changes in antidepressant medication rates for depression from 1998-2002

## Acknowledgments

Our thanks to the following organisations for their financial support and contribution to the ongoing development of BEACH: The Commonwealth Department of Health and Ageing, AstraZeneca (Australia), Aventis Pharma Pty Ltd, Roche Products Pty Ltd, Janssen-Cilag Pty Ltd and Merck Sharp & Dohme (Australia) Pty Ltd.

## Further reading

BEACH reports are available at [www.fmrc.org.au](http://www.fmrc.org.au) and include:

- It's different in the bush. A comparison of general practice activity in metropolitan and rural areas of Australia 1998-2000. AIHW Cat No. GEP 6.
- Imaging orders by general practitioners in Australia 1999-2000. AIHW Cat No GEP 7.
- General practice activity in Australia 2000-2001. AIHW Cat No. GEP 8.
- Cardiovascular problems and risk behaviours at general practice encounters in Australia 1998-2000. AIHW Cat No. GEP 9.
- General practice activity in Australia 2000-2001. AIHW Cat No. GEP 10.
- Male consultations in general practice in Australia 1999-2000. AIHW Cat No. GEP 11 (in press).

AFP

**The RACGP encourages  
GP participation in BEACH  
BEACH is endorsed by the Australian  
Medical Association**

## Correspondence

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