

Male consultations in general practice in Australia 1999–00

GP Statistics and Classification Unit

The Australian Institute of Health and Welfare is Australia's national health and welfare statistics and information agency. The Institute's mission is to improve the health and wellbeing of Australians by informing community discussion and decision making through national leadership in developing and providing health and welfare statistics and information.

The General Practice Statistics and Classification Unit is a collaborating unit of the Australian Institute of Health and Welfare and the University of Sydney, situated within the Family Medicine Research Centre at Westmead Hospital. It fulfils the obligation of the Australian Institute of Health and Welfare to collect statistics regarding general practitioners, their patients and their patients' care.

Recent related publications

General Practice Statistics and Classification Unit 2000 [cited 22-12-2000]. SAND abstracts from the BEACH program. Sydney: AIHW/University of Sydney. Available from Internet: <http://www.fmrc.org.au/beach.htm>

Britt H, Miller GC, Valenti L 2001. '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. Canberra: Australian Institute of Health and Welfare (General Practice Series No. 6).

Britt H, Miller GC, Knox S 2001. Imaging orders by general practitioners in Australia 1999-00. AIHW Cat. No. GEP 7. Canberra: Australian Institute of Health and Welfare (General Practice Series No. 7).

Senes S & Britt H 2001. A general practice view of cardiovascular disease and diabetes in Australia. AIHW Cat. No. CVD 17. Canberra: Australian Institute of Health and Welfare (Cardiovascular Disease Series No. 17).

Britt H, Miller GC, Knox S, Charles J, Valenti L, Henderson J, Kelly Z, Pan Y 2001. General practice activity in Australia 2000-01. AIHW Cat. No. GEP 8. Canberra: Australian Institute of Health and Welfare (General Practice Series No. 8).

Henderson J, Pan Y, Britt H, Charles J, Miller GC, Knox S 2002. Cardiovascular problems and risk behaviours among patients at general practice encounters in Australia 1998-00. AIHW Cat. No. GEP 9. Canberra: Australian Institute of Health and Welfare (General Practice Series No. 9).

Britt H, Miller GC, Knox S, Charles J, Valenti L, Henderson J, et al. 2002. General practice activity in Australia 2001-02. AIHW Cat. No. GEP 10. Canberra: Australian Institute of Health and Welfare (General Practice Series No. 10).

GENERAL PRACTICE SERIES

Number 11

BEACH

*Bettering the Evaluation
and Care of Health*

Male consultations in general practice in Australia 1999–00

Clare Bayram, Helena Britt, Zoe Kelly, Lisa Valenti

February 2003

A joint report by the University of Sydney and the Australian Institute of Health and Welfare

AIHW Cat. No. GEP 11

© Australian Institute of Health and Welfare and The University of Sydney 2003

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced without written permission from the Australian Institute of Health and Welfare. Requests and enquiries concerning reproduction and rights should be directed to the Head, Media and Publishing, Australian Institute of Health and Welfare, GPO Box 570, Canberra ACT 2601.

This is the eleventh publication of the General Practice Series, from the General Practice Statistics and Classification Unit, a collaborating unit of The University of Sydney and the Australian Institute of Health and Welfare. A complete list of the Institute's publications is available from the Publications Unit, Australian Institute of Health and Welfare, GPO Box 570, Canberra ACT 2601, or via the Institute's web site at <http://www.aihw.gov.au>.

ISBN 1 74024 239 4

ISSN 1442 3022

Suggested citation

Bayram C, Britt H, Kelly Z, Valenti L 2003. Male consultations in general practice in Australia 1999–00. AIHW Cat. No. GEP 11. Canberra: Australian Institute of Health and Welfare (General Practice Series No. 11).

Australian Institute of Health and Welfare

Board Chair

Dr Sandra Hacker

Director

Dr Richard Madden

Any enquiries about or comments on this publication should be directed to:

General Practice Statistics and Classification Unit

The University of Sydney

Acacia House

Westmead Hospital

WESTMEAD New South Wales 2145

Phone: 61 2 9845 8151

Fax: 61 2 9845 8155

Email: gpsc@fmrc.org.au

Published by the Australian Institute of Health and Welfare

Printed by Elect Printing

Foreword

This informative report benefits the cause of men's health in Australia by its very existence. Until relatively recently little attention has been paid to the specific issue of men's health, although gender has been referred to in some clinical contexts. Though the BEACH study was not specifically designed to examine encounters between general practitioners and male patients it provides an accurate picture of male morbidity and treatment in the wider context of all general practice encounters. The large sample of GPs involved and the random nature of their selection, together with the statistical techniques applied to the clustered encounter sample design ensure a robust, valid, reliable sample of GP encounters.

Clearly, general practitioners are in a position to contribute to the health of men in Australia, as they are the major health service providers for this particular population. Although the authors admit that men are not attending as much as one might hope, the report is to be welcomed for its acknowledgment that more should be done to help men of all ages access GP services.

The BEACH findings support the notion that men attend general practice less often than women. This is, in a sense, conventional wisdom, which may be partially due to women being more familiar with GP services due largely to the role ascribed to them to manage the health of the family. The report is to be commended for not speculating overmuch on why this is the case, since comments on this matter are generally based on assumptions rather than genuine evidence. The report allows us to examine this phenomenon in greater depth through empirical research to establish an evidence base for policies and practices.

It is difficult to single out one particular age group or subpopulation of males that requires special attention, because different age groups have different health concerns. Findings from this study highlight this – the rates of smoking, alcohol use and drug abuse in young adult males; work-related conditions in the middle ages; and the rates of obesity and the onset of chronic disease in the later years; are major concerns, especially when combined with low rates of GP attendance.

The report also highlights areas of concern about the mental health of males in the population. The rate of diagnosis of depression is lower among men than women, and especially low in men of retirement age. The provision of psychological counselling was also less common at encounters with males than at those with females. These facts suggest psychological problems may be under-managed in male patients, and that the management of men's mental health may need to be reviewed.

The report indirectly challenges the notion that men don't seek preventive medical advice – the need for a general check-up was a common reason reported by male patients for seeing the GP. The report suggests that at male patient contacts, GPs should perform opportunistic exploration of further health issues whenever possible. Currently efforts are being made to make health services and preventive health education more readily accessible to men, and this report can provide good baseline data for such initiatives.

Male Consultations in General Practice in Australia 1999–00 is to be highly commended for its call for increased awareness of areas of concern for men's health. It is clear that this report offers several challenges, both in terms of attracting men to GP services and in improving the effectiveness of the contact with the male population. As the authors say, it may also assist in the future planning of targeted health education and interventions for the male population.

I hope that more initiatives will be funded and will flourish in Australia and that GPs, as the first point of contact with the health system, will be helped in their task of contributing to the health of males.

Professor John Macdonald
Foundation Chair in Primary Health Care,
Director, Men's Health Information and Resource Centre (MHIRC)

Contents

- Forewordv
- List of tablesx
- List of figures xii
- Summaryxiii
- Acknowledgments xvii
- 1 Introduction.....1**
 - 1.1 Aims5
- 2 Methods.....6**
 - 2.1 The BEACH program.....6
 - 2.2 Statistical methods.....8
 - 2.3 The study of sex-specific encounters9
- 3 The general practitioners10**
 - 3.1 Results of recruitment.....10
 - 3.2 GP characteristics10
 - 3.3 Comparison between participating and non-participating GPs10
- 4 The encounters.....12**
 - 4.1 Distribution of services by patient sex12
 - 4.2 Summary of morbidity and management by patient sex.....12
- 5 The patients15**
 - 5.1 Patient characteristics by patient sex.....15
 - 5.2 Proportion of Australian population attending GPs.....18
 - 5.3 Patient reasons for encounter by patient sex.....20
- 6 Problems managed.....23**
 - 6.1 Number of problems managed at encounter by patient sex.....23
 - 6.2 Problems managed by ICPC-2 chapter and patient sex23
 - 6.3 Most frequent problems managed by patient sex26
 - 6.4 Multiple logistic regression analyses.....28

7	Medications	30
	7.1 Rates of medications prescribed (in groups and subgroups) by patient sex.....	30
	7.2 Most frequently prescribed generic medications by patient sex.....	32
8	Other (non-pharmacological) treatments	34
	8.1 Clinical treatments by patient sex.....	34
	8.2 Procedural treatments by patient sex	35
9	Referrals to specialists and allied health professionals	36
10	Investigations	37
	10.1 Pathology ordering by patient sex.....	37
	10.2 Imaging orders by patient sex	38
11	Morbidity managed in specific male age groups	39
	11.1 Male patients aged 15–24 years	39
	11.2 Male patients aged 25–34 years	39
	11.3 Male patients aged 35–44 years	41
	11.4 Male patients aged 45–54 years	41
	11.5 Male patients aged 55–64 years	42
	11.6 Male patients aged 65–74 years	43
	11.7 Male patients aged 75+ years.....	44
	11.8 Overview of problems managed across age groups	45
12	Patient wellbeing and risk factors	48
	12.1 Patient-assessed wellbeing by patient sex	48
	12.2 Patient body mass by patient sex.....	49
	12.3 Patient smoking status by patient sex	51
	12.4 Patient-reported alcohol consumption by patient sex	52
13	Work-related problems managed at male encounters	55
	13.1 Characteristics of male patients with work-related problems managed	55
	13.2 Most common work-related problems managed for male patients.....	57
14	Discussion	58
	14.1 Methodological issues.....	64
15	Conclusion	66
	Reference list	68
	Glossary	75
	Abbreviations	78

Appendixes	80
Appendix 1: Example of a recording form	80
Appendix 2: GP characteristics questionnaire	82
Appendix 3: Reasons for encounter and problems managed – code groups from ICPC-2 and ICPC-2 PLUS	84
Appendix 4: Clinical treatment – code groups from ICPC-2 PLUS	88
Appendix 5: Procedural treatment code groups from ICPC-2 PLUS	93

List of tables

- Table 3.1: Characteristics of participating GPs 11
- Table 4.1: Distribution of services by patient sex 13
- Table 4.2: Summary of morbidity and management by patient sex 14
- Table 5.1: Patient characteristics by patient sex 16
- Table 5.2: Comparison of the distribution of patient reasons for encounter by ICPC-2 chapter for encounters with males and females (in rank order for male encounters) 21
- Table 5.3: The ten most frequent patient reasons for encounter, by patient sex (in rank order for male reasons for encounter) 22
- Table 6.1: Number of problems managed at encounter by patient sex 23
- Table 6.2: Problems managed by ICPC-2 chapters, by patient sex (in rank order of male problems managed), univariate and multiple logistic analysis 25
- Table 6.3: The ten most frequent problems managed by patient sex, univariate and multiple logistic analysis 27
- Table 7.1: Relative prescribing rates of common medication groups and subgroups by patient sex 31
- Table 7.2: Most frequently prescribed generic medications by patient sex 33
- Table 8.1: Most frequent clinical treatments by patient sex 34
- Table 8.2: Procedural treatments by patient sex 35
- Table 9.1: Most frequent referrals to specialists by patient sex 36
- Table 10.1: The ten most frequently ordered pathology tests by patient sex 37
- Table 10.2: The ten most frequent imaging orders by patient sex 38
- Table 11.1: The ten most frequent problems managed at encounters with males aged 15–24 years 40
- Table 11.2: The ten most frequent problems managed at encounters with males aged 25–34 years 40
- Table 11.3: The ten most frequent problems managed at encounters with males aged 35–44 years 41
- Table 11.4: The ten most frequent problems managed at encounters with males aged 45–54 years 42
- Table 11.5: The ten most frequent problems managed at encounters with males aged 55–64 years 43
- Table 11.6: The ten most frequent problems managed at encounters with males aged 65–74 years 44
- Table 11.7: The ten most frequent problems managed at encounters with males aged 75+ years 45

Table 12.1: Patient-assessed wellbeing by patient sex	48
Table 12.2: Patient body mass (aged 18+ years) by patient sex.....	49
Table 12.3: Patient smoking status (18+ years) by patient sex.....	51
Table 12.4: Patient-reported alcohol consumption (18+ years) by patient sex.....	53
Table 13.1: Characteristics of male patients with work-related problems managed and all male patients.....	55
Table 13.2: Most common work-related problems managed for male patients.....	57

List of figures

- Figure 2.1: The BEACH relational database7
- Figure 5.1: Age distribution of patients at encounter by patient sex17
- Figure 5.2: Age–sex-specific distribution of patients at encounter17
- Figure 5.3: Proportion of total Australians (1999) who attended general practice at least once in 2000–01 by age and sex19
- Figure 5.4: Age–sex-specific average annual general practice attendance in 2000–01 for the Australian population (1999).....19
- Figure 11.1: Relative rate of management of drug abuse and depression at encounters with males by age group46
- Figure 11.2: Relative rate of management of hypertension, lipid disorder and diabetes at encounters with males by age group46
- Figure 11.3: Relative rate of management of upper respiratory tract infection (URTI) and asthma at encounters with males by age group47
- Figure 11.4: Relative rate of management of back complaints at encounters with males by age group47
- Figure 12.1: Patient body mass by sex50
- Figure 12.2: Male age-specific rates – body mass.....50
- Figure 12.3: Patient smoking status by sex51
- Figure 12.4: Male age-specific rates – smoking status.....52
- Figure 12.5: Patient alcohol consumption by sex.....53
- Figure 12.6: Male age-specific rates – alcohol consumption54
- Figure 13.1: Age distribution of male patients at work-related encounters56
- Figure 13.2: Age-specific rate of male encounters involving a work-related problem56

Summary

This report details findings from a secondary analysis of the data collected in the BEACH (Bettering the Evaluation and Care of Health) program, a continuous national study of general practice activity in Australia. The collection period reported is April 1999 to March 2000 inclusive. This secondary analysis was undertaken to determine the characteristics of male patients who attend general practitioners (GPs) and the characteristics of these encounters.

Method

A random sample of GPs who claimed at least 375 general practice Medicare items of service in the previous 3 months is regularly drawn from the Health Insurance Commission data by the General Practice Branch of the Department of Health and Aged Care. GPs are approached first by letter and then followed up by telephone recruitment. Each participating GP completes details about 100 consecutive patient encounters on structured paper encounter forms. The GPs also provide information about themselves and their practice.

In the 1999–00 BEACH data year a random sample of 1,047 GPs took part, providing data pertaining to 104,700 encounters. Results are reported in terms of GP and patient characteristics; patient reasons for encounter (RFEs); problems managed; medications and other treatments provided; and referrals and tests ordered. Patient-assessed health status and selected risk behaviours for subsamples of patients are also reported.

Two primary areas specific to male patients are investigated separately in this report. These are problems managed at encounters with male patients in each of the age groups 15–24, 25–34, 35–44, 45–54, 55–64, 65–74 and 75+ years; and work-related problems managed at encounters with male patients (irrespective of payment source).

The general practitioners

Males made up 69.6% of participating GPs, and those aged 45 years or older accounted for 59.1%. One in five participants was in solo practice and 26.7% had graduated in a country other than Australia. Almost one-third were Fellows of the Royal Australian College of General Practitioners (RACGP) and a further 2.2% were currently in the Training Program.

A comparison of characteristics of participating GPs with those of the GPs from the random sample who declined to participate found no significant differences between the groups with the exception of age group. Participants were significantly older and GPs aged less than 35 years were under-represented. The encounter data went through post-stratification weighting to overcome the difference and ensure that the BEACH data set was representative of Australian general practice. The weighting also incorporated the differential activity level of each GP to improve the national estimates.

The encounters

After post-stratification weighting for age (stratified by sex) and activity level, there were 104,856 encounters available for analysis. At 1,182 encounters patient sex was not recorded. There were 44,308 encounters with male patients and 59,366 encounters with female patients included in the analysis, derived from 1047 GPs. One of these GPs saw no male patients.

There were no differences between the proportion of direct (patient seen) or indirect encounters between the sexes. However, male patient encounters were less likely to be

claimable through Medicare, more likely to be claimable as standard consultations and less likely to be long consultations than female patient encounters. Male patients also had significantly more encounters claimable through workers compensation than female patients.

Although there were no sex-related differences in the number of RFEs reported at the encounter, males had significantly fewer problems managed at their encounters compared with females. Males were more likely than females to have had a problem managed that was judged by the GP to be work-related. Male patients also had higher rates of procedural treatments performed and lower rates of pathology orders than their female counterparts.

The patients

Patient characteristics

There were significant differences in the age distribution of male and female patients at GP encounters. Males were more likely to be aged 0–14 and 45–74 years, and less likely to be aged 15–44 and 75+ years, compared with females. However, there were fewer male patients in every age group from 15 years onward. Male patients were significantly less likely than female patients to hold a health care card and more likely to hold a Veterans' Affairs gold card.

Data from the Health Insurance Commission demonstrated that a lower proportion of Australian males (76%) attended a GP at least once in 2000–01 compared with Australian females (87%). When males did attend a GP, they did so at lower rates (average 5.1 services per annum) than females (6.2 services). These differences between the sexes were most significant between the ages of 15 and 54 years and over 75 years.

Patient reasons for encounters (RFEs)

Male patients presented significantly more RFEs related to the respiratory and musculoskeletal systems, the skin and the ear. RFEs relating to the neurological system and the genital and urinary systems were significantly less common at encounters with male patients. When the most common RFEs were examined, they showed minimal differences between the sexes, with males more likely to describe back complaints and general check-ups and less likely to report genital check-ups, compared with females.

Problems managed

Encounters with males were significantly more likely to have one problem managed and significantly less likely to have three problems managed than were encounters with females. Problems relating to the respiratory, musculoskeletal, circulatory and digestive systems and those associated with the skin and the ear were managed significantly more often at male encounters than at female encounters. Male patients had lower rates of management of problems relating to the neurological, genital and urological systems. Back complaints, diabetes, lipid disorders and general check-ups were more commonly managed at male encounters, while depression, genital check-ups and urinary tract infections were managed significantly less often at encounters with males than at those with females.

Multiple logistic regression analyses were performed to determine which variables (i.e. predictors), independent of other predictors, were related to patient sex at the encounter. After adjustment for these significant independent predictors, the differences identified in the univariate analysis of morbidity managed were not made insignificant or reversed. In the multivariate analyses, the significant differences were replicated and additional significant differences emerged. These new significant differences in problems managed were of a

general and unspecified nature, associated with the endocrine and metabolic system and related to the eye, which were managed more often at male encounters than female encounters. In contrast, social problems were managed less often at encounters with males than at those with females. Only one new significant difference in the most commonly managed morbidity emerged. Hypertension was found to be managed significantly less often at encounters with males.

Medications

Differences in the relative prescribing rate of medications types (by group, subgroup and generic name) mainly reflected differences found in the morbidities treated (Chapter 6). Males were more likely to have cardiovascular, respiratory and musculoskeletal medications prescribed and less likely to be prescribed medications from the psychological, hormone and urogenital groups. The analysis identified no differences in the prescription of generic medications between the sexes.

Other treatments

Other (non-pharmacological) treatments provided to patients were classified as either clinical or procedural. There was no overall difference between male and female encounters in the rates of clinical treatments. However, there was a specific clinical treatment (psychological counselling) that was performed less often at encounters with males than at those with females. There were significantly more procedures performed on male patients than female patients. This was reflected in the specific procedures of excision or removal of tissue (including destruction, debridement or cauterisation) and removal or repair of casts or prosthetic devices.

Referrals, tests and investigations

There were no significant differences in the overall rate of referrals or in rates of referral to specific medical specialties at male and female encounters.

The total pathology ordering rate and order rates for full blood counts, urine microscopy culture and sensitivity (MC&S) tests and thyroid function tests were significantly lower at encounters with male patients than at those with female patients.

There were no significant differences between the sexes in total ordering rates for imaging nor for any specific imaging test type.

Morbidity managed in specific male age groups

This section investigates the morbidities managed at encounters with males by ten-year age groups. In the younger age groups (15–34 years) the problems managed were mostly acute in nature, the most common being upper respiratory tract infection. Of particular interest in this age group was the relatively high rate of drug abuse managed (2.9 per 100 encounters). Heroin addiction accounted for more than 30% of these problems.

Between 35 and 44 years of age the most common problem managed was back complaint; other common problems managed were a mix of acute and chronic conditions. From 45 years onward, chronic conditions began to emerge as the most common problems managed. Hypertension was the most common condition managed in all age groups from 45 years onward.

The management of selected morbidities was also examined across age groups in this section to determine age-related changes. The management of depression showed the most interesting trend, with males aged 15–24 and 65+ years having the lowest management rates of depression despite these ages being associated with significant social life changes.

Patient wellbeing and health risk factors

- **Wellbeing:** Of the 12,465 male and 18,992 female respondents (aged 18+ years) less than 7% rated their health as poor. There was little difference between the sexes in self-reported health. However, male patients rated their health as 'very good' significantly less often than did female patients.
- **Body mass:** Responses were received from 13,062 male and 19,655 female patients aged 18 years and over. Males were less likely than females to be obese (18.1% compared with 20.0%), but more likely to be overweight (40.9% compared with 27.9%). However, when these categories were combined males were more likely than females to be overweight or obese (59.0% compared with 48.1%). Prevalence of obesity was highest in males aged between 45 and 64 years, and overweight was highest between 65 and 74 years of age.
- **Smoking:** There were 12,230 male and 19,930 female adults (aged 18+ years) who reported their smoking habits. Significantly more males (23.4%) than females (16.2%) smoked daily. Daily smoking was highest in males aged 18–24 years (36.7%) and declined with age.
- **Alcohol use:** 'At-risk' levels of alcohol intake were reported by 30.3% of the 13,076 male adult respondents and 20.1% of the 19,832 female adult respondents. Males aged between 18 and 24 years were most likely to consume alcohol at an 'at-risk' level (39.8%) and the proportion of 'at-risk' male drinkers declined with age. Of male patients who drank alcohol, 35.0% consumed alcohol at levels considered to place them at risk. Further, 47.3% of male drinkers aged between 18 and 24 years drank at risk levels.

Work-related problems managed at male encounters

Male patients had more work-related and workers compensation-funded encounters than did females. There were 2,012 male patient encounters involving problems judged by the GP to be work-related. One in ten problems managed at encounters with males aged between 25 and 44 years was found to be work-related. The most common work-related problems were back complaints, strains and sprains and other musculoskeletal injuries.

Conclusion

This secondary analysis of the BEACH data has provided the first national description of general practice encounters with male patients, their reasons for encounter, problems managed and treatment provided. The results of this study (such as male rates of GP attendance, obesity/overweight, smoking, and alcohol consumption) indicate that there is reason to be concerned about the health of males in the population, especially in the younger age groups.

There is potential to increase life expectancy and decrease death rates for Australian males by targeting their health risk behaviours, increasing their contact with GPs, and examining the social constructs which form such male behaviours. In the future, BEACH will provide a measure of the effectiveness of any strategies introduced to improve the attendance and morbidity of male patients in general practice.

Acknowledgments

We wish to thank the 1,047 general practitioners who participated in the BEACH (Bettering the Evaluation and Care of Health) study in 1999–00. This report would not have been possible without their valued cooperation and effort in providing the data.

We also thank the following organisations for their financial support and their contribution to the ongoing development of the BEACH program during the second year of its activities (April 1999 – March 2000):

- the Commonwealth Department of Health and Aged Care
- the Commonwealth Department of Veterans' Affairs
- the National Occupational Health and Safety Commission
- AstraZeneca (Australia)
- Aventis Pharma Pty Ltd
- Roche Products Pty Ltd.

This is a secondary analysis of data collected in the BEACH program 1999–00. The majority of this report was completed as part of a thesis by the lead author of this report, Clare Bayram (then Sutton), under the supervision of Professor Beth Reid at the University of Sydney, and Professor Helena Britt at the Family Medicine Research Centre. We acknowledge Professor Reid's contribution to this work.

We recognise the contribution made by current and past members of the BEACH research team to the data collection and data management process required to establish the data set ready for analyses. Particular acknowledgement is due to Chris Harrison and Stephanie Knox for providing statistical assistance in this study and Jan Charles and Joan Henderson for their editorial work. We also acknowledge the contribution and support of all staff members of the Family Medicine Research Centre.

The cooperation of Carolynn Fredericks and Gordon Calcino of the General Practice Branch of the Commonwealth Department of Health and Aged Care in regularly supplying general practitioner random samples and national Health Insurance Commission data is also appreciated. At the Institute, Dr Ching Choi assisted with the editing of the report and Amanda Nobbs coordinated the printing and publication process.

Ethics approval for the BEACH study was obtained from the Human Ethics Committee of the University of Sydney and the Health Ethics Committee of the Australian Institute of Health and Welfare (AIHW).

