

General practice activity in Australia 2006–07

Australian GP Statistics and Classification Centre

The Australian Institute of Health and Welfare is Australia's national health and welfare statistics and information agency. The Institute's mission is *better information and statistics for better health and wellbeing*.

The Australian General Practice Statistics and Classification Centre (previously 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:

Britt H, Miller GC, Henderson J, Bayram C 2007. Patient-based substudies from BEACH: abstracts and research tools 1999–2006. General practice series no. 20. AIHW cat. no. GEP 20. Canberra: Australian Institute of Health and Welfare.

Britt H, Miller GC, Charles J, Pan Y, Valenti L, Henderson J, Bayram C, O'Halloran J, Knox S 2007. General practice activity in Australia 2005–06. General practice series no. 19. AIHW cat. no. GEP 19. Canberra: Australian Institute of Health and Welfare.

Britt H, Miller GC, Knox S, Charles J, Pan Y, Henderson J, Bayram C, Valenti L, Ng A, O'Halloran J 2005. General practice activity in Australia 2004–05. General practice series no. 18. AIHW cat. no. GEP 18. Canberra: Australian Institute of Health and Welfare.

Knox S, Britt H, Pan Y, Miller GC, Bayram C, Valenti L, Charles J, Henderson J, Ng A, O'Halloran J 2005. Locality matters: the influence of geography on general practice activity in Australia 1998–2004. General practice series no. 17. AIHW cat. no. GEP 17. Canberra: Australian Institute of Health and Welfare.

Britt H, Miller GC, Knox S, Charles J, Valenti L, Pan Y, Henderson J, Bayram C, O'Halloran J, Ng A 2004. General practice activity in Australia 2003–04. General practice series no. 16. AIHW cat. no. GEP 16. Canberra: Australian Institute of Health and Welfare.

Australian General Practice Statistics and Classification Centre 2007. SAND abstracts from the BEACH program. Sydney: AIHW & University of Sydney. Viewed 25 October 2007, <www.fmrc.org.au/publications/SAND_abstracts.htm>.

Britt H, Miller GC, Knox S, Charles J, Valenti L, Bayram C, O'Halloran J, Henderson J, Pan Y, Harrison C 2004. General practice activity in the states and territories of Australia 1998–2003. General practice series no. 15. AIHW cat. no. GEP 15. Canberra: Australian Institute of Health and Welfare.

Britt H, Miller GC, Knox S, Charles J, Valenti L, Henderson J, Pan Y, Bayram C, Harrison C 2003. General practice activity in Australia 2002–03. General practice series no. 14. AIHW cat. no. GEP 14. Canberra: Australian Institute of Health and Welfare.

Britt H, Knox S, Miller GC 2003. Changes in pathology ordering by general practitioners in Australia, 1998–2001. General practice series no. 13. AIHW cat. no. GEP 13. Canberra: Australian Institute of Health and Welfare.

O'Halloran J, Britt H, Valenti L, Harrison C, Pan Y, Knox S 2003. Older patients attending general practice 2000–02. General practice series no. 12. AIHW cat. no. GEP 12. Canberra: Australian Institute of Health and Welfare.

GENERAL PRACTICE SERIES

Number 21

BEACH

Bettering the Evaluation And Care of Health

General practice activity in Australia 2006–07

**Helena Britt, Graeme C Miller, Janice Charles, Clare Bayram, Ying Pan,
Joan Henderson, Lisa Valenti, Julie O'Halloran, Christopher Harrison,
Salma Fahridin**

January 2008

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

Cat. no. GEP 21

© Australian Institute of Health and Welfare and the University of Sydney 2008

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced without prior 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 Communications Unit, Australian Institute of Health and Welfare, GPO Box 570, Canberra ACT 2601.

This publication is part of the Australian Institute of Health and Welfare's General practice series, from the Australian General Practice Statistics and Classification Centre, 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 <www.aihw.gov.au>.

ISSN 1442-3022

ISBN 978 1 74024 7528

Suggested citation

Britt H, Miller GC, Charles J, Bayram C, Pan Y, Henderson J, Valenti L, O'Halloran J, Harrison C, Fahridin S 2008. General practice activity in Australia 2006–07. General practice series no. 21. Cat. no. GEP 21. Canberra: Australian Institute of Health and Welfare.

Australian Institute of Health and Welfare

Board Chair

Hon. Peter Collins, AM, QC

Director

Penny Allbon

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

The Australian General Practice Statistics and Classification Centre

School of Public Health

University of Sydney

Acacia House

Westmead Hospital

Westmead NSW 2145

Phone: 61 2 9845 8151

Fax: 61 2 9845 8155

Email: gpstats@fmrc.org.au

Published by the Australian Institute of Health and Welfare

Printed by

Foreword

As BEACH approaches the end of its tenth year of continuous collection of GP activity data, it remains the only independent survey on patterns of primary care in Australia. BEACH is a powerful tool for public health. So much so, that the Canadians are drawing on the experience and expertise from BEACH in planning data collection in their own country. The rigour of the study design, the breadth of the sample – 93,000 encounters with 930 GPs in this year 9 collection – combined with the ability to examine trends over time, provides a unique opportunity to plan and evaluate the front line response to what is happening more broadly with the health of the population.

What's happening in Australia should make us sit up and take notice. As baby boomer GPs think ahead to retirement they are reducing their hours of work whilst their baby boomer patients and those aged more than 75 years are seeing their GP more frequently. Chronic diseases, such as diabetes, cancer, cardiovascular disease and mental ill health are on the rise. Without a better funded, coordinated and integrated approach to managing chronic disease in the community, much of the burden will continue to fall on GPs. This is reflected in the number of consultations related to the management of chronic problems. There has been a 5.4 million increase in the number of GP encounters related to chronic disease in less than a decade.

The response from GPs to an ageing and more demanding patient population reveals the impact of changes in Medicare funding, health policy and practice management. The use of longer consultations, increased utilisation of Medicare funded procedural care provided by practice nurses, fewer prescriptions, increased referrals to specialists and a reduction in work hours all come at a time when the number of new medical graduates entering general practice falls short of the number expected to leave the GP workforce over the next decade. The same problem with workforce replacement for nurses and allied health professions will place additional pressure on GPs.

Despite these challenges, general practice in Australia is remarkably resilient. Earlier this year Professor Helena Britt (Director of the Family Medicine Research Centre) with co-authors from the USA, UK and New Zealand published a paper in the *British Medical Journal*¹ that compared GP encounters and activities across those countries. Not only does general practice in Australia compare favourably to our Commonwealth and North American counterparts, the BEACH survey and methodology itself is regarded as a world leader.

It is inevitable that technology will drive a shift to electronic data capture from general practice but that day may be many years away. In the meantime, the public-private partnership that exists between the Australian Government Department of Health and Ageing, the Australian Institute of Health and Welfare, The University of Sydney, pharmaceutical companies and NGOs that fund a paper-based BEACH needs to be preserved. It is a tribute to Professor Britt and Professor Graeme Miller (Medical Director of the Family Medicine Research Centre) that they have been able to combine the demands of academic entrepreneurship in funding BEACH with the high quality of research required to serve the public good.

John Kenneth Galbraith once noted that managers don't much like information because it complicates the otherwise simple joys of making decisions. But there are joys in knowing, whether or not the news is good. The information provided by the BEACH annual reports is essential reading for our health managers. BEACH is essential to the betterment and evaluation of general practice in Australia.

Glenn Salkeld PhD
Professor of Public Health and Head,
School of Public Health,
The University of Sydney, NSW
Australia

1. Bindman AB, Forrest CB, Britt H, Crampton P, Majeed A 2007. Diagnostic scope of and exposure to primary care physicians in Australia, New Zealand, and the United States: cross sectional analysis of results from three national surveys. *BMJ* 334(7606):1261-6.

Acknowledgments

The Australian General Practice Statistics and Classification Centre (formerly the General Practice Statistics and Classification Unit) wishes to thank the 930 general practitioners who participated in BEACH between April 2006 and March 2007. 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 since it began in April 1998:

- AstraZeneca Pty Ltd (Australia) (1998–2007)
- Janssen-Cilag Pty Ltd (2000–07)
- Merck, Sharp and Dohme (Australia) Pty Ltd (2002–07)
- Pfizer Australia (2003–07)
- National Prescribing Service Ltd (2005–07)
- Abbotts Australia (2006–07)
- Sanofi-Aventis Australia Pty Ltd (2006–07)
- Roche Products Pty Ltd (1998–2006)
- Australian Government Department of Health and Ageing (1998–2004)
- National Occupational Health and Safety Commission (1998–2000)
- Australian Government Department of Veterans' Affairs (1998–2000)
- Aventis Pharma Pty Ltd (1998–2002).

Some financial support for the program was also provided by:

- The Office of the Australian Safety and Compensation Council, Department of Employment and Workplace Relations (2004–06)
- Australian Government Department of Veterans' Affairs (2004–07).

We acknowledge the support of the Royal Australian College of General Practitioners, the Australian Medical Association, the Australian Divisions of General Practice, the Australian College of Rural and Remote Medicine, and the Consumers Health Forum, and the contribution of their representatives to the BEACH Advisory Board.

The research team is grateful to Clare Bayram for her coordination and editing of this report, for the IT support of Timothy Chambers and the administrative support of Gervaise Woods, and for the valuable contribution of the general practitioner recruitment staff (Errol Henderson and Jan Fitzgerald) and data entry staff. We recognise the contribution of past members of the BEACH team, particularly Stephanie Knox.

We appreciate the cooperation of the Primary and Ambulatory Care Division of the Australian Government Department of Health and Ageing in regularly supplying general practitioner random samples and national Medicare data.

Ethics approval for this study was obtained from the Human Ethics Committee of the University of Sydney and the Ethics Committee of the Australian Institute of Health and Welfare.

Abbreviations

ABS	Australian Bureau of Statistics
AGPSCC	Australian General Practice Statistics and Classification Centre, University of Sydney, a collaborating unit of the Australian Institute of Health and Welfare
AIHW	Australian Institute of Health and Welfare
ATC	Anatomical Therapeutic Chemical (classification)
AUDIT	Alcohol Use Disorders Identification Test
AusDiab	Australian Diabetes, Obesity and Lifestyle Study
BEACH	Bettering the Evaluation And Care of Health
BOIMHC	Better Outcomes in Mental Health Care
BMI	Body mass index
CAPS	Coding Atlas for Pharmaceutical Substances
CDC	United States Centers for Disease Control and Prevention
CI	confidence interval (in this report 95% CI is used)
COAG	Council of Australian Governments
CT	Computerised tomography
DoHA	Australian Government Department of Health and Ageing
DUSOI	Duke University Severity of Illness
DVA	Australian Government Department of Veterans' Affairs
ED	Erectile dysfunction
EHR	Electronic health record
ESR	Erythrocyte sedimentation rate
EUC	Electrolytes, urea and creatinine
FMRC	Family Medicine Research Centre
FRACGP	Fellow of the Royal Australian College of General Practitioners
GP	General practitioner
GPSCU	General Practice Statistics and Classification Unit (now the Australian General Practice Statistics and Classification Centre, AGPSCC)
HbA1c	Haemoglobin, type A1c
HDL	High-density lipoprotein
HIV	Human immunodeficiency virus
ICPC	International Classification of Primary Care
ICPC-2	International Classification of Primary Care (Version 2)
ICPC-2 PLUS	A terminology classified according to ICPC-2
INR	International Normalised Ratio

IT	information technology
MBS	Medicare Benefits Schedule
M,C&S	Microscopy, culture and sensitivity
NDSHS	National Drug Strategy Household Survey
NeHTA	National e-Health Transition Authority
NSAID	Non-steroidal anti-inflammatory drug
OTC	over-the-counter (i.e. medications advised for over-the-counter purchase)
PBS	Pharmaceutical Benefits Scheme
QA	quality assurance (in this case the Quality Assurance Program of the Royal Australian College of General Practitioners)
RACGP	Royal Australian College of General Practitioners
RFE(s)	reason(s) for encounter (see Glossary)
SAND	Supplementary Analysis of Nominated Data
SAS	Statistical Analysis System
SNOMED CT	Systematized Nomenclature of Medicine Clinical Terms
URTI	Upper respiratory tract infection
WHO	World Health Organization
Wonca	World Organization of Family Doctors

Contents

Executive summary	xiv
1 Overview.....	1
1.1 Background.....	1
1.2 The BEACH program	2
Aims	2
Current status of BEACH	2
Access to BEACH data	3
1.3 Future options for national representative data collection.....	4
Requirements for electronic data collection	4
Possible ways to move forward	6
2 Methods	8
2.1 Sampling methods	8
2.2 Recruitment methods	8
2.3 Data elements	9
2.4 Changes to data elements and reporting methods.....	10
2.5 Supplementary Analysis of Nominated Data.....	11
2.6 The BEACH relational database	12
2.7 Statistical methods	13
Changes over time	13
Extrapolated national estimates.....	14
2.8 Classification of data	15
Presentation of data classified in ICPC-2.....	16
Classification of pharmaceuticals	17
Use of the medication classifications in reporting	18
2.9 Quality assurance.....	18
2.10 Methodological issues	18
Validity and reliability	18
Cluster sampling	20
GP participation	20
Limitations of extrapolations	21
2.11 Other BEACH applications.....	23
3 The sample	24
3.1 Annual results, 2006–07	24
Response rate.....	24
Representativeness of the GP sample	25

	Weighting the data, 2006-07.....	27
	Representativeness of the final encounter sample, 2006-07	27
	The weighted data set.....	28
3.2	The total data set, 1998-2007	29
4	The participating GPs.....	30
4.1	Annual results, 2006-07	30
	Characteristics of the GP participants.....	30
	Computer use at GP practices	33
4.2	Changes over time, 1998-99 to 2006-07	34
5	The encounters.....	41
5.1	Annual results, 2006-07	41
	Content of the encounters.....	41
	Encounter type	41
5.2	Changes over time, 1998-99 to 2006-07	46
6	The patients.....	52
6.1	Annual results, 2006-07	52
	Age-sex distribution of patients at encounter	52
	Other patient characteristics.....	52
	Patient reasons for encounter	53
6.2	Changes over time, 1998-99 to 2006-07	58
7	Problems managed.....	70
7.1	Annual results, 2006-07	70
	Number of problems managed at encounter	70
	Problems managed by ICPC-2 chapter	71
	Problems managed by ICPC-2 component	71
	Most frequently managed problems	74
	Most common new problems.....	75
	Most frequently managed chronic problems	77
	Work-related problems managed.....	78
7.2	Changes over time, 1998-99 to 2006-07	79
8	Overview of management	95
8.1	Annual results, 2006-07	95
8.2	Changes over time, 1998-99 to 2006-07	98
9	Medications	104
9.1	Annual results, 2006-07	104
	Source of medications.....	104
	Prescribed medications	104
	Medications supplied by GPs.....	111

Medications advised for over-the-counter purchase	112
9.2 Changes over time, 1998–99 to 2006–07	113
10 Other treatments.....	130
10.1 Annual results, 2006–07	130
Number of other treatments.....	130
Clinical treatments	131
Procedural treatments	133
10.2 Changes over time, 1998–99 to 2006–07	135
11 Referrals and admissions.....	145
11.1 Annual results, 2006–07	145
Number of referrals and admissions.....	145
Most frequent referrals.....	145
Problems most often referred.....	146
11.2 Changes over time, 1998–99 to 2006–07	148
12 Investigations.....	152
12.1 Annual results, 2006–07	152
Numbers of investigations.....	152
Pathology ordering	152
Imaging ordering	155
Other investigations ordered	157
12.2 Changes over time, 1998–99 to 2006–07	158
13 Practice nurse activity.....	162
13.1 Annual results, 2006–07	163
Practice nurse Medicare claims versus practice nurse activity	163
Discussion	166
13.2 Changes over time	167
14 Changes in policy and practice: type 2 diabetes and depression.....	168
14.1 Background.....	168
14.2 Type 2 diabetes.....	169
14.3 Mental health.....	176
14.4 Discussion	181
15 Patient risk factors.....	183
15.1 Annual results, 2006–07	183
Body mass index	183
Smoking (patients aged 18 years and over)	187
Alcohol consumption (patients aged 18 years and over).....	189
Risk factor profile of adult patients	191
15.2 Changes over time, 1998–99 to 2006–07	192

16 SAND abstracts and research tools.....	200
SAND abstract 105: Measurement of severity of illness in general practice	201
SAND abstract 106: Weight loss attempts and methods	203
SAND abstract 107: Type 2 diabetes and dyslipidaemia.....	206
SAND abstract 108: Type 2 diabetes among patients attending general practice.....	208
SAND abstract 109: Secondary prevention of heart attack and stroke.....	210
SAND abstract 110: Erectile dysfunction.....	212
Reference list.....	215
Glossary.....	223
Appendices	226
Appendix 1: Example of a 2006–07 recording form	226
Appendix 2: GP characteristics questionnaire, 2006–07	228
Appendix 3: Dissemination of results from the BEACH program	229
Available from < www.aihw.gov.au/publications/index.cfm/subject/19 >	229
Appendix 4: Code groups from ICPC-2 and ICPC-2 PLUS	229
Available from < www.aihw.gov.au/publications/index.cfm/subject/19 >	229
Appendix 5: Chronic code groups from ICPC-2 and ICPC-2 PLUS	229
Available from < www.aihw.gov.au/publications/index.cfm/subject/19 >	229
List of tables	230
List of figures	234

Executive summary

BEACH is a continuous cross-sectional national study of general practice activity in Australia which began in April 1998. It is the only continuous randomised study of GP activity in the world, and the only national program directly linking management actions (such as prescriptions, referrals, investigations) to the problem under management.

This ninth annual report summarises results from April 2006–March 07 from a sample of 93,000 encounters with 930 GPs. It describes the characteristics of GPs and the patients who consult them, patient reasons for encounter, the problems managed and management techniques used. It also examines changes that have occurred since 1998.

Summary

The general practice workforce is ageing, becoming increasingly feminised and seeking a better work-life balance (working few sessions). GP activity is also changing. More of the GPs' work is with baby-boomers and the aged and less is with children. Changes in problems managed by the GPs reflect the changing patient pattern, with more frequent management of chronic problems (reflecting ageing patients) and lower rates of acute problems, particularly those of the respiratory system.

GPs are prescribing fewer medications but supplying more directly to the patient. There have been significant decreases in clinical treatments (such advice and education) provided at the encounter following the introduction of practice nurse Medicare item numbers. More procedures are being undertaken during the encounters, and practice nurses are contributing strongly to their provision. GPs are referring their patients to specialists more often. Referrals to psychologists have also increased in response to Medicare coverage of these services. Orders for tests and investigations continue to grow steadily, particularly for pathology tests.

The changing general practice workforce

- The feminisation of the general practice workforce is reflected in the proportion of GP participants who are female, increasing from 30.0% in 1998–99 to 34.1% in 2006–07.
- The ageing of the GP workforce continues. In 2006–07 one in three participants were aged 55 years or more, an increase of about 40% since 1998–99. Limitations on GP training places over the last decade mean that now fewer than 10% of GPs are under 35 years of age, a reduction from 15% in 1998–99.
- Many GPs are working fewer hours. The proportion working less than 6 sessions per week has increased from 12% to 17% while the proportion working 11 or more sessions has halved (from 19.0% to 9.6%) over this time period. This effects the total number of full-time workload equivalent GPs available for patient care.
- Half the GPs now rely on deputising or emergency services for after hours care of their patients. This represents a 20% decrease in the proportion providing their own or cooperative after-hours services since 2000–01.
- Larger practices (of five or more GPs) now account for more than half of the GP sample while the number of participants in solo practice has halved since 1998–99, to about 8%.

The encounters

- Long surgery consultations accounted for 10% of the MBS claimable encounters in 2006–07, a significant increase since 1998–99 when they accounted for 7%.
- GPs are doing fewer home visits. In 1998–99 home visits accounted for 1.9% of encounters but have halved to 0.9% in 2006–07.
- The average measured length of Medicare/DVA claimable consultations has stayed constant at about 15 minutes since 2000–01. Length of consultation is measured (from recorded start and finish time) in a subsample of encounters.

The patients

Patients aged 75 years and over and baby boomers (aged 45–64 years) are taking up an increasing proportion of the GPs' workload. Encounters with patients aged 75 years and over increased by 30% and those with 45–64 year olds increasing by 15% from 1998–99 to 2006–07. Children make up an ever decreasing proportion of encounters.

Patients are coming to the GP with more reasons for encounter (RFEs). The number of RFEs has increased from 146.3 in 1998–99 to 150.8 per 100 encounters in 2006–07, equating to an estimated additional 3.6 million RFEs nationally in 2006–07 than nine years earlier

Visits to obtain results of tests and request administrative procedures (such as medical certificates) have increased. Attendances to receive results have doubled from 3.4 to 6.9 per 100 encounters and requests for administrative procedures have increased from 1.1 to 1.9 per 100 encounters.

Problems managed

There has been no change in the number of problems managed at the average GP encounter since 1998–99, being steady at about 1.5 problems per encounter.

There has been a decrease in the frequency of management of acute respiratory conditions (e.g. upper respiratory tract infection, acute bronchitis) which would be partially explained by the decrease in the proportion of workload associated with children.

The management rate of chronic problems has increased from 46.5 per 100 encounters in 1998–99 to 52.1 in 2006–07, equating to an additional 5.4 million occasions of chronic problem management in 2006–07 than in 1998–99. This is reflected in increased management rates of hypertension, diabetes, oesophageal disease, malignant skin neoplasm, atrial fibrillation and osteoporosis, reflecting the morbidity of the ageing attending patients.

Changes in management provided by GPs

Fewer medications are being prescribed, advised for over-the-counter purchase or supplied by the GP. This is largely due to decreasing prescription rates (from 93.6 per 100 encounters in 1998–99 to 83.3 per 100 in 2006–07), being counteracted slightly by an increase in GP-supplied medications (from 7.3 to 8.9 per 100 encounters). Extrapolation to all GP Medicare claims nationally suggests that in 2006–07 there were 9.2 million fewer occasions on which the GPs prescribed/advised/supplied medication than in 1998–99 – made up of about 11.2 million fewer prescriptions written with a counteracting increase of about 1.6 million GP-supplied medications.

Reasons for the decrease in prescriptions may include wider availability of some medications by over-the-counter purchase, the increasing number of combination medications available, changes in GP prescribing behaviour (for example, the decrease in prescriptions for oral

contraceptives), broadening of government initiatives such as free supply of selected vaccines, and increases in the number of repeats given by the GP.

Referral rates to medical specialists (particularly cardiologists) have increased since 1998–99. While the total referral rate to allied health professionals has not changed referrals to psychologists, podiatrists and dietitians have increased.

The number of tests and investigations ordered by GP continues to rise, particularly pathology test ordering. GPs are now more likely to order a pathology test and are ordering more tests once the decision to order has been made. The likelihood of ordering pathology tests at the encounter increased from 13.2% to 17.4%, an increase of 32% since 1998–99. GPs ordered about 44% more tests (or batteries of tests) per 100 encounters in 2006–07 (42.4 orders per 100 encounters) than in 2000–01 (29.7 per 100).

The rate of imaging orders increased from 7.7 per 100 encounters to 9.0 per 100 encounters, an increase of 17% from 1998–99 to 2006–07. The rate of other investigations ordered also increased over time, from 0.6 per 100 encounters in 2000–01 to 1.1 per 100 in 2006–07.

Clinical and procedural activity

Clinical treatment rates (education, advice and counselling) consistently increased from 1998–99 to 2004–05, but fell by 25% to 29.5 per 100 encounters in 2005–06 (reverting to the 1998–99 level) and stayed at that level in 2006–07. The decrease was largely in the areas of advice about treatment and lifestyle advice (including diet, exercise, smoking alcohol consumption etc). The sudden decrease followed the introduction of practice nurse Medicare item numbers in November 2004, and suggest that the practice nurses may be taking up some of these duties in patient contacts occurring independently of the GP–patient encounter. The 2005–06 decrease did not significantly effect the rate of psychological counselling recorded by the GPs – an activity for which the practice nurse cannot substitute.

Procedural treatments increased by almost 30% from 1998–99 to 2006–07. Some of the increase noted in 2005–06 and 2006–07 could reflect practice nurse activity which accounted for 23% of all procedures done during the encounter in 2005–06 and 28% in 2006–07.

There were 1,835 practice nurse Medicare items recorded in BEACH, two thirds being for provision of immunisations and a third for wound management. At least one practice nurse activity was recorded at 5% of the encounters. The majority (92%) of their activity was procedural. In contrast, less than 2% of all recorded clinical treatments (advice, counselling) were provided by the practice nurse in conjunction with the GP–patient encounter.

These activities include work undertaken by practice nurses at the time of the GP–patient encounter. They do not include any clinical or procedural work done by practice nurses under instruction from the GP, at independent consultations with the patient. It may be that the practice nurses are providing education, advice and lifestyle counselling at independent contacts with the patient, and that the overall education and advice level in general practice as a whole has not changed. However there are no data available about these ‘out of encounter’ activities, on which to test this hypothesis.

Policy and practice: Type 2 diabetes and depression

The continuous nature of the BEACH program allows us to consider changes in management in light of changes in policy. Policy initiatives have had a significant impact on the management of type 2 diabetes, but a lesser effect on management of depression.

For type 2 diabetes we found:

- an increased identification rate of new cases
- increased management rates among patients aged 45 and over of both sexes
- increased management rates of blood pressure and lipids as part of diabetes care
- increased pathology testing
- higher referral rates, suggesting improved patient access to other health professionals, particularly allied health.

For depression we found:

- no change in identification or management rates between 1998–99 and 2006–07
- GP provision of counselling for depression increased in 2000–01 and stayed at this higher level until 2006–07.
- in 2006–07, when Medicare rebates were offered for psychologist consultations for patients referred by GPs, GP provision of counselling for depression reverted to 1998–99 rates; referrals to psychologists increased sharply; and those to psychiatrists decreased.

Patient risk factor substudies

Overweight and obesity: Among a sample of more than 32,000 attending patients. Only four in ten patients were in the normal BMI range. More than half (58.5%) were overweight (23.5%) or obese (35.0%), a considerable increase since 1998–99, when 32.8% were overweight and 18.3% obese (51.1% being overweight or obese). These increases applied in both sexes.

In contrast, prevalence of overweight and obesity among a sub-sample of about 3,000 children (2–17 years) remained steady – 10.6% being obese and 18.6% overweight in 2006–07.

Fewer adults are smoking: According to the subsample study of approximately 30,000 adults there has been a significant decrease in prevalence of current daily smoking in adults, from 19.2% in 1998–98 to 16.1% in 2006–07. This decrease applied in both sexes.

Alcohol consumption: Of the 30,000 subsampled adults 27.0% reporting drinking alcohol at levels classed as ‘at-risk’. The prevalence of at-risk alcohol consumption has not changed since first measured in the 1998–99 sub-study.

The future of national data collection in general practice

Currently BEACH data collection is paper-based, at present it is not possible to collect representative general practice data electronically. Many complex issues need to be addressed prior to national electronic data collection becoming a viable alternative to the current method (see Section 1.4).

