

References

1. Australian Institute of Health and Welfare 2004. Australia's health 2004: the ninth biennial health report of the Australian Institute of Health and Welfare. AIHW Cat. No. AUS 44. Canberra: AIHW.
2. Commonwealth Department of Health and Aged Care 2001. Medicare Benefits Schedule book. Canberra: DHAC.
3. Commonwealth Department of Health and Aged Care 2000. General practice in Australia: 2000. Canberra: DHAC.
4. Health Insurance Commission 2002. Medicare Benefits Schedule group statistics reports. Viewed 14 October 2002, http://www.hic.gov.au/statistics/dyn_mbs/forms/mbsgtab4.shtml
5. Australian Bureau of Statistics 2002. National Health Survey: summary of results, Australia, 2001. Canberra: ABS.
6. National Health Priority Action Council 2003. National health priority areas. Viewed 30 September 2004, <http://www.nhpac.gov.au/nhpas.htm>
7. Meza RA, Angelis M, Britt H, Miles DA, Seneta E, Bridges-Webb C 1995. Development of sample size models for national general practice surveys. Aust J Pub Health 19(1):34-40.
8. Britt H, Sayer GP, Miller GC, Charles J, Scahill S, Horn F et al. 1999. BEACH Bettering the Evaluation and Care of Health: a study of general practice activity, six-month interim report. AIHW Cat. No. GEP 1. Canberra: Australian Institute of Health and Welfare, General Practice Series no. 1.
9. Britt H, Miller GC, Charles J, Knox S, Sayer GP, Valenti L et al. 2000. General practice activity in Australia 1999-2000. AIHW Cat. No. GEP 5. Canberra: Australian Institute of Health and Welfare, General Practice Series No. 5.
10. Britt H, Miller GC, Knox S, Charles J, Valenti L, Henderson J et al. 2001. General practice activity in Australia 2000-2001. AIHW Cat. No. GEP 8. Canberra: Australian Institute of Health and Welfare, General Practice Series No. 8.
11. SAS Proprietary Software Release 6.12 1996. Cary: SAS Institute Inc.
12. SAS Proprietary Software Release 8.2 2001. Cary: SAS Institute Inc.
13. Sayer GP 1999. Estimating and generalising with clustered sampling in general practice. Aust Fam Physician 28(Suppl1):S32-S34.
14. Kish L 1965. Survey sampling. New York: John Wiley & Sons.

15. Britt H 1997. A new coding tool for computerised clinical systems in primary care – ICPC plus [see comments]. *Aust Fam Physician* 26(Suppl 2):S79–S82.
16. Classification Committee of the World Organization of Family Doctors 1998. *ICPC-2: International Classification of Primary Care*. 2nd edn. Oxford: Oxford University Press.
17. World Health Organization. 2004. Family of international classifications. Viewed 11 October 2004, <http://www.who.int/classifications/en/WHOFICFamily.pdf>
18. Classifications and Terminologies Working Group 2002. Australian family of health and related classifications matrix. Viewed 11 October 2004, <http://www.aihw.gov.au/committees/health/nhimg/matrix/index.html>
19. World Health Organization Collaborating Centre for Drug Statistics Methodology 1997. *Anatomical Therapeutic Chemical (ATC) classification index with Defined Daily Doses (DDDs)*. January 1998 edn. Oslo: WHO.
20. Driver B, Britt H, O’Toole B, Harris M, Bridges-Webb C, Neary S 1991. How representative are patients in general practice morbidity surveys? *Fam Pract* 8:261–8.
21. Britt H, Harris M, Driver B, Bridges-Webb C, O’Toole B, Neary S 1992. Reasons for encounter and diagnosed health problems: convergence between doctors and patients. *Fam Pract* 9:191–4.
22. Britt H 1998. Reliability of central coding of patient reasons for encounter in general practice, using the International Classification of Primary Care. *Informatics* May:3–7.
23. Bridges-Webb C, Britt H, Miles DA, Neary S, Charles J, Traynor V 1992. Morbidity and treatment in general practice in Australia 1990–1991. *Med J Aust* 157(19 Oct Spec Sup):S1–S56.
24. Britt H 1997. A measure of the validity of the ICPC in the classification of reasons for encounter. *Informatics* November:8–12.
25. Britt H, Meza RA, Del Mar C 1996. Methodology of morbidity and treatment data collection in general practice in Australia: a comparison of two methods. *Fam Pract* 13(5):462–7.
26. Gehlbach SH 1979. Comparing methods of data collection in an academic ambulatory practice. *J Med Educ* 54:730–2.
27. Britt H, Angelis M, Harris E 1998. The reliability and validity of doctor-recorded morbidity data in active data collection systems. *Scand J Prim Health Care* 16:50–5.
28. Department of Primary Industries and Energy, Department of Human Services and Health 1994. *Rural, Remote and Metropolitan Area (RRMA) Classification*. Canberra: DPIE and DHAC.

29. Australian Government Department of Health and Ageing 2004. MedicarePlus: Drawing on qualified health professionals from overseas. Viewed 13 October 2004, <http://www7.health.gov.au/medicareplus/about/factsheets/pdf/fact09.pdf>
30. Charles J, Britt H, Valenti L 2004. The evolution of the general practice workforce in Australia, 1991-2003. *Med J Aust* 181(2):85-90.
31. McWhinney IR 1986. Are we on the brink of a major transformation of clinical method? *Can Med Assoc J* 135:873-8.
32. Wenck BC, Johnston PJ 2004. Implanon and medical indemnity: a case study of risk management using the Australian standard. *Med J Aust* 181(2):117-9.
33. Murray CJL, Lopez AD 1996. The global burden of disease: a comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020: summary. Cambridge: Harvard School of Public Health on behalf of the World Health Organization and the World Bank, 36.
34. O'Halloran J, Miller GC, Britt H 2004. Defining chronic conditions for primary care with ICPC-2. *Fam Pract* 21(4):381-6.
35. Britt H, Miller GC, McGeechan K, and Sayer GP 1999. Pathology ordering by general practitioners in Australia 1998. AIHW Cat. No. GEP 4. Canberra: Department of Health and Aged Care, Viewed 30 October 2000, <http://www.health.gov.au:80/haf/docs/pathorder.htm>
36. Health Insurance Commission 2000. 1999-2000 Annual report financial year statistics. Canberra: HIC.
37. 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.
38. Britt H, Knox S, Miller GC 2003. Changes in pathology ordering by general practitioners in Australia 1998-2001. AIHW Cat. No. GEP 13. Canberra: Australian Institute of Health and Welfare, General Practice Series No. 13.
39. MIMS Australia 2001. MIMS bi-monthly. Caswell A (ed). Sydney: MediMedia Australia, No. 37(7).
40. Henderson J, Knox S, Pan Y, Britt H 2004. Changes in asthma management in Australian general practice. *Primary Care Respiratory Journal* 13(3):138-143.
41. Mathers C, Vos T, Stevenson C 1999. The burden of disease and injury in Australia. AIHW Cat. No. PHE 17. Canberra: AIHW.
42. Dunstan D, Zimmet P, Welborn T, Sicree R, Armstrong T, Atkins R et al. 2001. Diabetes and associated disorders in Australia 2000: the accelerating epidemic. Melbourne: International Diabetes Institute.

43. Cole TJ, Bellizzi MC, Flegal KM, Dietz WH 2000. Establishing a standard definition for child overweight and obesity worldwide: international survey. *BMJ* 320(7244):1240-3.
44. 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.
45. Ridolfo B, Stevenson C 2001. The quantification of drug-caused mortality and morbidity in Australia, 1998. AIHW Cat. No. PHE 29. Canberra: AIHW, Drug Statistics Series.
46. Australian Institute of Health and Welfare 2002. 2001 National Drug Strategy Household Survey: First results. AIHW Cat. No. PHE 35. Canberra: AIHW, Drug Statistics Series.
47. National Health and Medical Research Council 2001. Australian alcohol guidelines: health risks and benefits. Canberra: NHMRC.
48. Saunders JB, Aasland OG, Babor TF, de la Fuente JR, Grant M 1993. Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO Collaborative Project on Early Detection of Persons with Harmful Alcohol Consumption – II. *Addiction* 88(6):791-804.
49. Centre for Drug and Alcohol Studies 1993. The Alcohol Use Disorders Identification Test. Sydney: Royal Prince Alfred Hospital and the University of Sydney.
50. Commonwealth Department of Health and Ageing 2003. Medicare Benefits Schedule Book, explanatory notes. Canberra: DoHA, 30.
51. Britt H, Miller GC, Knox S, Charles J, Valenti L, Bayram C et al. 2004. General practice activity in the states and territories of Australia 1998-2003. AIHW Cat. No. GEP 15. Canberra: Australian Institute of Health and Welfare, General Practice Series No. 15.
52. Miller G, Britt H, Pan Y, Knox S 2004. Relationship between general practitioner certification and characteristics of care. *Med Care* 42(8):770-8.
53. Britt H, Bhasale A, Miles DA, Meza A, Sayer GP, Angelis M 1996. The sex of the general practitioner. A comparison of characteristics, patients, and medical conditions managed. *Med Care* 34(5):403-415.
54. Crombie DL 1990. The problem of variability in general practitioner activities. *Yearbook of research and development*. London: Her Majesty's Stationery Office, 21-4.
55. Wilkinson D, McElroy H, Beilby J, Mott K, Price K, Morey S et al. 2002. Characteristics of general practitioners that provided health assessments, care plans or case conferences, as part of the enhanced primary care program. *Aust Health Rev* 25(6):137-144.

Glossary

A1 Medicare items: Medicare item numbers 1, 2, 3, 4, 13, 19, 20, 23, 24, 25, 33, 35, 36, 37, 38, 40, 43, 44, 47, 48, 50, 51, 601, 602, 720, 722, 724, 726, 728, 730, 734, 738, 740, 742, 744, 746, 749, 757, 759, 762, 765, 768, 771, 773, 775, 778, 779, 801, 803, 805, 807, 809, 811, 813, 815.

Aboriginal: The patient identifies himself or herself as an Aboriginal person.

Activity level: The number of general practice A1 Medicare items claimed during the previous 3 months by a participating GP.

Allied and other health professionals: Those who provide clinical and other specialised services in the management of patients, including physiotherapists, occupational therapists, dietitians, dentists and pharmacists.

Chapters (ICPC-2): The main divisions within ICPC-2. There are 17 chapters primarily representing the body systems.

Complaint: A symptom or disorder expressed by the patient when seeking care.

Component (ICPC-2): In ICPC-2 there are seven components which act as a second axis across all chapters.

Consultation: See *Encounter*.

Coxibs: A non-steroidal anti-inflammatory drug classified within the Anatomical Therapeutic Chemical classification as subgroup M01A H

Diagnosis/problem: A statement of the provider's understanding of a health problem presented by a patient, family or community. GPs are instructed to record at the most specific level possible from the information available at the time. It may be limited to the level of symptoms.

- *New problem:* The first presentation of a problem, including the first presentation of a recurrence of a previously resolved problem but excluding the presentation of a problem first assessed by another provider.
- *Old problem:* A previously assessed problem that requires ongoing care. Includes follow-up for a problem or an initial presentation of a problem previously assessed by another provider.

Encounter (enc): Any professional interchange between a patient and a GP.

- *Indirect:* Encounter where there is no face-to-face meeting between the patient and the GP but a service is provided (e.g. prescription, referral).
- *Direct:* Encounter where there is a face-to-face meeting of the patient and the GP.

Direct encounters can be further divided into:

Medicare-claimable

- *A1 items of service:* See *A1 Medicare items*
 - *Surgery consultations:* Encounters identified by any one of MBS item numbers 3, 23, 36, 44.
 - *Home visits:* Encounters identified by any one of MBS item numbers 4, 24, 37, 47.
 - *Hospital encounters:* Encounters identified by any one of MBS item numbers 19, 33, 40, 50.

- *Residential aged care facility*: Encounters identified by any one of MBS item numbers 20, 35, 43, 51.
- *Other institutional visits*: Encounters identified by any one of MBS item numbers 13, 25, 38, 40.
- *Other MBS encounters*: Encounters identified by an MBS item number that does not identify place of encounter (see *A1 Medicare items*).
- *Workers compensation*: Encounters paid by workers compensation insurance.
- *Other paid*: Encounters paid from another source (e.g. state).

General practitioner (GP): A medical practitioner who provides primary comprehensive and continuing care to patients and their families within the community (Royal Australian College of General Practitioners).

Medication: Medication that is prescribed, advised for over-the-counter purchase or provided by the GP at the encounter.

Medication rates: The rate of use of all medications including medications that were prescribed, supplied by the GP and advised for over-the-counter purchase.

Medication status:

- *New*: The medication prescribed/advised/provided at the encounter is being used for the management of the problem for the first time.
- *Continuation*: The medication prescribed/advised/provided at the encounter is a continuation or repeat of previous therapy for this problem.
- *Old*: see *continuation*.

Morbidity: Any departure, subjective or objective, from a state of physiological wellbeing. In this sense, sickness, illness and morbid conditions are synonymous.

Patient status: The status of the patient to the practice.

- *New patient*: The patient has not been seen before in the practice.
- *Old patient*: The patient has attended the practice before.

Prescribed rates: The rate of use of prescribed medications (i.e. does not include medications that were GP-supplied or advised for over-the-counter purchase).

Problem managed: See *Diagnosis/problem*.

Provider: A person to whom a patient has access when contacting the health care system.

Reasons for encounter (RFEs): The subjective reasons given by the patient for seeing or contacting the general practitioner. These can be expressed in terms of symptoms, diagnoses or the need for a service.

Recognised GP: A medical practitioner who is:

- vocationally recognised under Section 3F of the Health Insurance Act, *or*
- a holder of the Fellowship of the Royal Australian College of General Practitioners who participates in, and meets the requirements for, quality assurance and continuing medical education as defined in the RACGP Quality Assurance and Continuing Medical Education Program, *or*

- undertaking an approved placement in general practice as part of a training program for general practice leading to the award of the Fellowship of the Royal Australian College of General Practitioners or undertaking an approved placement in general practice as part of some other training program recognised by the RACGP as being of equivalent standard.²

Referral: The process by which the responsibility for part or all of the care of a patient is temporarily transferred to another health care provider. Only new referrals to specialists and allied health professionals, and for hospital and nursing home admissions arising at a recorded encounter are included. Continuation referrals are not included. Multiple referrals can be recorded at any one encounter.

Rubric: The title of an individual code in ICPC-2.

Torres Strait Islander: The patient identifies himself or herself as a Torres Strait Islander person.

Tricyclics: non-selective monoamine re-uptake inhibitor medications for depression.

Statins: HMG CoA reductase inhibitors used to lower cholesterol.

Abbreviations

ACE	Angiotensin converting enzyme
AIHW	Australian Institute of Health and Welfare
ATC	Anatomical Therapeutic Chemical (classification)
AUDIT	Alcohol Use Disorders Identification Test
BEACH	Bettering the Evaluation And Care of Health
BMI	Body mass index
CAPS	Coding Atlas for Pharmaceutical Substances
CI	Confidence interval (in this report 95% CI is used)
CT	Computerised tomography
DoHA	Australian Government Department of Health and Ageing
DVA	Australian Department of Veterans' Affairs
EHRs	Electronic health records
Enc	Encounter
EUC	Electrolytes, urea and creatinine
FRACGP	Fellow of the Royal Australian College of General Practitioners
GORD	Gastro-oesophageal reflux disorder
GP	General practitioner
GPSCU	General Practice Statistics and Classification Unit, University of Sydney, a collaborating unit of the Australian Institute of Health and Welfare
HbA1c	Haemoglobin, type A1c
HIC	Health Insurance Commission
HIV	Human immunodeficiency virus
HMG-CoA	3-hydroxy-3-methylglutaryl coenzyme A
HRT	Hormone replacement therapy
ICPC	International Classification of Primary Care
ICPC-2	International Classification of Primary Care (Version 2)
ICPC-2 PLUS	An extended vocabulary of terms classified according to ICPC-2
LCL	Lower confidence limit
MAOI	Monoamine oxidase inhibitor
MBS	Medicare Benefits Schedule
MC&S	Microscopy, culture and sensitivity
MRI	Magnetic resonance imaging
NDSHS	National Drug Strategy Household Survey 2001
NEC	Not elsewhere classified

NESB	Non-English-speaking background, i.e. a language other than English is spoken at home
NOS	Not otherwise specified
NSAID	Non-steroidal anti-inflammatory drug
OTCs	Over-the-counter i.e. medications advised for over-the-counter purchase
PBS	Pharmaceutical Benefits Scheme
PDD	Prescribed daily dose
PIP	Practice incentive payment
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)
RRMA	Rural, Remote and Metropolitan Area classification
SAND	Supplementary Analysis of Nominated Data
SAS	Statistical Analysis System
SRS	Simple random sample
SSRI	Selective serotonin re-uptake inhibitors
UCL	Upper confidence limit
URTI	Upper respiratory tract infection
WHO	World Health Organization
Wonca	World Organization of Family Doctors
–	Not applicable
..	Not available