Allan Pollack Graeme Miller

Genetic testing

Keywords

research; general practice, genetics



There have been rapid advances in genetics in recent years.¹ DNA tests available on the Medicare Benefits Schedule (MBS) include HFE (haemochromatosis), Fragile X syndrome and Factor V Leiden.²

Analysis of BEACH data from April 2001 to March 2013 was undertaken to determine the proportion of general practitioner-patient encounters in Australia that involved ordering of genetic tests. Of 1,158,191 encounters, genetic tests were ordered at only 447, (38.6 per 100,000, 95% CI: 34.8-42.4). For male patients, 44.9 (38.8-51.1) per 100,000 encounters involved ordering of genetic tests, whereas for female patients, tests were ordered at 34.2 encounters (29.6–38.9). Figure 1 shows the higher proportions at encounters with patients aged 15-64 years, compared with the younger and older age groups. Figure 2 shows that the proportion was higher in 2005, compared with 2001, but no marked change has been seen since then.

Over this 12-year period, genetic tests were ordered for only 452 of 1,777,244 problems managed. Of these 452, the most frequent diagnoses recorded were 'haemochromatosis', (17%, 14-21) and 'family history of disease'(15%, 12-19).

Authors

Allan Pollack, Graeme Miller, Family Medicine Research Centre, University of Sydney, NSW

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References

- 1. National Health and Medical Research Council, Genetics in Family Medicine: The Australian Handbook for General Practitioners. Canberra: Commonwealth of Australia, 2007. Available at www.nhmrc.gov.au/ files nhmrc/file/your health/ egenetics/genetics in family mdicine.pdf [Accessed 12 May 2014].
- National Health and Medical Research Council. Genetics in Family Medicine: Genetics at a glance. Canberra: Commonwealth of Australia, 2007. Available at www.nhmrc.gov.au/_files_nhmrc/file/your_health/egenetics/practioners/gems/ sections/genetics at a glance.pdf [Accessed 12 May 2014].

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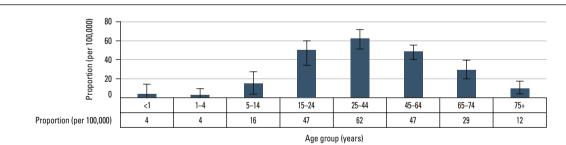


Figure 1. Proportion of GP-patient encounters at which genetic testing was ordered, by age group (95% CI), April 2001-March 2013

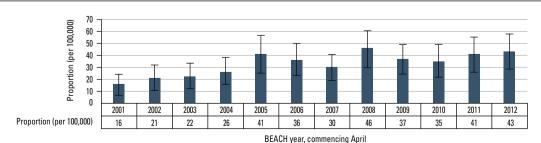


Figure 2. Proportion of all GP-patient encounters at which genetic testing was ordered, by year (95% CI)