



Clare Bayram  
Lisa Valenti  
Helena Britt

# Orders for thyroid function tests

## Changes over 10 years

### Keywords

thyroid function tests; general practice



In the BEACH (Bettering the Evaluation and Care of Health) program, between 2001–02 and 2010–11, general practice orders for thyroid function tests increased by 51%.

Figure 1 demonstrates a relatively steady increase over the decade in the number of thyroid function tests ordered for every 100 problems managed, from 1.1 (95% CI: 1.0–1.2) per 100 problems in 2001–02 to 1.7 (95% CI: 1.6–1.8) per 100 in 2010–11. We estimate that this significant increase in order rate, combined with the increased annual number of general practice attendances paid by Medicare (about 99.9 million in 2001–02 and 118.1 million in 2010–11),<sup>1</sup> led to about 2.4 million more general practice orders nationally in 2010–11 than 10 years earlier.

The distributions of the problems for which thyroid function tests were ordered in 2001–02 and 2010–11 are shown in Table 1. Despite the increased test rate over the decade, the pattern of morbidities for which this test was ordered was similar in both years. About a third of all the tests were ordered for endocrine/nutrition/metabolic problems, particularly hypothyroidism (accounting for 13.4% of all the test orders in 2010–11), hyperthyroidism (4.3%) and weight problems (3.8%). About one in 10 tests were ordered in investigation of weakness/tiredness. The contribution of general check ups to thyroid function testing almost doubled over the decade (from 2.7% to 4.9%), but this is likely to be associated with the increased rate at which general check ups were conducted (from 1.8 per 100 encounters in 2001–02 to 2.7 per 100 in 2010–11),<sup>1</sup> rather than a major change in GPs' ordering behaviour.

Circulatory, psychological and neurological problems together accounted for a further 20% of thyroid function test orders.

### Authors

Clare Bayram, Lisa Valenti and Helena Britt, Family Medicine Research Centre, University of Sydney, New South Wales.

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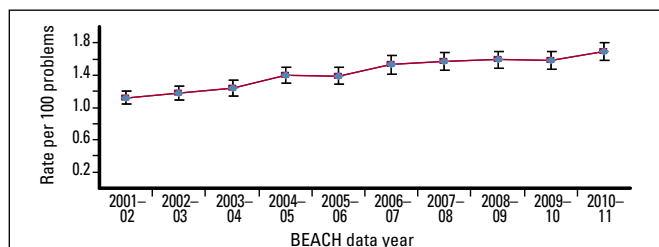


Figure 1: Thyroid function tests ordered by GPs per 100 problems managed 2001–02 to 2010–11 (with 95% confidence intervals)

**Table 1. Distribution of problems for which a thyroid function test was ordered, 2001–02 and 2010–11**

Problem type for which test ordered	% of thyroid function tests	
	2001–02 (n=1607)	2010–11 (n=2467)
<b>Endocrine/metabolic/nutrition</b>	<b>36.2</b>	<b>32.0</b>
• Hypothyroidism/myxoedema	15.5	13.4
• Hyperthyroidism/thyrotoxicosis	3.2	4.3
• Overweight/obesity/weight gain/loss	5.2	3.8
• Lipid disorders	1.4	1.7
• Diabetes	0.7	1.5
<b>General and unspecified</b>	<b>21.9</b>	<b>23.4</b>
• Weakness/tiredness	11.7	9.4
• General check ups	2.7	4.9
<b>Circulatory problems</b>	<b>8.3</b>	<b>9.7</b>
• Hypertension	3.8	4.4
• Cardiac arrhythmias	2.5	2.5
<b>Psychological problems</b>	<b>8.0</b>	<b>8.3</b>
• Depression	3.8	3.2
• Anxiety	1.3	1.8
<b>Neurological problems</b>	<b>3.3</b>	<b>2.7</b>
<b>Other problems</b>	<b>22.3</b>	<b>23.9</b>

and Ageing; AstraZeneca (Australia); Bayer Australia; CSL Biotherapies; GlaxoSmithKline Australia; Janssen-Cilag; Merck, Sharp and Dohme (Australia); Novartis Pharmaceuticals Australia; Pfizer Australia; Roche Products, Sanofi-Aventis Australia.

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correspondence [afp@racgp.org.au](mailto:afp@racgp.org.au)