Vitamin D testing: new targeted guidelines stem the overtesting tide

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Bilinski and Boyages have previously reported that the frequency of vitamin D testing had risen dramatically in Australia between 2000 and 2010.[1,2] Further, testing did not translate to improved health outcomes.[3] Since that report,[1] Medicare Benefits Schedule (MBS) expenditure on vitamin D testing rose from $109.0 million in the 2009–10 financial year to $151.1 million in 2012–13, falling slightly in 2013–14 to $143.1 million.

An MBS review for vitamin D testing in 2014 recommended targeted testing for high-risk groups only, and against population screening.[3] High-risk patients include those with osteoporosis, osteomalacia, disorders of calcium and parathyroid hormone, malabsorption, chronic renal disease, patients with darker pigmented skin or reduced sun exposure, those under 16 years of age and patients taking drugs known to reduce vitamin D levels. Five new Medicare item numbers (66833, 66834, 66835, 66836 and 66837) were introduced in November 2014 to replace the two previous numbers (66608 and 66609) and improve quality use of testing. This report analyses data from the Medicare statistical reporting tool for the first 8 months (November 2014 to June 2015) since the introduction of the new MBS numbers and guidelines.

The present study found that there had been a marked reduction in benefits paid for vitamin D testing (Box). In absolute terms, there was a saving of about $39.46 million (an average fall of 42%) compared with the same time period the year before. The greatest fall occurred in the summer month of February 2015 but the trend continued in the winter months. The number of services for vitamin D per 100 000 population fell from 18 140 in 2013–14 to 14 415 in 2014–15. The savings to the end of the 2014–15 financial year equate to about $42 million and, if the trend continues (ie, a reduction of 42%), the annual savings will be close to $64 million, reducing the annual spend to $60 million.

The new policy has almost halved expenditure in a short period of time and, if sustainable, will result in a large amount of funds to be reinvested. Before this intervention there had been an unsustainable growth in vitamin D testing. This report highlights the impact of various strategies including analysis of general practitioner test-ordering patterns and quality use of pathology testing policy based on good clinical practice and evidence-based medicine. The report highlights the value of regular monitoring and publication of all high-cost and high-volume pathology test item numbers, which will allow professional societies as well as individual clinicians to monitor trend data to look for opportunities to reinvest the scarce health dollar. New real-time business intelligence and Big Data tools have made this task easier.[4]

The study is limited by the nature of the MBS data, which capture only the number and dollar benefit of service. Further, patient-level data analysis could shed light on appropriateness of testing.

Although a large proportion of Australians (between 31% and 58%) are estimated to have vitamin D deficiency (defined as serum 25-hydroxyvitamin D levels <50 nmol/L[5]), according to season, moderate to severe deficiency is uncommon and only present in about 4% of people.[2,6] The new testing requirements should allow better targeting of those at greatest risk and those who will benefit most. ■

Medicare benefits paid for all vitamin D testing in Australia: July 2013–June 2015

	2013–14* ($)	2014–15† ($m)	Difference ($)	Difference (%)
July	12 772 332	10 901 057	−1 871 275	−14.7
August	11 713 108	10 840 342	−872 766	−7.5
September	12 958 166	14 157 002	1 198 836	9.3
October	12 306 916	11 422 808	−884 108	−7.2
November	11 661 161	9 744 773	−1 916 388	−16.4
December	12 265 479	7 653 015	−4 612 464	−37.6
January	8 276 481	5 133 015	−3 143 466	−38.0
February	13 777 880	6 294 101	−7 483 779	−54.3
March	12 315 477	7 097 905	−5 217 572	−42.4
April	11 416 530	6 301 455	−5 115 075	−44.8
May	12 454 074	5 954 850	−6 499 224	−52.2
June	11 207 630	5 732 827	−5 474 803	−48.8
Total	143 125 234	101 233 150	−41 892 085	−29.3

* MBS item numbers 66608 and 66609. † MBS item numbers 66833, 66834, 66835, 66836 and 66837 for November 2014 to June 2015, and 66608 and 66609 for July 2014 to October 2014, and then drop effectively to zero in the remaining months. ◆

Steven C Boyages
PhD, FRACP, FAFPHM

Western Sydney Local Health District, Sydney, NSW.

steve.boyages@gmail.com

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References are available online at www.mja.com.au.

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