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Dr Sam Sample  
123 Sample Street  
SAMPLETOWN ABC 1234

29 April 2011

Dear Dr Sample,

Enclosed is your confidential data on referrals for vitamin D testing.

Vitamin D has received considerable interest in the medical and lay press over recent years. Uncertainties surrounding the optimal serum level of vitamin D, and how to attain this, and the potential effects of vitamin D on a wide range of health outcomes have been the subject of an increasing number of consumer and health professional publications.

Since 2004/2005 there has been a ten-fold increase in the number of referrals for vitamin D tests. The greatest growth in vitamin D testing has occurred in people aged from 20 to 39 years. While current Australian guidelines recommend vitamin D testing in a range of well-defined 'at risk' populations (for example, institutionalised elderly people, and dark-skinned veiled women), the consequences of routine testing in low-risk populations are unclear.

The enclosed Medicare Benefits Schedule (MBS) feedback data provides you with an opportunity to reflect on your referral patterns for vitamin D testing over the last 4 years. It also allows you to compare your data to that of your peers within your allocated Rural and Remote Area (RRMA) group and provides supporting information to help inform your practice in this area.

See *NPS NEWS 72* at [www.nps.org.au/news\\_72](http://www.nps.org.au/news_72) for more information about vitamin D, testing and supplementation.

Yours sincerely,



Dr Janette Randall  
Chair



## Who is at risk of developing vitamin D deficiency? What is the prevalence of vitamin D deficiency in Australia?

Generally, serum 25-hydroxyvitamin D [25-OHD] levels above 50 nmol/L are agreed to indicate vitamin D adequacy.<sup>1-3</sup> However there is ongoing debate about the optimal 25-OHD level.<sup>2,3</sup> Studies suggest that the prevalence of moderate to severe vitamin D deficiency (25-OHD levels less than 25 nmol/L) in community-dwelling Australians in general is relatively low (less than 10%).<sup>4-9</sup> Prevalence varies however depending on the specific population studied and some groups are more likely to be deficient than others.

### Point for reflection

- **Can you readily identify if a patient is at risk of developing vitamin D deficiency?**

Groups at increased risk of vitamin D deficiency include:

- people who are housebound, particularly those over 65 years or resident in aged care facilities<sup>10,11</sup>
- people with naturally dark skin<sup>12,13</sup>
- people who cover themselves for religious or cultural reasons<sup>12</sup>

Others who may be at risk include those with altered absorption or metabolism, those with limited access to sunlight due to illness, disability or working conditions, obese people and those that avoid the sun due to increased risk of skin cancers.<sup>1,7,14</sup>

## How many vitamin D tests have you requested and when? Only measure serum 25-OHD levels if deficiency is suspected

Australian guidelines recommend vitamin D testing, and supplementation as needed, in all identified 'at-risk' groups.<sup>15-22</sup> One guideline suggests that supplementation may be considered, without testing, for residents of residential aged care facilities, due to the high likelihood of deficiency in this population.<sup>21</sup> Recommendations regarding re-testing vary between guidelines, and depending on the 'at risk' population and the original serum 25-OHD level.

Evidence for the effects of vitamin D on health outcomes apart from bone health and falls prevention is inconclusive. There is no standard definition of the optimal serum vitamin D level for health. Routine testing of otherwise healthy individuals at low-risk of deficiency is usually not indicated.<sup>23</sup>

| Season       | Your Vitamin D referrals for 1 June 2009 — 31 May 2010 |
|--------------|--|
| Winter       | 40   |
| Spring       | 74   |
| Summer       | 58   |
| Autumn       | 98   |
| <b>TOTAL</b> | <b>270</b>   |

Serum 25-OHD levels can vary depending on the season which the test was taken in. This should be taken into consideration when interpreting the results of serum 25-OHD measurements.<sup>24</sup> Serum 25-OHD levels are usually highest at the end of summer/early autumn. Two of eighteen Australian guidelines recommend repeat assessment of vitamin D status, where indicated, at the end of winter.<sup>15,25</sup>

### Points for reflection

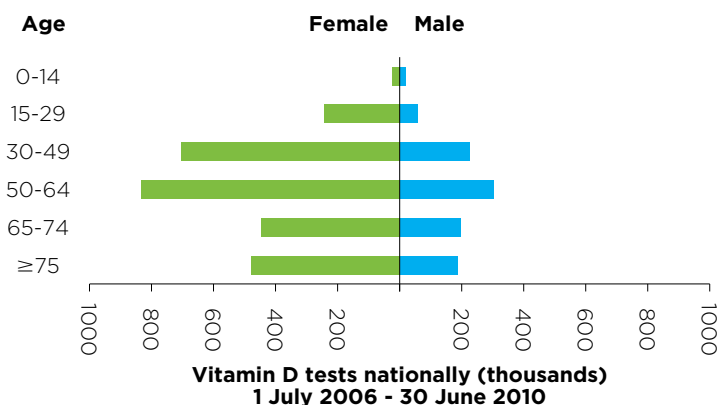
- **Were your referrals made at the appropriate time of year to get the best health outcome for your patient?**
- **Are you aware of the lifestyle factors that may influence vitamin D levels?**
- **Do you discuss a patient's recent (last 3 months) lifestyle factors that may affect their vitamin D level before you choose to test?**

## Are there testing related issues for vitamin D? Different vitamin D tests can produce different test results

In Australia, there are a number of different tests used to determine vitamin D levels. Considerable inter-assay and inter-laboratory variability has been reported when testing for vitamin D.<sup>26-28</sup> The lack of standardised methods to measure serum 25-OHD status can produce different results. This has the potential to confound decisions about clinical care and the estimates of the true population prevalence of vitamin D deficiency.<sup>29</sup>

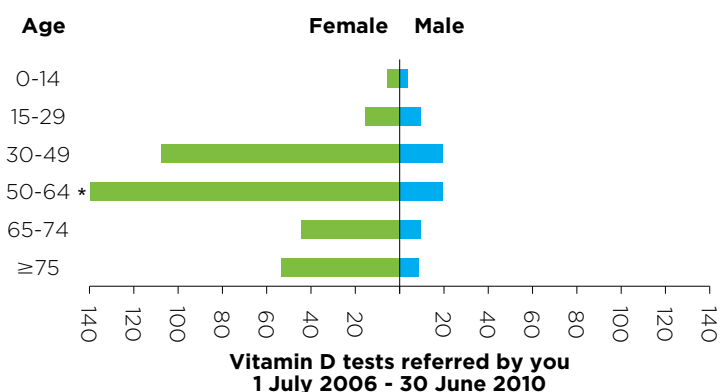
# What does your age/sex distribution for vitamin D testing look like?

Presented here are the number of vitamin D tests performed nationally (using data from Medicare Australia), grouped by sex and age between 1 July 2006 and 30 June 2010 and the dispersion between Australian States and Territories compared with the dispersion of the Australian population.

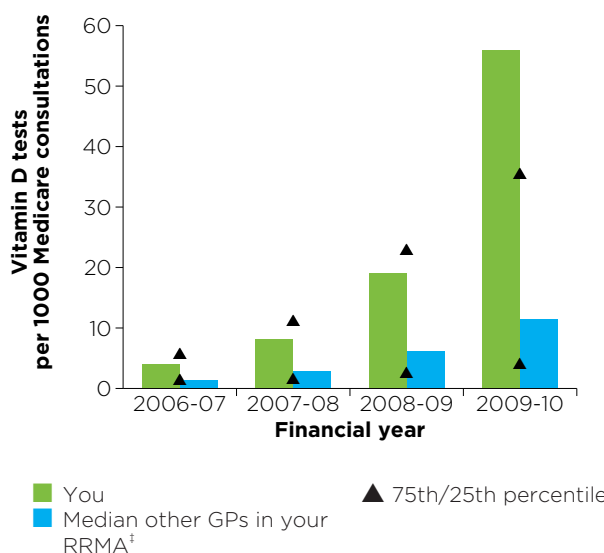


| State/Territory | % of Australian population | % of Medicare-funded Vitamin D tests |
|-----------------|----------------------------|--------------------------------------|
| NSW             | 32.6                       | 35.3                                 |
| VIC             | 24.8                       | 40.1                                 |
| QLD             | 20.1                       | 5.8                                  |
| WA              | 10.2                       | 5.9                                  |
| SA              | 7.4                        | 8.1                                  |
| TAS             | 2.3                        | 2.2                                  |
| ACT             | 1.6                        | 2.5                                  |
| NT              | 1.0                        | 0.2                                  |

Below is the sex and age range of the patients you have referred for vitamin D testing in the same period (1 July 2006 to 30 June 2010) alongside your rate of referral per 1000 Medicare-funded consultations.



\*Data values are outside the range of the graph



## Confidentiality

NPS has a contract with Medicare Australia to provide your MBS referral feedback data directly to you. NPS does not have access to these data. The data contained in this feedback are not used for any regulatory purposes. Discrepancies may occur between the data provided and your own referral practice. This may be due to either inaccurate recording of your provider number by the pathology provider or your referral stationery having been used by another doctor. If you consider your individual data to be incorrect, have other data queries or general feedback, please contact NPS on 02 8217 8700 or by email at [info@nps.org.au](mailto:info@nps.org.au)

## Notes

† The comparator group "other GPs in your RRMA" includes all general practitioners currently located in a similar geographical region i.e. **1. capital cities, 2. other metropolitan centres, 3. large rural centres, 4. small rural centres, 5. other rural centres, 6. remote centres, 7. other remote centres. Your RRMA peer group is 1.**

▲ 25% to 75% of "other GPs in your RRMA" fall in the range shown by the triangular symbols.

## About you and your practice

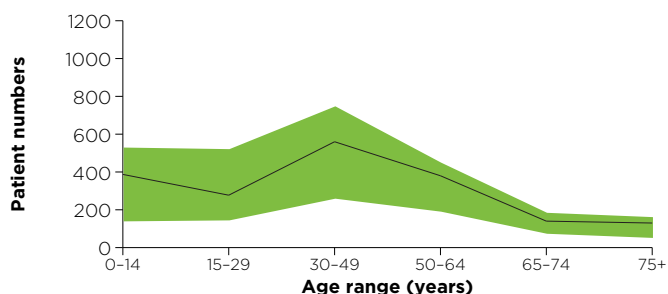
These data are an aggregation of all referrals for vitamin D testing where any of your listed MBS provider numbers (as shown here) were recorded as the referring doctor on a pathology request form.

### MBS Provider Numbers

Shown here are the first 6 characters of your MBS provider number(s) used to compile this document. **000999**

### Age profile of patients in your practice

(1 July 2009 – 30 June 2010)



The black line represents the age profile of patients in your practice. 25% to 75% of other GPs in your RRMA<sup>†</sup> fall within the shaded area. Your RRMA peer group is **1**.

### Medicare patients in your practice

(1 April 2010 to 30 June 2010)

| Patients       | You   | Median other GPs in your RRMA <sup>†</sup> |
|----------------|-------|--|
| Total Medicare | 1,008 | 667  |

Data from a three month period (1 April 2010 to 30 June 2010) that best represent your patient mix have been provided.

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