Vitamin B12 Testing - August 2025 Update - Changes to MBS 2025

- 4Cyte performs Total B12 as the first line test when vitamin B12 testing is requested. **Total B12 with no clinical qualifiers* is re-imbursed by Medicare once per 11-month period.**
- **Total B12 can be requested and measured unlimited times per year for patients with relevant MBS clinical qualifiers***. Medicare requires qualifiers to be recorded on the pathology request's clinical notes to ensure this testing is MBS rebated.
- Total B12 levels considered by 4Cyte to be deficient or inconclusive, **will now automatically reflex to a Homocysteine add-on.**
- B12 is a cofactor in Homocysteine metabolism. Deficiency of Vitamin B12 results in an elevated Homocysteine.
- Elevated Homocysteine is a sensitive indicator of B12 deficiency.
- **An inconclusive or deficient Total B12 with an elevated Homocysteine supports a decision to treat B12 deficiency.**
- Active B12 will no longer be "reflex" tested where Total B12 levels are considered by us to be deficient or inconclusive.
- Requests for Active B12 testing will result in reporting of Total B12 only. Exceptions (where Active B12 will continue to be tested at request of the referring doctor) on requests in patients who are paediatric, have CKD, or are pregnant.

*MBS Item 66842:

a) who:

(i) is still experiencing symptoms of vitamin B12 deficiency 3 to 6 months after a service described in Item 66838 or 66839 was rendered for the patient; or

(ii) obtained inconclusive results from a service described in item 66839; or

b) to whom one or more of the following applies:

(i) the patient has a diet low in vitamin B12;

(ii) the patient has a family history of vitamin B12 deficiency or an autoimmune condition;

(iii) the patient has previously had abdominal or pelvic radiotherapy;

(iv) the patient has previously had surgery involving the gastrointestinal tract;

(v) the patient uses, or has a recent history of using, recreational nitrous oxide;

(vi) the patient requires monitoring of vitamin B12 treatment;

(vii) the patient uses vitamin B12-antagonistic medicines;

(viii) the patient has one or more clinical conditions with a recognised risk of vitamin B12 deficiency

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12 August 2025

Dear Colleague,

I have enclosed with this letter the August 2025 4Cyte Testing update for Vitamin B12. The recent changes in the Medical Benefits Schedule for diagnosis and ongoing management of patients with possible B12 deficiency have resulted in changes to the biochemical testing approach at 4Cyte.

Initial testing for B12 requests is the measurement of total B12. 4Cyte will continue to perform requests for Holotranscobalamin (Active B12) testing only for patients in pregnancy, with Renal Failure and the paediatric population.

Table1. Interpretation of B12 as marker of B12 deficiency

B12 Deficient	<160 (Note the deficient cut-off has not changed)
B12 Result Inconclusive	160-350
B12 Sufficient	>350

To obtain more meaningful results, the Reference Range has been extended to include inconclusive results. Deficient and Inconclusive B12 results will automatically reflex to Homocysteine - which is increased in B12 deficiency. Homocysteine is a sensitive indicator of B12 deficiency

Table 2. Interpretation of Deficient / Inconclusive B12 and Homocysteine results

• B12 Deficient • Elevated homocysteine	B12 deficiency
• B12 Deficient • Normal homocysteine	Probable B12 deficiency
• B12 Inconclusive result • Elevated Homocysteine	Possible B12 deficiency
• B12 Inconclusive result • Normal Homocysteine	Probably not B12 deficiency

Apart from B12 and Homocysteine measurements it is important to consider clinical and family history, and haematology results in reaching a final diagnosis (Note consider other causes in the interpretation of an elevated homocysteine, such as smoking, some medications, CRF, hypothyroidism, iron deficiency, old age which may also elevate homocysteine).

Further subsequent measurements of B12 are recommended as follow-up for inconclusive B12 and homocysteine results, monitoring vitamin B12 treatment, and those with clinical conditions at risk of B12 deficiency. There are no restrictions on frequency of follow-up testing.

Possible causes of B12 deficiency include dietary deficiency, pernicious anaemia, malabsorption, PPI medication, metformin.

Further laboratory assessment to diagnose the cause of B12 deficiency includes Intrinsic Factor and gastric parietal cell antibodies, coeliac serology.

Yours sincerely

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