MAKING EVIDENCE RELEVANT

Ontario
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French version

About this bulletin
This bulletin is published by Health Quality Ontario (HQO) to update you on the work of its Ontario Health Technology Advisory Committee (OHTAC), Evidence Development and Standards (EDS) branch and research collaborators.

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Open for Comment

HQO has posted the following draft evidence-based analyses and OHTAC recommendations for public comment. Click on the headings below to find out more.

Vitamin B12 and Cognitive Function

Vitamin B12 has frequently been associated with neurocognitive disorders. This review addressed the following questions:

- Is there an association between vitamin B12 deficiency and the onset of dementia?
- Does treatment with vitamin B12 improve cognitive function in patients with dementia who are vitamin B12 deficient?
- Is treatment with oral vitamin B12 as effective as injections for people who have a confirmed vitamin B12 deficiency?

The analysis found that there was very low quality evidence to suggest an association between vitamin B12 deficiency and the onset of dementia. There was moderate quality of evidence that treatment with vitamin B12 does not improve cognitive function. In patients that have macrocytic anemia and require B12 supplementation, there was moderate quality evidence that oral supplements were as effective as injections.

Electrical Stimulation for Drug-Resistant Epilepsy

Electrical stimulation with either vagus nerve stimulation (VNS) or deep brain stimulation (DBS) may be an option for children and adults with epilepsy who do not respond to drug therapy and are not candidates for surgery. This analysis evaluated the effectiveness of VNS and DBS in reducing the frequency of seizures and decreasing hospitalization and emergency department visits for adults and children.

The analysis found that although both interventions appear to be effective at reducing seizure frequency in adults, the evidence on DBS is limited. The studies on VNS also demonstrated that there is a decrease in hospitalizations and emergency department visits after VNS implantation in both adults and children. There were no studies identified that looked at hospitalizations and emergency department visits following DBS.