



Title	Screening for Postnatal Depression Within the Well Child Tamariki Ora Framework: An Economic Analysis of Implementation of a Screening Program
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Aim

To evaluate the potential value for money of implementing a screening program for maternal postnatal depression (PND) within the Well Child Tamariki Ora Framework in New Zealand.

Conclusions and results

The total annual cost of implementing routine screening for PND is estimated at NZD 3 854 716, which incorporates costs associated with screening (NZD 783 519) and treatment (NZD 3 071 197). On a yearly basis routine screening is expensive, but it is associated with considerable maternal health benefits. Under the proposed program an estimated 9900 mothers will have depressive symptoms resolved at endpoint, versus an estimated 4570 under the current practice.

The additional cost of moving from the current practice to implementing a routine screening program is NZD 2 132 238 per year. The routine screening program is expected to detect 7420 extra cases and deliver 5330 extra PND cases resolved. The incremental cost per additional case detected is NZD 287, and the incremental cost per additional case resolved is NZD 400.

In the base case, the cost per additional QALY gained by introducing a routine screening program for PND is NZD 3461, which appears to be highly cost effective from a government perspective when compared to current practice. The model does not capture the impact that successful treatment of PND has on children and society in general, nor does it capture likely future savings to other government jurisdictions, eg, education, social development, and justice. Hence, the results in terms of the incremental cost-effectiveness ratio from the exploratory model are conservative.

Methods

The economic analysis is undertaken from the perspective of the New Zealand Ministry of Health as a third party payer. It is an exploratory analysis, intended for use by the Ministry of Health to inform policy decision-making in conjunction with other information.

The analysis compares the proposed program against current practice. It assumes that the proposed program will use the 3-question Patient Health Questionnaire as a screener for PND, and that screening would take place at 6 weeks postpartum (performed by a GP, or practice nurse), and again at 4 months postpartum (performed by a well-child provider).

The model captures direct medical costs associated with screening and treatment. Screening costs cover the time spent completing the questionnaire and discussing the results with mothers. Treatment costs incorporate social support, psychological therapy, and a combination of antidepressants and psychological therapy. The model captures the benefits of PND screening in terms of maternal health and health-related quality of life. The model was developed in the form of a decision tree using Microsoft Excel. Discounting of costs and benefits is not required as the time horizon of the model is 12 months.