

# **The cost-effectiveness of interventions to prevent postnatal depression: HTA systematic review, evidence synthesis and meta-analysis**

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**Background/Objectives:** The long term economic cost of perinatal mental health problems is £8.1bn. This serious burden for women, infants and society requires attention to prevent the progression of intergenerational problems and to reduce the huge financial burden to health care and society. Information is needed about the more cost-effective interventions. The aims of this study were to evaluate the cost-effectiveness of antenatal and postnatal interventions to prevent PND in pregnant and postnatal women.

**Methods:** We undertook a systematic review of economic evaluations in the prevention of postnatal depression and identified evidence needed to populate an economic model and to determine the potential value of collecting further data on input parameters (expected value of information analysis). A mathematical model was constructed to explore the cost-effectiveness of interventions contained within a NMA versus usual care. An area under the curve approach was employed alongside mapping from the EPDS values to a preference-based utility score (Short Form 6-Dimensions). The time horizon was 1 year. Expected value of partial perfect information analyses were undertaken for efficacy data and for mapping the EPDS values to utility.

**Results:** No economic evaluations were identified as appropriate for answering the decision problem hence a de novo model was constructed. The cost of the interventions relative to usual care ranged from cost saving to an increase of £1200 per woman.

**Discussion/Conclusions:** Interventions warrant replication within randomised controlled trials.

**Key words:** Economic evaluation, postnatal depression, prevention

**References:** Morrell CJ, Sutcliffe P, Booth A, Stevens J, Scope A, Stevenson M, et al. A systematic review, evidence synthesis and meta-analysis of quantitative and qualitative studies evaluating the effectiveness, cost-effectiveness, safety and acceptability of interventions to prevent postnatal depression. *Health Technol Assess* 2016;20(X).

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