

## Implementation supplement to the report: The economic case for increasing access to treatment for women with common mental health problems during the perinatal period

Annette Bauer, Michela Tinelli, Martin Knapp

Care Policy and Evaluation Centre, London School of Economics and Political Science

25 May 2022

### Background

This supplement was developed in response to feedback we received from some members of our advisory group after publication of the report '*The economic case for increasing access to treatment for women with common mental health problems during the perinatal period*', which can be accessed [here](#).

The advisory group included some of the clinical researchers who led the development and implementation of the intervention studies that formed the main body of evidence for the integrated model of mental health care within health visitor and maternity services that we costed in our study. Concerns were raised about the safe implementation of the model if training and supervision were not conducted in the same way as they had been done in the trials, as opposed to the reduced general perinatal mental health training from non-mental health specialist staff which formed the basis of the costing for the second part of our report. The latter reflects training and supervision considered to be most feasible by representatives from relevant professional bodies of trained staff (Institute of Health Visiting and Royal College of Midwives) given their existing structures of provision and previous experiences with training. Specifically, this referred to a train-the-trainer model used by the Institute for Health Visiting (iHV), which has previously been shown to be scalable for other areas of skills development but has not been robustly evaluated to date.

**From a costing perspective, changing the training and supervision model makes negligible difference to the costs, as these elements represent only a very small proportion (less than 1%) of the overall financial commitment, most of which relates to the costs for additional workforce. However, the issue raised is important to consider from a safety and effectiveness (rather than cost) perspective.** We therefore agreed with the advisory group that it would be helpful to produce this supplement to raise

awareness of this important implementation issue and provide an alternative costing of training and supervision.

At present we do not have the evidence that would allow us to conclude whether a substantial deviation from training and supervision as provided in the trials would reduce the effectiveness of the intervention. In the absence of this knowledge and despite the negligible difference to the overall economic modelling, it is helpful to provide a calculation of the costs of a training and supervision model as provided in the trials so that decision makers have the information required to invest in this model. We therefore conducted additional analysis of the training and supervision costs following the standards of the trial. We present the calculation here and discuss the possible implications and suggestions for further research.

## Method

We conducted the additional calculation in line with the training and supervision provided in one of the trials referred to in our study (the PONDER trial).

In particular, this included:

- A larger number of training days than costed in our report: 8 days instead of 3 days of training.
- Training by clinical psychologists instead of specialist perinatal mental health midwives and health visitors.
- Monthly supervision (60 minutes each) by a clinical psychologist rather than one session (90 minutes) every 3 months by specialist perinatal mental health midwives and health visitors.
- Continuous training every five years by a clinical psychologist rather than by specialist perinatal mental health midwives and health visitors.
- A working timeline of 20 years with a profile of training and supervision sessions (rather than a one-off training event).

It needs to be noted that it is not possible to directly compare results based on the methodological approach taken in the PONDER trial with results based on the methodological approach taken in the report, which reflects the iHV train-the-trainer model as assumed to be implemented in practice. For example, in the report a one-off training provided to midwives, health visitors and mental health practitioner (assumed to be either on Band 6 or Band 7), is costed, whilst continuous training and supervision is assumed to be provided by the additional specialist midwives and health visitors, which are already included in the costing of staff time. Therefore, a proportion of the costs linked to training and supervision are subsumed under the resources required for employing additional specialist midwives and health visiting staff, and it is not possible to separate those without additional assumptions. To derive results from the two different training models and methodological approaches in a way that they are as comparable as possible, we re-calculated the costs for training and supervision under the iHV train-the-trainer model using the methodological

approach in the PONDER trial (and not including the costs of additional staff needed for supervision). We calculated aggregated annual figures including the costs for training material, venue, refreshments, admin support and travel and staff time for training events and supervision using the approach from the PONDER trial. Instead of providing estimates for a one-off training event, we considered a 20-year working life and assumed continuous training every five years accompanied by multiple supervision sessions per year. Training cost for training material, venue, refreshments, admin support and travel related to one training session in year 0 are provided in Table 1. Refresher training after 5 years were assumed to be equivalent to 3/8 of original course.

An overview of the new set of assumptions with regards to training and supervision costs, and how those relate to the assumptions presented in the report, is given in Table 1. We then calculated aggregated costs for England, Wales, Scotland and Northern Ireland following the same approach outlined in the report, i.e. by applying this to the estimated headcount number of staff that need to be trained or to receive supervision (page 17 in the [report](#)).

Table 1: Parameters, values and assumptions that informed the costing of training and supervision of an integrated care model.

|   | <b>Training and supervision as considered in report</b>  | <b>Training and supervision as in trial</b>  |
|---|--|--|
| <b>Model of training</b>                        | Champions' Train-the-trainer model delivered by the Institute of Health Visiting: This cascading model assumes that staff who have been trained provide training to other staff in their localities who have not yet been trained.   | Training provided in PONDER trial reported in: Morrell C J, Warner R, Slade P, Dixon S, Walters S. Psychological interventions for postnatal depression: cluster randomised trial and economic evaluation. The PONDER trial. <i>Health Technology Assessment</i> 2009;13(30) |
| <b>Staff providing training and supervision</b> | Specialist perinatal mental health midwifery and health visiting staff (Band 7)<br><br>First cohort of new staff is trained by specialist perinatal mental health midwifery and health visiting staff; subsequent groups are trained by non-specialist staff. Supervision would be provided by specialist perinatal mental health midwifery and health visiting staff. | Clinical psychologist staff (Band 8b)<br><br>We assumed that staff would be trained and supervised by clinical psychologists (in groups of 15 trainees per trainer).   |

|  |   |  |
|--|---|--|
| <b>Number training days</b>  | 3 days                                  | 8 days   |
| <b>Supervision frequency and duration</b>  | Four sessions per year, 90 minutes each | Twelve sessions per year, 60 minutes each  |
| <b>Cost for training material, venue, refreshments, admin support and travel related to one training session</b> | £800 per trainee                        | £400 per trainee   |
| <b>Cost for staff time related to one training session</b>   | £1,000 per trainee                      | £2,400 per trainee (this includes the time of a clinical psychologist providing the training)                                |
| <b>Cost for staff time related to one supervision session</b>  | £600 per trainee                        | £1,600 per trainee (this includes the time of a clinical psychologist providing the supervision)                             |
| <b>Cost for subsequent (refresher) training and supervision<sup>1</sup></b>                                      | £870 per trainee                        | £1,800 per trainee (this includes time for a clinical psychologist providing subsequent/ refresher training and supervision) |

## Findings

Table 2 presents the total yearly cost for training and supervision when provided in the same way as in the PONDER trial. The clinical researcher leading the study advised us that training and supervision models for the other trials covered by our study were similar to PONDER.

Table 2: Total yearly cost for training and supervision based on the Ponder trial model, in 2021, £

|                             | ENGLAND   | WALES  | SCOTLAND | N IRELAND | UK        |
|-----------------------------|-----------|--------|----------|-----------|-----------|
| Midwives                    | 421,000   | 21,000 | 35,000   | 15,000    | 492,000   |
| Health visitors             | 1,390,000 | 70,000 | 115,000  | 50,000    | 1,625,000 |
| Mental health practitioners | 539,000   | 27,000 | 44,000   | 19,000    | 630,000   |

This compares as follows with the yearly cost for training based on the assumptions in the report but using the methodological approach as per PONDER trial model.

<sup>1</sup> Provided 5 yearly, assuming 20-year working life and discount rate of 3.5%

Table 3: Total yearly cost for training and supervision based on the Train-the-trainer model currently delivered by the Institute for Health Visiting, in 2021, £

|                             | ENGLAND | WALES  | SCOTLAND | N IRELAND | UK      |
|-----------------------------|---------|--------|----------|-----------|---------|
| Midwives                    | 203,000 | 10,200 | 17,000   | 7,000     | 238,000 |
| Health visitors             | 672,000 | 34,000 | 56,000   | 24,000    | 768,000 |
| Mental health practitioners | 260,000 | 13,000 | 21,000   | 9,000     | 304,000 |

## Discussion

In this supplement, we report newly calculated costs for training and supervision to respond to concerns about implementation raised by clinical researchers who were advisors to our study – specifically the generalisability of findings on safety and effectiveness of interventions from trials to scalable approaches in practice. Our new calculations do not alter the findings about potential (cost-)effectiveness from the first part of the study and only very marginally alter the financial commitment recommended in the second part of the study. As with the implementation of any intervention shown to be clinically effective in trials and cost-effective in economic analyses, scaling up of this integrated model of care should be accompanied by service improvement evaluation studies to demonstrate effectiveness and cost-effectiveness using a variety of outcomes.