

Computerised interpretation of the fetal heart rate during labour: a randomised controlled trial (INFANT)

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Declared competing interests of authors: Keith Greene is the founder and shareholder of K2 Medical Systems (Plymouth, UK) and Clinical Director for the development of the INFANT system. Christopher Mabey is employed by, and is a shareholder of, K2 Medical Systems, the technology provider for the study. Edmund Juszczak reports grants from the National Institute for Health Research (NIHR) Health Technology Assessment (HTA) and Efficacy and Mechanism Evaluation programmes during the conduct of the study, and is a member of the NIHR HTA Commissioning Board. Peter Brocklehurst reports grants and personal fees from the Medical Research Council and grants from the National Institute for Health and Care Excellence, NIHR Health Services and Delivery Research, NIHR HTA and Wellcome Trust, outside the submitted work, and is chairperson of the NIHR HTA Women and Children's Health panel and is a member of the HTA Prioritisation Group. Sara Kenyon is a member of the NIHR HTA Women and Children's Health panel and received NIHR funding to undertake the HOLDS (High Or Low Dose Syntocinon® for delay in labour) trial, and was part funded by the NIHR Collaboration for Leadership in Applied Health Research and Care West Midlands.

Published February 2018

DOI: 10.3310/hta22090

Plain English summary

The INFANT RCT

Health Technology Assessment 2018; Vol. 22: No. 9

DOI: 10.3310/hta22090

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Plain English summary

The INFANT study aimed to find out if we can improve how we monitor babies during labour. In the UK, continuous monitoring is used if either the mother or the baby is considered likely to not cope well with contractions during labour. For these labours, a cardiotocograph is used to continuously record the baby's heart rate. The midwives/doctors look at a graph of the heart rate to find out how the baby is coping.

Interpreting the pattern made by the baby's heart rate is complicated. The INFANT study looked at whether or not a computer system that analyses the heart rate can help the midwives/doctors interpret the recording more accurately. The study asked questions about babies' health and well-being, medical procedures experienced by women and whether one approach provided better value for money than the other in terms of delivering high-quality care. Women who agreed to have continuous electronic fetal monitoring were divided at random into two groups. One group had the computer decision support software switched on and the other group had it switched off. This made it possible to assess the effect of the new software fairly, as the groups of women and babies were otherwise almost identical in terms of their health and chance of complications.

Between January 2010 and August 2013, 47,062 women took part in the study. After the different interventions in their care, we found no difference in the chance of babies being unwell between the two groups of women: 0.7% ($n = 172$) of babies were unwell in the decision support group, as were 0.7% ($n = 171$) of babies in the no decision support group. We found no differences in other outcomes, such as the risk of pregnant women requiring an emergency caesarean section.

In this study, decision support software did not improve the care for women in labour.

ISSN 1366-5278 (Print)

ISSN 2046-4924 (Online)

Impact factor: 4.236

Health Technology Assessment is indexed in MEDLINE, CINAHL, EMBASE, The Cochrane Library and the Clarivate Analytics Science Citation Index.

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This report

The research reported in this issue of the journal was funded by the HTA programme as project number 06/38/01. The contractual start date was in September 2009. The draft report began editorial review in September 2016 and was accepted for publication in June 2017. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health.

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