



Effective Health Care Electronic Fetal Heart Rate Monitoring Versus Alternative Monitoring Nomination Summary Document

Results of Topic Selection Process & Next Steps

- Electronic fetal heart rate monitoring (EFM) versus alternative monitoring is not feasible for a full systematic review due to the limited data available for a review at this time. However, this topic could be considered for potential new research projects within the Effective Health Care (EHC) Program.

Topic Description

Nominator: Individual

Nomination Summary: The nominator is interested in the comparative effectiveness of various methods to monitor fetal heart rate in all states of labor in women who are at a low risk of pregnancy complication.

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Population(s): Pregnant women with a low risk of pregnancy complication

Intervention(s): Electronic fetal heart rate monitoring (via a cardiotocograph) including continuous, intermittent, external, and internal

Comparator(s): Alternative monitoring methods including auscultation (listening via a Doppler device or fetoscope), watchful waiting, patterns of fetal movement, and no monitoring

Outcome(s): Neonatal and maternal morbidity and mortality; rates of cesarean section delivery, operative delivery (use of forceps or vacuum extraction), and labor induction; length of stay; cost; maternal-child bonding; patient/family satisfaction; and potential harms (e.g., discomfort for the laboring mother, lack of mobility, increased risk for further intervention and increased length of stay without neonatal benefit)

Key Questions from Nominator:

1. For women with low-risk pregnancy status, what is the comparative effectiveness of continuous electronic fetal heart rate monitoring versus alternative monitoring to prevent neonatal morbidity and mortality?

Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)
- In the US, each year millions of fetuses are assessed with electronic fetal monitoring (EFM). It is one of the most commonly performed obstetric procedures and is increasingly being used in laboring women despite the lack of evidence for long-term neonatal benefit and the existence of evidence for an increase in obstetric interventions with its use. Most guideline developers agree that there is not sufficient evidence to recommend EFM in women at low risk for pregnancy complications and alternative methods such as intermittent auscultation should be used in place of EFM; however, this does not reflect the current standard of US obstetric practice.
- This is a very important topic; however, with limited large-scale clinical trials available comparing EFM with alternative methods, this topic is not feasible for a full systematic review. There is a need for new research comparing EFM with alternative monitoring such as intermittent auscultation.