

# Evidence Synthesis Ireland Fellowship Scheme 2019

# Review Identification Form

In order to help us advertise your review and select an appropriate fellow, please complete the following:

**Review Centre/Group Mentor (RCM) and email address** *– please identify who will act as lead contact and mentor for the fellow and provide email contact address*

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| Valerie Smith; |

**Review title** *– please provide the review title*

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| Physiological track-and-trigger/early warning systems for use in maternity care |

**Review type** *– please identify the type of review in question e.g. qualitative synthesis, Cochrane review of effectiveness, rapid review*

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| Cochrane review of effectiveness |

**Review details***– please identify the topic of the review and a very brief background, objectives and PICO (or other question format details) of the review. Please also include current status of review (e.g. protocol on PROSPERO, searches started etc.)*

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| **Background:** Professional bodies and international reports ([CMACE 2011](https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013276/references#CD013276-bbs2-0008); [ACOG 2011](https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013276/references#CD013276-bbs2-0001); [RCOG 2012](https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013276/references#CD013276-bbs2-0027); HSE 2017) are recommending the use of clinical assessment protocols or evaluation tools, commonly referred to as physiological track‐and‐trigger systems (TTS) or early warning systems (EWS), as a means of assisting maternity care providers with physiological assessment. The concept is that a compromised pregnant or postpartum woman can be identified early in the course of possible deterioration based on routine observation and assessment of the physiological parameters indicative of well‐being (respiration rate, blood pressure, heart rate, etc.). Early recognition enables early intervention with the ultimate intention that maternal and infant adverse outcomes are reduced or avoided. While there is some evidence to suggest that physiological TTS/EWS may be useful in predicting morbidity ([Carle 2013](https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013276/references#CD013276-bbs2-0006); [Maguire 2015](https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013276/references#CD013276-bbs2-0022)), concerns have also been expressed about the lack of validated systems for use in maternity populations ([Mackintosh 2014](https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013276/references#CD013276-bbs2-0021)). This raises questions as to the clinical effectiveness of such systems, in particular, for reducing maternal and neonatal morbidity and mortality in maternity populations. For this reason, a synthesis of evidence of the clinical effectiveness of TTS/EWS is required.  **Aim:** To evaluate the clinical and cost effectiveness of maternal physiological track‐and‐trigger systems/early warning systems on pregnancy, labour and birth, postpartum (up to 42 days) and neonatal outcomes.  **Participants:** Women who are pregnant or who have given birth at any gestation within the previous 42 days (high and low risk populations).  **Intervention:** Physiological TTS/EWS, which rely on periodic observation of selected basic physiological clinical parameters with predetermined calling or response criteria for escalating care to facilitate prompt recognition of clinical deterioration.  **Comparator:** Non‐use of a system or use of an alternative TTS/EWS.  **Outcomes**: The primary outcome is maternal death. Secondary outcomes include; maternal critical illness (e.g. sepsis, maternal collapse, etc.), Admission to ICU, length of hospital stay, perinatal death, admission of baby to NICU, and cost effectiveness measures.  **Types of studies:** Randomised and quasi‐randomised controlled trials (RCTs), including cluster‐RCTs. |

**Review current status** *– please indicate current status of review (e.g. protocol on PROSPERO, searches started etc.)*

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| The protocol for the review is complete and published in the Cochrane Library a <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013276/full>  **All** aspects of the Full Review, from searches onwards, have yet to commence. |

**Any specific/desirable requirements for fellow (e.g. clinical expertise, methodological expertise)**

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| Midwifery/maternity expertise would be desirable but not essential. |

**Estimated start and completion dates\*** *– please provide an estimated time for start and completion of the review*

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| 1-Dec-2019 to 30-Nov 2020 |

\*Please note that reviews must not have completed screening stages to be eligible