MEWS - Maternity Early Warning Score

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Introduction

CM Health is introducing a systematic scoring chart for maternity patients to Women’s Health Service. The MEWS (Maternity Early Warning Score) chart will assist staff to identify antenatal and postnatal women at risk of deteriorating in condition and improve the response to the acutely deteriorating woman.

Setting

CM Health serves the Counties Manukau region in Auckland, New Zealand. It has a birthing unit at Middlemore Hospital, one of the largest tertiary hospitals in New Zealand, and primary birthing units at satellite sites in Botany Downs, Papakura and Pukekohe. All primary birthing units offer pregnancy clinics, labour and birthing facilities and provide postnatal care.

- The estimated Counties Manukau population for 2013 is 512,130, 11.5% of the total New Zealand population.
- Counties Manukau has high numbers of Māori, Pacific and Asian peoples and a relatively youthful population.
- Counties Manukau has a high birth rate compared with many other areas – 7282 babies were delivered in 2013 at CM Health.

This contributes to relatively high demand on our maternity and postnatal care.

Major Haemorrhage After Birth Have Tripled

In 2010 the Women’s Health Quality Specialist Midwife brought together a multiprofessional team with the idea to develop a modified EWS for Maternity Services.

Midwives, nurses, managers, members of the Patient At Risk team, Clinical Training & Education Centre, Acute Pain team, obstetricians, anaesthetists and midwife and nurse educators formed a group and worked together over three years to develop and implement a modified early warning score for women during childbirth.

New Parameter

A new parameter – blood loss – has been added to the MEWS score. Blood loss is one of the most common causes of preventable severe maternal morbidity, and is often exacerbated by delayed or inappropriate treatment. It can be one of the critical indicators of deterioration, and the amount of blood lost is frequently underestimated.

Modification for Birthing Units

MEWS has also been introduced to the three primary birthing units. As these units operate in the community setting, have no medical staff onsite and rely on the ambulance service for transfer, the action plan has been modified to their needs. An easy peel-off sticker, with the action algorithm appropriate for the birthing units, is applied and makes it instantly functional.

Research

Research indicates that warning signs precede virtually every critical inpatient event. There are well-established early warning score (EWS) charts in existence for use with general patients. A general EWS physiologically unstable patient chart was introduced at CM Health in 2007. (2)

However, EWS charts designed for general patients are unsuitable for use in obstetrics due to the physiological changes and modified responses that occur during pregnancy.

Although the importance of early warning scores for obstetric patients is widely recognized, there are no national or international ‘gold standards’ obstetric warning scores currently in use. (3)

Multiprofessional Team

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Multiprofessional Team

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Over the last four years midwives in the delivery suite observed an increase in major haemorrhages after birth, also known as postpartum haemorrhage (PPH), particularly major PPH over 1500mls. In too many cases, PPH was not managed in a timely manner to prevent women going down the continuum of deterioration, and patients became unstable.

Time to do something about it!

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References