Early detection of clinical deterioration in the pregnant and postpartum woman

Key notes on: Clinical Deterioration

- Early recognition of clinical deterioration may prevent further morbidity and even death
- Clinical deterioration is a change in clinical status that increases the chance of morbidity
- Pregnant and postpartum women may appear well with only subtle signs of illness before sudden severe deterioration signs and symptoms that are mistaken for 'discomforts of pregnancy' lead to a delay in diagnosis
- Respiratory rate is consistently found to be a clinically relevant vital sign regarding deterioration
- Failed or delayed recognition of clinical deterioration is a repeat finding in maternal death reports - along with a poor understanding of severity of illness in maternity patients
- All maternity services should be using 'track and trigger' charting to document regular assessment E.g. early warning charts/charts using 'human factors' to 'track and trigger' a response to an abnormal finding with an associated process for escalation of care
- Rapid Response Teams/Medical Emergency Teams/Critical Care Outreach/ICU liaison nurses may play an important role in responding to an evolving emergent clinical problem – and members of these teams need to have an understanding of maternity physiology and pathophysiology
- Request senior staff involvement early if a woman deteriorates/becomes sick obtain a second opinion if you feel the response to the woman's condition is inadequate

Key resources/recommended reading

MATERNAL

CRITICAL CARE

Jones D, Mitchell I, Hillman K, Story D. Defining clinical deterioration. Resuscitation. 2013;84(8):1029-34.

Carrington M, Down J. Recognition and assessment of critical illness. Anaes & Int Care Med. 2010;11:6-8.

Australian Commission on Safety and Quality in Health Care. National Consensus Statement: Essential Elements for Recognising and Responding to Clinical Deterioration. Sydney, ACSQHC, 2010.

Australian Commission on Safety and Quality in Health Care. Safety and Quality Improvement Guide Standard 9: Recognising and Responding to Clinical Deterioration in Acute Health Care. Sydney. ACSQHC, 2012.

Barrett N, Yentis S. Outreach in obstetric critical care. *Best Practice & Research Clinical Obstetrics and Gynaecology*. 2008;22:885–898.

Geller S, Rosenberg D, Cox S, Brown M, Simonson L, Driscoll C, et al. The continuum of maternal morbidity and mortality: Factors associated with severity. *Am J Obstets and Gynecol.* 2004;191(3):939-44.

Bick DE, Sandall J, Furuta M, Wee MYK, Isaacs R, Smith GB, et al. A national cross sectional survey of heads of midwifery services of uptake, benefits and barriers to use of obstetric early warning systems (EWS) by midwives. *Midwifery*. 2014;30(11):1140-6.

Isaacs RA, Wee MYK, Bick DE, Beake S, Sheppard ZA, Thomas S, et al. A national survey of obstetric early warning systems in the United Kingdom: five years on. *Anaesthesia*. 2014;69(7):687-92.

Austin DM, Sadler L, McLintock C, McArthur C, Masson V, Farquhar C, et al. Early detection of severe maternal morbidity: A retrospective assessment of the role of an Early Warning Score System. *Australian and New Zealand Journal of Obstetrics and Gynaecology*. 2014;54(2):152-5.

Paternina-Caicedo A, Miranda J, Bourjeily G, Levinson A, Dueñas C, Bello-Muñoz C, et al. Performance of the Obstetric Early Warning Score in critically ill patients for the prediction of maternal death. *American Journal of Obstetrics and Gynecology*. 2017;216:58e1-e8.