

Developing a reliable process for the administration of synthetic oxytocin when used for the induction or augmentation of labour

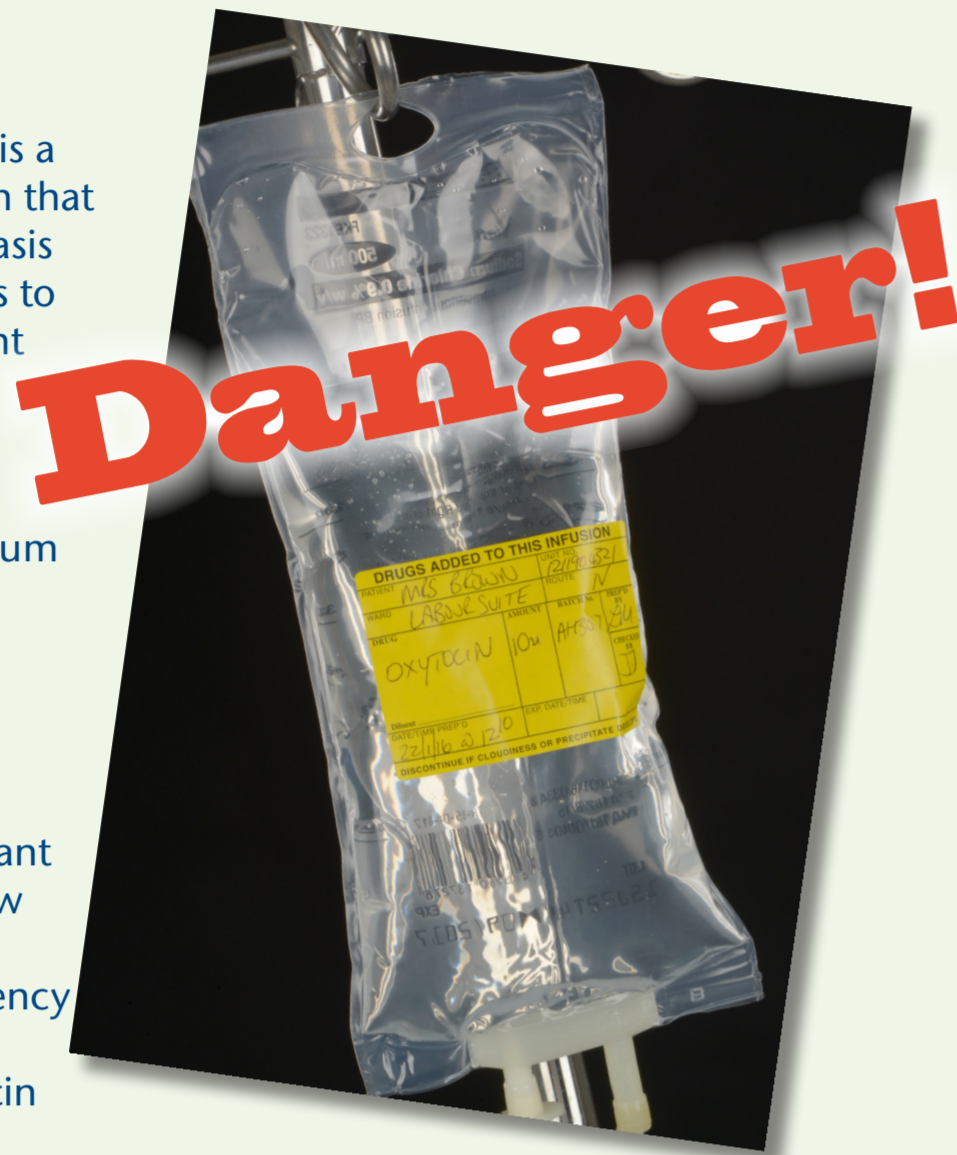
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Background

Synthetic Oxytocin is a high risk medication that is used on a daily basis within labour wards to induce and augment labour.

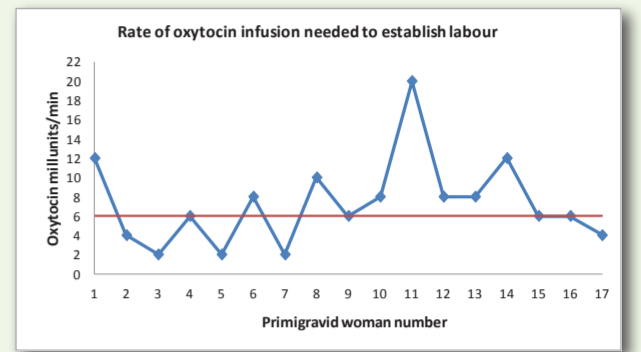
It is associated with adverse outcomes within the intrapartum period such as tachysystole, uterine rupture and Hypoxic Ischaemic Encephalopathy.

Following a significant adverse event review a local audit of use identified inconsistency in the initiation and escalation of oxytocin

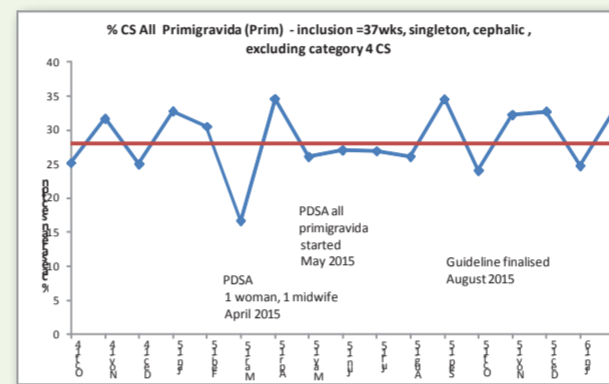


Outcome/Results

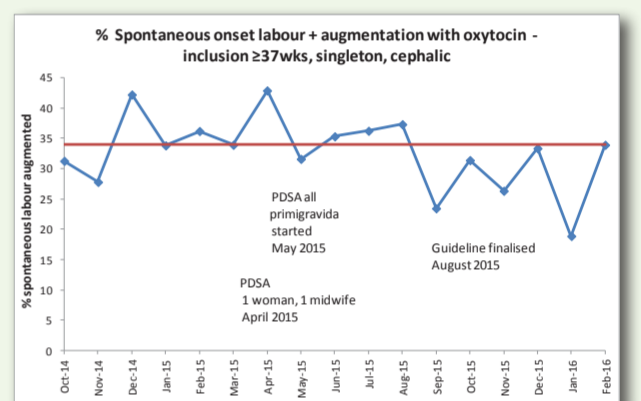
Effective uterine contractions can be established at lower rates of oxytocin administration for primigravid women.



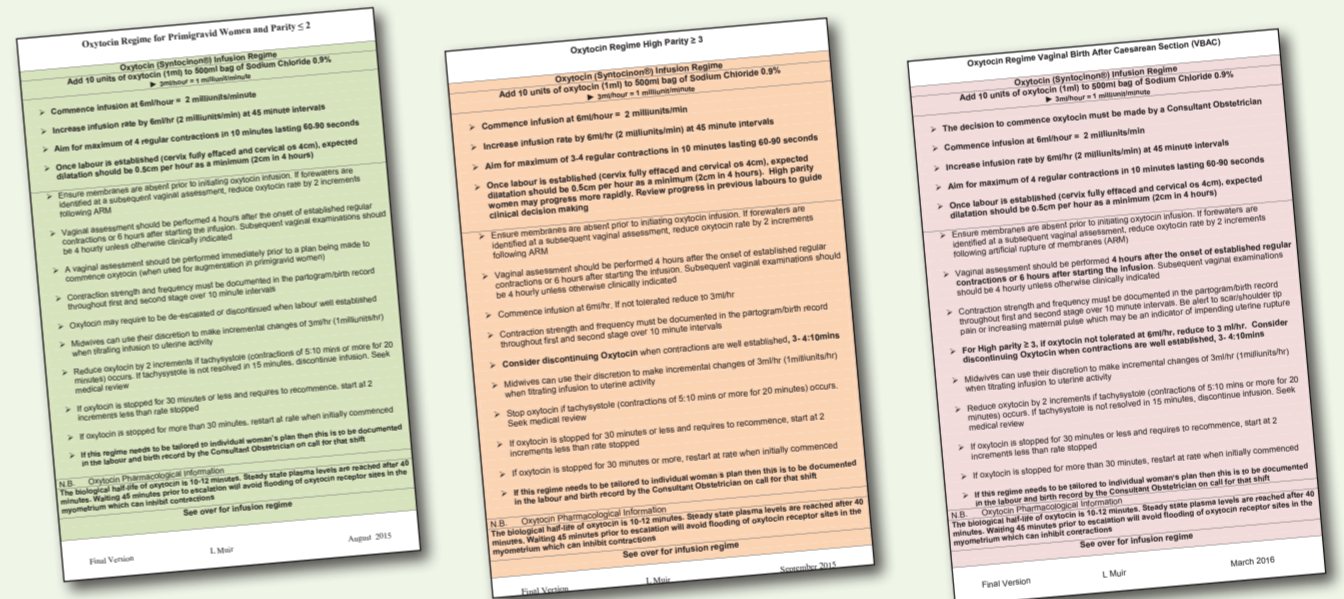
A lower dosage of oxytocin infusion is effective whilst maintaining the caesarean section rate



A reduction in the use of synthetic oxytocin for augmentation of spontaneous labour



Regime guidance



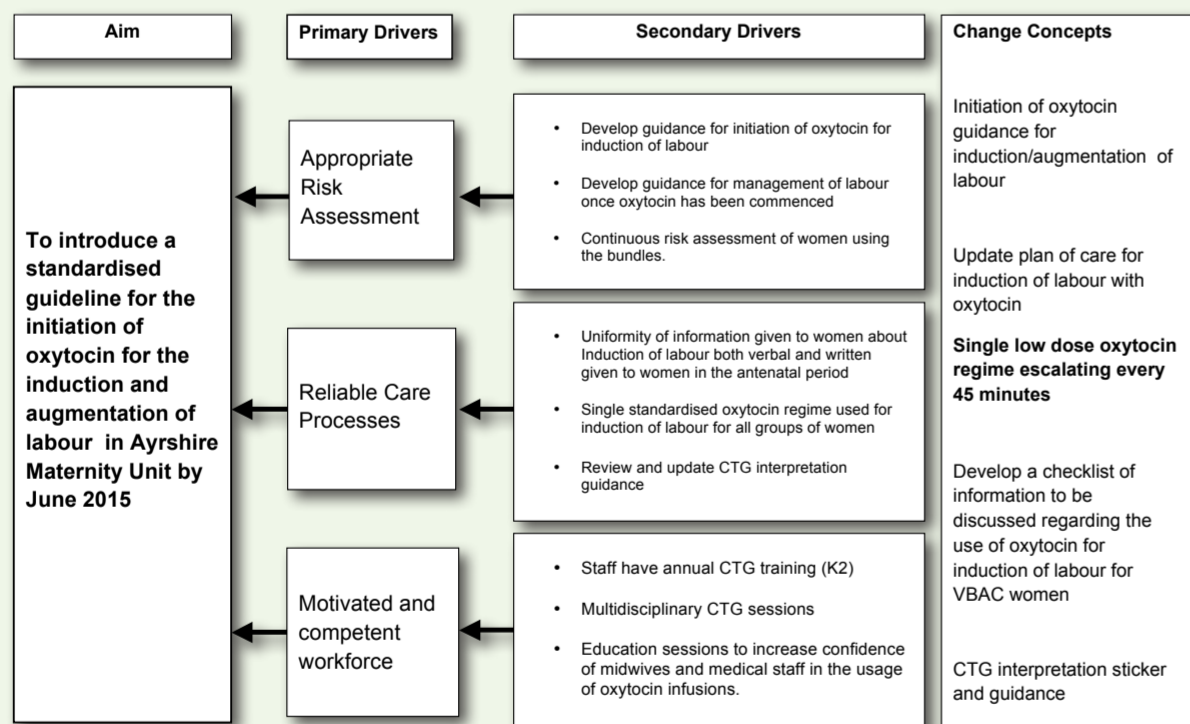
What did we want to do?

This project aimed to standardise the administration of oxytocin when clinically appropriate using a low dose regime

How did we do it?

A Driver Diagram defining our improvement plans was formulated and shared with obstetricians and midwives

Oxytocin driver diagram



Is it making a difference?

Reduced incidence of tachysystole (5 contractions or more over 20 minute period) as evidenced by the feedback from midwives and snapshot Deep Dive.

Midwives reported 100% confidence with using the new regime

Comments

- The regime is easy to follow
- It is good to know the physiological action of oxytocin - did not know this
- I notice that women's contractions are established on lower rates of infusion than I expected
- The escalation of oxytocin is much steadier, less overstimulation
- Reads well. Like the option to use midwife discretion to make changes of 3 ml/hr (1 milliunit/min)

Conclusion

This project has demonstrated that we have been able to reduce the exposure of primigravid women to a high risk medication whilst maintaining the caesarean section rate

A standardised low dose oxytocin regime has been implemented for all groups of women with tailored guidance for individual risk groups.

When using Oxytocin for the induction and augmentation of labour, our learning and experience is that 'Less is More'

Key References Materials

- NICE clinical guideline 190 Intrapartum care: care of healthy women and their babies during childbirth (Issued: December 2014)
- Krening CF, Rehling-Anthony K, Garko C. Oxytocin Administration: the transition to a safer model of care. J Perinatal Neonatal Nursing 2012 Jan-Mar 26 (1): 15-24
- Heuser C, Knight S et al. Tachysystole in term labor: incidence, risk factors, outcomes and effects on fetal heart tracings Am J Obstet Gynecol 2013; 209 (1): 32 e 1-6

PDSA (Plan, Do, Study, Act) tests of change were formulated commencing initially with the group of Primigravid Low Risk postdates induction.

