

# THINK MAGNESIUM: CONCERTED MULTIDISCIPLINARY IMPROVEMENT INITIATIVE TO INCREASE ANTENATAL MAGNESIUM UPTAKE IN < 30 WEEK PRETERM BIRTHS

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## Introduction

**Audit measure: Is a mother who delivers her baby below 30 weeks gestational age given magnesium sulphate in the 24 hours prior to delivery? NICE/RCOG SIP ✓**

Journey to excellence is not a finite event but a continuous course of learning and change. Improvements made should be resilient and adaptable to challenges and variations over time. In this case study we demonstrate how we **scaled up and sustained** improvement and discuss the challenges posed by certain intrinsic factors in the pathway

**Antenatal magnesium sulphate reduces risk of cerebral palsy in preterm births**

**Magnesium sulphate uptake over last 3 years at our centre:**

2016 – 15 %

Local QI initiative

2017 – 56 %

Local QI initiative

2018 – 77 %

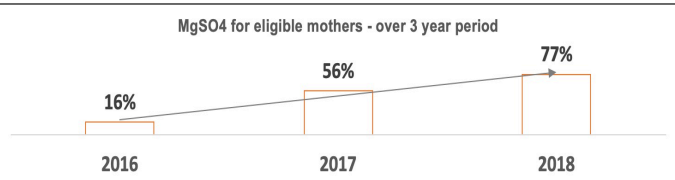
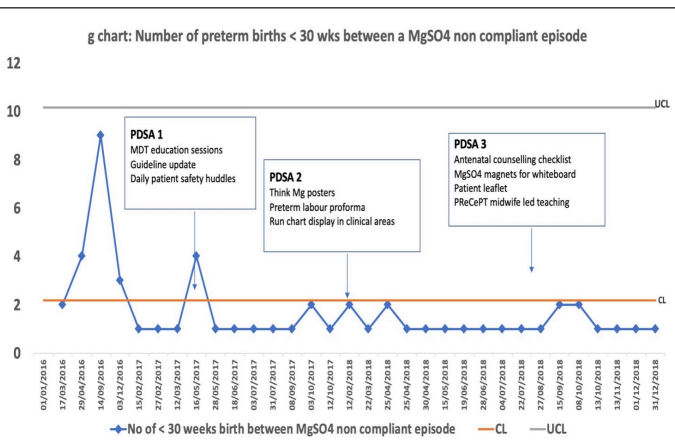
## Aim

Further improve antenatal MgSO<sub>4</sub> compliance from 56 % to > 80 % in 1 year (end of calendar year 2018)

## Change ideas/PDSAs

- Preterm labour proforma with specific focus on MgSO<sub>4</sub> and steroids
- Think Magnesium posters, enhanced communication strategy
- Involve change champions & opinion leaders

## Results



## Learning and Adaptation for other units

- Use creativity and resourcefulness of frontline staff to identify effective solutions to bottlenecks & removal of non-value steps
- Listen to the voice of staff and service users, involve them in 'change idea testing'
- Posters, newsletters and social media messages to celebrate key milestones & events

**Acknowledgements:** Bhavani Sivakumar, Neonatal Data Administrator & frontline perinatal staff, parents and families for their participation and engagement in this collaborative quality improvement initiative

- Run chart picked up drop in compliance over 3 consecutive months
- Process mapping done to identify bottlenecks
- Improvements to triage assessments & processes planned – part of PRCePT cluster RCT.

