

OPTIMISING GLYCAEMIC CONTROL FOR DIABETIC WOMEN FOLLOWING ANTENATAL STEROIDS

Quality Improvement Project

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INTRODUCTION

The risk of respiratory distress is higher for infants whose mothers have diabetes due to delayed pulmonary maturity, despite macrosomia. Steroids are important for this group, but can cause hyperglycaemia. Algorithms for insulin administration after steroids have been shown to improve glycaemic control. However, national data continues to show a high incidence of insulin-related drug errors.

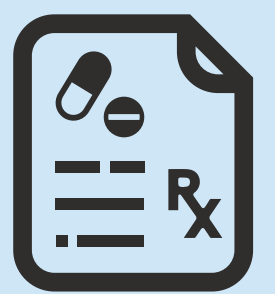
OBJECTIVE

- To optimise glycaemic management for pregnant women with diabetes admitted for antenatal steroids. Target: 100% of women spend >90% of admission time within NICE targets.
- To measure adherence to local guidelines for blood glucose management.
- To design and implement interventions which enable and improve guideline adherence.

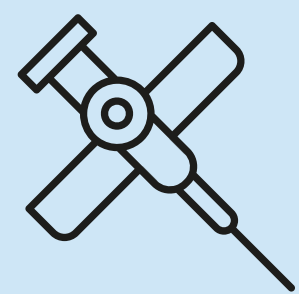
INTERVENTIONS

PDSA CYCLE 1

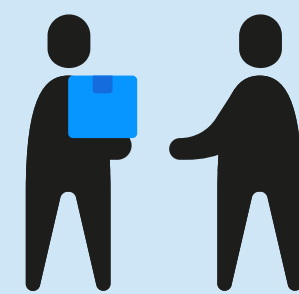
A package of interventions including: 'steroid proforma' for use in clinic, prescribing in advance, cannulation training and IV insulin training videos. Designed to target 3 key areas:



ADVANCE
PLANNING



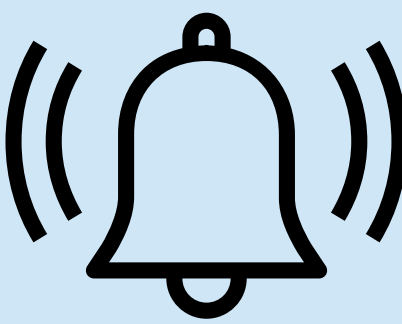
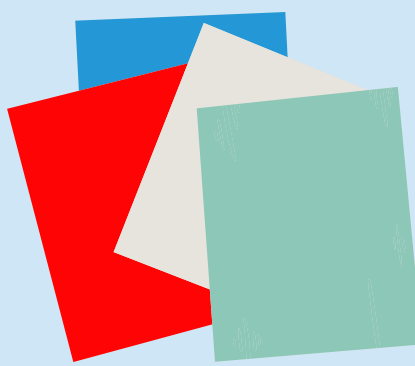
PROMPT
CANNULATION



OPTIMISED
HANDOVER

PDSA CYCLE 2

Sets of infographic cards were introduced to facilitate prompt diagnosis, management and escalation of common diabetic complications including ketonuria and hypoglycaemia.



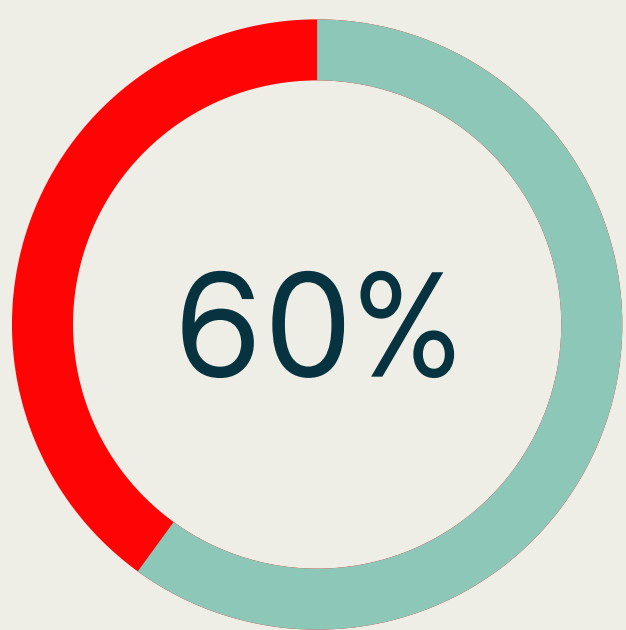
DESIGN AND METHODS

Design: Quality improvement project (QIP) using Model for Improvement approach, with Plan Do Study Act (PDSA) cycles.

Method: Data collection was via retrospective case note analysis using electronic records for women with diabetes who had a planned admission for steroid administration prior to caesarean section.

Baseline data: admissions July 2020-April 2021
PDSA cycle 1 data: July-August 2021
PDSA cycle 2: ongoing

BASELINE

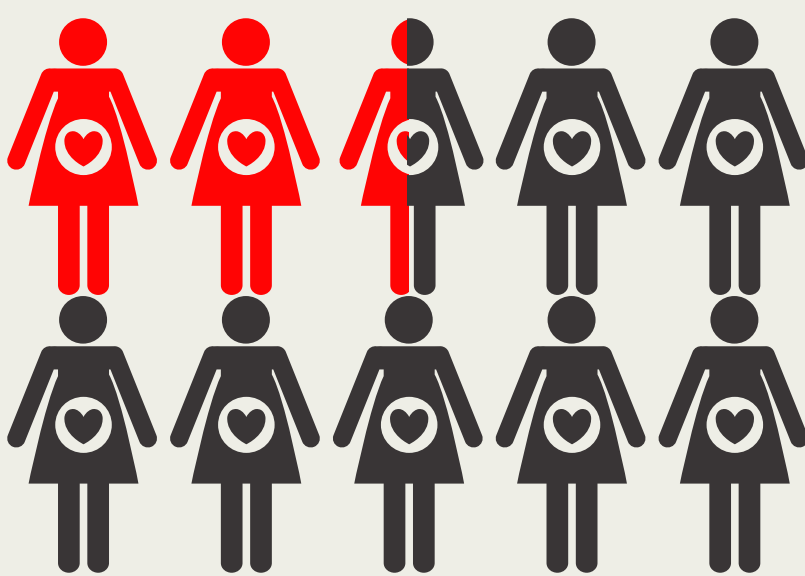
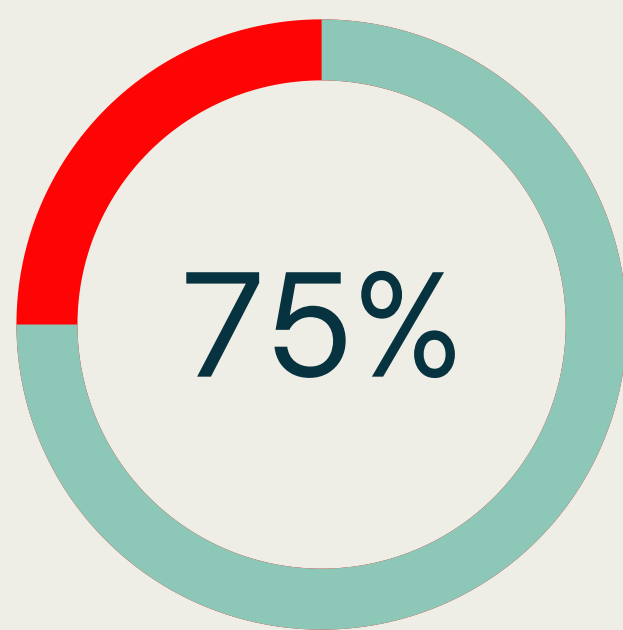


RESULTS

Percentage of women who spent >90% of admission with NICE blood glucose targets

Proportion of women who experienced a delay/error receiving IV insulin

PDSA 1



CONCLUSION

Ensuring adequate care planning prior to admission, including written management plan with drugs prescribed, may improve management of hyperglycemia..

The Royal Wolverhampton
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