



## 3<sup>rd</sup> Annual Quality & Patient Safety Conference Improving the Healthcare Journey for Patients & Staff



### TITLE

## The Early Provision of Buccal Colostrum as Part of Oral Cares for Preterm Babies in NICU - a multidisciplinary project

### SUBMITTED BY

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### ABSTRACT

#### INTRODUCTION

Pre-term birth is a risk factor for delayed oral feeding and oral aversion, especially for early pre-term babies born less than 34 weeks ("EPBs"), who are particularly vulnerable (Greene et al, 2018). For EPBs, early administration of buccal colostrum within hours of birth, improves health outcomes, sensory development, and breastfeeding (NHS Thames Valley, 2019).

#### METHODOLOGY

The team developed a project implementation plan including fishbone, driver diagram and four PDSA cycles.

#### AIM

To achieve provision of buccal colostrum for all babies under 34 weeks within a 24-hour window and ideally 6 hours of birth, as part of oral cares in NICU by end 2021.

#### CHANGE IMPLEMENTED

The team determined the components of the process, identifying the people, tasks, tools, environment and organization. A driver diagram was compiled which assisted in planning the rollout of this initiative. This diagram was updated and developed further as PDSAs were completed

#### MEASUREMENT

We demonstrated reduced time to achieve oral feeding and higher rates of (combined) breastfeeding.

Our reduced average length of stay of 10 nights is the equivalent of a €206,000 saving.

#### RESULTS

Preliminary analysis (at 8 months) demonstrates:

- increased rates of buccal colostrum within 6 (0% to 25%, n=6) and 24 hours of birth (3.7% to 30%, n=6); decreased times from birth to early oral experience (average 18 to 2 days) and birth to first full feed (average 33 to 19 days);
- reduced average length of stay (by 10 nights), and increased rates of combined breastfeeding on discharge (44% to 100%).

No change in rate of exclusive breastfeeding was observed. Provisional parental and staff feedback are positive

#### VALUE

The resulting reduced average length of stay by 10 nights is the equivalent of a €206,000 saving. Preliminary results demonstrate improvements across a range of patient, process, staff, and financial outcomes. This project is a novel interdisciplinary collaboration to implement best practice for a vulnerable patient cohort.

#### SUSTAINMENT

The project has now moved into the sustainability phase, with work across management teams and the wider neonatal networks in Ireland. This will assist in replicating the successes of early oral cares in other neonatal units in Ireland.

#### ADDITIONAL INFORMATION

We strive to entrench these improvements within the hospital culture; we will initiate other quality improvement initiatives to improve outcomes.