

# Improving The Care of Late Preterm and Low Birth Weight Babies Through Implementation of Transitional Care

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## Background

The publication of the BAPM transitional care (TC) framework in 2017<sup>1</sup> sought to provide guidance on TCs. The definition of a TC given was holistic, allowing units to accommodate the needs of their patients within the context of their existing neonatal care and resources. It also highlighted that the main aim of a TC is keeping babies with mothers and that it is 'a service, rather than a location'.<sup>1</sup>

An overwhelming majority (89%) of neonatal units across the country have a transitional care<sup>2</sup>, in varying forms. Centres with Special Care Baby Units (SCBUs) manage less well at keeping late pre-term babies with mums, when compared with higher intensity local neonatal units and neonatal intensive care units<sup>2</sup>.

## Aims

Improve the care of low birth weight and late preterm infants

Primary measurable outcome: Number of admissions to SCBU or re-admissions from home

Other measures:

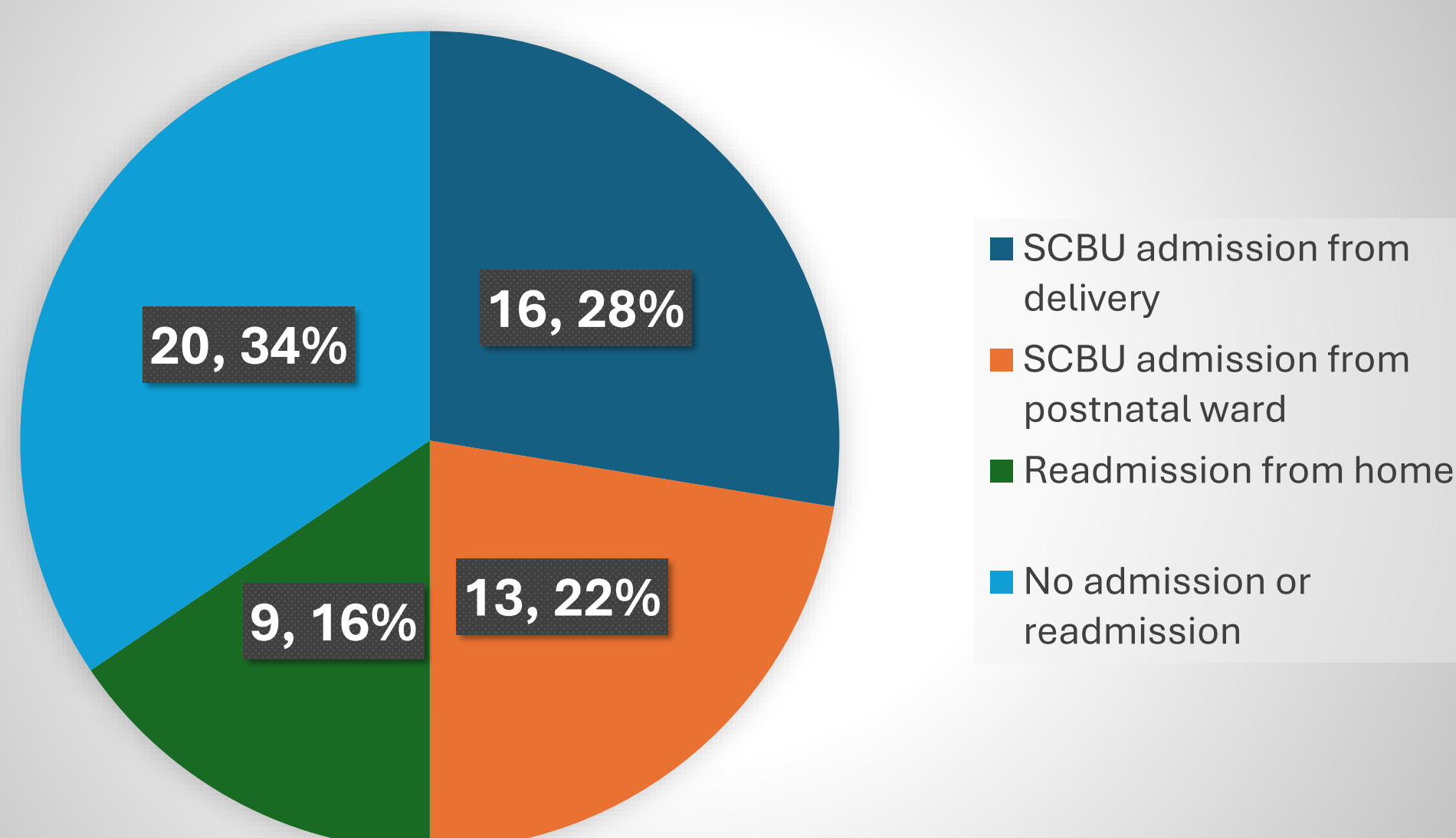
- Time of first medical review
- Time and source of admission
- Intended mode of feeding on day 1 and actual mode of feeding on day 5
- Weight loss

## Method

Babies were identified through badger and data team, from a six-month period born at 34+0 – 36+6 weeks gestation or birth weight less than 2500g.

Notes were reviewed to gather information on location of care for each baby and the pathway to this location (see table 1).

## Admission Rates



## Results of Primary Outcome

16 of 58 were admitted directly to SCBU

13 of remaining 42 admitted from postnatal ward to SCBU

9 of 29 discharged from postnatal ward were readmitted in first week

## Other Outcomes

- 74% of mothers intended to Breastfeed
  - 74% of those that intended to Breastfeed, were exclusively breastfeeding at day 5
- 80% of Babies were seen by a doctor within 4 hours of birth
  - 93% were seen within 24h

## Implementation of Transitional Care

Criteria for Transitional Care:

- GA 34+0 to 35+6 weeks who do not fulfil criteria for special care or high dependency care
- BW 1.8-2.5kg
- Known congenital/antenatally detected abnormalities (cleft palate, Downs)
- Risk factors for sepsis requiring IV antibiotics, but clinically stable
- Non-hemolytic jaundice requiring phototherapy and/or assessment of serum bilirubin 4 – 6 hourly
- At risk of hemolytic disease requiring immediate and/or enhanced phototherapy and/or assessment of serum bilirubin 4 – 6 hourly
- Neonatal abstinence syndrome requiring treatment
- Inability to maintain temperature and need of hot cot
- Weight loss >10%
- "Step down" care: babies who were initially cared for on the SCBU/HDU who are now fit to be cared for by their mother with some extra support

The Pathway:

- Midwife to alert paediatric team of infant meeting criteria for TC
- Antenatal counselling where possible and provision of parental leaflet
- Paediatric medical review within first 4 hours
- 4 hourly NEWTT observations for minimum 24 hours, ideally 48-72 hours to ensure effective feeding and prevention of readmission for weight loss / jaundice.
- Requires early discussion and planning with parents and midwifery teams, and can be adjusted on an individual infant basis
- Transcutaneous bilirubin at 24h
- Day 3 weight

## Conclusion

Over a quarter of babies on the postnatal ward developed a problem that required admission to SCBU. Nearly one-third of babies sent home from the postnatal ward required readmission, largely for weight loss and phototherapy.

There were opportunities to anticipate and identify these problems early through enhanced monitoring and clear plans to negate the necessity for admission or re-admission. In doing so, the parental distress and cost implications would have been avoided.

The key focus of implementation of our pathway is education and empowerment of all members of the team including parents, early discussions to manage expectations and formalising the need for enhanced monitoring whilst accommodating bespoke plans to meet the needs of the baby and family.

In our unit with a SCBU and postnatal ward, the implementation of our TC would seek to reduce admissions of late preterm babies and therefore, unnecessary separation from mothers.

## References

1. British Association of Perinatal Medicine. A Framework for Neonatal Transitional Care, October 2017. Available at <https://www.bapm.org/resources/24-neonatal-transitional-care-a-framework-for-practice-2017>
2. Fleming PF, Arora P, Mitting R, Aladangady N. A national survey of admission practices for late preterm infants in England. BMC Pediatr. 2014 Jun 17;14:150. doi: 10.1186/1471-2431-14-150. PMID: 24939510; PMCID: PMC4067689.